APPROVED FY2022 BUDGET

Albuquerque Bernalillo County Water Utility Authority

Albuquerque Bernalillo County Water Utility Authority

Albuquerque, New Mexico

Approved Operating Budget FY22

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Albuquerque Bernalillo County
Water Utility Authority

April 21, 2021

To: Steven Michael Quezada, Chair

From: Mark S. Sanchez, Executive Director

Subject: Resolution Appropriating Funds for the Operation of the Water Authority for the Fiscal Year Beginning July 1, 2021 and Ending June 30, 2022

Presented to the Board for review and consideration is the proposed budget for the Albuquerque Bernalillo County Water Utility Authority (Water Authority) for Fiscal Year 2022 (FY22). This submittal is the Water Authority's financial plan for FY22. The development of this financial plan has been guided by the Water Authority's Five-year Goals, One-year Objectives, Performance Plan and the Guiding Principles. In the development of this proposed budget, the Water Authority has taken a conservative financial approach to provide effective and efficient water and wastewater services balanced against projected resources. This proposed budget is based upon the 10-year Financial Plan. It is balanced, fiscally conservative and sound.

The Water Authority has developed the budget according to the utility's projected estimated revenues. General Fund revenue for FY22 is estimated to be $239.3 million, representing an increase of $1.5 million from the FY21 budget amount. There is no rate increase proposed for FY22.

The proposed General Fund operating expenses for FY22 are $239.3 million, representing an increase of $1.5 million from the FY21 budget, including interfund transfers. This is comprised of an increase of $1.7 million for salaries and benefits, an increase of $0.8 million for operating expenses, and a decrease of $1.0 million for interfund transfers to the capital and debt service funds. Personnel expenses include a 2.0% step increase in wages and a 5.0% increase in health benefit costs. The most significant expense continues to be debt service payments, which comprise 32.5% of the total General Fund operating expense in FY22.

For FY22, General Fund revenues, including an addition of $8.5 million from fund balance, are expected to be equal to proposed expenses. This amount will bring the Working Capital or Fund Balance to $38.0 million at June 30, 2022, net of the reserve fund balances. 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. For FY22, the Rate Reserve fund remains at $9.0 million; the Risk Reserve is $0.5 million; and the Soil Amendment Facility Reserve is $1.5 million.

Also submitted in a separate resolution is the Capital Improvement Program (CIP) proposed budget for FY22. This budget reflects the Water Authority's commitment to spend $250.0 million to upgrade its sewage treatment plant and an additional $36.0 million per year to cover the costs of routine replacement of aging pipes, pumps and other infrastructure as recommended in a recent asset management study commissioned by the Water Authority. The proposed CIP appropriation for FY22 is $80.4 million. $71.7 million is appropriated for the level one priority basic capital programs, $5.0 million for growth-related projects, $3.4 million for special projects, and $0.3 million for *Water 2120* projects. The 3.4 million for special projects is comprised of $2.0 million for Automated Meter Infrastructure (AMI), $1.0 million for steel water line replacement, $0.4 million for various renewable energy projects.

This budget proposal represents the Water Authority's coordinative effort to bring to the Board a financial plan that will provide the necessary funding to perform all the varied operational and administrative functions, to maintain the Level of Service (LOS) to its customers with high-quality water and wastewater service and address the Water Authority's priorities for FY22 to improve services and gain operating efficiencies.

BOARD MEMBERS

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Mark S. Sanchez, Executive Director

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Albuquerque Bernalillo Co. Water Utility Authority

New Mexico

For the Fiscal Year Beginning

July 1, 2020

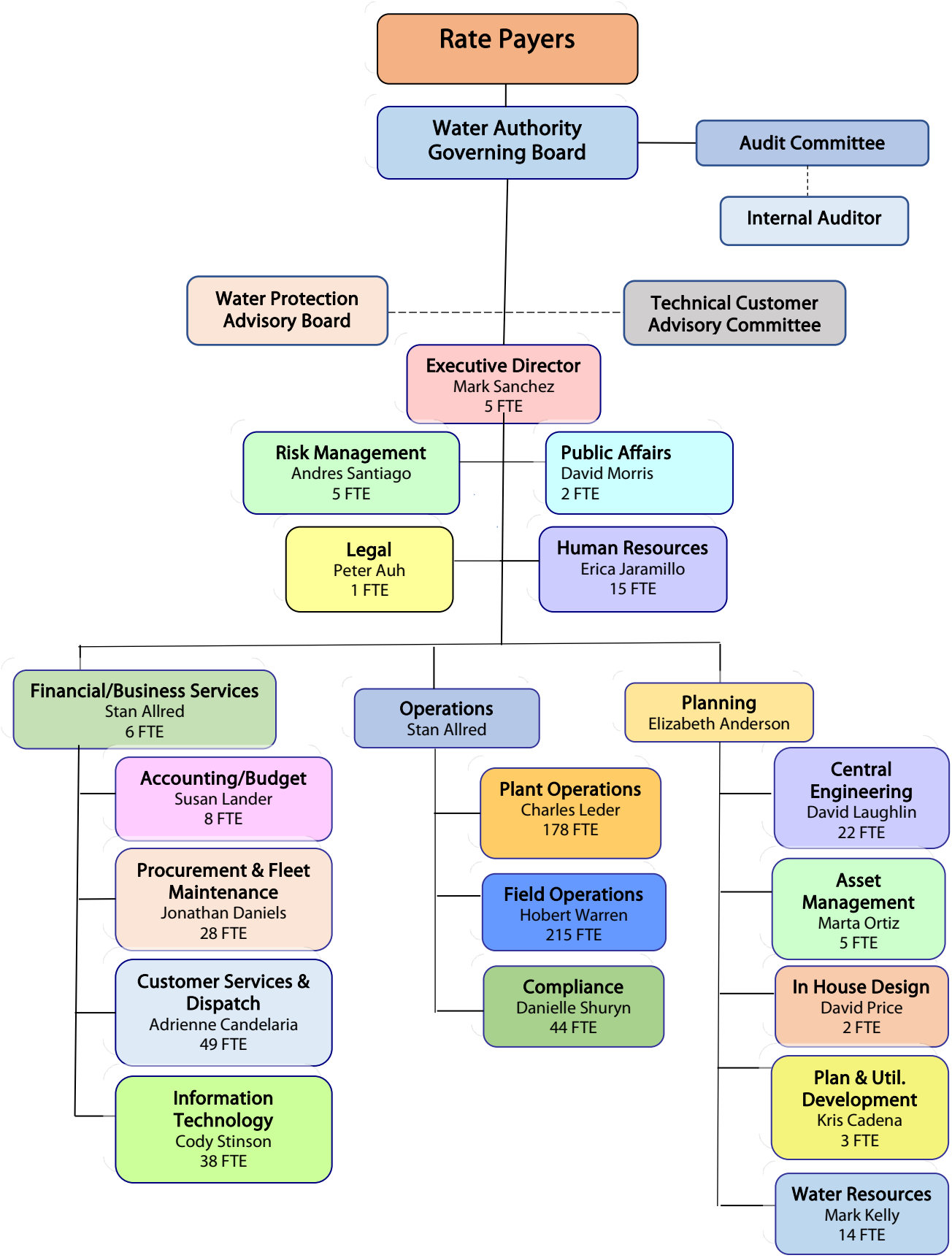
Christopher P. Morrill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to **Albuquerque Bernalillo County Water Utility Authority, New Mexico** for its annual budget for the fiscal year beginning July 1, 2020. To receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

ORGANIZATION CHART



The **Approved Budget** presents all funding issues by program strategy and division levels for all operating funds. The **Appendix** is the **Performance Plan**, which assesses the performance of the Water Authority using measures that are designed to help the Water Authority improve its operational efficiency and effectiveness. These performance measures help guide the operating and capital budgets in allocating the Water Authority's financial resources, thus making these budgets performance-based.

The **Approved Budget** has 9 major sections: Executive Summary, Five-Year Goals and One-Year Objectives, Approved Budget & Financial Consolidations, Revenue Analysis and Economic Outlook, Functional Units, Capital Budget, Debt Obligations, Statistical and Supplemental Information and Appropriations Legislation.

Executive Summary: This section is designed as an overview, explaining the policies as well as outlining the budget.

Five-Year Goals and One-Year Objectives: This section explains the Water Authority's five-year goals and details the current one-year priority objectives.

Approved Budget & Financial Consolidations: This section contains Resources, Appropriations, Fund Balance/ Working Capital Tables by fund group, and the financial plan. The funds are presented with estimated ending fund balances for both the current year and the budget year.

Revenue Analysis and Economic Outlook: This section contains detailed information on the projected revenue and the Economic Outlook to be addressed in the coming year. This section also looks at the Albuquerque economy as it relates to the budget.

Functional Units: This section contains personnel information and functional unit information.

Capital Budget: This section explains the Water Authority's capital process which is prepared on an annual basis. Anticipated capital projects and the expected operating impacts are discussed as well.

Debt Obligations: This section provides tables and schedules of the Water Authority's debt obligations.

Statistical and Supplemental Information: This section contains statistical information that is useful to understand the budget and Water Authority operations. There is a brief explanation of the methodology used in budget preparation, a listing of acronyms, and a selected glossary of terms.

Appropriations Legislation: This section contains copies of the legislation that has been approved by the Water Authority Board.

The Appendix contains the **Performance Plan,** which contains performance measures organized by the Water Authority's Five-Year Goal areas. Each goal area is described by a goal statement which explains the long-term desired result for that goal. The purpose of these performance measures is to help the Water Authority understand how it is meeting its goals and to answer some of the basic questions: 1) Are we improving year to year? 2) How do we compare with the industry standard? 3) Are we increasing customer satisfaction?

The electronic version of the FY22 Approved Budget can be found at the Water Authority's website:

http://www.abcwua.org/your-water-authority-finances/

The electronic version of the FY22 Performance Plan can be found at the Water Authority's website:

http://www.abcwua.org/your-water-authority-finances/

The electronic version of the FY2022-2031 CIP Decade Plan can be found at the Water Authority's website:

http://www.abcwua.org/your-water-authority-finances/

Budget Policies and Procedures Ordinance

NMSA 1978, Section 72-1-10, which created the Albuquerque Bernalillo County Water Utility Authority (Water Authority), along with the Water Authority's Budget Policies and Procedures Ordinance, requires the Executive Director to formulate the operating budget for the Water Authority. The Executive Director shall propose the budget to the Board at the April regularly scheduled meeting each year. The Water Authority Board then will approve or amend and approve the Executive Director's proposed budget, after the Board has received the budget and has deliberated on it, provided public notice and allowed for public input at or before the May regularly scheduled meeting.

Process for Preparing, Reviewing, and Adopting the Budget

Prior to issuing budget instructions, the Water Authority's Ten Year Financial Plan is revised to determine the revenue and appropriation levels that are projected for the budgeted fiscal year as well as how future years will be impacted by these financial decisions. Details of the assumptions, challenges, one-year objectives and working capital estimates used in the preparation of the FY22 budget are contained in the Executive Summary of this document. Once revenue and appropriation levels are determined, budget instructions are issued in January. A salary forecast is completed for review by the Executive Director. Expense data is accumulated at the current level and totals are reviewed to determine if other actions or changes in budget instructions must be made to achieve a balanced budget. Budget meetings are held with the Executive Director and Water Authority Senior Staff. During this process, divisions may request program expansions, offer plans for reducing costs, or propose revenue enhancements. One-year objectives and the Performance Plan for the fiscal year are submitted to the Board in March for April approval. The performance plan contains performance measures that guide the operating and capital budgets in allocating the Water Authority's financial resources and is driven by the five-year goals and one-year objectives. The Executive Director submits the proposed operating and capital budgets to the Water Authority Board on or before the 1st of April. This proposal includes the budgets, capital program, and rate proposal which may recommend changes in rates and fees. After receiving the budget proposal from the Executive Director, the Water Authority Board schedules at least two public hearings on it. Because of its deliberations and the information gathered at the public hearings, the Water Authority Board may amend the budget proposal at any time prior to approval at the May regularly scheduled meeting.

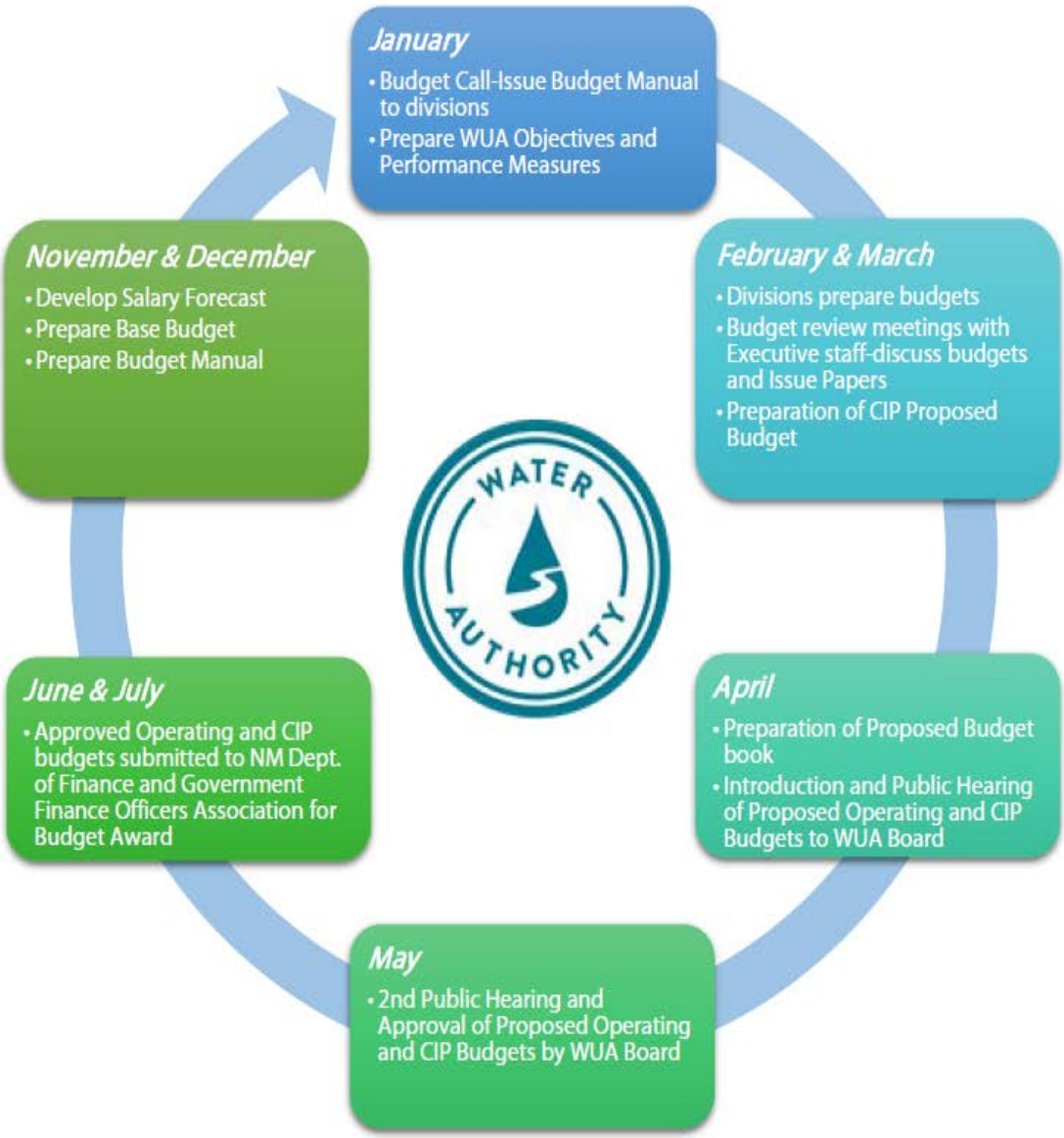
Process for Amending the Budget after Adoption

In accordance with the Water Authority's Budget Policies and Procedures Ordinance, the Water Authority Board, upon its own initiative or upon a recommendation by the Executive Director, may amend the operating and/or capital budget during the fiscal year to which it applies. No amendment to the operating budget shall result in total authorized expenses that exceed resources to be available for the fiscal year to which the budget is applicable. During the fiscal year, the Executive Director is authorized to transfer funds or change expense authority within and among line-item authority, as established by the annual appropriation resolution and other approved appropriations for operating purposes, if the transfer or change does not result in the increase or decrease in that line-item expense authority in excess of the cumulative amount of $100,000 or 5% of the line-item authority, whichever is lower. Actions taken by the Executive Director to transfer funds or change expense authority within and among line-item authority shall be reported in detail to the Water Authority Board at its next regularly scheduled meeting. The Executive Director may transfer funding of up to 10% of an existing capital project within adopted projects as approved by the Board provided that the change does not significantly alter the project's scope. Any change which exceeds this amount requires Water Authority Board approval.

Budgetary and Accounting System Requirements

The Water Authority uses the accrual method for both the budget and accounting basis. Revenues are recognized when earned, and expenses are recognized as they are incurred. The Water Authority is operated as an enterprise fund, which is an accounting entity with a self-balancing set of accounts established to record the financial position and results that pertain to a specific governmental activity. Appropriations are at the fund level, the level at which expenses may not legally exceed appropriations. Budgetary control is maintained by a formal appropriation and encumbrance system. Appropriations may be made or modified during the year by a legally adopted resolution. Appropriations revert to fund/working capital balance to the extent they have not been expended or encumbered at fiscal year-end.

BUDGET PROCESS FLOW CHART



BUDGET CALENDAR OF EVENTS

Jan	Begin discussion on Water Authority's Performance Plan
Jan - Mar	Divisional preparation of FY22 Operating Budget request. Meetings between Water Authority Executive Director, Chief Operating Officer, Chief Financial Officer, Chief Planning Officer and Division Managers
Jan-Mar	Preparation of FY22-31 CIP Decade Plan and FY22 CIP Budget request. Meetings between Water Authority Executive Director, Chief Operating Officer, Chief Financial Officer, Chief Planning Officer and Division Managers
Jan – Feb	Preparation of Water Authority Objectives and Performance Measures
Feb 8	**Budget Call** to Operating Divisions
Feb – Mar	Budget review with Executive Director, Chief Operating Officer, Chief Financial Officer, Chief Planning Officer and Division Managers
Feb 28	Proposed budgets due to Finance Division; Includes all Issue Papers and Organization Changes
Mar 26	CIP Budget Due to Finance Division
Apr 1	Proposed Operating and CIP Budget Documents Prepared
Apr 1	Proposed Operating and CIP Budget Documents submitted to Water Authority Staff
Apr 1	Technical Customer Advisory Committee Budget Presentation
Apr 21	Approval of Water Authority Objectives at Water Authority Board Meeting
Apr 21	Introduction and Public Hearing of Proposed Operating and CIP Budgets at Water Authority Board Meeting
May 19	2nd Public Hearing and Approval of Proposed Operating and CIP Budgets at Water Authority Board Meeting
June 1	Proposed Operating and CIP Budgets due to NM Department of Finance and Administration (DFA)
July 31	Approved Operating and CIP Budgets due to DFA and submission to Government Finance Officers Association (GFOA)

EXECUTIVE SUMMARY

Approved Operating Budget FY22

The Albuquerque Bernalillo County Water Utility Authority (Water Authority) identifies resources to provide quality water in sufficient quantity, collect and treat wastewater to acceptable standards, provide professional utility engineering services, and provide utility customer services. The Water Authority operates and maintains water pump stations, reservoirs, wells, water lines, the San Juan-Chama Drinking Water Treatment Plant, the Southside Water Reclamation Plant, the Soil Amendment Facility, sewage lift stations, odor control facilities, and sanitary wastewater lines. The Water Authority also works to secure the region with a safe, adequate, and sustainable water supply.

Mission

The mission of the Albuquerque Bernalillo County Water Utility Authority is to:
Assure responsive Customer Service. Provide reliable, high quality, affordable and sustainable water supply, wastewater collection treatment, and reuse systems. Support a healthy, environmentally-sustainable, and economically-viable community.

FY22 Budget Highlights

The FY22 Executive Director's Approved Budget establishes the Water Authority's financial plan and uses the Goals, Objectives and the Performance Plan as guides for the appropriation of funds. The Water Authority, in conjunction with the operating divisions, developed this budget by determining those essential costs necessary to successfully run the utility operation.

Assumptions

In the preparation of the FY22 budget, certain assumptions were made related to the operations of the Water Authority, the economic climate and system growth within Bernalillo County and the City of Albuquerque.

- Water and Wastewater Revenues. Budgeted total operating revenues were projected using a 5-year historical trend based upon growth and consumption. The trend was structured by class of customer as well as by service size of each class. The projections also consider the Water Authority's continued conservation efforts.
- System Growth. System growth is based on a 2% growth factor; however, this growth is offset by estimated water conservation of 1%.
- Utility Expansion Charges. Utility Expansion Charges remain at $8.0 million, reflecting the current trend in the development of residential housing.
- Wage Adjustments. There is a 2% cost of living adjustment for FY22.
- Fringe Benefits. Fringe Benefits reflect an increase of 5%.
- Target Fund Balance/Working Capital Balance. The target fund balance/working capital balance for the General Operating Fund will be equal to 1/12th of the annual budgeted operating expenses.
- Conservative Projection of Revenues and Expenses. The budget is based on conservative revenue and expense estimates.

Challenges

The biggest challenge facing the Water Authority in FY22 is navigating the COVID-19 pandemic. Staff for water and sewer utilities are designated "Essential Critical Infrastructure Workers" by the U.S. Department of Homeland Security. As such, according to federal guidelines, utilities have a special responsibility to maintain normal work schedules in their vital role in the protection of public health and welfare. Work-from-home provisions and schedule adjustments have been enacted across the utility to ensure that all services continue uninterrupted while protecting employees from unnecessary exposure.

At the outset of the COVID-19 pandemic, the Water Authority conducted internal reviews to determine the extent of any immediate and intermediate financial impacts attributable to the Water Authority and any increased cost of service attributable to the COVID-19 pandemic. Throughout the COVID-19 pandemic, the Water Authority has maintained operations and service with field groups continuing to work as essential personnel within the service area of the Water Authority and other office-based personnel working from home. The Water Authority experienced increased consumption during fiscal year 2021 when compared to usage in the

prior year, resulting in increased revenues. As of June 2021, the Water Authority remains under budget, continues to monitor chemical and power costs, and continues to maintain a healthy fund balance and cash on hand.

In response to the pandemic, the Water Authority has suspended service disconnections for non-payment. The Water Authority did not suffer material impacts with respect to terminated accounts due to nonpayment or delinquencies during fiscal year 2021 and does not expect to suffer material impacts during fiscal year 2022.

Staff have been tasked to monitor expenses and to prioritize projects to better manage the reduced resources. Finance personnel are closely monitoring revenues and expenses and to date, the effects of the pandemic to the Water Authority have been minimal.

Other challenges facing the Water Authority are managing the increasing costs of chemicals and electricity for water treatment. The Water Authority operates and maintains two water systems, the well/aquifer system and the surface water treatment system. Although the well system usage will be reduced as the surface water system increases capacity, the well system will still have to be fully operational to supplement the surface water, as necessary. The operation of these systems represents a dual cost for the Water Authority. The increasing costs associated with chemicals and electricity also impact the operation of the Southside Water Reclamation Plant which continues undergoing extensive renovations begun in FY10.

One Year Objectives FY22

The One-Year Objectives 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 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 policy directives from the Water Authority Board, are used to close performance or service delivery gaps and improve performance levels.

Some objectives are related to completing projects or improving programs. Some of the FY22 objectives are tied to resources contained in the FY22 Approved Budget. A few of the objectives are carried over from FY21 either because they require more time to complete or are ongoing issues. Some of the objectives are tied to the Performance Plan to improve operations and/or customer service.

Fund Balance/Working Capital

In the FY22 budget, revenues are projected to equal expenses in the General Operating Fund. Surplus revenue will be added to the balance to achieve a Fund Balance/Working Capital equal to $1/12^{th}$ of the annual budgeted operating expenses.

As we look forward to FY22, we also reflect on the Water Authority successes in the preceding year. These included:

✓ Fitch Ratings affirmed its bond rating of "AA" and revised the Outlook to Positive.
✓ 2021 American Council of Engineering Companies (AEC) Engineering Excellence Award, solids dewatering facility (Carollo Engineers, designer)
✓ 2020 National Association of Clean Water Agencies (NACWA) Environmental Achievement Award for Watershed Collaboration
✓ 2020 Excellence in Management Platinum Award (NACWA)
✓ 2020 Utility of the Future designation for watershed stewardship (Water Environment Federation)
✓ FY20 Government Finance Officers Association (GFOA) Distinguished Budget Presentation Award, Special Performance Measure recognition
✓ FY19 GFOA Certificate of Achievement for Excellence in Financial Reporting (both Comprehensive and Popular)

Other achievements in the preceding fiscal year include the earmarking of additional funds to continue a project to extend municipal water services to the historic South Valley neighborhood of Los Padillas, the installation of 20,000 additional automated meters, and the installation of carbon filters at lift stations to address odor concerns. Additionally, the extensive multi-year, $250 million refurbishment of the Southside Water Reclamation Plant continued on-schedule.

Operations

In calendar year 2020, the Surface Water Treatment Plant (SWTP) section produced 32% of all water for the Water Authority, which reflects drought conditions in the Rio Grande River during the year. The treatment plant also met the Partnership for Safe Water-Treatment turbidity goal over 99.5% of the time during the year and received the American Water Works Association (AWWA) Partnership for Clean Water Presidents Award. Treatment Plant staff assisted in the emergency water hauling to the Navajo Nation.

Groundwater section provided all the potable water to the service area between July 2020 and January 2021 due to the shutdown of the Surface Water Treatment Plant. Staff navigated through COVID-19 related staffing shortages without compromising service to Water Authority customers and assisted in the emergency water hauling to the Navajo Nation.

Groundwater major projects during the year included: booster and well pump renovations and replacements; upgrades to the chlorine residual measurement at pump stations; installation of equipment at the MDC reservoir to improve water quality; and contractor-led pump station and well house roof inspections and maintenance.

The Southside Water Reclamation Plant (SWRP) section accomplishments included: returning the MDC wastewater treatment plan to compliance with effluent quality standards; transitioning to new leadership at all levels throughout the year; consistently meeting SWRP effluent quality standards through the year; and undertaking major renovations at the Cogeneration facility and leak repairs to BHW piping. The CY2020 Annual Compliance Certification for Air Quality permit had no deviations to report.

Field Distribution section crews installed 20,000 additional Automated Meter Infrastructure (AMI) meter devices. The division received and responded to 30,000 line- locate requests from New Mexico 811 for excavations during the fiscal year leading to a reduction in underground utility damage frequency. Staff inspected and exercised 4,000 isolation valves (85% operability rating), tested approximately 300 small water meters for accuracy (median 97.9%), and updated over 3,200 assets into the asset registry.

Field staff relocated from City Pino Yards and the Northwest Service Area to the new operations facility at Mission Ave. Metal recycling, debris disposal, materials relocation, storage shed demolition, records archiving and building cleanout tasks were completed.

Increased pressure reducing valve maintenance coupled with remote pressure monitoring

continued to yield an overall decline in water leaks/breaks, allowing for a shift from traditional reactive maintenance to a more balance preventative and corrective maintenance structure.

Wastewater Collections section continued to implement the Capacity Management Operations and Maintenance (CMOM) program. As part of the commitment to the program staff completed and approved the CMOM Annual Report for CY19, staff and contractors televised 5% of the small diameter system, and in response to internal studies, Short Interval cleaning was focused on the colder portion of the year when SSOs are more likely.

In conjunction with Centralized Engineering section, approximately 300 additional high-risk manholes were contractor-inspected utilizing a 360-degree scanning system and staff utilized the WATS model to evaluate and recommend sites for chemical feed stations on the Westside and Tijeras Interceptors.

Collections staff completed the Root Foaming Study, initiated inspection and documentation of AVOPS Permit-required Confined Spaces, supported the inspection of Lift Station 20 force mains, developed new SOPs for acoustic monitoring equipment and CCTV for vacuum line inspections, and assisted in the installation of pilot AMI monitoring at a carbon filter station and a vacuum sewer pit.

Planning & Utility Development section, in coordination with the City of Albuquerque and Bernalillo County, continued its work to ensure that the water and wastewater infrastructure designed and constructed as part of new developments met Water Authority standards. Staff drafted Standard Operating Procedures to better define internal processes.

Centralized Engineering section managed CIP projects primarily associated with the renewal of the Water Authority's water and wastewater infrastructure. Capital renewal expenses by the end of FY21 are projected to be approximately $86 million, including: $15M for Sanitary Sewer Renewal, $6M for Drinking Water Pipeline Renewal; $22M for SWRP Renewal; $5.5M for SAF/Lift Stations, Odor Control Renewal; $7M for GW Systems Renewal; and $6M for SJC Treatment Plant Renewal.

In FY21, an In-House Design section was formed to use in-house staff to perform work previously done by outside contractors. Projects included: preparing Master Guide Specifications to replace currently used City of Albuquerque Standard Specifications; designing construction packages (plans & specifications) for the FY22 Steel Water Line Replacement program; and supporting the Field and Plant divisions with research, record drawings, exhibits, and image repository pages.

The Asset Management group was established mid-year in FY20. During FY21, staff created dashboards and established KPI's that are distributed throughout the Authority on a monthly basis; created dashboards in Maximo for O&M and Warehouse staff for measuring data quality, continued efforts to update the accuracy of the asset registry, developed the FY22-FY31 Decade Plan template used in the division workshops during the development of the Decade Plan; and completed, in conjunction with a contractor, a 5-year Strategic Asset Management Plan outline and details for implementation.

Water Resources Water Conservation section launched new landscape watering efficiency rebates, conducted hundreds of COVID-safe water waste, xeriscape, APS and City parks leak audits and irrigation inspections. Conservation staff initiated the "Ask an Expert" email, a direct way for communicating with customers to answer questions about plants, irrigation and leaks.

Both the Bear Canyon Recharge and DWTP Large-Scale Recharge projects were operational during the 2020-2021 recharge period. Water Resources staff worked closely with Operations staff to troubleshoot meter issues and develop a solution that ensured continued compliance with the Office of the State Engineer. Additionally, Water Resources staff supported the Compliance Division in the drafting and submittal of a permit renewal application for the North I-25 Non-potable Reuse System and Bear Canyon Recharge (DP-1206).

Water Resources staff collaborated and assisted the following agencies and programs: the Middle Rio Grande Endangered Species Collaborative Program, the U.S. Fish and Wildlife Service, the San Juan-Chama Contractors Association, and the Water Research Foundation.

The Water Authority continued its commitment of $165,000 in support of the City of Albuquerque's BioPark Aquatic Conservation Facility, and $200,000 in support of the Rio Grande Water Fund's watershed restoration. Staff continued meeting with Explora to develop water exhibits for their new STEM science center.

The education program adapted its curriculum to reach students through online platforms during the pandemic, providing virtual class presentations, puppet shows, tours of the wastewater treatment plant, and field trips to the Bosque. Staff created an 8-page summer program booklet, which was distributed to over 1,800 students. The education program staff created a new Instagram site, which is monitored and updated weekly. The 70+ pages of content in the education website were updated and reorganized into a new format which is easier to navigate and visually appealing. A new activity was developed for high school students, in which students perform a simulation of fish egg collecting from the river under different conditions to see how factors such as flow and habitat affect the population of the silvery minnow.

Compliance

The Water Quality Lab set up and calibrated a new Total Organic Carbon instrument and developed SOP's for the instrument; installed a new deionized water system and fume hood replacement. The lab received A2LA Laboratory accreditation, which is valid to July 31, 2022 and added Fecal as MPN (IDEXX) to its Scope of Accreditation.

The Water Quality program submitted their annual audit to the New Mexico Environment Department, conducted manganese monitoring at various points in the treatment process, began testing manganese and color apparent in the Water Process Lab, and completed a modeling project evaluating the need for proposed small diameter pipeline additions in the South Valley.

The NPDES program completed the first phase of the Fish Tissue study project according to the sampling plan and completed the first-year fish tissue quota. Staff continued and expanded the data collection phase of the Mercury Reduction Study. The sampling requirements for the first year of the new NPDES permit at SWRP were completed and submitted to the EPA.

Administration, Employee Relations and Development

In November 2020, Public Relations and Water Authority staff held virtual Customer Conversations meetings. In Spring 2021, the 2020 Water Quality Report will be published and distributed to the service area and in Spring/Summer 2021, advertising will increase to focus on conservation and drought communications.

The Risk/Safety program implemented a Continuity of Operations Plan and other support functions amid COVID-19 and staff continued to support and deliver safety trainings and compliance inspections during the pandemic.

Risk staff contracted a security team to safeguard all utility physical properties, continued to implement the Security Consultant's Deliverables in accordance with AWWA G430 standards, developed an Integrated Emergency Response Plan that was certified by the EPA, and formally participated in a multi-jurisdictional hazard mitigation plan with other public agencies.

Through the COVID-19 pandemic, Human Resources wellness staff continued to offer wellness challenges remotely and offered challenges to employees that were easy to do on their own with a variety of topics offered, including increasing physical activity, nutrition and weight loss tips as well as disease and injury prevention topics.

Human Resources staff, in conjunction with Risk, developed COVID-19 checklists for managers and employees. These were critical in

establishing guidelines for dealing with COVID-19 outbreaks. HR had contact with every employee who was out experiencing symptoms and tested positive; determined return to work dates, coordinated cleaning of work sites and determined if other employees were affected by the virus.

The certification training programs continued to develop employees' knowledge and skills in various positions, including water and wastewater operations and maintenance, dispatch, and customer service. Thirty-two employees were promoted throughout the Water Authority during the fiscal year; ninety employees participated in the 2nd year of the Management Series Training Program; and employees received a total of $79,625 in tuition assistance.

Budget, Finance and Business Management

The Finance Accounting section submitted the FY20 Comprehensive Annual Financial Report (Annual Report) to the Government Financial Officers Association (GFOA) for the Certificate of Achievement for Excellence in Financial Report program and the Popular Annual Financial Report (PAFR) program.

Purchasing staff partnered with Risk to implement a major overhaul of the process regarding collection of certificates of insurance, implementing a new platform for improving collection of certificates from vendors/contractors. Staff quickly initiated a roll-out of the BlueInk eSignature platform for efficiently signing procurement/contract documents as part of the emergency protocols for remote working during COVID-19.

Warehouse and Fleet Maintenance staff completed the move from the Pino facilities to the new operations facility at Mission Ave. Warehouse staff continued to implement improvements to the inventory management/materials and services ordering process using Maximo enhancements put in place by partnering with a consultant and successfully acquired COVID-19 PPE to fulfill the needs of staff. Fleet staff incorporated the Soil Amendment Facility fleet pool and maintenance into the centralized fleet processes, continued vehicle replacement and implemented a more formalized approach to assessing long-term vehicle needs for the Decade Plan.

Treasury section increased the security ladder maturities from six months to twelve/eighteen months to address the large drop in short-term rates. Staff supported Customer Services during COVID-19, the move to the Mission Ave. facility, work-from-home transitions, several system updates and implementations, and implemented a number of BlueInk electronic forms.

During the 2nd quarter, all Customer Service operations (call center, billing, new services and dispatch) were consolidated at the new operations building at Mission Ave. In addition, about 50% of the Dispatch and Call Center worked from home as a result of safety measures put in place due to COVID-19. A newly designed Water Authority webpage was developed which features a single sign-on customer portal that allows customers to view and pay their bill and see their water usage. With the launch of the new webpage, Customer Services replaced paper forms with BlueInk electronic forms.

Communication Center Operations (Dispatch) moved under Customer Service division in FY21. The dispatch phone system was migrated from a hunt-group system to the Unified Contact Center. This provided fast call management, reduced wait times, real-time reporting on call volumes, and call recording. Another upgrade was the replacement of the old radio system with a web-based dispatch console. These upgrades provided more efficient and effective operations and allowed for work-from-home capability for Dispatch staff.

Information Technology staff completed the annual update and review of the Comprehensive Information Technology Security Plan and related policies.

Staff completed the Maximo upgrade and migrated and standardized the mobile field activities, including Line Spotting (NM811), water lines, and the meter changeout program. The Water Authority completed migration of all

mobile and cellular devices to AT&T and fully converted to utilization of its Push-To-Talk functionality.

Other significant ITD projects included: the redesign of the Water Authority's website, the upgrade to a new GIS database version, continued progress of the utility's single SCADA system initiative, implemented a comprehensive Change Management Program, Service Requests, and Incident and Task tracking.

The FY22 Executive Director's Approved Budget establishes the Water Authority's financial plan and uses the Goals, 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 eleven 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.

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. The Water Authority's goal is to have the DWP supply 70-75% of all customer demand. Flow conditions in the Rio Grande, due to the continuing drought conditions, have limited the ability to fully realize this goal on a consistent basis.

In FY22, the SWRP section will be participating in the PNM Strategic Energy Management program to systematically trim the SWRP energy costs. Staff will work to optimize the operation of cogeneration facilities and the new exhaust gas cleaning system as well as improve the knowledge base of these facilities. Management at the SAF will actively search for new large-scale customers for compost and wood chips.

The Water Authority began a major renovation of the 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 plat. 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). In FY22, RRAMP improvements will focus on Anaerobic Digester renewal, covers for the primary clarifiers to aid in odor control, aeration basin renewal, replacing the rotary drum thickener system for more efficient sludge concentration and digestion, and ongoing Cogen equipment improvements and replacements.

The SWTP will complete the commissioning of a permanent screw press dewatering system for iron sludge at its facility and will continue to work with SWRP staff on managing iron sludge discharges to the collection system. Staff plan to work towards the AWWA Partnership for Safe Water-Treatment Phase IV Excellence in Treatment Award.

Groundwater Operations management will fine tune the groundwater system operations to trim the summer power costs while maintaining system resilience & reliability. Staff plan to deploy high arsenic wells to meet supply needs in the Northside non-potable system once the Collector Well is offline (pending permit approvals). Staff have commissioned and plan to operate a new flow control valve that replaces

the defunct sleeve valve at the SWTP.

Wastewater Collections section will utilize the process to capture new construction closed-circuit television (CCTV) for inclusion in Maximo and ITpipes Repository after unique GIS identifiers are established. Staff will continue to clean and CCTV the system in accordance with CMOM commitment. Staff will utilize the WATS model and infoSWMM to model the chemical usage and concentration to optimize a chemical cost reduction balanced with odor and corrosion control. Staff will utilize the WATS model to study locations for new chemical stations on the Tijeras interceptor and on the westside.

Water Field-Distribution section will task a dedicated crew to replace 30,000 aging water meters with smart meters. Field crews will continue to perform block to block rehab repairs which will generate significant cost savings by performing these tasks in-house.

Field crews will continue the flushing program to systematically flush water lines and filter the water using the new No Des system before returning it to the distribution system and minimize water loss. Crews will exercise 4,000 isolation valves. The long-term goal is to exercise all isolation valves over a ten-year period. To support the water audit and strategic water loss plan, staff will test a minimum of 300 small meters.

Field crews will continue the 5-year plan to replace the SJC transmission line actuators. The current actuators are undersized and weak so crews are replacing them before they break; generating cost savings by not having to hire outside contractors.

Water Resources-Conservation will begin their Watersmart Academy for professional landscapers. Classes will count towards licenses. Staff will produce and publish a new Efficient Irrigation Customer Guide, which will build on input provided in the Customer Conversations meetings.

The education program will complete the fish monitoring activity for high school students and create a new field trip for 7th grade students involving citizen science and data collection and analysis. Staff will continue its collaboration with Explora to design water exhibits for the new STEM education wing of the museum which is scheduled to open in 2021.

The capture analysis was completed in FY21 and the next steps, based on the information collected will be: defining realistic source water protection areas, updating the potential source of contamination inventory, and updating the source water assessments.

Staff will work to get the remaining permanent easements around Abiquiu reservoir, which is an important step to increasing the storage at this facility from 170,000 acre-feet to 238,000 acre-feet. Staff will begin the analysis and evaluation for storage of San Juan-Chama or native water at locations in the Middle Rio Grande. Staff will work with Central Engineering, Operations, and Compliance to develop a guidance and flowcharts for evaluating, building and managing future joint projects to include: aquifer storage and recovery projects, reuse projects and updates to *Water 2120*.

Water Resources staff have committed leadership and support of the Endangered Species Act-Collaborative Program. The program has developed a timeline with milestones for completion of a Science & Adaptive Management Plan and a Long-Term Plan.

The 2004 Water Authority Biological Opinion – 2020 Amendment covers sediment management at the SJC diversion facility and potential future installation of a mechanical rake system. The amendment also renews the BioPark funding commitment and egg monitoring for 10 years.

Centralized Engineering will continue managing CIP projects. Major projects include: $8M for construction of the FY21-1 Westside Fortuna/Avalon Interceptor Rehab, $3.5M for steel water line replacement (Walter/Monte Vista package), $27M for various SWRP renewal projects, and $7.8M for GW Systems Renewal projects.

In-House Design projects for FY22 include: finalizing the FY22 Steel Water Line Replacement

packages, preparing construction documents to address point repairs of failed portions of the sanitary sewage collection system, finalizing the draft of the 5-year Strategic Plan for In-House Design, and starting the preparation of the FY23 Steel Water Line Replacement packages.

The Asset Management Program Team will start, with a consultant, the Comprehensive Asset Management Plan (CAMP) with a consultant by performing condition and risk assessments, updating asset attributes and replacement cost data for the SJCWTP and SWRP.

The upgrade to Finance Enterprise will allow Asset Management staff to use Project Management for tracking each work authorization for each project and provide budget allocation towards projects for monitoring cash flows.

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.

The Water Quality Lab plans to refurbish the HVAC chiller compression Unit, upgrade the HVAC system controller unit, replace three fume hoods, and perform a future laboratory instruments needs assessment.

The Water Quality program will implement the sample collection scheduling through Maximo, continue the study of water quality parameters with a focus on DBPs, manganese, iron and cyanide, and prepare for the anticipated 2020 Sanitary Survey reschedule (Due to Covid-19, the survey was postponed in 2020). Staff will begin the ASR sampling routines providing more timely access to the data and cost-savings over hiring a contractor to perform the sampling.

In accordance with the new NPDES permit, the staff will continue with the fish tissue study. Staff will work with a consultant to complete the Mercury Reduction study.

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.

Public Relations staff will formulate an Internal Communications Plan and investigate platforms to increase and manage the utility's social media presence.

Risk/Safety will continue implementing the Security Consultant's deliverables in accordance with AWWA G430 standards and to carry out important liability protection of the utility's assets. Risk staff will continue supporting the multi-jurisdictional Hazard Mitigation Plan.

The Safety Team will provide safety inspections and trainings to include compliance-related item. Staff will be using the new Learning Management System (LMS) platform to maintain effective training delivery and tracking of training hours.

Risk and HR staff will continue supporting the continuity of operations as it relates to COVID-19 while meeting CDC and NMDOH guidelines.

HR Staff will conduct the biannual Employee Satisfaction and Engagement Survey. The survey results will be used to maintain and improve in the areas identified. Staff will create a new benefits flyer for distribution to interviewees and develop a remote working plan for the organization.

A new Learning Management System will be deployed. This system will provide an area to store all training materials, provide online training access, and provide a space for employees to store and track all certifications, classes, and training information.

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.

The approved 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 utility's Workers Compensation expense.

Budget, Finance and Business Management

Finance will submit to GFOA the FY22 Approved Budget for the Distinguished Budget Presentation Award, the FY21 Comprehensive Annual Financial Report (Annual Report) for the Certificate of Achievement for Excellence in Financial Reporting and the FY21 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.

During FY22, the Purchasing section will work with Centralized Engineering to automate the on-call construction Request for Offers bidding process, perform an analysis of inventory configurations to improve the effectiveness of inventory management, and enhance the focus on Fleet satellite storeroom management procedures.

Budget will continue to provide budget and ERP system training to utility staff and schedule monthly budget update meetings with staff. Staff will monitor, update and lead discussions of the FY22 Water Authority Goals & Objectives and EUM metrics.

Treasury will maintain a diversified portfolio of bank balances and Treasury securities to offset banking fees. Staff will partner with Accounts Payable and ITD to implement the Wells Fargo Payment Manager program to increase the security of payments to vendors and to outsource check printing.

Customer Services-Dispatch will focus on an initiative to replace their paper call logs with an electronic record of inbound calls using Maximo, making these records easily searchable and shared/viewed by staff.

Customer Services will implement a self-service payment kiosk at the Mission Ave. location. This walk up/drive up kiosk will allow customers to make payments with cash, check or card. Direct integration with the billing system will provide real-time lookup and payment posting. The kiosk will provide 24/7 self-service access to customers. ITD Quality Assurance staff will continue implementation of the Information Technology Infrastructure Library (ITIL) best practices for: service requests, change management, incidences, and self-service. Staff will build-out remedy reporting functions to ensure service requests are being resolved in a timely manner.

ITD Infrastructure objectives for FY22 include: upgrading the Active Directory, upgrading Microsoft Intune for software deployments to WUA computers that being used remotely, creating a self-service password reset portal, and installing endpoint protection for Water SCADA servers.

ITD Network staff will perform a network core upgrade at the City Hall location, deploy CISCO networks, and deploy cloud WebEx Teams for enterprise messaging.

ITD Application staff will work on external website enhancements, redesign/rebuild the employee portal, assist in streamlining Payroll processes in the ERP system, continue the rollout of the LMS, and perform upgrades to Kronos (timekeeping) and Cognos (reporting)

IT OP Applications will implement Fleet-AVL integration (odometer/runtime monitoring), replace the GIS website, and upgrade MapEngine and PowerSync.

IT Security will continue to be a major focus in FY22. Objectives are: to complete the implementation of DNAC/ISE, continue to reduce

the risk assessment scores, move towards automation of Splunk for security events, reduce the KnowBe4 phish-prone percentage, and to continue moving towards a Zero Trust Framework.

IT SCADA objectives for FY22 include: HMI implementation, Collections/Stormwater PLC replacement, implementation of cyber-security policies, and to refresh the network for the Reclamation SCADA system.

The Rate Reserve fund will remain at $9.0 million; the Risk Reserve at $0.5 million; and the Soil Amendment Facility Reserve at $1.5 million. The Water Authority will also provide deferred UEC collections on up to 50 affordable housing units developed by non-profit housing developers.

BUDGET, FINANCIAL, LEASE AND DEBT POLICIES

Long-term financial policies are contained in state statute, and Albuquerque Bernalillo County Water Utility Authority ordinances. Five major policies are described by the various laws and instructions cited below. A final policy regarding the need to match nonrecurring revenue with nonrecurring appropriations is described but is not found in law or formal rule.

1. The adopted budget is balanced, and subsequent action will preserve the balance. Balance is defined as resources equal to or in excess of expenses for each fiscal year.

STATE STATUTES:

> 6-6-6. Approved budgets; claims or warrants in excess of budget; liability. "When any budget for a local public body has been approved and received by a local public body, it is binding upon all officials and governing authorities, and no governing authority or official shall allow or approve claims in excess thereof, and the allowances or claims or checks or warrants so allowed or paid shall be a liability against the officials so allowing or paying those claims or checks or warrants, and recovery for the excess amounts so allowed or paid may be had against the bondsmen of those officials."

BUDGET ORDINANCE PROVISIONS:

> § 2-1-3 BUDGET CONTENTS AND FORMAT.
>
> "(A) The Executive Director's budget proposal submitted to the Board shall include: The Executive Director's budget message; An annual appropriation resolution recommended by the Executive Director for operating and capital; A complete statement of the non-capital project financial operation of the Authority for the fiscal year last completed; A comparable statement for the current fiscal year including expenditures to date and anticipated expenditures to the end of that year; A financial plan in comparable form for the fiscal year commencing on July 1 of the year in which the budget proposal is submitted.
>
> The Financial Plan for the ensuing fiscal year shall include: All proposed expenditures for the administration, operation and maintenance and capital projects of the Authority; All interest and debt redemption charges; All anticipated revenues and other available resources by source and amount; The proposed means of financing all proposed expenditures.
>
> A performance plan for the fiscal year commencing on July 1 of the year in which the budget proposal is submitted. The performance plan shall be connected to the five-year goals and contain performance measures that help guide the operating and capital budgets in allocating the Authority's financial resources."
>
> "(B) The Authority budget shall be fund based."
>
> "(C) The budget proposal shall be balanced and not propose expenditures in excess of resources anticipated to be available to the Authority for the fiscal year for which the budget is proposed."

§ 2-1-8 BUDGET AMENDMENTS BY BOARD DURING FISCAL YEAR.

Upon its own initiative or upon a recommendation by the Executive Director, the Board may amend the operating and/or capital budget during the fiscal year to which it applies. No amendment to the operating budget shall result in total authorized expenditures that exceed resources to be available for the fiscal year to which the budget is applicable.

2. Authority goals and objectives are established and integrated into the budget process.

BUDGET ORDINANCE PROVISIONS:

§ 2-1-1 INTENT.

"(A) Laws 2003, Chapter 437, codified as NMSA 1978, Section 72-1-10 created the Albuquerque Bernalillo County Water Utility Authority ("Authority") and provides for the administration and operation of the Authority. As part of the administrative responsibilities of the Authority, it shall establish and adopt five-year goals and one-year objectives, which goals and objectives shall be reviewed and revised annually by the Albuquerque Bernalillo County Water Utility Authority Board ("Board"). The Authority operating budget shall be formulated by the Authority's Executive Director and be consistent with the goals and objectives as established and approved by the Board. In order to maintain uniformity, other legislation and policies of the Authority are to be consistent with these goals and objectives as well. The Executive Director shall propose the budget to the Board at the April regularly scheduled meeting each year with the Board to approve the budget as proposed or amend and approve it at or before the May regularly scheduled meeting."

"(B) To adopt a goals and objectives process that encourages active citizen participation, that is linked to the budget process, that encourages performance measurement, and that is consistent with the desired conditions of the Authority's service area, the Authority shall coordinate its goal setting with the City of Albuquerque and Bernalillo County governments."

"(C) The Board's adoption of goals and objectives, which will be valuable in themselves, will be major factors in determining funding for Authority programs and improvements in the operating budget and the capital improvements budget."

"(D) This ordinance shall apply to all expenditures made by and approved by the Authority and shall supersede any existing policies governing the operating and capital budgets."

3. ABCWUA Board participates in the development of the Executive Director's proposed budget.

BUDGET ORDINANCE PROVISIONS:

§ 2-1-2 PREPARATION OF AUTHORITY BUDGET PROPOSAL.

"(A) The Authority shall prepare a proposed operating and capital budget taking into consideration the needs of the Authority's operations, and the resources anticipated to be available to the Authority for the fiscal year for which the budget is prepared."
"(B) The Executive Director shall propose an operating and capital budget to the Board at the April meeting of each year. This proposal shall include the budgets, capital program, and rate proposal which may propose changes in rates and fees." The public reviews and has an opportunity to comment on the proposed budget.

BUDGET ORDINANCE PROVISIONS:

§ 2-1-5 CONSIDERATION OF BUDGET PROPOSAL BY THE BOARD.

"(A) After receiving the budget proposal from the Executive Director the Board shall schedule at least two public hearings on it. As a result of its deliberations and the information gathered at the public hearings, the Board may amend the budget proposal at any time prior to the May regularly scheduled meeting."

4. Total revenues minus the expenses of the system shall be 133% or more of the debt service requirement.

RATE ORDINANCE PROVISIONS:

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

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

"(C) Increasing Minimum Monthly Fixed Charges. So long as there are Senior Obligations outstanding, if the determination of §1-1-2(B) above shows that the net revenues are less than 133% of the debt service requirements on the outstanding Senior Obligations, the fixed monthly charge will be increased for water and sewer accounts. So long as there are Subordinate Obligations outstanding, if the determination of §1-1-2(B) above shows that the Net Revenues are less than 120% of the Debt Service Requirements on the outstanding Senior Obligations and outstanding Subordinate Obligations, the fixed monthly charge will be increased for water and sewer accounts. The increase in the fixed monthly charge will be a percentage of the established fixed monthly charges that produce additional revenues so that if the adjusted charges had been effective the

previous quarter, the total Net Revenues would have been sufficient to meet the requirements of this paragraph. If the determination of §1-1-2(B) above shows that the Net 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."

5. Nonrecurring revenue should not be used to support recurring expense. Nonrecurring revenue is produced from a one-time event, such as a change in reserve policy. Nonrecurring expenses include studies, capital projects, capital outlay, computer equipment, buildings, land and one-time expenses to pay off a loan, prior year litigation expenses or other similar expenses.

§ 2-1-11 FINANCIAL AND MANAGEMENT REPORTS.

"(B) Reports shall be received by the Board on a timely basis according to the following schedule:
(4) The midyear report shall be received for introduction at the Board meeting in February. The midyear report shall be accompanied by a midyear appropriation resolution for those programs which are projected to be overspent and which the Executive Director determines that expenditure controls cannot bring the programs within the limits of administration expenditure authority, $100,000 or 5% of the line-item authority, whichever is lower. Mid-year appropriation adjustments shall be proposed only when caused by unexpected circumstances such as a natural disaster, unforeseen shifts in the national economy, and other events that constitute an emergency. Except as otherwise provided, the Executive Director and Board shall confine budget adjustments to the midyear resolution. The midyear report and midyear appropriation resolution shall be reviewed by the Board at a minimum of one public hearing."

The Authority's Debt and Capital Improvement Plan spending is integrated in the budget process and is mandated by ordinance.

§ 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% 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% 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."

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

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

LEASE POLICIES

In FY20, the Water Authority elected to early implement GASB Statement No. 87, Leases.

The Water Authority's Lease Policy & Guidelines provides for the following:

- Definition of a Lease – A contract that conveys control of the right to use another entity's nonfinancial asset, such as buildings, land, vehicles and equipment, as specified in the contract for a period of time in an exchange or exchange-like transaction. Any contract that meets this definition should be accounted for under this policy, unless specifically excluded in GASB Statement No. 87.

- Lease Term – The lease term is defined as the period during which a lessee/lessor has a noncancelable right to use an asset, plus the following periods, if applicable:
  - Periods covered by a lessee's/lessor's option to extend the lease if it is reasonably certain that the lessee/lessor will exercise that option
  - Periods covered by a lessee's/lessor's option to terminate the lease if it is reasonably certain that the lessee/lessor will not exercise that option

- The Water Authority will not recognize as a lease for the following:
  - A short-term lease – A lease that has a maximum possible term under the lease contract of 12 months (or less), including any options to extend
  - A lease <$5,000 – A lease amount that is under a $5,000 minimum lease threshold

  - GASB Statement No. 87 exceptions such as intangible assets (i.e. software licenses) and biological assets (i.e. water rights)

- The Water Authority will prepare the note disclosure and record all accounting entries in the Comprehensive Annual Financial Report (CAFR) according to the guidance of GASB Statement No. 87.

- The Water Authority will implement GASB Statement No. 87 effective July 1, 2018 for comparative statement presentation purposes.

DEBT POLICIES

The Water Authority's Debt Management Policy & Guidelines provides for the following:

- Full and timely payment of principal and interest on all outstanding debt
- System revenue bonds shall be used as a source of funding, after considering alternative funding sources, such as federal and state grants and pay as you go financing
- Debt shall be incurred to finance capital improvements and long-term assets associated with the water and wastewater system. Types of projects include, but not limited to, constructing, acquiring, enlarging, extending, bettering, repairing or improving the water and wastewater system facilities. For a more detailed list refer to chapter 72, article 1 section 10K NMSA 1978 as amended
- Capital improvements plans should be developed, approved and financed in accordance with Rate Ordinances and the Decade Plan
- The Water Authority will evaluate the impact of debt amounts and debt service requirements of any new proposed debt within the overall context of outstanding debt
- Principal and interest retirement schedules shall be structured to: (1) meet available cash flow available to service debt, (2) achieve a low borrowing cost for the Water Authority, (3) accommodate the debt service payments of existing debt and (4) respond to perceptions of market demand. Level debt payments and shorter maturities shall always be encouraged to demonstrate to ratepayers, investors and rating agencies that debt is being managed and retired prudentlyDebt incurred shall generally be limited to obligations with serial and term maturities but may be sold in the form of other structures if circumstances warrant
- 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 impact
- Debt incurred may be issued, at the discretion of the Water Authority, on either Senior, Subordinate or Super Subordinate liens on the System's net revenues
- The average life of the debt incurred should be no greater than the projected average life of the assets being financed
- The payment of debt shall be secured by net revenues of the joint water and wastewater system ("net system revenues")
- Maintain Post Issuance Compliance Guidelines that formalize post issuance compliance controls and procedures related to the Water Authority's financial and legal obligations (see Appendix)
- Inter-fund borrowing may be used as an alternative to conventional borrowing
- The Water Authority shall not pledge any Water Authority revenues to any conduit bond financings or guarantee indebtedness of others
- The Water Authority may use the services of qualified internal staff and outside advisors, including bond counsel, tax counsel, disclosure counsel, underwriters and financial advisors, to assist in the analysis, evaluation, and decision process

- The Water Authority shall select a method of sale that achieves the financial goals of the Water Authority and minimizes financing costs. Such sales can be competitive, negotiated or private placement, depending upon the project and market conditions. The recommendation by the Water Authority's Financial Advisor will be considered in the decision as to the most appropriate sale method
- The Water Authority shall make every attempt to earn and maintain the highest investment grade rating achievable
- Finance team members and Underwriters should be selected in accordance with the Water Authority Purchasing Procedures and the Debt Management Policy & Guidelines ("Debt Policy"). The selection should maximize the quality of services received while minimizing the cost to the Water Authority. Any subtractions or additions to the finance team members shall be subject to the Water Authority's Chief Financial Officer's ("CFO") approval. Selected underwriters and financial advisors shall adhere to the Municipal Securities Rule-making Board ("MSRB") and the Securities and Exchange Commission ("SEC") rules and regulations
- The Water Authority shall maintain good communications with bond rating agencies to ensure complete and clear understanding of the credit worthiness of the Water Authority
- Financial reports and bond official statements shall follow a policy of full, complete and accurate disclosure of financial conditions and operating results. All reports shall conform to guidelines issued by the Government Finance Officers Association ("GFOA"), Securities and Exchange Commission ("SEC") and the Internal Revenue Service ("IRS") to meet the disclosure needs of rating agencies, underwriters, investors and taxpayers.
- Federal income tax laws restrict the ability to earn arbitrage relating to tax-exempt bonds. Every attempt shall be made to eliminate or minimize negative arbitrage.

FIVE-YEAR GOALS AND ONE-YEAR OBJECTIVES

Approved Operating Budget FY22

MISSION AND OVERVIEW OF GOAL DEVELOPMENT

The Albuquerque Bernalillo County Water Utility Authority (Water Authority) identifies resources to provide quality water in sufficient quantity, collect and treat wastewater to acceptable standards, provide professional utility engineering services, and provide utility customer services. The Water Authority operates and maintains water pump stations, reservoirs, wells, water lines, the Southside Water Reclamation Plant, the Soil Amendment Facility, sewage lift stations, odor control facilities, and sanitary sewer lines. The Water Authority also works to secure the region with a safe, adequate, and sustainable water supply.

Mission

The mission of the Albuquerque Bernalillo County Water Utility Authority is to:

Assure responsive Customer Service.
Provide reliable, high quality, affordable and sustainable water supply, wastewater collection treatment, and reuse systems.
Support healthy, environmentally-sustainable, and economically-viable community.

Overview of Goal Development

The Water Authority Budget Ordinance requires that a Performance Plan be connected to the Five-Year Goals and contain performance measures that help guide the operating and capital budgets in prioritizing and allocating the Water Authority's financial resources. The Water Authority uses these measures to help improve its operational efficiency and effectiveness by identifying areas of improvement. The measures also provide a mechanism to conduct comparative analyses to implement quality improvement processes and enhance decision-making.

The Water Authority utilizes the *American Water Works Association's (AWWA) Benchmarking Performance Indicators Survey* (Survey) in developing its Performance Plan. The Survey provides utilities an opportunity to collect and track data from already identified and tested performance measures, based on the same collection process and definitions. The most recent survey data was compiled in 2019 by AWWA from 144 different utilities. The Performance Plan uses the survey data as a basis for its performance measures to track the Water Authority's performance with that of other utilities.

The FY22 Performance Plan can be found in the Appendix section of this budget document and on the Water Authority's website:

http://www.abcwua.org/your-water-authority-finances/

FIVE-YEAR GOAL DEVELOPMENT

The Water Authority's Performance Plan is organized by its Five-Year Goal areas which are modeled after AWWA's business model. This model is based on fifteen successful quality achievement programs, including the Malcolm Baldridge 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. The figure below shows the Water Authority's Five-Year Goals which parallels the AWWA model. The Water Authority also developed guiding goal statements for each goal area which explains the long-term desired result for each goal.

The Performance Plan contains 27 key performance measures. The performance measures are organized by the Five-Year Goal areas. The performance measures are linked to the Goal areas in that the tracking of the metric is used to achieve the long-term desired result for that goal.

Water Authority's Five-Year Goals & Guiding Goal Statements

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.

Business Planning & Management

Maintain a well-planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

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.

Water Supply & Operations

Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

Wastewater Collection & 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.

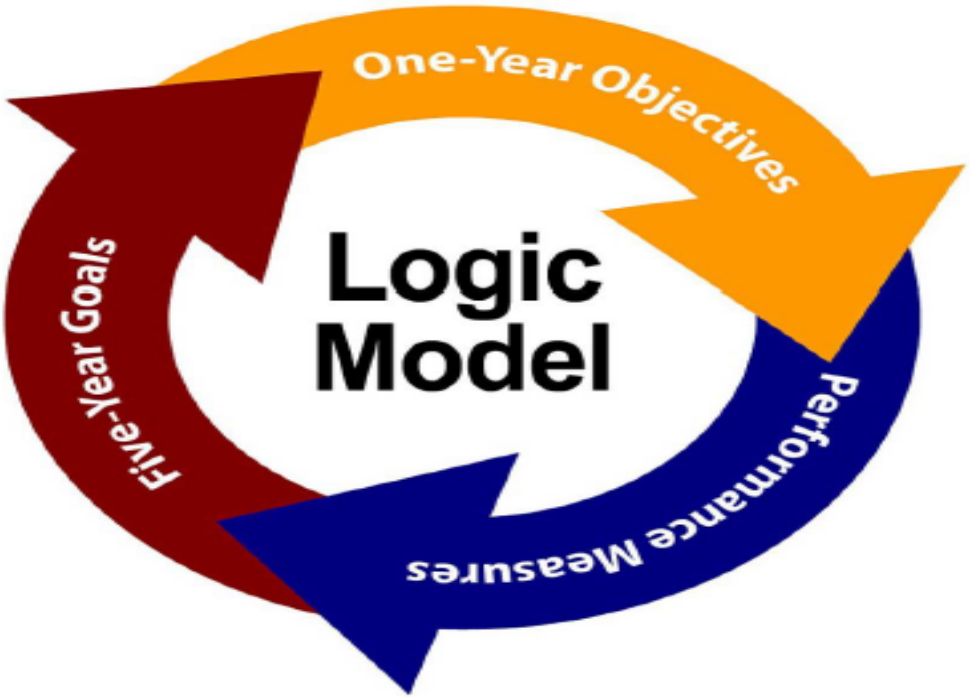
PERFORMANCE PLAN LOGIC MODEL

The Performance Plan presents each performance measure through an *evaluation logic model.* The logic model is a systematic and visual method that shows how performance measures quantify what is being done (inputs), how well it is being done (outputs), and why it is being done (outcomes). *Inputs* are the specific data needed to construct and calculate each performance measure. These resources may include dollars, hours, people or material resources used to produce an output. *Outputs* are the product of the calculation of the inputs and describe the level of effectiveness of each performance measure. The outputs are the metrics that are benchmarked with other utilities. *Outcomes* are the desired result of the performance measure that the Water Authority would like to achieve relating to its long-range goals and with its shorter-term objectives. The logic model is used to show where the organization wants to be and how it can get there.

Simply stated, the performance measures identify gaps in service delivery or performance. They are used to help monitor the Water Authority's performance and to develop performance targets. The Water Authority sets performance targets that are aligned with the desired outcomes to determine how effective or efficient the utility is in achieving the desired outcome. The Water Authority uses the desired outcomes to create an ongoing discussion with its stakeholders and show why decisions are made in prioritizing and allocating financial resources.

The Five-Year Goals and One-Year Objectives are incorporated into the logic model. The figure below shows the alignment between the goals, objectives and performance measures in the logic model. With the performance measures being used to identify gaps, the One-Year Objectives, which are policy directives from the Water Authority Board, are used to close performance or service delivery gaps and improve performance levels. It should be noted that not all One-Year Objectives are tied to performance measures or have a measurable component. Some Objectives are related to completing projects or improving or implementing programs.

Logic Model Alignment of Goals, Objectives and Performance Measures



FY22 GOALS AND OBJECTIVES

Below are the Goals and One-Year Objectives for FY22, as approved by the Water Authority Board.

Goal 1: Water Supply and Operations

Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

- Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.
- Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.
- Develop a long-term strategy for utilizing existing wells that are currently out of service within the water system by the end of the 4th Quarter of FY22.
- Submit annual treatment data to the Partnership for Safe Water-Treatment program for inclusion in the program's annual report of aggregated system water quality data. Maintain individual and combined filter effluent turbidity less than 0.1 NTU more than 95% of time in operation. 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 FY22. Continue working towards the application for the Phase IV Excellence in Water Treatment Award in the Partnership for Safe Water-Treatment.
- Submit annual distribution data to the Partnership for Safe Water-Distribution 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 FY22.
- To improve the validated water audit inputs for apparent water loss, test a minimum of 300 small meters to support the water audit and strategic water loss plan by the end of the 4th Quarter of FY22. Test small meters in accordance with the recommendations of the water audit recently conducted by the Southwest Environmental Finance Center.
- To improve reliability and reduce interrupted water service, exercise 4,000 isolation valves by the end of the 4th Quarter of FY22.
- As part of the water distribution system preventative maintenance program, implement a flushing program that uses a systematic approach to flush water lines, filtering the water using the new NoDes system before returning it to distribution by the end of the 4th Quarter of FY22. Continue monitoring and reporting the occurrence of complaints before and after flushing to evaluate whether the flushing program improved water quality in the pilot area. Identify metrics to be used for measuring the effectiveness of this process moving forward. Utilize the new unidirectional flushing (UDF) module of the InfoWater hydraulic model to assist the pilot program by the end of the 4th Quarter of FY22.
- Work with the Non-Revenue Water Loss Committee on the implementation of water loss control strategies by identifying areas of improvement recommended in the water loss report and reporting activities through the end of the 4th Quarter of FY22.
- Locate water leaks by 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 FY22; Track, evaluate, and report on pilot-scale Echologics acoustic leak detection system on a quarterly basis in FY22.
- To prepare for increased climate variability, encourage installation of water conservative landscaping, while working towards the *Water 2120* conservation goal of 110 gallons per capita

per day (gpcd) by 2037 by implementing the following activities:

- ❖ Perform a smart controller field performance study on the top 5% of residential customers,
- ❖ Increase smart controller rebate adjustments and Xeriscape square feet conversions by comparing current fiscal year to prior fiscal years,
- ❖ Increase the amount of commercial class customers rebate adjustments by comparing from baseline (prior fiscal year) to current fiscal year;
- ❖ Work with the Public Information Officer to develop outreach targeting water use messaging that incorporates climate variability. Present the new messaging to management by the end of the 3rd Quarter of FY22,
- ❖ Develop a Landscape Irrigation Guide to educate customers about the importance of efficient irrigation and how to efficiently water landscapes by the end of the 4th Quarter of FY22.

- ➢ Identify a new aquifer storage and recovery (ASR) project location. Work with the New Mexico Environment Department and Office of the State Engineer to begin ASR permitting by the end of the 4th Quarter of FY22.
- ➢ Track and report conservation education outreach to service are customers and meet the following targets: 1) 100 Irrigation Audits; 2) 45 Meetings with Landscapers, 3) 30 Meetings with Property Managers; and 4) two Water Conservation Open House Meetings by the end of the 4th Quarter of FY22.
- ➢ To better educate children on the importance of water and resource planning, continue to collaborate with ¡Explora! to design interactive water exhibits for the new STEM center which is planned to open in Q2 of FY22.
- ➢ Implement the Rivers and Aquifers Protection Plan (RAPP), the Water Authority's source water protection plan through:
  - ❖ Complete source water assessments for surface water and groundwater by 2nd Quarter of FY22. The source water assessments will utilize the source water protection areas (SWPAs) developed from the capture analysis and the updated potential sources of contamination (PSOC) inventory from FY21. Review the results of the source water assessments to determine if changes are required to the RAPP and protection measures,
  - ❖ Tracking and review of site data and documents for priority groundwater contamination sites through the end of the 4th Quarter of FY22,
  - ❖ Collaboration and coordination with other agencies, including support of the Water Protection Advisory Board (WPAB) and the Office of Natural Resources Trustee through the end of the 4th Quarter of FY22,
  - ❖ Contracting with the NM Bureau of Geology and Mineral Resources to provide an update to the Middle Rio Grande Basin Water Quality Study by the end of the 4th Quarter of FY22.
- ➢ Provide leadership and support of the Middle Rio Grande Endangered Species Collaborative Program (ESA Collaborative Program) through: 1) Participation in the Collaborative Program Executive Committee and 2) Participating in the development of adaptive management practices for the program.
- ➢ Complete acquisition of easements for additional storage in Abiquiu Reservoir by the end of the 4th Quarter of FY22. Continue towards permitting and environmental approvals for storage of native water in Abiquiu Reservoir through the 4th Quarter of FY22.
- ➢ Initiate, site, drill, install, and sample a groundwater monitoring well at the northernmost extent of groundwater contamination at the Kirtland Air Force Base (KAFB) Bulk Fuels Facility jet fuel leak site by 4th Quarter of FY22. Construction of this well will include the development of a work plan and sampling and analysis plan (SAP) with New Mexico Environment Department (NMED) input. Work with Water Authority Public Information Office to coordinate neighborhood communications around the need for and drilling of the well.

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.

- Limit overall permit excursions to no more than 5 operating discharge permit violations through the end of the 4th Quarter of FY22.
- Beneficially reuse biosolids by diverting 30% to compost thru the end of the 4th Quarter of FY22.
- Complete WasteWater 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 FY22.
- Continue work on the Partnership for Clean Water program for the Southside Water Reclamation Plant (SWRP) to optimize system operations and performance; Continue work on outstanding items 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 FY22.
- In accordance with the Capacity, Management, Operations and Management (CMOM) Plan, televise and assess the condition of approximately 5% of the small diameter sanitary sewer system by the end of the 4th Quarter of FY22. Confirm that CCTV (video) inspection data is subsequently uploaded to Maximo and the ITpipes Repository. ITpipes reports that summarize the video data are then immediately available in various standard formats.
- In FY21, in accordance with the Collection System Odor and Corrosion Control Master Plan-Treatment Alternatives, dated August 12, 2019, the Water Authority identified primary chemical feed sites to improve odor and corrosion issues on the Tijeras Interceptor and the Westside Interceptors. In FY22, the Water Authority will develop conceptual level designs to verify the viability of the proposed locations. If verified, continue with design in FY22. If determined to be not viable by the end of the 2nd Quarter of FY22, return with explanation to Collections Section for revision of the siting study.
- Manage chemical usage to maintain collection system corrosion and odor control, with a goal of zero odors, while considering impacts on wastewater treatment operations and effluent quality. Utilize collections system and wastewater treatment monitoring data, winter-summer optimized chemical dosing recommendations from the Master Plan dated August 12, 2019, and sewer odor/corrosion modeling results applied as appropriate. Identify metrics for monitoring and reporting by the end of the 1st Quarter of FY22. Monitor and report metrics through the end of the 4th Quarter of FY22.
- Monitor compliance with the Water Authority's Cross Connection Prevention and Control Ordinance. Obtain a compliance rate goal of 75% through the end of the 4th Quarter of FY22.
- 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. The compliance rate goal is 87% for each category through the end of the 4th Quarter of FY22. Evaluate the effectiveness of this metric by the end of the 2nd Quarter of FY22. Track and report data through the end of the 4th Quarter of FY22.
- 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, to coordinate efforts to reduce FOG discharges. Track and report the number of SSOs due to FOG compared with previous years through the end of the 4th Quarter of FY22.

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.

- Improve customer satisfaction and operational efficiency in achieving the four call-center targets through the 4th Quarter of FY22:
  - Average Wait Time of less than 1:00 minute,
  - Average Contact Time of less than 4:00 minutes,
  - Abandoned Call Ratio of less than 3,
  - First Call Resolution of greater than 95%,
  - Average call quality of greater than 85%.
- Replace paper logs with electronic record of inbound calls to Dispatch by the end of the 4th Quarter of FY22.
- Improve customer satisfaction by achieving a billing accuracy ratio of less than 8 errors per 10,000 bills through the 4th Quarter of FY22.
- Continue implementation of the Automated Meter Infrastructure (AMI) project by replacing 30,000 aging water meters with smart meters to increase revenue, support conservation efforts, and provide better customer service by the end of the 4th Quarter of FY22.
- Develop and implement a Strategic Plan for Internal Communications through the end of the 4th Quarter of FY22 and report activities quarterly.
- Conduct Customer Conversation meetings to engage customers and obtain input from customers on the Water Authority's activities through the end of the 4th Quarter of FY22.
- Conduct a customer opinion survey in order to assess the Water Authority's performance from the customer's viewpoint from previous surveys by the end of the 4th Quarter of FY22.
- Install the Spanish language add-in to provide Spanish translation on the new website by the end of the 1st Quarter of FY22.

Goal 4: Business Planning and Management

Maintain a well-planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

- Expend $64 million in water and wastewater capital rehabilitation and replacement programs to replace aging, high risk assets that are past their useful life by the end of the 4th Quarter of FY22. $1 million shall be dedicated and used for identifying and replacing steel water pipes in critical or poor condition by the end of the 4th Quarter of FY22.
- Prepare a report on the status of the implementation of the Reclamation Rehabilitation Asset Management Plan (RRAMP) including activities completed and remaining work by the end of the 1st Quarter of FY22. Continue implementation of the RRAMP by planning, designing and constructing SWRP improvements through the end of the 4th Quarter of FY22.
- Implement at least one planned Interceptor Rehabilitation project in FY22, and complete at least one interceptor design packages by the 4th Quarter of FY22; Implement at least one planned Small Diameter Sanitary Sewer Rehabilitation project in FY22.
- Coordinate with Bernalillo County to design and initiate construction of a force main to convey wastewater from the Municipal Detention Center (MDC) to the Water Authority collections system by the 4th Quarter of FY22.
- Work with the Navajo Nation to design and construct water conveyance infrastructure to deliver water provided by the Navajo Nation to To'Hajiilee by the end of the 4th Quarter of FY22.
- Solicit feedback on the draft of the Utility Development Guide and incorporate feedback by the end of the 2nd Quarter of FY22.

Circulate a final draft for review by the end of the 4th Quarter of FY22.

- Finalize Operating Plans for Centralized Engineering, Field, Water Resources, and Asset Management, to be used to inform/train new staff and for existing staff to use as resource by the end of the 4th Quarter of FY22.
- Complete a comprehensive asset management plan to understand and document the asset condition, risk assessment, remaining useful life, and replacement cost for every asset by the end of the 4th Quarter of FY23. Input this information into the enterprise asset management system (EAMS) and begin life cycle cost accounting.
- Continue monitoring progress on the Strategic Asset Management Program (SAMP) and report quarterly through the end of the 4th Quarter of FY22. Track and report metrics on asset registry accuracy and report status towards achieving target(s) by the end of the 4th Quarter of FY22.
- To promote a continued Culture of Security in accordance with the AWWA G430 standard within the Water Authority, develop policies and procedures that include strategies for internal communication and trainings on security-related topics. Track and measure metrics that are directly related to National Infrastructure Protection Plan (NIPP) Water Sector-Specific Plan (SSP) and America's Infrastructure ACT (AWIA). Conduct at least 2 table-top exercises for security and cybersecurity that include representatives from across the organization. Based on the countermeasures identified in Phase 1 of the Water Authority's Final Security Plan, implement at least 3 of the countermeasures by the end of the 4th Quarter of FY22.
- Complete the annual update and review of the Comprehensive Information Technology Security Plan and related policies that are aligned with the standards, guidelines, and best practices of the National Institute of Standards and Technology (NIST) Cybersecurity Framework by the end of the 4th Quarter of FY22. Track and measure metrics that are directly related to NIST standards. Incorporate specific standards and policies that directly relate to the utilities Supervisory Controls and Data Acquisition (SCADA) systems.
- Continue implementation of the SCADA Master Program; Implement both short-term and long-term goals directly tied to the sequencing of migrating to a single SCADA platform for surface water, groundwater, wastewater treatment and collections systems by the end of the 4th Quarter of FY22. Specific FY22 projects include the SWRP DCS HMI upgrade, Collection/Stormwater PLC replacement, and Network refresh for SWRP SCADA network.
- Complete annual maintenance for all network and infrastructure items. This includes networks, firewalls, servers, telephony, mobility and data storage for both information technology and SCADA. Specific projects include the evaluation of the SCADA network and infrastructure for SWRP by the end of the 3rd Quarter of FY22. Begin installation and setup of such infrastructure to upgrade the SWRP SCADA systems to mirror the IT infrastructure model that was installed at the Surface Water Treatment Plant by the end of th 4th Quarter of FY22.
- Upgrade and patch all enterprise applications to add enhancements for cybersecurity purposes, support, and to leverage functionality enhancements to improve business processes, capture and use data intelligently, and create efficiencies.
- Complete a gap analysis and best practices review to identify current and future geographic information system (GIS) needs by the end of the 2nd Quarter of FY22. Follow up on action items and report status quarterly through the end of the 4th Quarter of FY22.
- Continue to identify opportunities to apply machine learning to assess current operations by the end of the 4th Quarter of FY22. Opportunities might include strategies that use predictive analytics on near real-time data for early warning of potential issues and opportunities to integrate capabilities of the Water Authority's existing modeling tools. Expand usage of Splunk data analytics tool to implement functions for cybersecurity, water quality, and/or asset management by the end of the 4th Quarter of

FY22. Develop a strategy for the utilization of machine learning and analytics to predict failure of linear and vertical assets by the end of the 4th Quarter of FY22.

- Maintain the Compliance Division Regulatory Compliance 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, local laws and ordinances, and issues involving emerging contaminants to identify and assess potential impacts on the Water Authority. Provide quarterly reports through the end of the 4th Quarter of FY22.
- Collect, monitor, and report weekly, monthly and quarterly key laboratory performance metrics to include:
  - WQL results approved and reported for each laboratory section (chemistry, microbiology, metals, and external labs). Maintain greater than 0.5 results reported per productive hour per quarter in each analytical section through end of the 4th Quarter of FY22.
  - Laboratory Productivity (results reported per productive hour, results sent to subcontract laboratories in lieu of in-house testing). Maintain greater than 2,000 results per quarter in each analytical section through the end of the 4th Quarter of FY22.
  - Percentage of results reported late (turnaround time). Maintain less than 10 percent results reported late per quarter and provide quarterly results through the end of the 4th Quarter of FY22.
- Continue to develop LabVantage (laboratory information management system) throughout FY22 to increase the automation of data entry to reduce data entry errors and reduce the amount of paper used at the laboratory. Begin developing reports in LabVantage by the end of the 4th Quarter of FY22.
- Utilize the Environmental Monitoring Program to monitor the reliability and consistency of results from Compliance field instrumentation and sample collection techniques. Conduct at least one internal audit per year. Conduct and report on internal audits of sampling procedures and report results as they pertain to regulatory requirements and standard operating procedures. Issue corrective action response requests as needed and track and report on their progress. Ensure Compliance Division field instruments are calibrated as necessary and that personnel demonstrate capability in sample collection and measurement. Monitor and report on corrective action response report (CARR) closure duration quarterly through the end of the 4th Quarter of FY22.
- Maintain accreditation with the American Association for Laboratory Accreditation (A2LA) by addressing any changes resulting from the on-site assessment of the Water Quality Laboratory. Conduct internal audits, Standard Operating Procedure (SOP) revisions, and identify actions to address risks and opportunities as required by ISO/IEC 17025:2017. Implement any changes resulting from the 2019 Methods Update Rule. Track and report on corrective actions and risk assessment responses. Maintain a closure duration of less than 60 days per CARR and an average completion of less than 30 days for all CARRs per fiscal year through the end of the 4th Quarter of FY22.
- Prepare for the Revised Lead and Copper Rule by developing a system for a lead service line inventory and to identify and track monitoring at all schools and child-care centers in the service area by the end of the 4th Quarter of FY22. The final rule was published in January 2021 and must be implemented by the end of the 2nd Quarter of FY24.
- Evaluate water and sewer rate structures to ensure equity within the structures by the end of the 4th Quarter of FY22. Complete an affordability study that utilizes the methodology described in the 2019 report titled "Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector".
- Consistent with the effective utility management (EUM) continuous improvement

process, complete the biennial attribute self-assessment using the EUM Benchmarking Assessment Tool by the end of the 2nd Quarter of FY22 and incorporate findings into the FY23 Goals and Objectives.

Goal 5: Organizational 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.

- Recognize at least 15% of the work force through initiatives such as employee incentive awards, on-the-spot awards, and years of service awards through the 4th Quarter of FY22.
- Complete two employee wellness challenges per fiscal quarter focusing on nutrition, physical activity and weight loss, and disease and injury prevention to employees with a 60 percent or greater overall completion rate by the end of the 4th Quarter of FY22. Increase time spent stretching to 4,125 hours to improve productivity and wellness of employees by the end of the 4th Quarter of FY22. Incorporate more remote wellness options for employees to participate in while keeping social distance, including video classes, and instructional videos by the end of the 4th Quarter of FY22.
- Maintain an average utility-wide vacancy rate of no greater than 5% through the end of FY22. Maintain an average number of days to fill positions of 40 days or less and report quarterly through the end of the 4th Quarter of FY22.
- To promote a continued Culture of Safety in the Water Authority, provide a variety of job-related safety trainings, opportunities for recognition and safety communications to create awareness and promote good work practices. Track and report the hours of training offered and percent attendance by working group by the end of the 1st Quarter of FY21. Track and report the hours of training offered and percent attendance by working group through the end of the 4th Quarter of FY22 and study the data to identify trends that could be mitigated by implementing tailored work practices, standard operating procedures (SOPs), and customized safety trainings. Reduce injury hours to 2,600 hours or less to improved productivity and reliability of services provided by employees by the end of the 4th Quarter of FY22.
- Provide employees with job-related training and monitor hours of training completed. Maintain an average of at least 25 hours of training per employee through the end of the 4th Quarter of FY22.
- Consistent with the Water Research Foundation Project 4907 Utility Innovation Project, develop a Strategic Plan for the Water Authority's Innovation Program by the end of the 4th Quarter of FY22.
- Develop a formalized plan for remote working options within the Water Authority by the end of the 1st Quarter of FY22.

APPROVED BUDGET
AND
FINANCIAL CONSOLIDATIONS

Approved
Operating Budget
FY22

ABCWUA FUNDS

The Water Authority accounts for all activities to provide water and wastewater services for the residents of both the City of Albuquerque and Bernalillo County. These activities include, but are not limited to, administration, operation, maintenance, financing and related debt service, billing and collection. This proprietary type Water Authority provides services which are intended to be financed primarily through user charges or activities where periodic determination of net income is appropriate.

Fund 21 - General Fund - To account for the general operations of providing water and wastewater services in the Water Authority's service area.

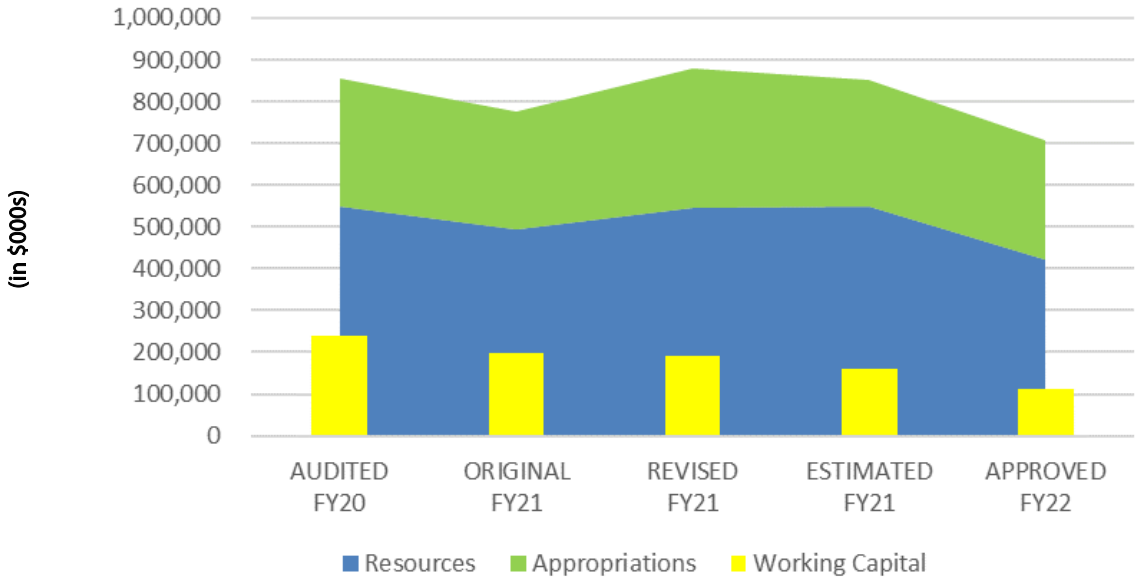
Fund 31 - Debt Service Fund - To accumulate the monies to pay the debt service associated with water and wastewater services.

Fund 27 – Water 2120 Projects/ Fund 28 – Capital Rehab Fund/ Fund 29 – Capital Growth Fund - To account for the operations of the Water Authority's Capital Improvement Program.

CONSOLIDATED RESOURCES, APPROPRIATIONS AND WORKING CAPITAL BALANCE

CONSOLIDATED RESOURCES, APPROPRIATIONS, AND FUND BALANCE

($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Proceed Revenues	87,784	-	48,600	49,195	-	(48,600)
Miscellaneous Revenues	6,509	10,932	10,932	4,925	10,543	(389)
Enterprise Revenues	234,274	228,326	229,526	235,296	228,761	(765)
Transfers from Other Funds	115,066	119,433	122,233	122,233	118,433	(3,800)
Interfund Adjustments	(115,066)	(119,433)	(122,233)	(122,233)	(118,433)	3,800
Total Current Resources	328,567	239,258	289,058	289,416	239,304	(49,754)
Add from Working Capital	-	6,550	6,550	9,350	8,461	1,911
Beginning Working Capital Balance	219,689	248,823	248,823	248,823	170,361	(78,462)
TOTAL RESOURCES	548,256	494,631	544,431	547,589	418,126	(126,305)
APPROPRIATIONS:						
Enterprise Operations	117,292	122,355	122,355	118,093	124,897	2,542
Debt Service	83,888	85,900	85,900	85,900	81,754	(4,146)
CIP Water 2120, Basic Rehab & Growth	106,636	71,670	126,502	101,636	80,393	(46,109)
Transfers to Other Funds:	115,066	119,433	122,233	122,233	118,433	(3,800)
Interfund Adjustments	(115,066)	(119,433)	(122,233)	(122,233)	(118,433)	3,800
TOTAL APPROPRIATIONS	307,816	279,925	334,757	305,629	287,044	(47,713)
Adj to Working Capital Balance	8,384	(6,550)	(6,550)	(71,600)	(8,461)	(1,911)
ENDING WORKING CAPITAL BALANCE	248,823	208,156	203,124	170,361	122,621	(80,503)
Rate Reserve	(9,000)	(9,000)	(9,000)	(9,000)	(9,000)	-
Risk Reserve	(500)	(500)	(500)	(500)	(500)	-
Soil Amendment Facility Reserve	(1,486)	(1,486)	(1,486)	(1,486)	(1,486)	-
ENDING WORKING CAPITAL BALANCE (NET OF RESERVES)	237,836	197,170	192,139	159,375	111,635	(80,504)

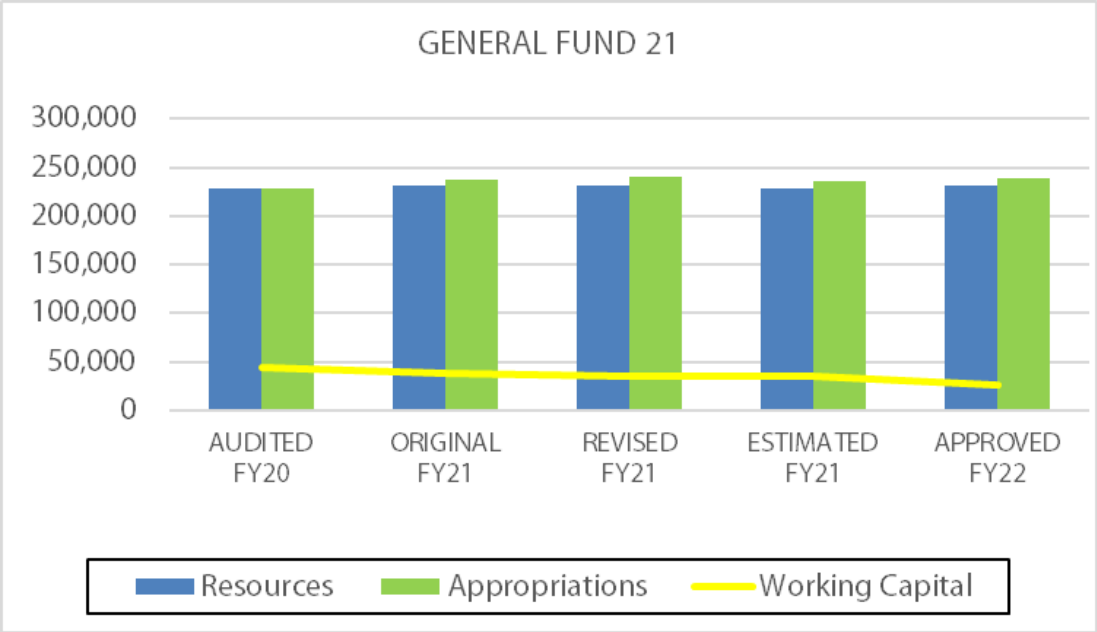


COMBINED FY22 FUNDS BUDGET

($000's)	GENERAL FUND FUND 21	DEBT SERVICE FUND 31	CAPITAL FUNDS 27/28/29	FY22 TOTALS
RESOURCES				
Interest	500			500
Miscellaneous	7,909		435	8,344
Water	123,355			123,355
Water Resources Management	4,500			4,500
Wastewater	92,471			92,471
Solid Waste Admin Fee	1,761			1,761
DMD Admin Fee	373			373
Utility Expansion Charges		8,000		8,000
Transfers	-	77,815	40,618	118,433
TOTAL CURRENT RESOURCES	230,869	85,815	41,053	357,737
Add from Working Capital	8,461	-	-	8,461
TOTAL RESOURCES	239,330	85,815	41,053	366,198
APPROPRIATIONS				
Wages	42,745			42,745
Fringe Benefits	19,765			19,765
Other Services	19			19
Utilities	12,713			12,713
Supplies	11,976			11,976
Travel, Training, and Dues	554			554
Repairs and Maintenance	14,652			14,652
Vehicle Maintenance	3,046			3,046
WC, Insurance, Tort, and Other Liab	3,506			3,506
NM Water Conservation Fee	656			656
Interest	82			82
Principal	1,320			1,320
Admin Svcs/OPEB	494			494
Contractual Services	13,369		80,393	93,762
Transfer to Capital Fund	36,618	4,000		40,618
Transfer to Debt Service	77,815			77,815
Debt Service Payments		81,754		81,754
TOTAL APPROPRIATIONS	239,330	85,754	80,393	405,477
Revenue Over (Under) Expenditures	1	61	(39,340)	(39,278)
Adjustment to Fund Balance	8,461	-	-	8,461
Beginning Fund Balance	46,138	52,432	71,791	170,361
Rate Reserve	9,000	-	-	9,000
Risk Reserve	500			500
Soil Amendment Facility Reserve	1,486			1,486
ENDING FUND BALANCE (NET OF THE RATE RESERVE)	**26,691**	**52,493**	**32,451**	**111,635**

GENERAL FUND – 21
RESOURCES, APPROPRIATIONS AND WORKING CAPITAL BALANCE

The General Fund budget provides quality water and wastewater removal to its ratepayers. This fund handles all operating dollars for the Water Authority. Transfers to the debt service fund and capital funds are also maintained in this fund.



Resources

General Fund revenue budget for FY22 is $239.3 million, including an addition of $8.56 million from working capital. Of the total revenue, 92.1% is comprised of charges for water and wastewater services. FY22 revenue is estimated to be $1.5 million above the FY21 revised budget.

Appropriations

General Fund appropriation budget for FY22 is $239.3 million. Operating expenses contain a net decrease of $1.3 million from the FY21 revised budget. This includes an increase of $1.7 million in salaries and benefits, an increase of $0.8 million in operating expenses, an increase of $0.2 million for the Capital funds transfer and a decrease of $4.0 million for the Debt Service fund transfer. Personnel expenses include a 2% cost of living adjustment, as per labor agreements and a 5% increase in benefits.

In FY21, there was a one-time $2.8 million transfer from the General Fund to the Capital fund for various plant facility improvements.

FY22 approved issue papers submitted by divisions total $1.6 million. A detailed listing of the approved issue papers is on page 75.

Reserves

For FY22, the Rate Reserve is $9.0 million; the Risk Reserve is $0.5 million; and the Soil Amendment Facility Reserve is $1.5 million.

Working Capital

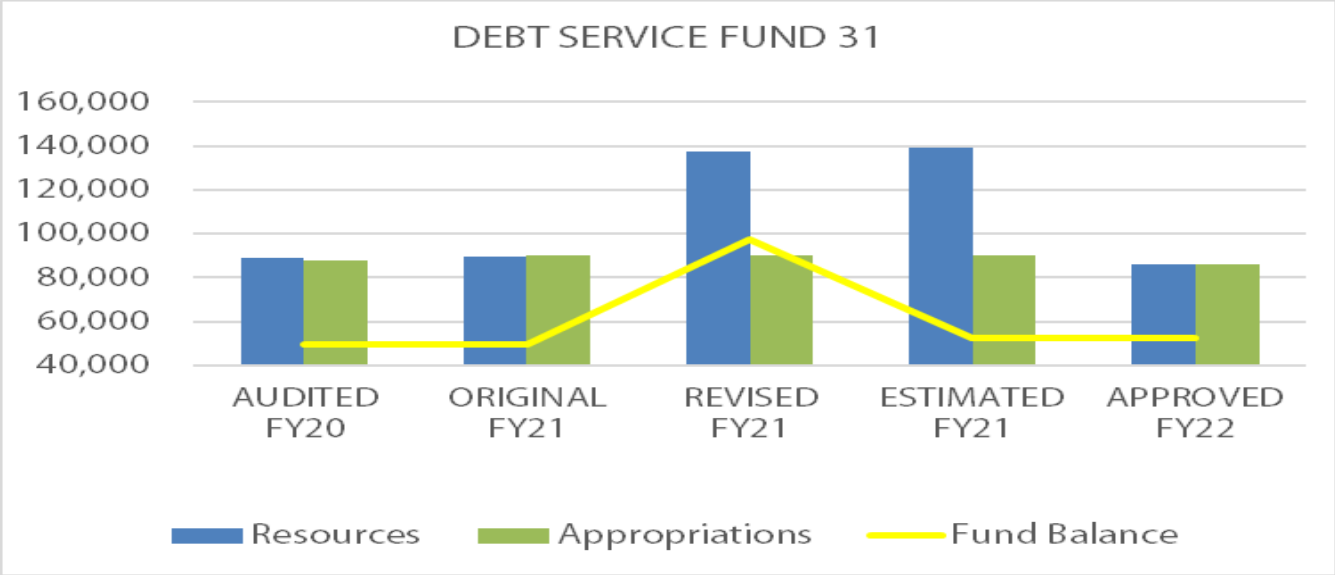
The Water Authority continues to strive to achieve a Fund Balance equal to 1/12th of the annual budgeted operating expenses. The Working Capital balance at June 30, 2022 is projected to be $26.7 million, net of the reserves.

GENERAL FUND – 21
RESOURCES, APPROPRIATIONS AND WORKING CAPITAL BALANCE

($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Rate Revenues:						
Water Service	104,909	90,578	90,578	104,374	90,578	-
Water Facilities Rehab	37,247	32,402	32,402	37,760	32,402	-
Wastewater Service	41,949	64,869	64,869	42,006	64,869	-
Wastewater Facilities Rehab	34,115	27,602	27,602	34,321	27,602	-
Contr/Aid/Hookups	386	375	375	366	375	-
Water Resources Management	4,269	4,500	4,500	4,372	4,500	-
Total Rate Revenue	**222,875**	**220,326**	**220,326**	**223,199**	**220,326**	**-**
Other Revenues:						
Solid Waste Admin Fee	1,637	1,673	1,673	1,673	1,761	88
DMD Admin Fee	496	350	350	350	373	23
Interest on Investments	1,885	1,000	1,000	214	500	(500)
Miscellaneous Revenue	2,065	7,909	7,909	2,307	7,909	-
Total Other Revenue	**6,083**	**10,932**	**10,932**	**4,544**	**10,543**	**(389)**
Total Current Resources	228,958	231,258	231,258	227,743	230,869	(389)
Add from Working Capital	-	6,550	6,550	9,350	8,461	1,911
Beginning Working Capital Balance	53,634	54,913	54,913	54,913	46,138	(8,776)
TOTAL RESOURCES	**282,592**	**292,721**	**292,721**	**292,006**	**285,468**	**(7,253)**
APPROPRIATIONS:						
Programs:						
Administration	2,462	1,864	1,864	1,948	1,797	(67)
Risk	3,825	4,803	4,803	4,958	5,643	840
Legal	907	796	796	882	799	3
Human Resources	1,803	1,847	1,847	1,729	1,778	(69)
Finance	7,268	7,654	7,707	7,420	7,984	277
Customer Services	4,772	5,276	5,193	4,899	5,226	33
Information Technology	8,158	8,323	8,364	9,184	8,728	364
Wastewater Plant	12,175	11,669	11,669	11,833	11,869	200
San Juan-Chama Water Treatment Plant	4,172	4,528	4,528	4,241	4,570	42
Groundwater Operations	6,490	6,793	6,823	6,399	6,883	60
Wastewater Collection	7,138	7,228	7,228	7,049	7,571	343
Water Field Operations	18,494	20,519	20,519	18,008	20,729	210
Compliance	5,047	5,604	5,563	4,605	5,682	119
Planning & Engineering	3,398	-	-	-	-	-
Central Engineering	-	3,116	3,116	2,941	3,178	62
Asset Management	269	552	552	552	601	49
Planning & Utility Development	-	639	639	552	666	27
Water Resources	3,656	4,599	4,599	3,253	4,643	44
Power & Chemicals	23,279	21,487	21,487	22,357	21,487	-
Taxes	284	656	656	1,007	656	-
Overhead	1,252	1,655	1,655	1,597	1,660	5
San Juan-Chama	2,444	2,747	2,747	2,679	2,747	-
Total Enterprise Appropriations	**117,292**	**122,355**	**122,355**	**118,093**	**124,897**	**2,542**
Transfers to Other Funds:						
Rehab Fund - 28	31,618	33,618	36,418	36,418	36,618	200
Debt Service Fund - 31	79,411	81,815	81,815	81,815	77,815	(4,000)
Total Transfers	**111,029**	**115,433**	**118,233**	**118,233**	**114,433**	**(3,800)**
TOTAL APPROPRIATIONS	**228,321**	**237,788**	**240,588**	**236,326**	**239,330**	**(1,258)**
Adjustment to Working Capital	642	(6,550)	(6,550)	(9,542)	(8,461)	(1,911)
ENDING WORKING CAPITAL BALANCE	**54,913**	**48,383**	**45,583**	**46,138**	**37,677**	**(7,906)**
Rate Reserve	(9,000)	(9,000)	(9,000)	(9,000)	(9,000)	-
Risk Reserve	(500)	(500)	(500)	(500)	(500)	-
Soil Amendment Facility Reserve	(1,486)	(1,486)	(1,486)	(1,486)	(1,486)	-
ENDING WORKING CAPITAL BALANCE (NET OF RESERVES)	**43,927**	**37,397**	**34,597**	**35,152**	**26,691**	**(7,906)**

DEBT SERVICE FUND - 31
RESOURCES, APPROPRIATIONS AND FUND BALANCE

The Debt Service Fund is used to accumulate monies for payment of principal and interest on revenue bonds secured by pledge of water and wastewater revenues. It is the Water Authority's policy to allocate the annual amount of Utility Expansion Charge (UEC) revenues as follows: $6 million remains in this fund and the remainder is transferred to the capital funds to be used for cash financing of growth projects.



Resources

Debt Service resources approved for FY22 are $85.8 million; a decrease of $4.0 million. The current resources are comprised of revenue from Utility Expansion Charges (UEC) and transfers from the General Fund. UEC revenue remains at $8.0 million based on the current trend in residential development. The transfer from the General Fund decreases $4.0 million based on the Water Authority's debt service schedule.

Appropriations

Appropriations total $85.8 million, of which $81.8 million is principal and interest payments for outstanding debt and $4.0 million is a transfer to the Growth Capital fund. Debt service payments decrease in FY22 $4.1 million, based on the Water Authority's debt service schedule. The transfer to the capital fund remains at $4.0 million.

Fund Balance

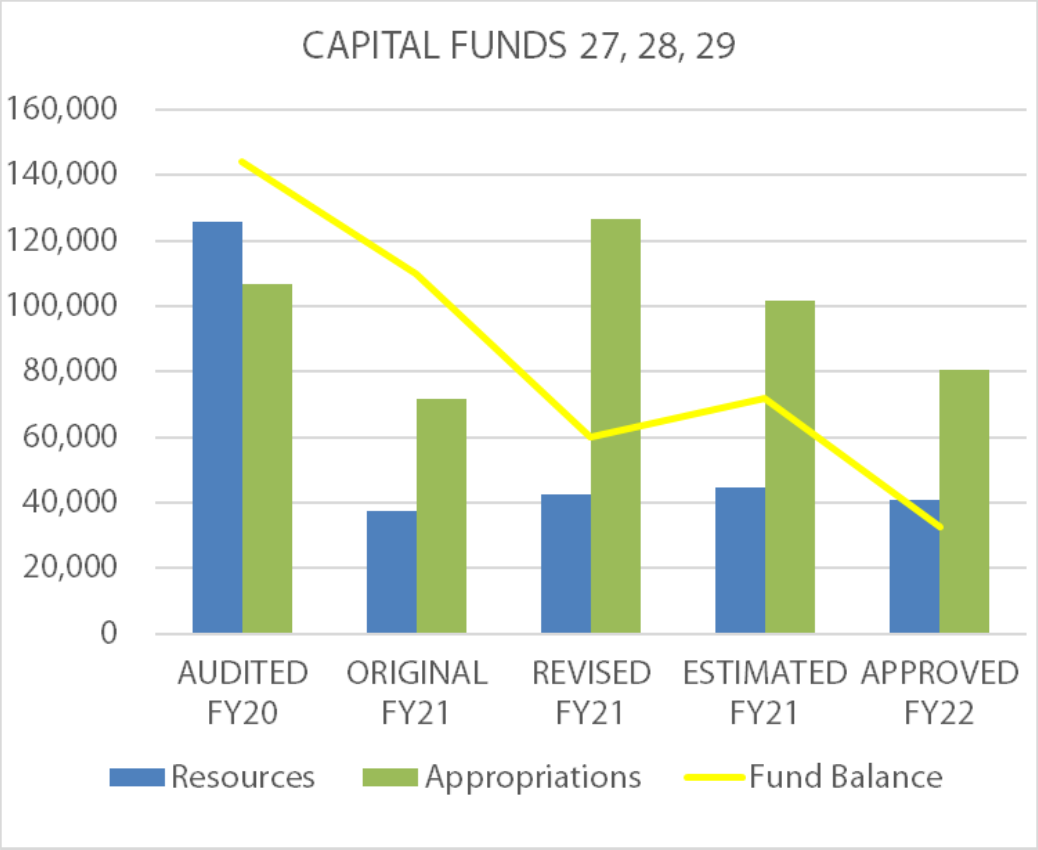
Fund Balance at June 30, 2022 is projected to be $52.5 million.

DEBT SERVICE FUND - 31
RESOURCES, APPROPRIATIONS AND FUND BALANCE

($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Proceed Revenues	6	-	47,800	47,800	-	(47,800)
Miscellaneous Revenues	400	-	-	464	-	-
Utility Expansion Charges	8,917	8,000	8,000	9,041	8,000	-
Transfers from Other Funds	79,421	81,815	81,815	81,815	77,815	(4,000)
Total Current Resources	88,744	89,815	137,615	139,120	85,815	(51,800)
Beginning Fund Balance	49,939	49,731	49,731	49,731	52,432	2,701
TOTAL RESOURCES	138,683	139,546	187,346	188,851	138,247	(49,099)
APPROPRIATIONS:						
Debt Service	83,888	85,900	85,900	85,900	81,754	(4,146)
Transfers to Other Funds	4,000	4,000	4,000	4,000	4,000	-
TOTAL APPROPRIATIONS	87,888	89,900	89,900	89,900	85,754	(4,146)
Year-End Adjustment	-	-	-	(47,800)	-	-
Adj to Fund Balance	(1,064)	-	-	1,281	-	-
ENDING FUND BALANCE	49,731	49,646	97,446	52,432	52,493	(44,953)

CAPITAL FUNDS – 27, 28, 29
RESOURCES, APPROPRIATIONS AND FUND BALANCE

The Capital Funds are used to fund the operations of the Water Authority's Capital Improvement Program based on projects identified in the Water Authority's Decade Plan. The resources for these funds are the transfers from the General and the Debt Service Funds.



Resources

Total current resources approved for FY22 are $41.0 million. These resources are comprised of transfers from the General Fund ($36.6 million) and the Debt Service Fund ($4.0 million) and Water Resource Charge revenue ($0.4). CIP resources increase $3.4 million in FY22 from the FY21 Original Budget.

Appropriations

FY22 appropriations total $80.4 million. CIP appropriations increase $8.7 million from the FY21 Original Budget, based on the Water Authority's FY22-FY31 Decade Plan.

Fund Balance

The Fund Balance at June 30, 2022 is projected to be $32.5 million.

CAPITAL FUNDS – 27, 28, 29
RESOURCES, APPROPRIATIONS AND FUND BALANCE

($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Proceeds:						
Loan Proceeds	1,134	-	800	1,395	-	(800)
Bond Proceeds	86,644	-	-	-	-	-
Total Proceed Revenue	87,778	-	800	1,395	-	(800)
Miscellaneous Revenues:						
Other	26	-	-	(83)	-	-
Total Miscellaneous Revenues	26	-	-	(83)	-	-
Enterprise Revenues:						
Grants	1,349	-	1,200	635	-	(1,200)
Lease of Water Rights	295	-	-	810	-	-
Water Resource Charge	839	-	-	1,612	435	435
Total Enterprise Revenues	2,482	-	1,200	3,056	435	(765)
Transfer from Other Funds:						
General Fund - 21	31,618	33,618	36,418	36,418	36,618	200
Growth Fund - 29	27	-	-	-	-	-
Debt Service Fund - 31	4,000	4,000	4,000	4,000	4,000	-
Total Transfers	35,645	37,618	40,418	40,418	40,618	200
Total Current Resources	125,931	37,618	42,418	44,786	41,053	(1,365)
Beginning Fund Balance	116,116	144,180	144,180	144,180	71,791	(72,389)
TOTAL RESOURCES	**242,047**	**181,798**	**186,597**	**188,966**	**112,844**	**(73,753)**
APPROPRIATIONS:						
CIP Water 2120	45	637	3,168	150	300	(2,868)
CIP Basic Rehab	102,700	67,033	114,581	95,861	75,083	(39,498)
CIP Growth	3,928	4,000	8,753	5,625	5,010	(3,743)
Total CIP	106,673	71,670	126,502	101,636	80,393	(46,109)
Transfer To Other Funds:						
Debt Service Fund - 31	-	-	-	-	-	-
Total Transfers	-	-	-	-	-	-
TOTAL APPROPRIATIONS	**106,673**	**71,670**	**126,502**	**101,636**	**80,393**	**(46,109)**
ADJUSTMENTS:						
Adjustment to Fund Balance	8,805	-	-	(15,539)	-	-
ENDING FUND BALANCE	**144,180**	**110,128**	**60,096**	**71,791**	**32,451**	**(27,645)**

FINANCIAL PLAN

The following table is the financial plan for Fund 21 (General Fund). The plan displays financial projections from FY21 thru FY30. This plan considers the Water Authority's Capital needs, Debt Service needs, revenue sources and expenses. The Financial Plan helps the Water Authority plan for future potential expense levels in both operating and capital and compare them to the estimated revenue resources for each projected fiscal year. The plan shows the effects of the budget on the Water Authority's future Working Capital and provides a tool to project future budget needs for the Utility.

The highlighted amount in Capital Funds – Water 2120 for FY29 and FY30 is for the new Reuse Plant identified in the *Water 2120* Plan.

FINANCIAL PLAN

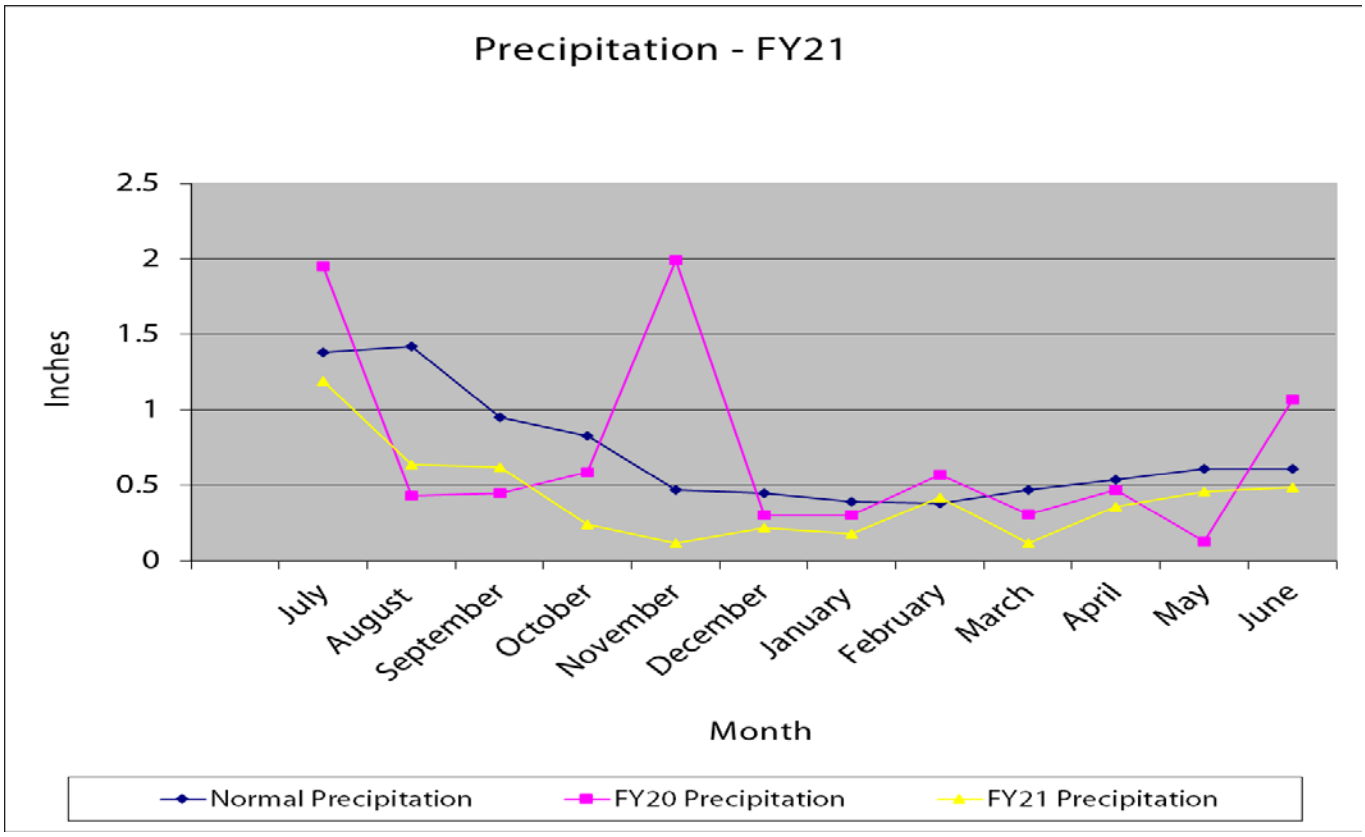
Operating Fund										
	2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Capital Funds										
Needs: Basic (Min 50% cash Trans)	37000	37000	37000	37000	37000	37000	37000	37000	37000	37000
Increase for Rehab/Asset Mgt Plan	18000	21000	24000	27000	30000	33000	36000	39000	42000	45000
Water Reclamation	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Additional CIP	0	1000	2000	500	500	3300	3300	3300	3300	3300
Steel Line	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
AMI	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Water 2120	0	300	300	1700	1700	1700	1700	1700	126700	26700
Resources:										
Beginning Bal.	44124	14842	53695	22548	47499	16450	38601	4752	22903	14054
Trf. from Operating	33618	36618	39618	42616	45616	48616	51616	54616	57616	60616
Trf. from Debt Service	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Bond Proceeds		69000		56000		56000		52000	150000	52000
Water Resource Charge		435	435	435	435	435	435	435	435	435
Subtotal	81742	124895	97748	125599	97550	125501	94652	115803	234954	131105
Interest on Above	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Total	82842	125995	98848	126699	98650	126601	95752	116903	236054	132205
Balance June 30	14842	53695	22548	47499	16450	38601	4752	22903	14054	7205
Debt Service Fund										
Resources:										
Interest Income	100	100	100	100	100	100	100	100	100	100
UECs	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Transfer from 621	81815	77815	81413	86516	81249	79391	67553	60937	52544	62198
Adjustments/Misc										
Bg. Fund Balance	3188	3188	3334	3334	3334	3334	3334	3334	3334	3334
Total	93103	89103	92847	97950	92683	90825	78987	72371	63978	73632
Expenditures:										
Agent Fees	15	15	15	15	15	15	15	15	15	15
Trf to Capital	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Debt Service	85900	81754	85498	85101	79834	73976	59638	49022	40629	50283
Advanced Rehab										
								5000	5000	5000
FY/26 Bond Proceeds						4000	6500	5500	5500	5500
FY/24Bond Proceeds				5500	5500	5500	5500	5500	5500	5500
FY/20 Bond Proceeds										
FY/22 Bond Proceeds										
Total	89915	85769	89513	94616	89349	87491	75653	69037	60644	70298
Fund Balance	3188	3334	3334	3334	3334	3334	3334	3334	3334	3334
Operating Fund										
Resources										
Rate Revenue	222875	223989	236309	236309	249306	250552	251805	253064	254329	255601
adj due to re-estimate										
Nonrate Revenue	6083	5832	5832	5832	6000	6000	6000	6000	6000	6000
Bg. Res over Comm	53634	48363	41457	38762	25752	25920	23899	29635	37869	50002
Total	282592	278184	283598	280903	281058	282472	281705	288699	298198	311603
Rate Stabilization Fund										
Expenditures										
Labor	60803	62019	63259	64525	65815	67131	68474	69844	71240	72665
Operations Exp	60693	61195	63246	64194	65157	66135	67127	68134	69496	70886
Issue Paper		1705								
Incentive	300	375	300	300	300	300	300	300	300	300
Transf. to DS	81815	77815	81413	86516	81249	79391	67553	60937	52544	62198
Transf. to Cap.	33618	36618	39618	42616	45616	48616	51616	54616	57616	60616
Total	239229	241727	249836	260151	260137	263573	257070	255830	253197	268665
Rate Reserve	9000	9000	9000	9000	9000	9000	9000	9000	9000	9000
Resources over Comm.	34363	27457	24762	11752	11920	9899	15635	23869	36002	33937
Res over Comm with Rate Res	48363	41457	38762	25752	25920	23899	29635	37869	50002	47937
Rate Increases	0.00%	0.00%	5.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**

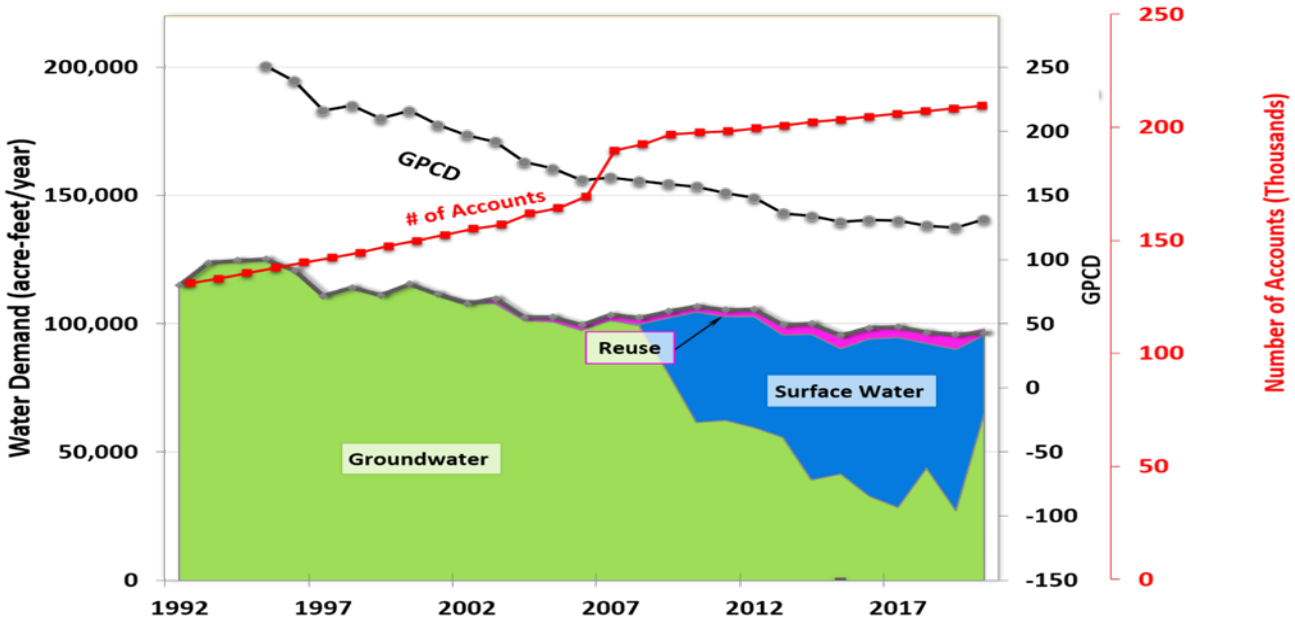
REVENUE ANALYSIS
AND
ECONOMIC OUTLOOK

Approved
Operating Budget
FY22

PRECIPITATION HISTORY & WATER USAGE TRENDS

A history of the precipitation for FY20 and FY21 as compared to the average moisture that the service area has received since the beginning of the fiscal year is seen in the chart below as well as a chart of the water use trends.





RATE STRUCTURE AND MAJOR REVENUE SOURCES

The Water Authority's Rate Structure

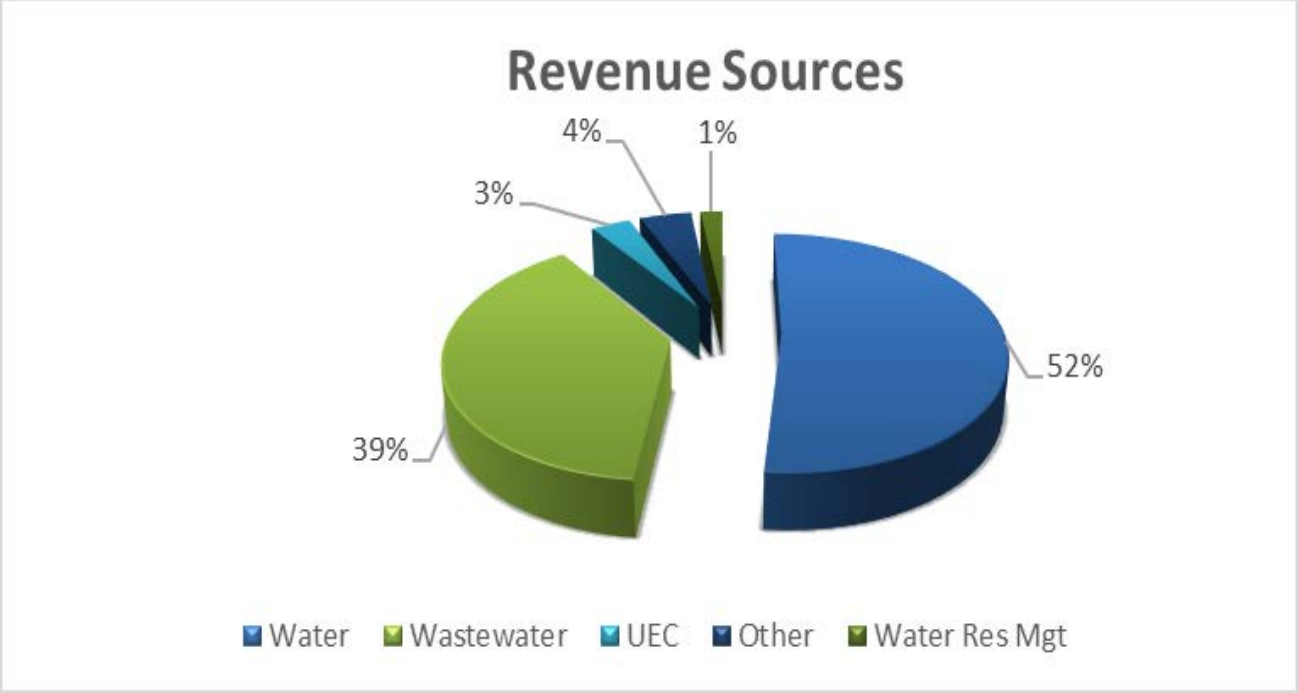
The Water Authority's rate structure is based upon Cost of Service Principles. It is evaluated every two years to ensure that there is equity amongst the different classes of customers and within the class of customers. During the summer months, the rate structure has a seasonal block rate structure to promote conservation. The base line is based upon the customer's winter usage. The Water Authority rate structure also has additional fees for those highest water users in the summer.

Major Revenue Sources

Water Sales ($123.4 million, 51.6% of total revenue). The Water System provides water services to approximately 687,405 residents comprising approximately 95% of the residents of Bernalillo County. About one-third of unincorporated County residents are customers of the Water System. Service is provided to approximately 215,542 accounts, including 185,889 residential and 29,653 multi-family, commercial, institutional and industrial accounts. Approximately 71% of the water sales are for residential uses.

Wastewater ($92.5 million, 38.7% of total revenue). Wastewater services are provided to virtually all homes, schools, and businesses within the Albuquerque city limits, as well as the Village of Tijeras, Kirtland Air Force Base, Sandia Heights, and other residential areas in Bernalillo County. In all, the Water Authority provides service to about 600,000 people, with approximately 202,625 accounts, including 182,679 residential customer accounts, 17,647 multi-family and commercial accounts, 1,055 institutional accounts and 1,244 industrial and other customer accounts.

Utility Expansion Charges ($8.0 million, 3.3% of total revenue). A Utility Expansion Charge is paid at the time of a meter sale or an application for service for all properties connecting to the water and/or wastewater system.



REVENUE

FY20 AUDITED ACTUAL REVENUES AND FY21 REVENUE PROJECTIONS

The Water Authority's revenue projections are summarized in the three tables included in this section. The first table, General Fund 21, presents the audited actual results for FY20, budgeted revenues and estimated actuals for FY21, and budgeted revenue for FY22. The second table, Debt Service Fund 31, and third table, CIP Funds 27, 28, 29, provide for the same comparison as the General Fund 21 table.

REVISED FY21 REVENUE ESTIMATES

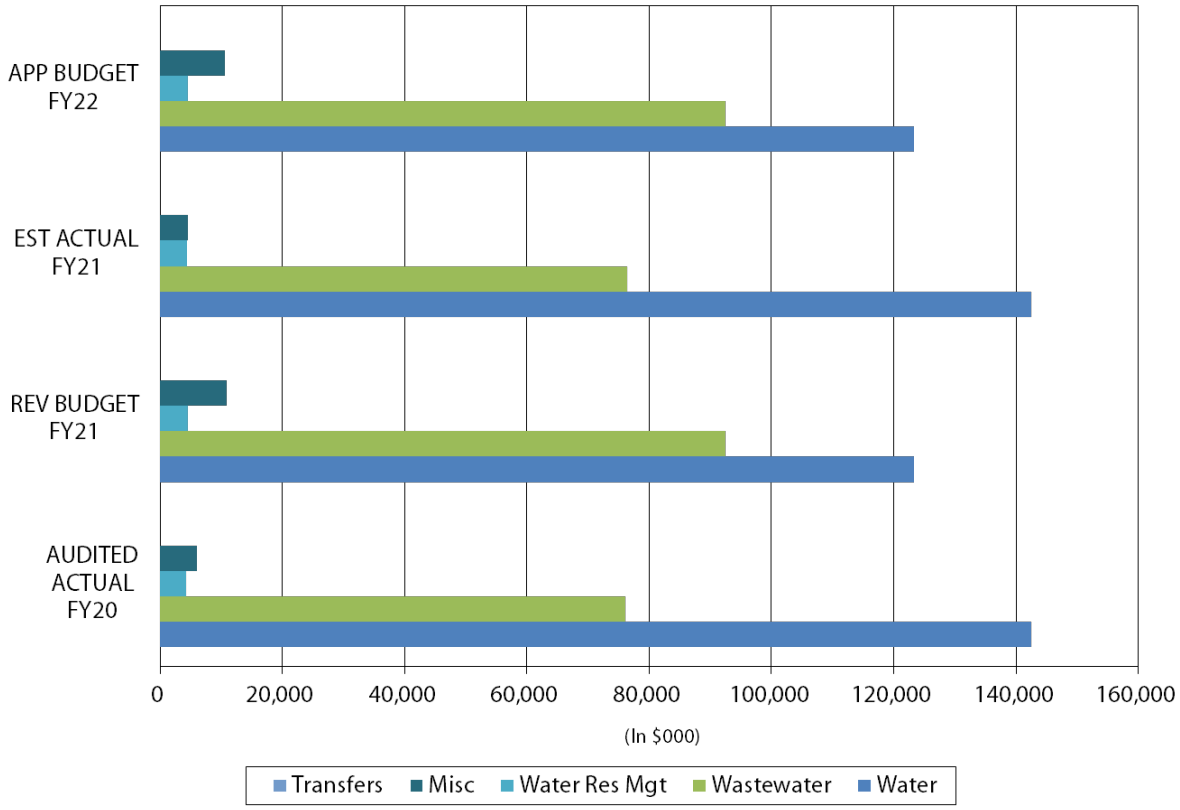
General Fund revenues for FY21 are anticipated to be $227.7 million or $1.2 million below FY20 actuals. Rate revenue is anticipated to be $0.3 million above FY20 actuals; Other revenue is projected to be $1.5 million below FY20 actuals. The increase in Rate revenue is attributed to an increase in consumption due to both decreased rainfall in FY21 and effects of the Covid-19 pandemic. The decrease in Miscellaneous revenue is mainly attributed to the decrease in Interest Income stemming from a drop in interest rates.

APPROVED BUDGET REVENUE ESTIMATES FOR FY22

Budgeted General Fund revenues for FY22 are $239.3 million, including the addition of $8.5 million from fund balance, represents an increase of $1.5 million above the revised budgeted FY21 amount.

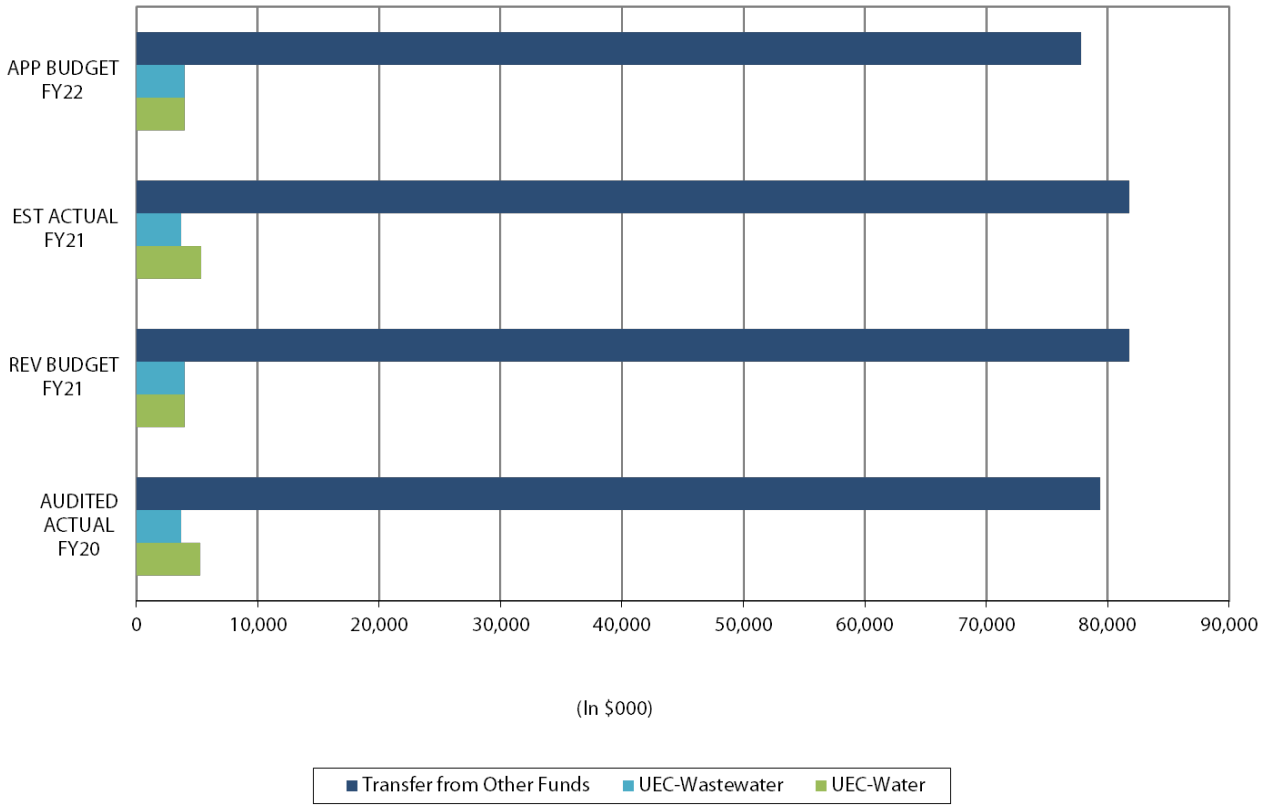
Revenue in the Debt Service Fund decreases $4.0 million in FY22 due to a decrease in the transfer from the General Fund for debt service payments.

REVENUE – GENERAL FUND - 21



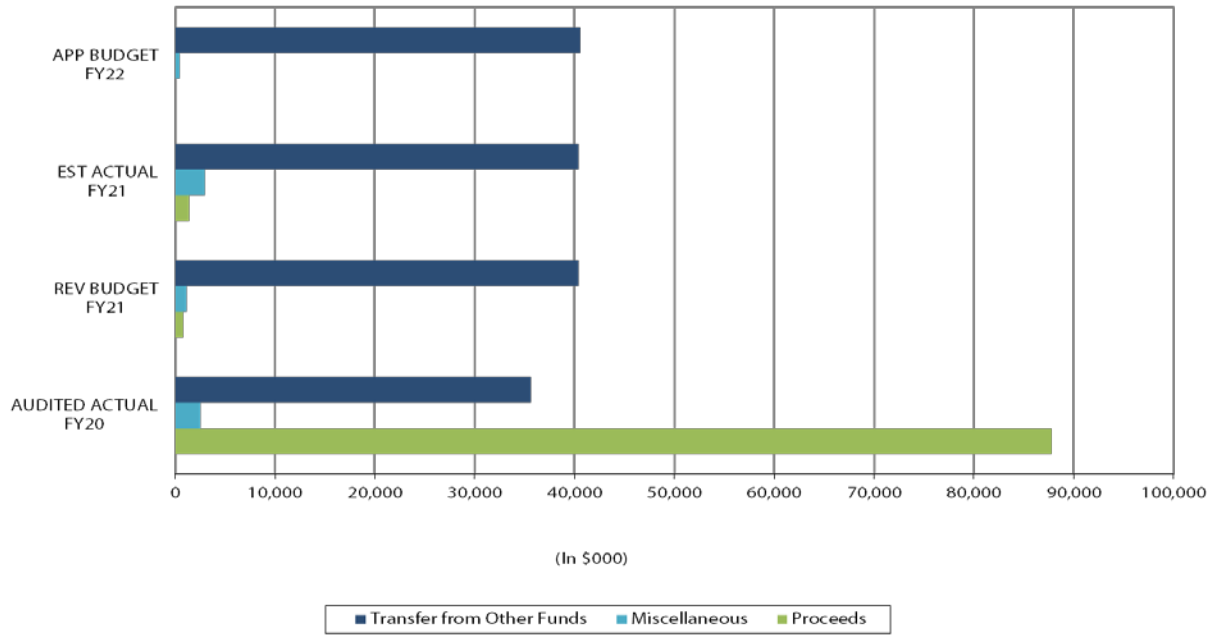
($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Rate Revenues:						
Water Service	104,909	90,578	90,578	104,374	90,578	-
Water Facilities Rehab	37,247	32,402	32,402	37,760	32,402	-
Wastewater Service	41,949	64,869	64,869	42,006	64,869	-
Wastewater Facilities Rehab	34,115	27,602	27,602	34,321	27,602	-
Contr/Aid/Hookups	386	375	375	366	375	-
Water Resources Management	4,269	4,500	4,500	4,372	4,500	-
Total Rate Revenue	**222,875**	**220,326**	**220,326**	**223,199**	**220,326**	**-**
Other Revenues:						
Solid Waste Admin Fee	1,637	1,673	1,673	1,673	1,761	88
DMD Admin Fee	496	350	350	350	373	23
Interest on Investments	1,885	1,000	1,000	214	500	(500)
Miscellaneous Revenue	2,065	7,909	7,909	2,307	7,909	-
Total Other Revenue	**6,083**	**10,932**	**10,932**	**4,544**	**10,543**	**(389)**
Total Current Resources	228,958	231,258	231,258	227,743	230,869	(389)
Add from Working Capital	-	6,550	6,550	9,350	8,461	1,911
Beginning Working Capital Balance	53,634	54,913	54,913	54,913	46,138	(8,776)
TOTAL RESOURCES	**282,592**	**292,721**	**292,721**	**292,006**	**285,468**	**(7,253)**

REVENUE – DEBT SERVICE FUND - 31



($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Proceed Revenues	6	-	47,800	47,800	-	(47,800)
Miscellaneous Revenues	400	-	-	464	-	-
Utility Expansion Charges	8,917	8,000	8,000	9,041	8,000	-
Transfers from Other Funds	79,421	81,815	81,815	81,815	77,815	(4,000)
Total Current Resources	88,744	89,815	137,615	139,120	85,815	(51,800)
Beginning Fund Balance	49,939	49,731	49,731	49,731	52,432	2,701
TOTAL RESOURCES	138,683	139,546	187,346	188,851	138,247	(49,099)

REVENUE – CIP FUNDS – 27, 28, 29



($000's)	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
RESOURCES:						
Proceeds:						
Loan Proceeds	1,134	-	800	1,395	-	(800)
Bond Proceeds	86,644	-	-	-	-	-
Total Proceed Revenue	87,778	-	800	1,395	-	(800)
Miscellaneous Revenues:						
Other	26	-	-	(83)	-	-
Total Miscellaneous Revenue	26	-	-	(83)	-	-
Enterprise Revenues:						
Grants	1,349	-	1,200	635	-	(1,200)
Lease of Water Rights	295	-	-	810	-	-
Water Resource Charge	839	-	-	1,612	435	435
Total Enterprise Revenues	2,482	-	1,200	3,056	435	(765)
Transfer from Other Funds:						
General Fund - 21	31,618	33,618	36,418	36,418	36,618	200
Growth Fund - 29	27	-	-	-	-	-
Debt Service Fund - 31	4,000	4,000	4,000	4,000	4,000	-
Total Transfers	35,645	37,618	40,418	40,418	40,618	200
Total Current Resources	125,931	37,618	42,418	44,786	41,053	(1,365)
Beginning Fund Balance	116,116	144,180	144,180	144,180	71,791	(72,389)
TOTAL RESOURCES	**242,047**	**181,798**	**186,597**	**188,966**	**112,844**	**(73,753)**

ECONOMIC OUTLOOK

The following is based on the April 2021 forecast from IHS Global Insight (IHS). Along with the baseline forecast, alternative forecasts are prepared with pessimistic and optimistic scenarios.

NATIONAL ECONOMY AND KEY POINTS FROM THE GLOBAL INSIGHT OUTLOOK

The national economy influences the Albuquerque and New Mexico economy in a variety of ways. Interest rates affect purchasing and construction. Federal government spending affects the local economy through spending and employment at the federal agencies, the national labs and military bases. Inflation affects prices of local purchases and wages and salaries of employees.

Baseline Scenario

This scenario reflects a probability of 50%. The key assumptions include:

- Gross Domestic Product (GDP) rebounds 6.2% in 2021, slows to 4.3% in 2022 and 2.2% in 2023
- Consumer Spending, a key driver of growth, jumps 7.0% in 2021, grows 4.7% in 2022 and 2.8% in 2023
- Business Fixed Investment jumps 7.3% in 2021, grows 6.6% in 2022 and 4.4% in 2023
- Housing starts rise from 1.40 million in 2020 to 1.55 million in 2021, slipping to 1.39 million in 2022 and 1.27 million in 2023
- Exports recover 6.3% in 2021 and 7.6% in 2022 and grow 5.4% in 2023
- Fiscal Policy $1.9 trillion ARP included, with stimulus checks in March, extensions to unemployment programs, COVID-19 mitigation, and aid to state and local governments. AJP not included
- Monetary Policy Federal Reserve keeps the federal funds rate at the zero bound through mid-2024; current pace of asset purchases maintained thru 2021 before tapering over 2022
- Credit Conditions ease through 2022 then remain essentially stable
- Productivity Growth slips from 2.5% in 2020 to 1.6% in 2021, 1.9% in 2022 and 1.4% in 2023
- Consumer Confidence rebounds strongly starting in the 2nd quarter of 2021 and rivals prior highs by the end of 2023
- Oil Prices have Brent crude oil averages at $66 in 2021, $63 in 2022, and $62 in 2023
- Stock Markets -the S&P 500 rising 16.3% in 2020, rising 8.2% in 2021, 10.8% in 2022 and 6.4% in 2023
- Inflation Consumer Price Index (CPI) is 1.4% in 2020, 1.8% in 2021 and 2022, and 2.0% in 2023
- Foreign Growth Eurozone growth rises 3.9% in 2021 and 2022, while China's growth rises from 2.3% to 7.8% in 2021 and slows to 5.7% in 2022
- US broad dollar stalls over the balance of 2021 before rising gently through 2028

Pessimistic Scenario

This scenario reflects a probability of 25%. The key assumptions include:

- Gross Domestic Product (GDP) rises 4.0% in 2021, picks up to 4.4% in 2022 and slips to 3.2% in 2023
- Consumer Spending, a key driver of growth, recovers 4.9% in 2021 but falter and slips to 4.6% in 2022 and 3.5% in 2023
- Business Fixed Investment grows 5.9% in 2021, 6.0% in 2022, and 5.1% in 2023
- Housing starts rise from 1.40 million in 2020 to 1.51 million in 2021 but fall to 1.33 million in 2022 and 1.22 million in 2023
- Exports grow 4.4% in 2021 and 7.3% in 2022 and 9.2% in 2023
- Fiscal Policy $1.9 trillion ARP included, with stimulus checks in March, extensions to unemployment programs, COVID-19 mitigation, and aid to state and local governments. AJP not included
- Monetary Policy Federal Reserve keeps the federal funds rate at the zero bound through mid-2027;

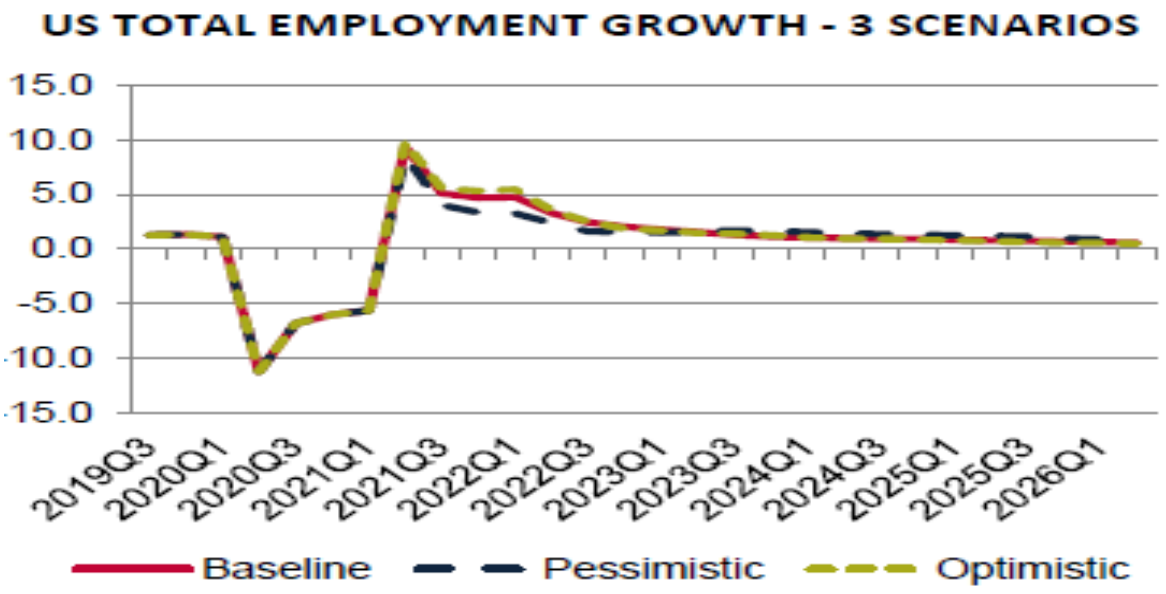
aggressive "quantitative easing" and liquidity enhancement measures
- Credit Conditions remain slightly tighter than in baseline
- Productivity Growth slows to 0.2% in 2021, recovering to 2.5% growth in 2022 and 2.1% in 2023
- Consumer Confidence remains below the baseline over the entire forecast interval
- Oil Prices have Brent crude oil averages at $66 in 2021, $57 in 2022, and $58 in 2022
- Stock Markets - the S&P 500 rises only 3.0% in 2021, then accelerates to 10.7% in 2022 and 7.2% in 2023
- Inflation Consumer Price Index (CPI) is 1.5% in 2021 but slows to 0.6% in 2022 and 0.9% in 2023
- Foreign Growth – the global economy suffers a more severe recession
- US Dollar real dollar depreciates thru Q3 of 2021 and stagnates before resuming a gentle rise near the end of 2022

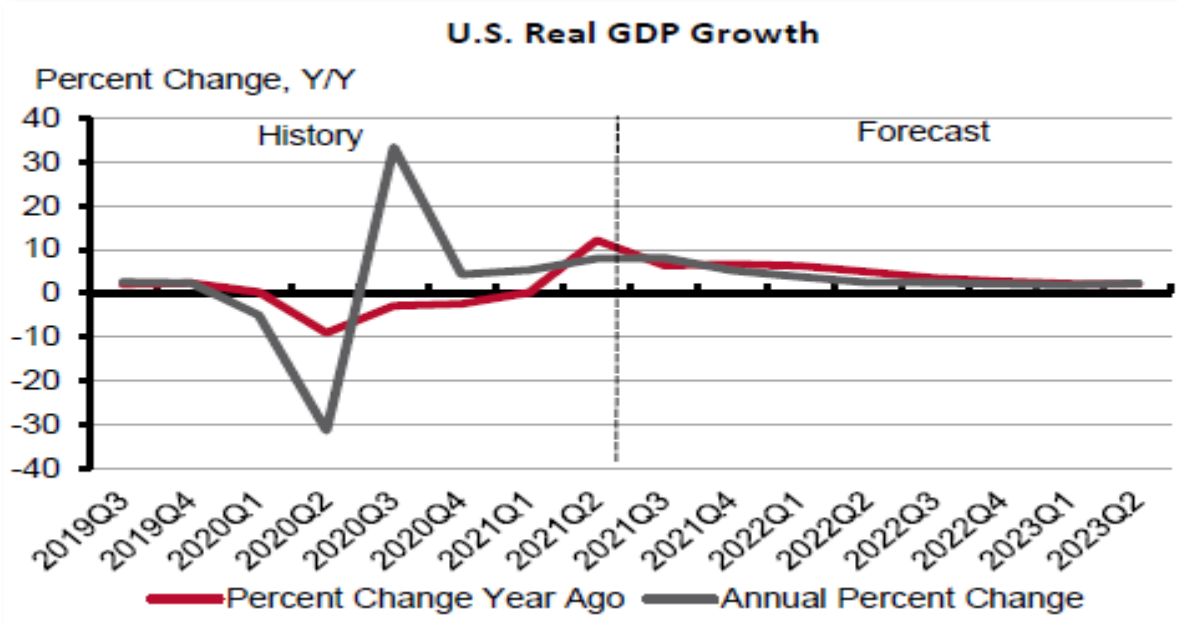
Optimistic Scenario

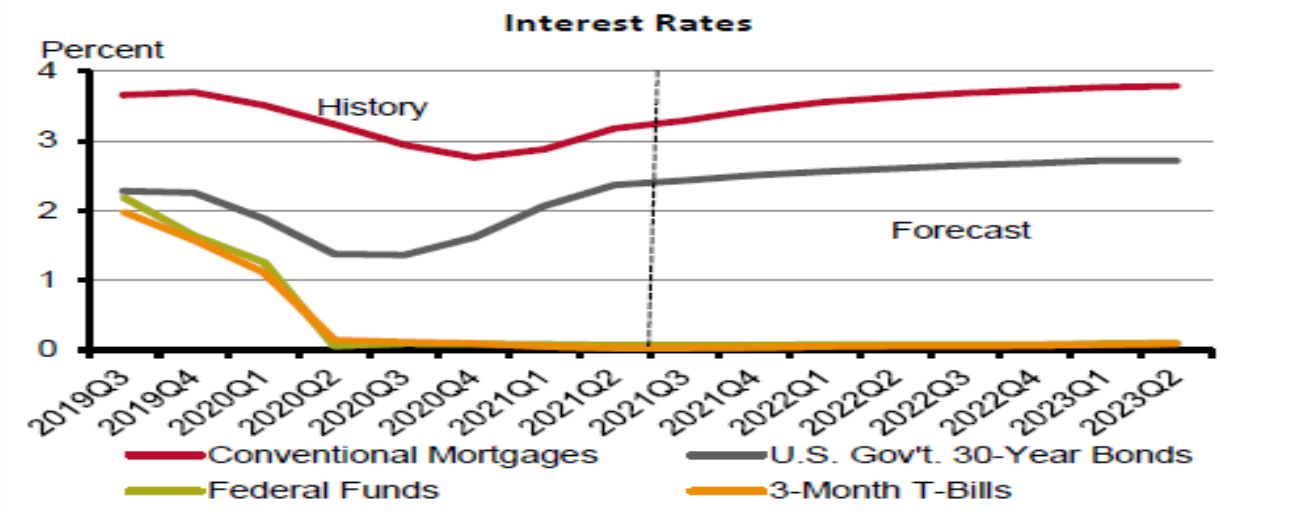
This scenario reflects a probability of 25%. The key assumptions include:

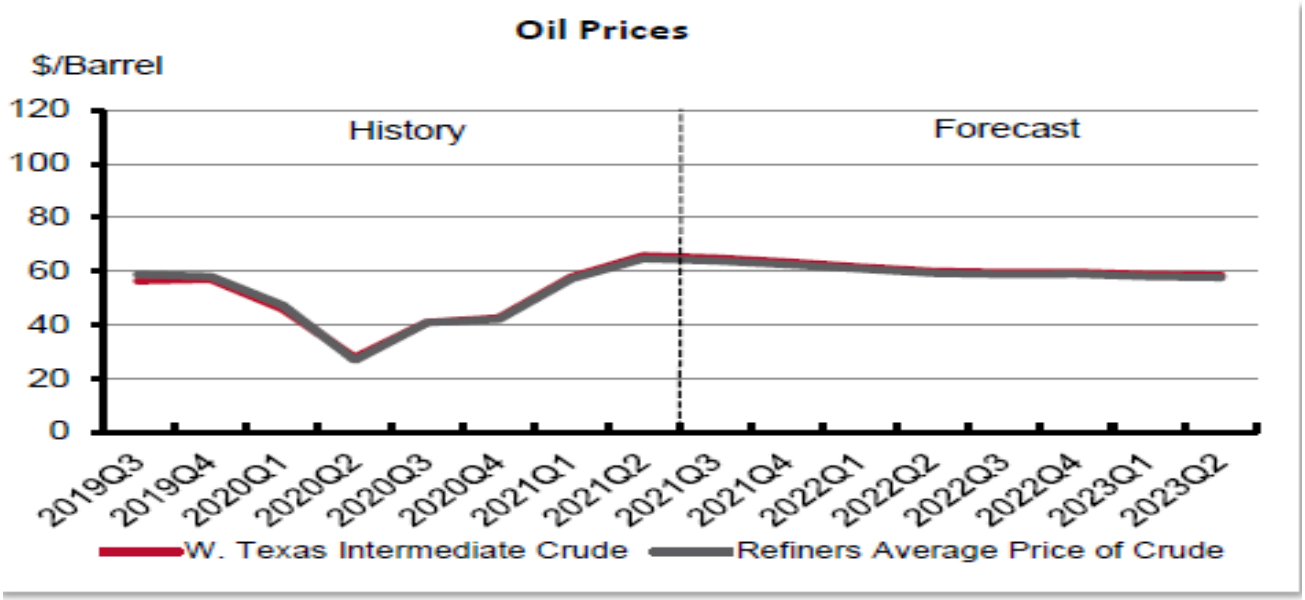
- Gross Domestic Product (GDP) surges 7.1% in 2021, rises 5.0% in 2022 and 2.3% in 2023
- Consumer Spending, a key driver of growth, surges 8.2% in 2021 and rises 5.8% in 2022, slipping to 3.4% growth in 2023
- Business Fixed Investment rises 8.4% in 2021, 7.2% in 2022, and 4.6% in 2023
- Housing starts grow from 1.40 million in 2020 to 1.61 million in 2021 then settles back to 1.49 million in 2022 and 1.37 million in 2023
- Exports rise 7.0% in 2021, 7.5% in 2022, and 5.0% in 2023.
- Fiscal Policy forecast includes stimulus funds are spent earlier and to a greater degree than in the baseline
- Monetary Policy Federal Reserve keeps the federal funds rate at the zero bound until mid-2022
- Credit Conditions are slightly looser than in baseline
- Productivity Growth attains 1.8% in 2021 and 2.4% in 2022 before slipping to 1.7% in 2023
- Consumer Confidence outperforms baseline over the entire forecast interval
- Oil Prices have Brent crude oil averages at $68 in 2021, $66 in 2022, and $65 in 2023
- Stock Markets -the S&P 500 surges 12.4% in 2021 and adds gains of 10.8% in 2022 and 6.6% in 2023
- Inflation Consumer Price Index (CPI) inflation accelerates to 2.0% in 2021 and rises to 2.1% in 2022 and 2.2% in 2023
- Foreign Growth global economy experiences a recession that is less severe than in the baseline
- US Dollar wobbles before appreciating gently starting in mid-2022

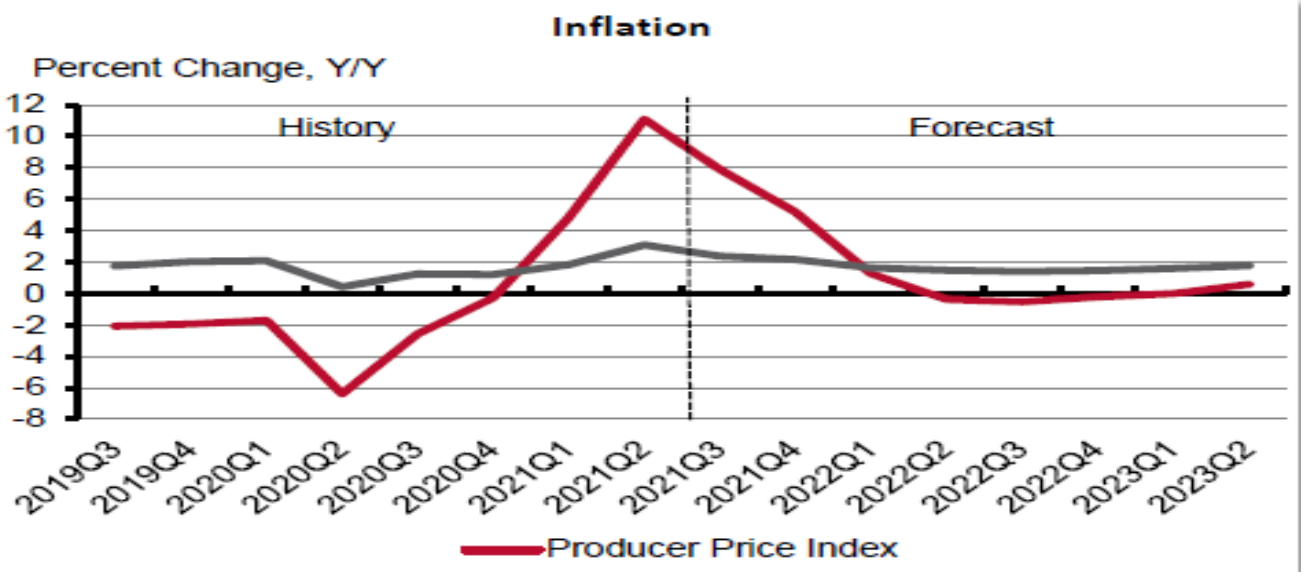
The following charts provide information on some of the key measures in the April 2021 forecast.






Interest Rates
Percent
4
3
2
1
0
History
Forecast
2019Q3
2019Q4
2020Q1
2020Q2
2020Q3
2020Q4
2021Q1
2021Q2
2021Q3
2021Q4
2022Q1
2022Q2
2022Q3
2022Q4
2023Q1
2023Q2
Conventional Mortgages
U.S. Gov't. 30-Year Bonds
Federal Funds
3-Month T-Bills


Oil Prices
$/Barrel
120
100
80
60
40
20
0
History
Forecast
2019Q3
2019Q4
2020Q1
2020Q2
2020Q3
2020Q4
2021Q1
2021Q2
2021Q3
2021Q4
2022Q1
2022Q2
2022Q3
2022Q4
2023Q1
2023Q2
W. Texas Intermediate Crude
Refiners Average Price of Crude


Inflation
Percent Change, Y/Y
12
10
8
6
4
2
0
-2
-4
-6
-8
History
Forecast
2019Q3
2019Q4
2020Q1
2020Q2
2020Q3
2020Q4
2021Q1
2021Q2
2021Q3
2021Q4
2022Q1
2022Q2
2022Q3
2022Q4
2023Q1
2023Q2
Producer Price Index

The outlook for the Albuquerque economy is developed by the Bureau of Business and Economic Research (BBER) at the University of New Mexico. They use national forecasts from IHS and local insights to develop forecasts of the state and local economy. The BBER FOR-UNM forecasting model for April 2021 provides the forecast of the Albuquerque economy that is presented in the following section.

Albuquerque MSA Employment

Near Term Forecast

According to the most recent data from the Current Employment Statistics (CES), the Albuquerque MSA economy forecast for calendar year 2021 projects that the MSA will add 9,218 jobs (2.5%) with private sector gains in most industries (9,217 jobs, 3.2%) and slight government losses (-37 jobs, -0.0%).

Private sector gains will mostly be had in a combination of the sectors employing the largest number of people and those hit hardest during the pandemic. Leading the gains will be accommodation & food services (2,528 jobs, 7.9%). Despite the solid gains in 2021, this sector will still be down nearly 5,000 jobs compared to the levels seen in 2019.

Bucking the trend, as this sector did not contract in 2020, professional & technical services (1,464 jobs, 4.5%) will expand in 2021. In 2020, employment in this sector expanded 0.6% and has been one of the most consistent performers over the last several years as it has added jobs in each year since 2014.

As businesses begin to reopen in earnest in the first half of 2021, the temporary workforce will expand and push administrative & waste services (1,216 jobs, 5.3%) ahead. Meanwhile, the large healthcare sector (1,199 jobs, 2.1%) will bunce back from unprecedented losses in 2020. Also moving ahead for the year will be construction (819 jobs, 3.5%) and manufacturing (727 jobs, 4.5).

Showing signs of life will be arts, entertainment & recreation (710 jobs, 20.6%) as pandemic-era restriction begin to relax in the second half of the year. The pandemic hit this sector particularly hard and it contracted more than any other sector in 2020 in percentage terms (-33.0%). In addition, educational services (625 jobs, 13.6%); finance & insurance (308 jobs, 2.4%); other services (260 jobs, 3.0%); and real estate (205 jobs, 3.9%) will all forge ahead.

Five private sector industries are projected to shed jobs. Leading the losses will be retail trade (-890 jobs, -2.3%) as consumers increasingly turn to online retailing at the expense of local retailers. Also shedding jobs will be information (-208 jobs, -4.1%); workers will likely be undercounted in this sector as the film industry continues to move toward hiring contract-based workers who are not covered by UI and therefore not included in the QCEW data.

Also shedding jobs will be agriculture (-88 jobs, -17.7%); utilities (-8 jobs, -0.7%); and mining (-7 jobs, -3.0%).

Owing to the completion of the 2020 Decennial Census, the federal government (-629 jobs, -4.2%) will drop jobs. However, both local (504 jobs, 1.3%) and state (88 jobs, 0.4%) government will add to the bottom line.

Out Years Forecast

In the longer term from 2021 to 2026, the Albuquerque MSA economy is forecasted to add 41,815 jobs for an average annual growth (AAG) rate of 2.3%. This is an upward revision from the January 2021 forecast of 29,766 jobs (1.6% AAG) and more than compensates for the slightly worse-than-expected performance in 2020. Job levels in the MSA should exceed 2019 levels by 2023. By the end of the forecast window, the economy should have around 28,801 more jobs (7.5%) than in 2019.

Both the private sector and public sector will see positive growth over the period from 2021 to 2026 with the private sector adding 36,079 jobs (2.4% AAG) and the government sector adding 5,736 jobs (1.5% AAG).

Leading the gains over the forecast window will be healthcare and social assistance (8,458 jobs, 3.0% AAG). Gains over the period will come after losses in 2020 (-1.5% projected; for the series' first annual loss since at least 1990). By the end of the forecast

window (2026), this series will exceed the pre-COVID peak by nearly 8,800 jobs (15.5%).

Accommodation and food services, which had added jobs in each year since 2011 before contracting in 2020 (projected -18.7%), is expected to add significant jobs over the period (7,056 jobs, 4.1% AAG).

The professional & technical services sector, which relies in part on federal contracts and grants in New Mexico, should also contribute nicely over the period and add 5,257 jobs (3.1% AAG) with consistent gains through the forecast window. In fact, employment in this sector is projected to be some 6,900 jobs (21.0%) higher, in 2026 than in 2019.

The administrative & waste services sector is also forecasted to be a solid performer over the period (3,520 jobs, 2.9% AAG) as employers hire temporary workers to fill staffing holes and backfill some of the recently lost call center jobs (as call center employment is nothing if not cyclical).

The construction sector is forecasted to expand and to add jobs at a modest pace (3,215 jobs, 2.6% AAG). After fighting its way out of a hole, employment levels in 2026 will exceed 2019 levels by about 3,690 jobs; however, despite the gains over the period, this sector will still have around 3,500 fewer jobs than it had prior to the start of the Great Recession (27,715 jobs in 2026). However, there is some upside risk to this sector as it may benefit from possible expansions by Facebook and Netflix, retrofitting of the Intel plant in Rio Rancho, and infrastructure investment proposed by the Biden Administration.

Also projected to add jobs over the period are arts, entertainment & recreation (1,680 jobs, 8.1% AAG): other services (1,278 jobs, 2.8% AAG); transportation & warehousing (1,193 jobs 2.8% AAG); finance & insurance (995 jobs, 1.5% AAG); educational services (966 jobs, 3.7% AAG); retail trade (737 jobs, 0.4% AAG); real estate (722 jobs, 2.6% AAG); information (327 jobs, 1.3% AAG), especially with expansions made by Netflix Studios and other film production studios; wholesale trade (316 jobs, 0.6% AAG); and manufacturing (205 jobs, 0.2% AAG).

With respect to manufacturing, this forecast does not include the recently announced reinvestment by Intel and its plan to add 700 jobs over the next several years.

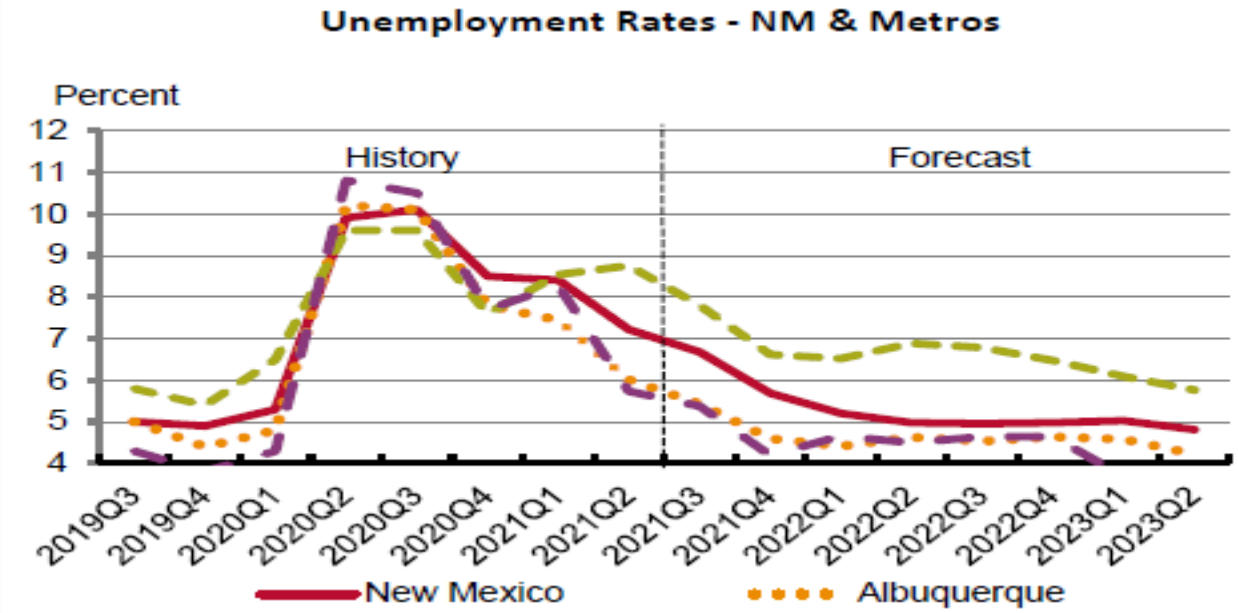
No private sector industries are projected to lose jobs over the forecast window.

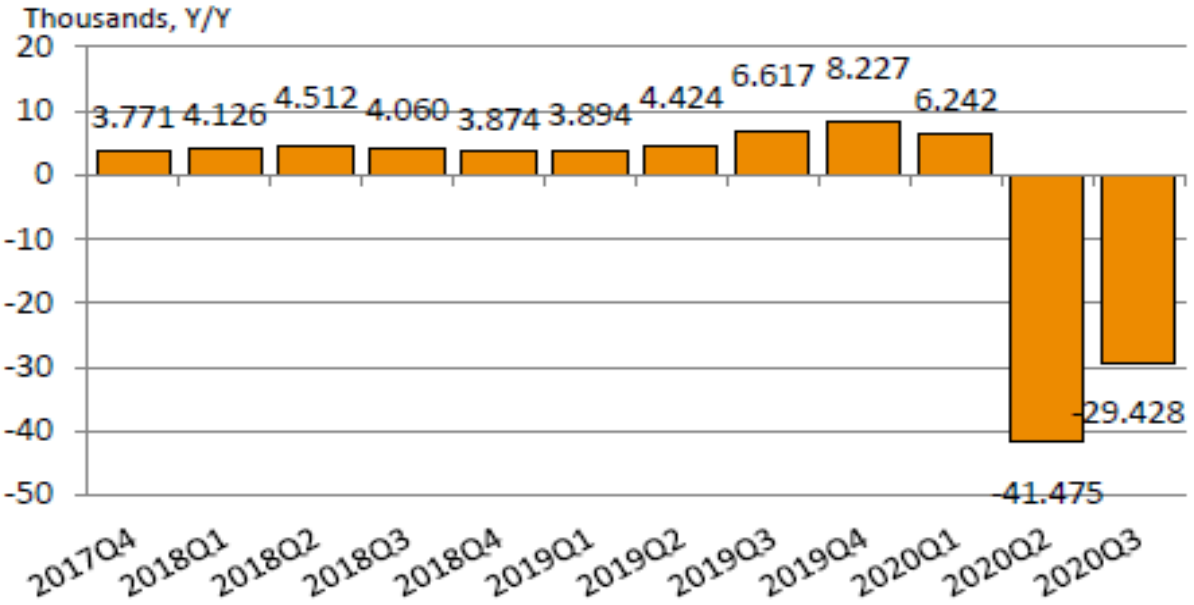
Improving funding outlooks will allow for solid public sector hiring. As a result, local government is projected to add 4,421 jobs (2.3% AAG) and state government is projected to add 1,234 jobs (0.7% AAG) over the period. Local government will benefit to a return to normalcy as tribal businesses resume activities in earnest. These are both substantial upward revision from the January 2021 forecast. In addition, the federal government (80 jobs, 0.1% AAG) will also add to its bottom line.

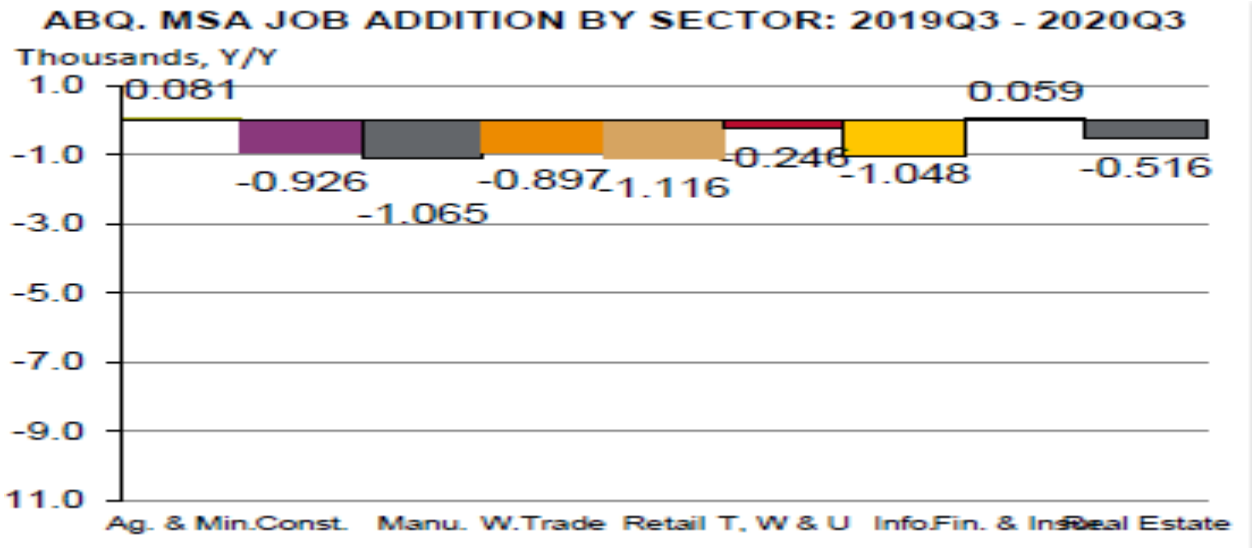
After a very weak 2017 (2.0%), personal income growth accelerated in 2018 (4.1%) and 2019 (3.9%). Although wage & salary growth will slow in 2020, large transfer payments operated to keep income growth buoyant (6.5%). Continued transfer growth should induce even faster overall income growth in 2021 (7.3%) before the bottom falls out in 2022 (04.0%). Thereafter, annual growth should average about 5.0% per year.

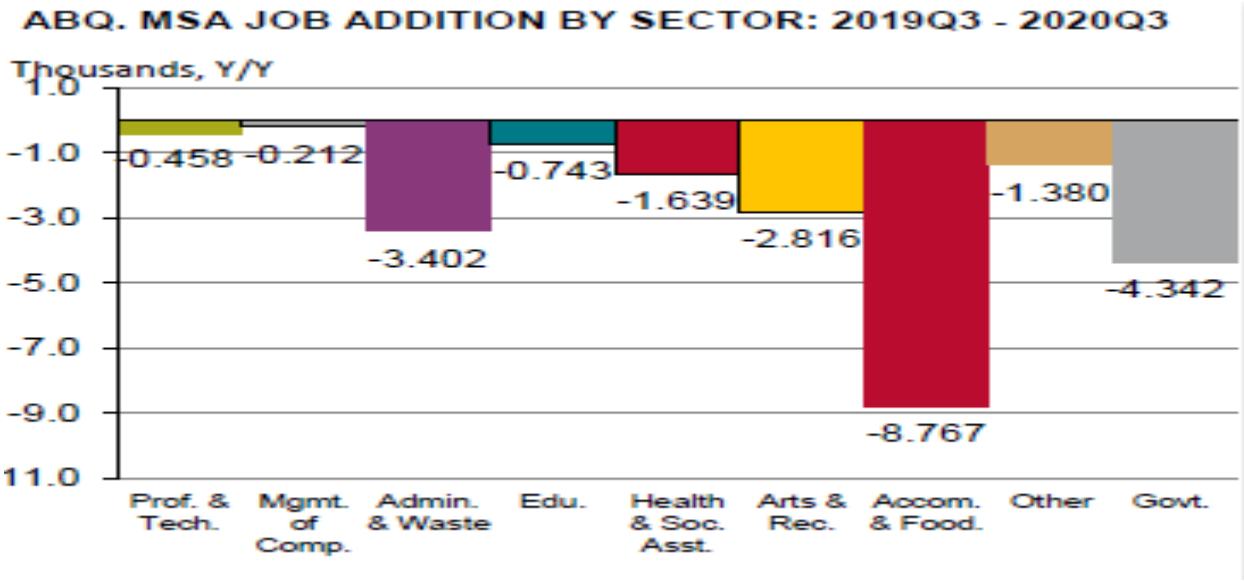
In 2020, the MSA's labor force contracted 1.7% and is expected to bounce back in 2021 (2.0%) and 2022 (1.4%). Thereafter, growth should average about 0.7% per year. After increasing from 4.6% in 2019 to 8.2% in 2020, the non-seasonally adjusted unemployment rate should fall rapidly; to 5.9% in 2021 and 4.6% in 2022. The rate should average about 4.3% for the remainder of the forecast.

After declines in 2020 to 1,282 permits (-210 permits compared to a year earlier) total housing permits in the City of Albuquerque are expected to bounce back a bit in 2021 to 1,582 permits. For the remainder of the forecast period, permits should trend upward and average about 1,725 per year.


Unemployment Rates - NM & Metros
Percent
12
11
10
9
8
7
6
5
4
History
Forecast
2019Q3
2019Q4
2020Q1
2020Q2
2020Q3
2020Q4
2021Q1
2021Q2
2021Q3
2021Q4
2022Q1
2022Q2
2022Q3
2022Q4
2023Q1
2023Q2
New Mexico
Albuquerque


ABQ MSA TOTAL JOB ADDITION BY QUARTER
Thousands, Y/Y
20
10
0
-10
-20
-30
-40
-50
3.771
4.126
4.512
4.060
3.874
3.894
4.424
6.617
8.227
6.242
-41.475
-29.428
2017Q4
2018Q1
2018Q2
2018Q3
2018Q4
2019Q1
2019Q2
2019Q3
2019Q4
2020Q1
2020Q2
2020Q3


ABQ. MSA JOB ADDITION BY SECTOR: 2019Q3 - 2020Q3
Thousands, Y/Y
1.0
-1.0
-3.0
-5.0
-7.0
-9.0
11.0
0.081
-0.926
-1.065
-0.897
-1.116
-0.246
-1.048
0.059
-0.516
Ag. & Min.
Const.
Manu.
W.Trade
Retail T.
W & U
Info.
Fin. & Ins.
Real Estate


ABQ. MSA JOB ADDITION BY SECTOR: 2019Q3 - 2020Q3
Thousands, Y/Y
1.0
-1.0
-3.0
-5.0
-7.0
-9.0
11.0
-0.458
-0.212
-3.402
-0.743
-1.639
-2.816
-8.767
-1.380
-4.342
Prof. & Tech.
Mgmt. of Comp.
Admin. & Waste
Edu.
Health & Soc. Asst.
Arts & Rec.
Accom. & Food.
Other
Govt.

Housing & Construction

Construction permits show the trends in construction and the types of construction. Construction is categorized as new construction or additions, alterations, and repairs. New construction is further separated as residential and commercial.

After declines in 2020 to 1,282 permits (-210 permits compared to a year earlier) total housing permits in the City of Albuquerque are expected to bounce back a bit in 2021 to 1,582 permits. For the remainder of the forecast period, permits should trend upward and average about 1,725 per year.

Housing Permits - NM & Albuquerque Breakdown (Thousands)

	2019	2020	2021	2022	2023
NM Total Housing Units	4.815	5.929	5.029	5.231	5.545
% Change Year Ago	-2.7	9.9	-5	4	6
NM Single-Family Housing Units	4.069	4.605	4.592	4.656	4.807
% Change Year Ago	-2.8	13.2	-0.3	1.4	3.2
NM Multi-Family Housing Units	0.746	0.687	0.437	0.575	0.738
% Change Year Ago	-2.1	-7.9	-36.4	31.6	28.3
City of Albuquerque Total Housing Units	1.492	1.282	1.582	1.65	1.658
% Change Year Ago	-2.7	-14.1	23.4	4.3	0.5
City of Albuquerque Single-Family Housing Units	0.893	0.865	1.347	1.357	1.337
% Change Year Ago	-19.9	-3.1	55.7	0.7	-1.5
City of Albuquerque Multi-Family Housing Units	0.599	0.417	0.235	0.293	0.321
% Change Year Ago	43.3	-30.4	-43.6	24.6	9.5

The construction sector is forecasted to expand and to add jobs at a modest pace (3,215 jobs, 2.6% AAG). After fighting its way out of a hole, employment levels in 2026 will exceed 2019 levels by about 3,690 jobs; however, despite the gains over the period, this sector will still have around 3,500 fewer jobs than it had prior to the start of the Great Recession (27,715 jobs in 2026). However, there is some upside risk to this sector as it may benefit from possible expansions by Facebook and Netflix, retrofitting of the Intel plant in Rio Rancho, and infrastructure investment proposed by the Biden Administration.

Construction Employment - NM & Albuquerque (Thousands)

	2019	2020	2021	2022	2023
NM Construction Employment	49.661	48.436	49.33	51.353	52.294
% Change Year Ago	5.1	-2.5	1.8	4.1	1.8
Albuquerque MSA Construction Employment	24.029	23.681	24.5	25.592	26.122
% Change Year Ago	5.1	-2.5	1.8	4.1	1.8

FUNCTIONAL UNITS

Approved
Operating Budget
FY22

PERSONNEL INFORMATION

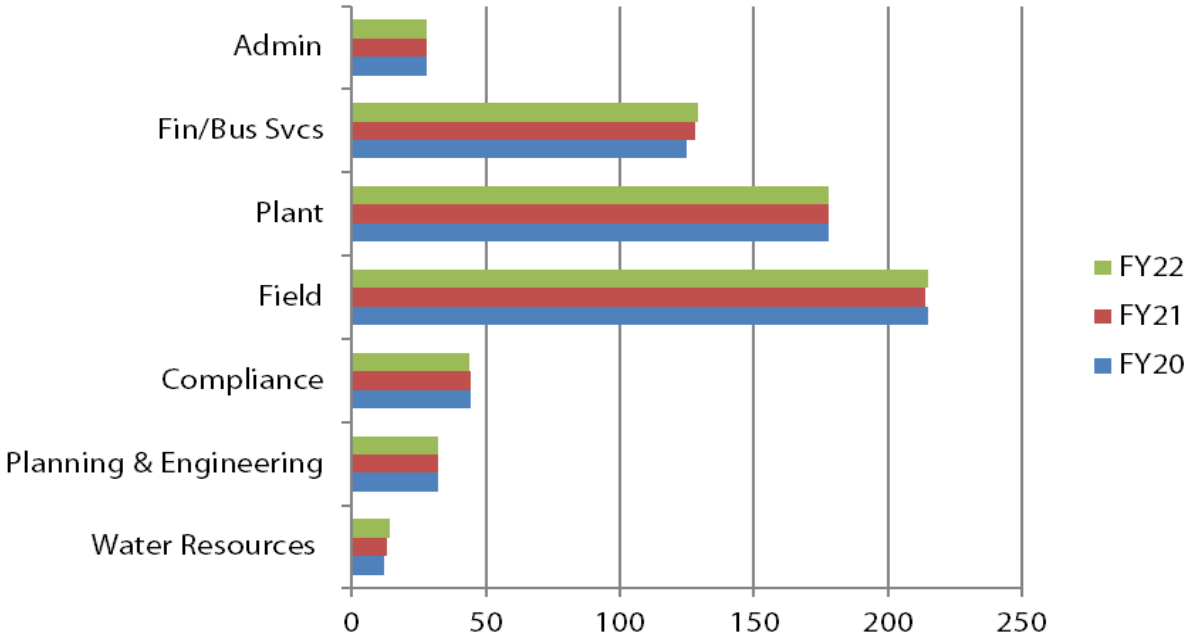
The FY22 budget is authorized and approved at 640.0 full-time equivalent (FTE) employees.

Three labor unions represent 498 of the 640 Authority employees. Local 2962 AFSME, AFL-CIO, CLC represents 58 clerical series employees, Local 624 AFSCME, AFL-CIO represents 307 blue collar employees and Local 3022 AFSCME, COUNCIL 18, AFL-CIO represents 133 management series employees.

Changes in Employment - The FY22 approved budget has an increase of 2.5 full-time equivalent positions over the FY21 level: Systems Analyst I in Information Technology, Community Garden Coordinator in water Resources and the reclassification of a part-time position in Compliance to full-time. All other changes are due to staff reassignments and program realignments.

POSITIONS	AUDITED ACTUAL FY20	ORIGINAL BUDGET FY21	REVISED BUDGET FY21	ESTIMATED ACTUAL FY21	APPROVED BUDGET FY22	APPR 22/ REV 21 CHG
Administration						
Water Authority	7	7	7	7	7	0
Risk	5	5	5	5	5	0
Legal	1	1	1	1	1	0
Human Resources	15	15	15	15	15	0
Total Administration	28	28	28	28	28	0
Financial /Business Services						
Finance	39	39	40	40	42	2
Customer Services	52	53	51	51	49	(2)
Information Technology	34	36	37	38	38	1
Total Financial/Business Services	125	128	128	129	129	1
Plant						
Wastewater Treatment	91	91	91	91	91	0
San Juan-Chama Water Treat Plant	34	34	34	34	34	0
Groundwater	53	53	54	54	53	(1)
Total Plant	178	178	179	179	178	(1)
Field						
Wastewater Collection	62	63	64	64	64	0
Water Field Operations	153	151	150	150	151	1
Total Field	215	214	214	214	215	1
Compliance	44.5	44.5	43.5	43.5	44.0	0.5
Planning & Engineering	27	32	-	-	0	
Central Engineering	-	-	24	24	24	
Asset Management	5	-	5	5	5	
Planning & Utility Development	-	-	3	3	3	
Total Planning & Engineering	32	32	32	32	32	0
Water Resources	12	13	13	14	14	1
TOTAL FULL TIME POSITIONS	**634.5**	**637.5**	**637.5**	**639.5**	**640.0**	**2.5**

CHANGES IN EMPLOYMENT BY FUNCTIONAL UNIT



Number of Employees

FY22 APPROVED ISSUE PAPERS

Approved issue papers and initiatives funded in FY22 total $1,611,623. The list below identifies the issues and divisions that received additional funding.

Water Authority Approved Issue Papers - FY22	
Fund 21 - General Fund	**1,611,623**
Administration	
COO's Office - Reassign Budget to Executive Director/Risk	-
Risk - Security Services Contract Increase Funding	749,469
HR - M-Series Certification Programs-2% Increase	149,080
HR - M-Series Certification Program Development	54,080
Financial Services	
Finance - Warehouse Intelligent Lockers	10,500
Customer Services - Reassign Staff to Finance	-
Customer Services - Self-Service Bill Payment Kiosk	40,000
ITD - Systems Analyst I Position - FY21 Mid-Year	77,101
ITD - Maintenance/Support Agreement Increase Funding	120,000
Plant	
SJCWTP - Exterior Painting - One-Time	10,000
SJCWTP - Groundskeeper Maintenance Increase Funding	27,000
GW Operations - Roof Inspections/Maintenance	41,000
Compliance	
Laboratory/NPDES - Various Position Changes	24,503
NPDES - Mercury Reduction Study - One-Time	75,000
Water Quality - ASR Projects Pumping Equipment	49,000
Planning & Engineering	
Asset Management - Maximo & Training Increase Funding	15,000
Water Resources	
Water Conservation - Community Garden Coordinator - FY21 Mid-Year	69,890
General Government	
Tuition Reimbursement & Incentive Programs	100,000
TOTAL	**1,611,623**

ADMINISTRATION

The work units under the Administrative umbrella include Executive Director, Public Affairs, Risk, Legal, and Human Resources.

The Executive Director provides overall leadership for Water Authority operations. This program encompasses the Public Affairs operations. This program provides policy design and development, development of legislation for Water Authority Board approval, staff evaluation of all proposed legislation from the administrative, operational and financial prospective and coordination and development of the Water Authority's annual budget including the Goals and Objectives and the Performance Plan. The Technical Customer Advisory Committee (TCAC), an advisory group to the Water Authority, is coordinated by this unit.

In FY22, the COO's Office budget was reorganized into the Executive Director department.

The Chief Operations Officer provides leadership of the Water Authority's operations divisions: Plant, Field, and Compliance.

Risk consists of risk and safety compliance staff.

Legal consists of an attorney who functions as general counsel for the utility and provides advice and legal counsel on all aspects of the utility operation. This work includes: advising on labor and employment matters; drafting and reviewing agreements, contracts, legislation, policies and procedures; functioning as a liaison and primary contact for outside counsel; and overseeing and handling collection efforts.

Human Resources provides all human resource functions to the Water Authority. This includes hiring, training, disciplinary actions, benefits, labor relations and other personnel issues as they arise.

FY22 ADMINISTRATION OBJECTIVES

- Recognize at least 15% of the work force through initiatives such as employee incentive awards, on-the-spot awards, and years of service awards through the 4th Quarter of FY22.
- Complete two employee wellness challenges per fiscal quarter focusing on nutrition, physical activity and weight loss, and disease and injury prevention to employees with a 60 percent or greater overall completion rate by the end of the 4th Quarter of FY22. Increase time spent stretching to 4,125 hours to improve productivity and wellness of employees by the end of the 4th Quarter of FY22. Incorporate more remote wellness options for employees to participate in while keeping social distance, including video classes, and instructional videos by the end of the 4th Quarter of FY22.
- Maintain an average utility-wide vacancy rate of no greater than 5% through the end of FY22. Maintain an average number of days to fill positions of 40 days or less and report quarterly through the end of the 4th Quarter of FY22.
- To promote a continued Culture of Safety in the Water Authority, provide a variety of job-related safety trainings, opportunities for recognition and safety communications to create awareness and promote good work practices. Track and report the hours of training offered and percent attendance by working group by the end of the 1st Quarter of FY21. Track and report the hours of training offered and percent attendance by working group through the end of the 4th Quarter of FY22 and study the data to identify trends that could be mitigated by

implementing tailored work practices, standard operating procedures (SOPs, and customized safety trainings. Reduce injury hours to 2,600 hours or less to improved productivity and reliability of services provided by employees by the end of the 4th Quarter of FY22.

- Provide employees with job-related training and monitor hours of training completed. Maintain an average of at least 25 hours of training per employee through the end of the 4th Quarter of FY22.
- Consistent with the Water Research Foundation Project 4907 Utility Innovation Project, develop a Strategic Plan for the Water Authority's Innovation Program by the end of the 4th Quarter of FY22.
- Develop a formalized plan for remote working options within the Water Authority by the end of the 1st Quarter of FY22.

FY22 ADMINISTRATION HIGHLIGHTS

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.

Public Relations staff will formulate an Internal Communications Plan and investigate platforms to increase and manage the utility's social media presence.

Risk/Safety will continue implementing the Security Consultant's deliverables in accordance with AWWA G430 standards and to carry out important liability protection of the utility's assets. Risk staff will continue supporting the multi-jurisdictional Hazard Mitigation Plan.

The Safety Team will provide safety inspections and trainings to include compliance-related item. Staff will be using the new Learning Management System (LMS) platform to maintain effective training delivery and tracking of training hours.

Risk and HR staff will continue supporting the continuity of operations as it relates to COVID-19 while meeting CDC and NMDOH guidelines.

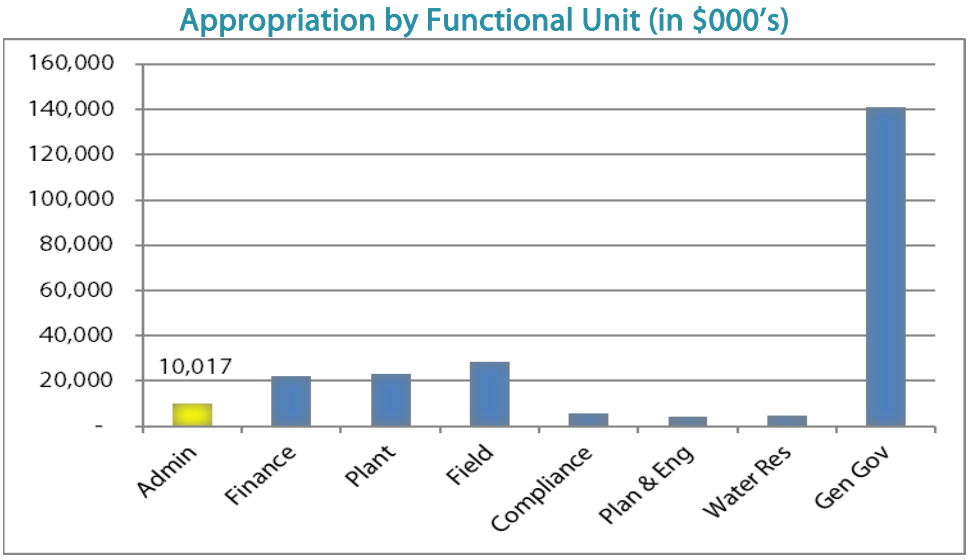
HR Staff will conduct the biannual Employee Satisfaction and Engagement Survey. The survey results will be used to maintain and improve in the areas identified. Staff will create a new benefits flyer for distribution to interviewees and develop a remote working plan for the organization.

A new Learning Management System will be deployed. This system will provide an area to store all training materials, provide online training access, and provide a space for employees to store and track all certifications, classes, and training information.

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.

The 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 utility's Workers Compensation expense.

ADMINISTRATION



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Executive Director						
Personnel	778	659	659	625	1,007	348
Operating	928	673	673	752	790	118
Total	1,706	1,331	1,331	1,377	1,797	466
COO's Office						
Personnel	475	334	334	392	-	(334)
Operating	281	199	199	180	-	(199)
Total	756	533	533	572	-	(533)
Risk						
Personnel	462	475	475	488	494	19
Operating	3,363	4,328	4,328	4,470	5,149	821
Total	3,825	4,803	4,803	4,958	5,643	840
Legal						
Personnel	181	180	180	179	184	4
Operating	726	616	616	703	615	(1)
Total	907	796	796	882	799	3
Human Resources						
Personnel	1,503	1,489	1,489	1,558	1,566	77
Operating	300	358	358	171	212	(146)
Total	1,803	1,847	1,847	1,729	1,778	(69)
Total Division	**8,997**	**9,310**	**9,310**	**9,518**	**10,017**	**707**
Staffing (FTE)	28	28	28	28	28	-

FINANCIAL/BUSINESS SERVICES

The Financial/Business Services Division provides the Financial, Fleet Maintenance, Customer Services and Information Technology functions for the Water Authority.

Finance provides support and information to the Water Authority as well as outside entities such as bonding agencies, vendors, and local businesses. The section develops and administers rates, bonding functions, arbitrage calculations, budgeting, accounting, payroll, purchasing/warehouse, auditing and overall financial support. This unit monitors the Water Authority's progress in meeting the yearly objectives and financial performance. Quarterly progress reports are submitted to the Water Authority Board on the status of the objectives and the financial plan. During FY20, Fleet Maintenance, which provides all maintenance and repairs to the vehicles and equipment in the Water Authority's fleet, was moved under the Purchasing section.

Customer Services oversees the application for new services, utility billing, dispatch operations, utility revenue collection as well as billing information to water and wastewater customers.

Information Technology maintains and supports the information technology services function of the Water Authority. This includes office automation, GIS applications, operation management systems, billing/collection systems, asset management and work order systems and communication systems.

FY22 FINANCIAL/BUSINESS SERVICES OBJECTIVES

- Improve customer satisfaction and operational efficiency in achieving the four call-center targets through the 4th Quarter of FY22:
  - Average Wait Time of less than 1:00 minute,
  - Average Contact Time of less than 4:00 minutes,
  - Abandoned Call Ratio of less than 3,
  - First Call Resolution of greater than 95%,
  - Average call quality of greater than 85%.
- Replace paper logs with electronic record of inbound calls to Dispatch by the end of the 4th Quarter of FY22.
- Improve customer satisfaction by achieving a billing accuracy ratio of less than 8 errors per 10,000 bills through the 4th Quarter of FY22.
- Continue implementation of the Automated Meter Infrastructure (AMI) project by replacing 30,000 aging water meters with smart meters to increase revenue, support conservation efforts, and provide better customer service by the end of the 4th Quarter of FY22.
- Develop and implement a Strategic Plan for Internal Communications through the end of the 4th Quarter of FY22 and report activities quarterly.
- Conduct Customer Conversation meetings to engage customers and obtain input from customers on the Water Authority's activities through the end of the 4th Quarter of FY22.
- Conduct a customer opinion survey in order to assess the Water Authority's performance from the customer's viewpoint from previous surveys by the end of the 4th Quarter of FY22.
- Install the Spanish language add-in to provide Spanish translation on the new website by the end of the 1st Quarter of FY22.
- To promote a continued Culture of Security in accordance with the AWWA G430 standard within the Water Authority, develop policies and procedures that include strategies for internal communication and trainings on security-related topics. Track and measure metrics that are directly related to National Infrastructure Protection Plan (NIPP) Water Sector-Specific Plan (SSP) and America's Infrastructure ACT (AWIA). Conduct at least 2 table-top exercises for security and cybersecurity that include representatives from across the organization. Based on the countermeasures identified in Phase 1 of the Water Authority's Final Security Plan, implement at least 3 of the countermeasures by the end of the 4th Quarter of FY22.
- Complete the annual update and review of the Comprehensive Information Technology

Security Plan and related policies that are aligned with the standards, guidelines, and best practices of the National Institute of Standards and Technology (NIST) Cybersecurity Framework by the end of the 4th Quarter of FY22. Track and measure metrics that are directly related to NIST standards. Incorporate specific standards and policies that directly relate to the utilities Supervisory Controls and Data Acquisition (SCADA) systems.

- Continue implementation of the SCADA Master Program; Implement both short-term and long-term goals directly tied to the sequencing of migrating to a single SCADA platform for surface water, groundwater, wastewater treatment and collections systems by the end of the 4th Quarter of FY22. Specific FY22 projects include the SWRP DCS HMI upgrade, Collection/Stormwater PLC replacement, and Network refresh for SWRP SCADA network.
- Complete annual maintenance for all network and infrastructure items. This includes networks, firewalls, servers, telephony, mobility and data storage for both information technology and SCADA. Specific projects include the evaluation of the SCADA network and infrastructure for SWRP by the end of the 3rd Quarter of FY22. Begin installation and setup of such infrastructure to upgrade the SWRP SCADA systems to mirror the IT infrastructure model that was installed at the Surface Water Treatment Plant by the end of th 4th Quarter of FY22.
- Upgrade and patch all enterprise applications to add enhancements for cybersecurity purposes, support, and to leverage functionality enhancements to improve business processes, capture and use data intelligently, and create efficiencies.
- Complete a gap analysis and best practices review to identify current and future geographic information system (GIS) needs by the end of the 2nd Quarter of FY22. Follow up on action items and report status quarterly through the end of the 4th Quarter of FY22.
- Continue to identify opportunities to apply machine learning to assess current operations by the end of the 4th Quarter of FY22. Opportunities might include strategies that use predictive analytics on near real-time data for early warning of potential issues and opportunities to integrate capabilities of the Water Authority's existing modeling tools. Expand usage of Splunk data analytics tool to implement functions for cybersecurity, water quality, and/or asset management by the end of the 4th Quarter of FY22. Develop a strategy for the utilization of machine learning and analytics to predict failure of linear and vertical assets by the end of the 4th Quarter of FY22.
- Evaluate water and sewer rate structures to ensure equity within the structures by the end of the 4th Quarter of FY22. Complete an affordability study that utilizes the methodology described in the 2019 report titled "Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector".
- Consistent with the effective utility management (EUM) continuous improvement process, complete the biennial attribute self-assessment using the EUM Benchmarking Assessment Tool by the end of the 2nd Quarter of FY22 and incorporate findings into the FY23 Goals and Objectives.

FY22 FINANCIAL/BUSINESS SERVICES HIGHLIGHTS

Finance will submit to GFOA the FY22 Approved Budget for the Distinguished Budget Presentation Award, the FY21 Comprehensive Annual Financial Report (Annual Report) for the Certificate of Achievement for Excellence in Financial Reporting and the FY21 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.

During FY22, the Purchasing section will work with Centralized Engineering to automate the on-call construction Request for Offers bidding process, perform an analysis of inventory configurations to improve the effectiveness of inventory management, and enhance the focus on Fleet satellite storeroom management procedures.

Budget will continue to provide budget and ERP system training to utility staff and schedule monthly budget update meetings with staff. Staff will monitor, update and lead discussions of the FY22 Water Authority Goals & Objectives and EUM metrics.

Treasury will maintain a diversified portfolio of bank balances and Treasury securities to offset banking fees. Staff will partner with Accounts Payable and ITD to implement the Wells Fargo Payment Manager program to increase the security of payments to vendors and to outsource check printing.

Customer Services-Dispatch will focus on an initiative to replace their paper call logs with an electronic record of inbound calls using Maximo, making these records easily searchable and shared/viewed by staff.

Customer Services will implement a self-service payment kiosk at the Mission Ave. location. This walk up/drive up kiosk will allow customers to make payments with cash, check or card. Direct integration with the billing system will provide real-time lookup and payment posting. The kiosk will provide 24/7 self-service access to customers.

ITD Quality Assurance staff will continue implementation of the Information Technology Infrastructure Library (ITIL) best practices for: service requests, change management, incidences, and self-service. Staff will build-out remedy reporting functions to ensure service requests are being resolved in a timely manner.

ITD Infrastructure objectives for FY22 include: upgrading the Active Directory, upgrading Microsoft Intune for software deployments to WUA computers that being used remotely, creating a self-service password reset portal, and installing endpoint protection for Water SCADA servers.

ITD Network staff will perform a network core upgrade at the City Hall location, deploy CISCO networks, and deploy cloud WebEx Teams for enterprise messaging.

ITD Application staff will work on external website enhancements, redesign/rebuild the employee portal, assist in streamlining Payroll processes in the ERP system, continue the rollout of the LMS, and perform upgrades to Kronos (timekeeping) and Cognos (reporting)

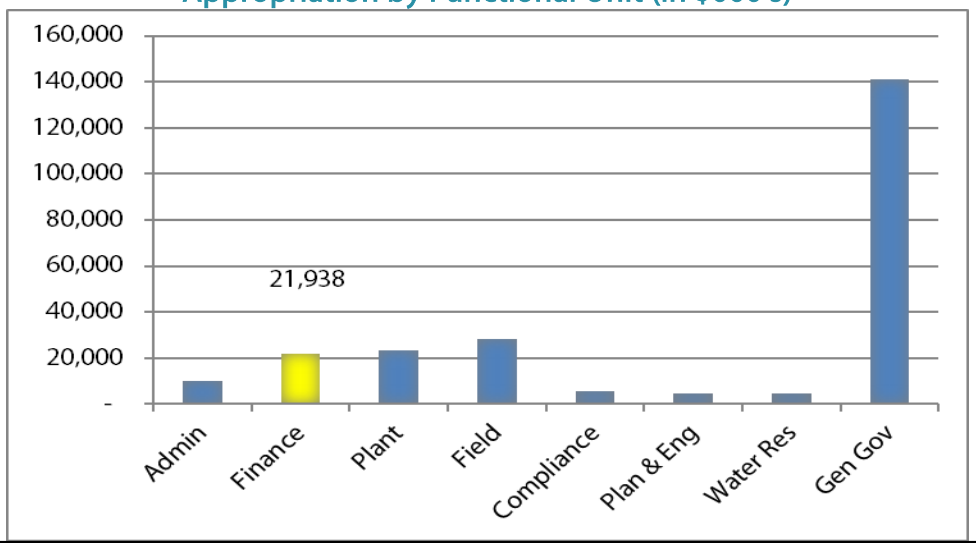
IT OP Applications will implement Fleet-AVL integration (odometer/runtime monitoring), replace the GIS website, and upgrade MapEngine and PowerSync.

IT Security will continue to be a major focus in FY22. Objectives are: complete the implementation of DNAC/ISE, continue to reduce the risk assessment scores, move towards automation of Splunk for security events, reduce the KnowBe4 phish-prone percentage, and to continue moving towards a Zero Trust Framework.

IT SCADA objectives for FY22 include: HMI implementation, Collections/Stormwater PLC replacement, implementation of cyber-security policies, and to refresh the network for the Reclamation SCADA system.

FINANCIAL/BUSINESS SERVICES

Appropriation by Functional Unit (in $000's)



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Finance						
Personnel	2,531	2,530	2,583	2,580	2,740	157
Operating	1,718	1,431	1,431	1,605	1,444	13
Total	4,249	3,961	4,014	4,185	4,184	170
Fleet Maintenance						
Personnel	822	823	823	901	935	113
Operating	2,198	2,870	2,870	2,335	2,865	(6)
Total	3,019	3,693	3,693	3,235	3,800	107
Customer Services						
Personnel	3,111	3,390	3,307	2,203	3,300	(7)
Operating	1,661	1,886	1,886	1,734	1,926	40
Total	4,772	5,276	5,193	3,937	5,226	33
Information Technology						
Personnel	4,053	4,270	4,311	4,408	4,560	249
Operating	4,105	4,053	4,053	4,777	4,168	115
Total	8,158	8,323	8,364	9,184	8,728	364
Total Division	**20,198**	**21,253**	**21,263**	**20,541**	**21,938**	**675**
Staffing (FTE)	125	128	128	129	129	1.0

PLANT

The Plant Division is responsible for operating and maintaining the facilities required for providing a safe and sustainable water supply and treating and disposing of wastewater generated in the community.

Wastewater and Biosolids Management

The Southside Water Reclamation Plant provides preliminary screening, grit removal, primary clarification and sludge removal, advanced secondary treatment including ammonia and nitrogen removal, final clarification, and effluent chlorination and dechlorination prior to discharge to the Rio Grande River. Treatment plant capacity is based upon 76 MGD hydraulic capacity. The treatment plant has a 6.6 mega-watt cogeneration facility. This facility supplies 100% of the treatment plant's present electrical needs, along with providing heating of various buildings and sludge digesters. The engines are fueled by methane produced in the digesters and by natural gas purchased through a contract carrier. The plant currently generates electricity from the bio-gas produced in the digesters. This is no cost gas that qualifies the electricity generated for Renewable Energy Certificates (REC). These certificates have a value to other electrical energy producers and the Authority continues to research on how to sell its RECs to increase revenue.

Total beneficial reuse of biosolids is accomplished by a combination of land application on 5,000 acres of public-private range land (85% of sludge produced) and production of compost (15% of sludge *Non-potable Water Reuse*).

The existing North I-25 reuse and reclamation system is operated by the Plant Division. The system includes a Ranney type diversion structure on the Rio Grande that diverts a small portion of San Juan-Chama water that is combined with industrial effluent to provide a source of non-potable water for large irrigation sites in the north valley and northeast heights. Operational in April 2013, the Southside Re-use Program will use treated wastewater from the Water Authority's Southside Water Reclamation Plant, which includes domestic and industrial wastewater, to irrigate turf at parks, fields and other recreational areas. The project allows less reliance on unsustainable groundwater pumping and helps protect the aquifer.

Drinking Water

The Water Authority currently operates and maintains two different water systems capable of providing high quality drinking water to the community. The San Juan-Chama Drinking Water Project will supply 70-75% of the metropolitan area's future water. Surface water from the Rio Grande is diverted from the river through a high-tech, 620-foot-long adjustable height bladder dam. Eight miles of pipeline transports the diverted water to the new water treatment plant for purification. Thirty-six miles of new pipeline then transports the treated water to the existing reservoirs throughout the service area.

The groundwater supply is produced from sixty (60) wells grouped in 17 well fields located throughout the metropolitan area and the San Juan-Chama surface water is diverted from the Rio Grande. Total well production capacity is approximately 255 million gallons per day ("MGD"). Eliminating high arsenic wells (those greater than 10 parts per billion arsenic) results in available production capacity of 179 MGD. Peak day demand for 2020 was 141 MGD. The Water Authority also has 4 arsenic treatment facilities that remove naturally occurring arsenic from groundwater. Each well field includes chlorination for disinfection as required by the Safe Drinking Water Act.

Water storage reservoirs provide for fire, peak hour and uphill transfer storage. Water is distributed from higher to lower elevations through a 115-foot vertical height pressure zone to provide minimum static pressures of 50 pounds per square inch ("psi") for consumers. 61 reservoirs are located throughout the service area, with a total reservoir storage capacity of 245 million gallons. If demand requires, reservoir water can also be transferred to a higher zone or across zones through an east-west series of reservoirs by means of pump stations sited at the reservoirs. There are a total of 45 pump stations housing 130 booster pumps, with a total capacity of 748 MGD, available for water transfers between reservoirs.

PLANT

FY22 PLANT OBJECTIVES

- Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.
- Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.
- Develop a long-term strategy for utilizing existing wells that are currently out of service within the water system by the end of the 4th Quarter of FY22.
- Submit annual treatment data to the Partnership for Safe Water-Treatment program for inclusion in the program's annual report of aggregated system water quality data. Maintain individual and combined filter effluent turbidity less than 0.1 NTU more than 95% of time in operation. 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 FY22. Continue working towards the application for the Phase IV Excellence in Water Treatment Award in the Partnership for Safe Water-Treatment.
- Limit overall permit excursions to no more than 5 operating discharge permit violations through the end of the 4th Quarter of FY22.
- Beneficially reuse biosolids by diverting 30% to compost thru the end of the 4th Quarter of FY22.
- Complete Wastewater 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 FY22.
- Continue work on the Partnership for Clean Water program for the Southside Water Reclamation Plant (SWRP) to optimize system operations and performance; Continue work on outstanding items 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 FY22.

FY22 PLANT HIGHLIGHTS

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 eleven 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.

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. The Water Authority's goal is to have the DWP supply 70-75% of all customer demand. Flow conditions in the Rio Grande, due to the continuing drought conditions, have limited the ability to fully realize this goal on a consistent basis.

In FY22, the SWRP section will be participating in the PNM Strategic Energy Management program to systematically trim the SWRP energy costs. Staff will work to optimize the operation of cogeneration facilities and the new exhaust gas cleaning system as well as improve the knowledge base of these facilities. Management at the SAF will actively search for new large-scale customers for compost and wood chips.

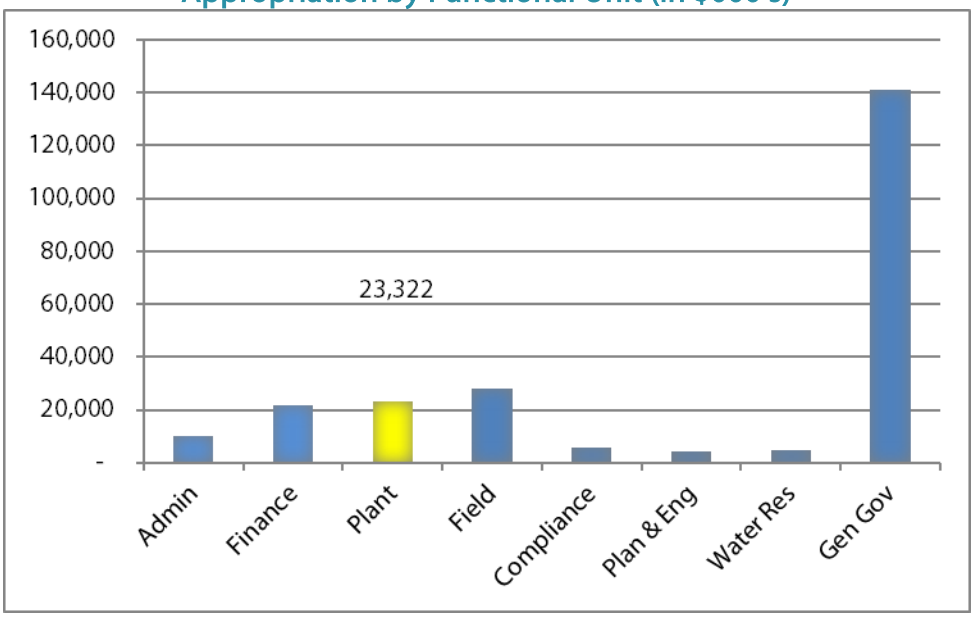
The Water Authority began a major renovation of the SWRP in FY10, called the Reclamation Rehabilitation and Asset Management Plan (RRAMP). The RRAMP is a multi-year program to renew the treatment processes at the plat. Several key improvement projects in this program have been completed, including the Preliminary Treatment Facility (PTF), aeration basin and air piping renovations, final clarifier renovations, and

major renovations and improvements to the Solids Dewatering Facility (SDF). In FY22, RRAMP improvements will focus on Anaerobic Digester renewal, covers for the primary clarifiers to aid in odor control, aeration basin renewal, replacing the rotary drum thickener system for more efficient sludge concentration and digestion, and ongoing Cogen equipment improvements and replacements.

The SWTP will complete the commissioning of a permanent screw press dewatering system for iron sludge at its facility and will continue to work with SWRP staff on managing iron sludge discharges to the collection system. Staff plan to work towards the AWWA Partnership for Safe Water-Treatment Phase IV Excellence in Treatment Award.

Groundwater Operations management will fine tune the groundwater system operations to trim the summer power costs while maintaining system resilience & reliability. Staff plan to deploy high arsenic wells to meet supply needs in the Northside non-potable system once the Collector Well is offline (pending permit approvals). Staff have commissioned and plan to operate a new flow control valve that replaces the defunct sleeve valve at the SWTP.

Appropriation by Functional Unit (in $000's)



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Wastewater Plant						
Personnel	8,611	8,846	8,846	8,518	9,013	167
Operating	3,564	2,823	2,823	3,315	2,856	33
Total	12,175	11,669	11,669	11,833	11,869	200
San Juan-Chama WTP						
Personnel	3,262	3,342	3,342	3,244	3,416	74
Operating	910	1,186	1,186	997	1,154	(32)
Total	4,172	4,528	4,528	4,241	4,570	42
Groundwater Operations						
Personnel	5,172	5,269	5,299	5,190	5,430	131
Operating	1,318	1,524	1,524	1,208	1,453	(71)
Total	6,490	6,793	6,823	6,399	6,883	60
Total Division	**22,837**	**22,990**	**23,020**	**22,473**	**23,322**	**302**
Staffing (FTE)	178	178	179	179	178	(1)

FIELD

The Field division is responsible for operating and maintaining the water distribution system, wastewater collection and non-potable reuse distribution system. Drinking water is distributed to approximately 687,405 residents comprising approximately 95% of the residents of Bernalillo County. About one-third of unincorporated County residents are customers of the Water System. Service is provided to approximately 215,542 accounts, including 185,889 residential and 29,653 multi-family, commercial, institutional and industrial accounts. Approximately 71% of the water sales are for residential uses.

Wastewater Collection and Lift Stations

Wastewater Collections serves both customers connected to the collection system and those transporting wastewater to the treatment plant. The wastewater system consists of small diameter collector sewers, sewage lift stations, and large diameter interceptor sewers conveying wastewater flows by gravity to the Southside Water Reclamation Plant located south of the service area.

The wastewater collection system also includes lift stations that convey wastewater from lower to higher areas or across the Rio Grande. In the north and south valley, wastewater is collected in a vacuum system that includes valve pits, vacuum lines and a vacuum pump station that collects and conveys wastewater to gravity sewers to the Southside Water Reclamation plant for treatment and disposal.

The Field division provides contract operations for existing storm water lift stations. These lift stations move storm water from low lying areas to other facilities for ultimate discharge to the Rio Grande.

Water Distribution

The water distribution system consists of more than 3,130 miles of transmission and distribution pipelines that transport drinking water from the reservoirs to our customers throughout the service area. The water system takes advantage of the unique topography of the Water Authority's service area which allows ground level storage while simultaneously providing system pressure by gravity. Control of the water system is provided by remote telemetry units distributed throughout the system for control from a central control facility.

In addition, the Field division is responsible for water service lines, large and small diameter valves, pressure reducing and air relief valves and utility line locations. The division is responsible for main and service line repairs, street and sidewalk excavations/restoration, system shutdowns for construction coordination, and water meter reading and meter boxes and meter installation.

FY22 FIELD OBJECTIVES

- Submit annual distribution data to the Partnership for Safe Water-Distribution 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 FY22.
- To improve the validated water audit inputs for apparent water loss, test a minimum of 300 small meters to support the water audit and strategic water loss plan by the end of the 4th Quarter of FY22. Test small meters in accordance with the recommendations of the water audit recently conducted by the Southwest Environmental Finance Center.
- To improve reliability and reduce interrupted water service, exercise 4,000 isolation valves by the end of the 4th Quarter of FY22.
- As part of the water distribution system preventative maintenance program, implement a flushing program that uses a systematic approach to flush water lines,

filtering the water using the new NoDes system before returning it to distribution by the end of the 4th Quarter of FY22. Continue monitoring and reporting the occurrence of complaints before and after flushing to evaluate whether the flushing program improved water quality in the pilot area. Identify metrics to be used for measuring the effectiveness of this process moving forward. Utilize the new unidirectional flushing (UDF) module of the InfoWater hydraulic model to assist the pilot program by the end of the 4th Quarter of FY22.

- In accordance with the Capacity, Management, Operations and Management (CMOM) Plan, televise and assess the condition of approximately 5% of the small diameter sanitary sewer system by the end of the 4th Quarter of FY22. Confirm that CCTV (video) inspection data is subsequently uploaded to Maximo and the ITpipes Repository. ITpipes reports that summarize the video data are then immediately available in various standard formats.
- In FY21, in accordance with the Collection System Odor and Corrosion Control Master Plan-Treatment Alternatives, dated August 12, 2019, the Water Authority identified primary chemical feed sites to improve odor and corrosion issues on the Tijeras Interceptor and the Westside Interceptors. In FY22, the Water Authority will develop conceptual level designs to verify the viability of the proposed locations. If verified, continue with design in FY22. If determined to be not viable by the end of the 2nd Quarter of FY22, return with explanation to Collections Section for revision of the siting study.
- Manage chemical usage to maintain collection system corrosion and odor control, with a goal of zero odors, while considering impacts on wastewater treatment operations and effluent quality. Utilize collections system and wastewater treatment monitoring data, winter-summer optimized chemical dosing recommendations from the Master Plan dated August 12, 2019, and sewer odor/corrosion modeling results applied as appropriate. Identify metrics for monitoring and reporting by the end of the 1st Quarter of FY22. Monitor and report metrics through the end of the 4th Quarter of FY22.

FY22 FIELD HIGHLIGHTS

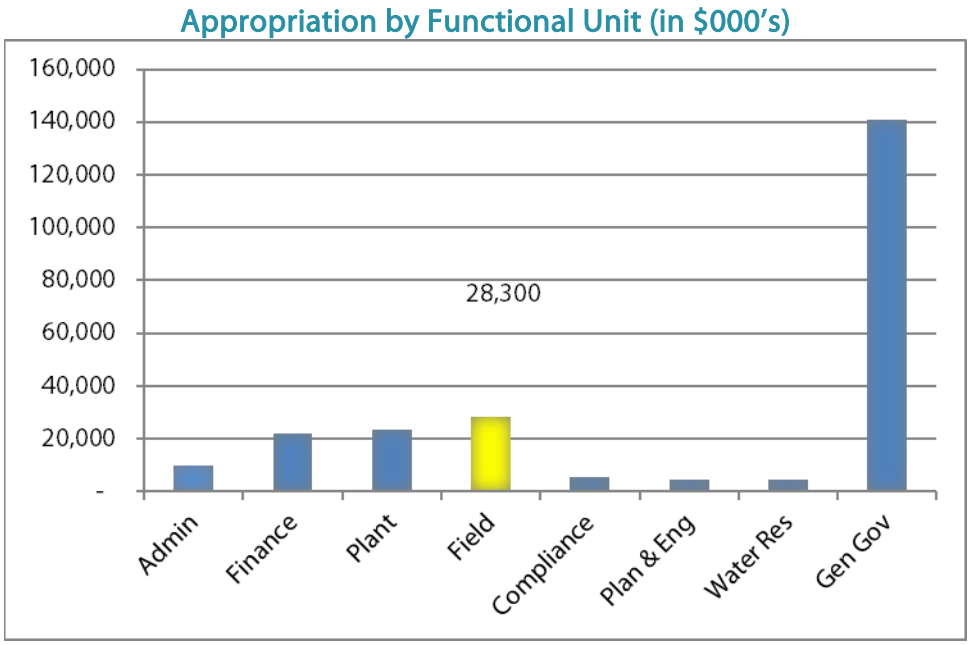
Wastewater Collections section will utilize the process to capture new construction closed-circuit television (CCTV) for inclusion in Maximo and ITpipes Repository after unique GIS identifiers are established. Staff will continue to clean and CCTV the system in accordance with CMOM commitment. Staff will utilize the WATS model and infoSWMM to model the chemical usage and concentration to optimize a chemical cost reduction balanced with odor and corrosion control. Staff will utilize the WATS model to study locations for new chemical stations on the Tijeras interceptor and on the westside.

Water Field-Distribution section will task a dedicated crew to replace 30,000 aging water meters with smart meters. Field crews will continue to perform block to block rehab repairs which will generate significant cost savings by performing these tasks in-house.

Field crews will continue the flushing program to systematically flush water lines and filter the water using the new No Des system before returning it to the distribution system and minimize water loss. Crews will exercise 4,000 isolation valves. The long-term goal is to exercise all isolation valves over a ten-year period. To support the water audit and strategic water loss plan, staff will test a minimum of 300 small meters.

Field crews will continue the 5-year plan to replace the SJC transmission line actuators. The current actuators are undersized and weak so crews are replacing them before they break; generating cost savings by not having to hire outside contractors.

FIELD



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Wastewater Collection						
Personnel	5,673	5,770	5,770	5,759	6,104	334
Operating	1,465	1,458	1,458	1,290	1,467	9
Total	7,138	7,228	7,228	7,049	7,571	343
Water Field Operations						
Personnel	13,135	12,997	12,997	12,516	13,205	207
Operating	5,359	7,522	7,522	5,492	7,524	3
Total	18,494	20,519	20,519	18,008	20,729	210
Total Division	**25,632**	**27,747**	**27,747**	**25,057**	**28,300**	**553**
Staffing (FTE)	215	214	214	214	215	1

COMPLIANCE

Water and wastewater operations are regulated by a myriad of federal, state, and local environmental permits, regulations, rules, etc. including Safe Drinking Water Act regulations and National Pollutant Discharge Elimination System permits, state Solid Waste Facility, Ground Water Discharge, and Underground Storage Tank Permits and Registration, and Bernalillo County Air Quality permits. The Compliance Division continues to develop and maintain a matrix to define requirements, index historical compliance reports and manage submittals to assure all regulatory requirements and procedures are met accurately and on time. Water Quality serves the water operations group to assure continued compliance with drinking water regulations, including monitoring for the San Juan-Chama Water Treatment Plant (SJCWTP), as well as to provide process control monitoring for all facilities and source water monitoring of known and suspected groundwater contamination and the Rio Grande surface water supply. NPDES monitors and regulates industrial discharges by Authority ordinance to assure quality of influent to the Southside Water Reclamation Plant (SWRP) for pollutants of concern: heavy metals, toxic organics, and extra strength discharges and monitors effluent and sludge quality. While drinking water customer complaints and inquiries are addressed expeditiously and an annual Water Quality Report is provided to consumers, the P2 program continues to assist regulated industrial waste discharge customers and the public to reduce potential pollution threats. The Water Quality Laboratory (WQL), an internationally accredited environmental laboratory, provides more than 18,500 sample analyses annually to support Plant and Field Operations and other client groups.

FY22 COMPLIANCE OBJECTIVES

- Monitor compliance with the Water Authority's Cross Connection Prevention and Control Ordinance. Obtain a compliance rate goal of 75% through the end of the 4th Quarter of FY22.
- 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. The compliance rate goal is 87% for each category through the end of the 4th Quarter of FY22. Evaluate the effectiveness of this metric by the end of the 2nd Quarter of FY22. Track and report data through the end of the 4th Quarter of FY22.
- 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, to coordinate efforts to reduce FOG discharges. Track and report the number of SSOs due to FOG compared with previous years through the end of the 4th Quarter of FY22.
- Maintain the Compliance Division Regulatory Compliance 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, local laws and ordinances, and issues involving emerging contaminants to identify and assess potential impacts on the Water Authority. Provide quarterly reports through the end of the 4th Quarter of FY22.
- Collect, monitor, and report weekly, monthly and quarterly key laboratory performance metrics to include:
  - WQL results approved and reported for each laboratory section (chemistry, microbiology, metals, and external labs). Maintain greater than 0.5 results reported per productive hour per quarter in each analytical section through end of the 4th Quarter of FY22.

- ❖ Laboratory Productivity (results reported per productive hour, results sent to subcontract laboratories in lieu of in-house testing). Maintain greater than 2,000 results per quarter in each analytical section through the end of the 4th Quarter of FY22.
- ❖ Percentage of results reported late (turnaround time). Maintain less than 10 percent results reported late per quarter and provide quarterly results through the end of the 4th Quarter of FY22.

➢ Continue to develop LabVantage (laboratory information management system) throughout FY22 to increase the automation of data entry to reduce data entry errors and reduce the amount of paper used at the laboratory. Begin developing reports in LabVantage by the end of the 4th Quarter of FY22.

➢ Utilize the Environmental Monitoring Program to monitor the reliability and consistency of results from Compliance field instrumentation and sample collection techniques. Conduct at least one internal audit per year. Conduct and report on internal audits of sampling procedures and report results as they pertain to regulatory requirements and standard operating procedures. Issue corrective action response requests as needed and track and report on their progress. Ensure Compliance Division field instruments are calibrated as necessary and that personnel demonstrate capability in sample collection and measurement. Monitor and report on corrective action response report (CARR) closure duration quarterly through the end of the 4th Quarter of FY22.

➢ Maintain accreditation with the American Association for Laboratory Accreditation (A2LA) by addressing any changes resulting from the on-site assessment of the Water Quality Laboratory. Conduct internal audits, Standard Operating Procedure (SOP) revisions, and identify actions to address risks and opportunities as required by ISO/IEC 17025:2017. Implement any changes resulting from the 2019 Methods Update Rule. Track and report on corrective actions and risk assessment responses. Maintain a closure duration of less than 60 days per CARR and an average completion of less than 30 days for all CARRs per fiscal year through the end of the 4th Quarter of FY22.

➢ Prepare for the Revised Lead and Copper Rule by developing a system for a lead service line inventory and to identify and track monitoring at all schools and child-care centers in the service area by the end of the 4th Quarter of FY22. The final rule was published in January 2021 and must be implemented by the end of the 2nd Quarter of FY24.

FY22 COMPLIANCE HIGHLIGHTS

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.

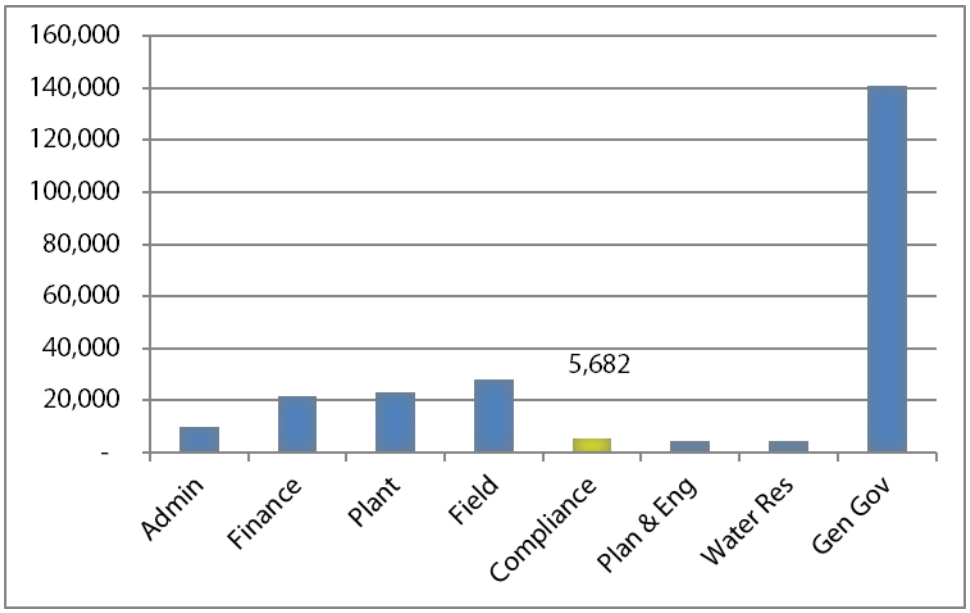
The Water Quality Lab plans to refurbish the HVAC chiller compression Unit, upgrade the HVAC system controller unit, replace three fume hoods, and perform a future laboratory instruments needs assessment.

The Water Quality program will implement the sample collection scheduling through Maximo, continue the study of water quality parameters with a focus on DBPs, manganese, iron and cyanide, and prepare for the anticipated 2020 Sanitary Survey reschedule (Due to Covid-19, the survey was postponed in 2020). Staff will begin the ASR sampling routines providing more timely access to the data and cost-savings over hiring a contractor to perform the sampling.

In accordance with the new NPDES permit, the staff will continue with the fish tissue study. Staff will work with a consultant to complete the Mercury Reduction study.

COMPLIANCE

Appropriation by Functional Unit (in $000's)



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Laboratory						
Personnel	1,710	1,945	1,904	1,588	1,899	(6)
Operating	472	515	515	400	514	(1)
Total	2,183	2,460	2,419	1,988	2,413	(6)
NPDES						
Personnel	1,274	1,515	1,515	1,191	1,560	44
Operating	108	148	148	119	220	73
Total	1,382	1,663	1,663	1,310	1,780	117
Water Quality						
Personnel	964	1,007	1,007	791	967	(40)
Operating	518	474	474	515	522	48
Total	1,482	1,481	1,481	1,306	1,489	8
Total Division	**5,047**	**5,604**	**5,563**	**4,605**	**5,682**	**119**
Staffing (FTE)	44.5	44.5	43.5	43.5	44	0.5

PLANNING & ENGINEERING

The division coordinates and manages Capital Improvement Plan (CIP) line extensions and infrastructure design for water and wastewater system expansion, manages water and wastewater line rehabilitation and reviews and approves new water and wastewater utility development. The group also coordinates and manages small diameter water and wastewater rehabilitation and replacement to developed areas of the North and South Valley.

The Asset Management program is an extensive business model that helps utility managers make better acquisition, operations and maintenance, renewal, and replacement decisions. The principles of asset management were developed to address the critical problem of aging public infrastructure and changing utility business environment. In Fiscal Year 2019, the Water Authority upgraded its Maximo® Enterprise Asset Management System/Computerized Maintenance Management System and integrated mobile work order technology to improve the accuracy of the asset data.

FY22 PLANNING & ENGINEERING OBJECTIVES

- Locate water leaks by 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 FY22; Track, evaluate, and report on pilot-scale Echologics acoustic leak detection system on a quarterly basis in FY22.
- Expend $64 million in water and wastewater capital rehabilitation and replacement programs to replace aging, high risk assets that are past their useful life by the end of the 4th Quarter of FY22. $1 million shall be dedicated and used for identifying and replacing steel water pipes in critical or poor condition by the end of the 4th Quarter of FY22.
- Prepare a report on the status of the implementation of the Reclamation Rehabilitation Asset Management Plan (RRAMP) including activities completed and remaining work by the end of the 1st Quarter of FY22. Continue implementation of the RRAMP by planning, designing and constructing SWRP improvements through the end of the 4th Quarter of FY22.
- Implement at least one planned Interceptor Rehabilitation project in FY22, and complete at least one interceptor design packages by the 4th Quarter of FY22; Implement at least one planned Small Diameter Sanitary Sewer Rehabilitation project in FY22.
- Coordinate with Bernalillo County to design and initiate construction of a force main to convey wastewater from the Municipal Detention Center (MDC) to the Water Authority collections system by the 4th Quarter of FY22.
- Work with the Navajo Nation to design and construct water conveyance infrastructure to deliver water provided by the Navajo Nation to To'Hajiilee by the end of the 4th Quarter of FY22.
- Solicit feedback on the draft of the Utility Development Guide and incorporate feedback by the end of the 2nd Quarter of FY22. Circulate a final draft for review by the end of the 4th Quarter of FY22.
- Finalize Operating Plans for Centralized Engineering, Field, Water Resources, and Asset Management, to be used to inform/train new staff and for existing staff to use as resource by the end of the 4th Quarter of FY22.
- Complete a comprehensive asset management plan to understand and document the asset condition, risk assessment, remaining useful life, and replacement cost for every asset by the end of the 4th Quarter of FY23. Input this information into the enterprise asset management system (EAMS) and begin life cycle cost accounting.
- Continue monitoring progress on the Strategic Asset Management Program (SAMP) and report quarterly through the end of the 4th Quarter of FY22. Track and report metrics on

asset registry accuracy and report status towards achieving target(s) by the end of the 4th Quarter of FY22.

FY22 PLANNING & ENGINEERING HIGHLIGHTS

Centralized Engineering will continue managing CIP projects. Major projects include: $8M for construction of the FY21-1 Westside Fortuna/Avalon Interceptor Rehab, $3.5M for steel water line replacement (Walter/Monte Vista package), $27M for various SWRP renewal projects, and $7.8M for GW Systems Renewal projects.

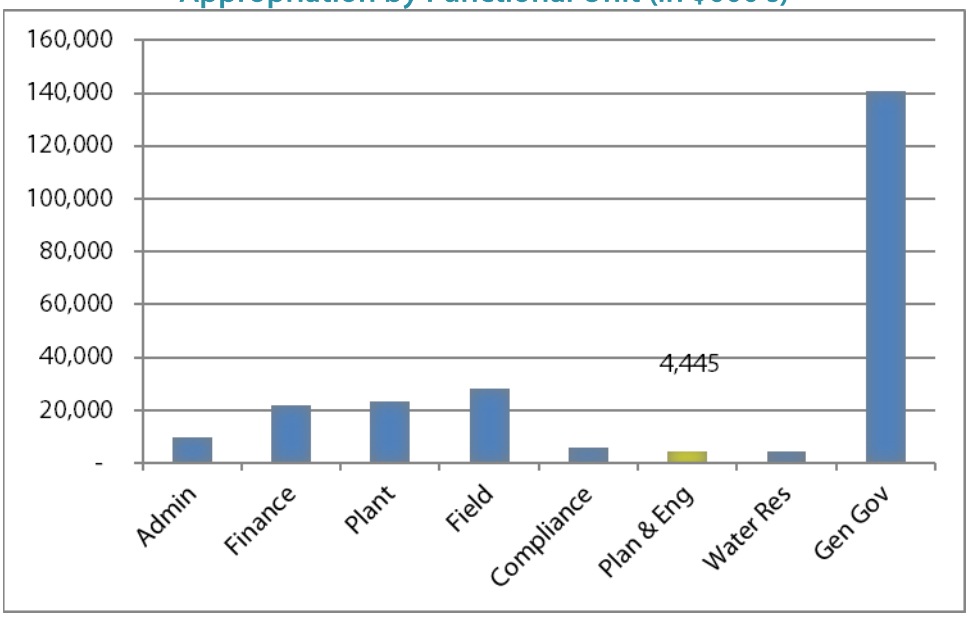
In-House Design projects for FY22 include: finalizing the FY22 Steel Water Line Replacement packages, preparing construction documents to address point repairs of failed portions of the sanitary sewage collection system, finalizing the draft of the 5-year Strategic Plan for In-House Design, and starting the preparation of the FY23 Steel Water Line Replacement packages.

The Asset Management Program Team will start, with a consultant, the Comprehensive Asset Management Plan (CAMP) with Hazen consultant by performing condition and risk assessments, updating asset attributes and replacement cost data for the SJCWTP and SWRP.

The upgrade to Finance Enterprise will allow Asset Management staff to use Project Management for tracking each work authorization for each project and provide budget allocation towards projects for monitoring cash flows.

PLANNING & ENGINEERING

Appropriation by Functional Unit (in $000's)



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Central Engineering						
Personnel	2,791	3,050	3,050	2,781	3,112	62
Operating	103	66	66	160	66	-
Total	2,894	3,116	3,116	2,941	3,178	62
Asset Management						
Personnel	259	535	535	537	568	32
Operating	10	17	17	15	33	17
Total	269	552	552	552	601	49
Planning & Util. Develop.						
Personnel	435	554	554	457	578	24
Operating	69	85	85	95	88	3
Total	503	639	639	552	666	27
Total Division	**3,667**	**4,307**	**4,307**	**4,045**	**4,445**	**138**
Staffing (FTE)	32	32	32	32	32	-

WATER RESOURCES

The Water Resources Division implements the Water Authority Board-adopted Water Resources Management Strategy (Strategy) to provide a safe and sustainable water supply. The Strategy provides policies and recommendations for continuation of the need to shift from sole reliance on the aquifer to renewable supplies including the San Juan-Chama Drinking Water Project. The Strategy is designed to ensure Water Authority customers a safe and sustainable water supply at least to 2060. The Strategy incorporates the projects identified to be implemented in the original strategy including the San Juan-Chama Drinking Water Project, North I-25 Non-potable Surface and Industrial Reuse Project, Southside Municipal Effluent Polishing and Reuse project and demonstration project for aquifer storage and recovery.

This Division also oversees the Water Authority's water conservation programs. The long-term water conservation strategy elements implemented to date include an extensive public education and marketing effort, financial incentives for replacement of high volume toilets with low volume toilets, financial incentives for replacing existing high-water use landscaping with xeriscaping, financial incentives for replacing high water use washing machines with low use models, and free water use audits. Residential audits include retrofits of showerheads, faucet aerators, and toilet displacement devices. Mandatory water waste prohibitions and limitations on high water use plants in landscaping new development have been enacted and are being enforced.

FY22 WATER RESOURCES OBJECTIVES

- Work with the Non-Revenue Water Loss Committee on the implementation of water loss control strategies by identifying areas of improvement recommended in the water loss report and reporting activities through the end of the 4th Quarter of FY22.
- To prepare for increased climate variability, encourage installation of water conservative landscaping, while working towards the *Water 2120* conservation goal of 110 gallons per capita per day (gpcd) by 2037 by implementing the following activities:
  - Perform a smart controller field performance study on the top 5% of residential customers,
  - Increase smart controller rebate adjustments and Xeriscape square feet conversions by comparing current fiscal year to prior fiscal years,
  - Increase the amount of commercial class customers rebate adjustments by comparing from baseline (prior fiscal year) to current fiscal year;
  - Work with the Public Information Officer to develop outreach targeting water use messaging that incorporates climate variability. Present the new messaging to management by the end of the 3rd Quarter of FY22,
  - Develop a Landscape Irrigation Guide to educate customers about the importance of efficient irrigation and how to efficiently water landscapes by the end of the 4th Quarter of FY22.
- Identify a new aquifer storage and recovery (ASR) project location. Work with the New Mexico Environment Department and Office of the State Engineer to begin ASR permitting by the end of the 4th Quarter of FY22.
- Track and report conservation education outreach to service are customers and meet the following targets: 1) 100 Irrigation Audits; 2) 45 Meetings with Landscapers, 3) 30 Meetings with Property Managers; and 4) two Water Conservation Open House Meetings by the end of the 4th Quarter of FY22.
- To better educate children on the importance of water and resource planning, continue to collaborate with ¡Explora! to design interactive water exhibits for the new STEM center which is planned to open in Q2 of FY22.
- Implement the Rivers and Aquifers Protection Plan (RAPP), the Water Authority's source water protection plan through:
  - Complete source water assessments for surface water and groundwater by 2nd Quarter of FY22. The source water assessments will utilize the source water

protection areas (SWPAs) developed from the capture analysis and the updated potential sources of contamination (PSOC) inventory from FY21. Review the results of the source water assessments to determine if changes are required to the RAPP and protection measures,
- ❖ Tracking and review of site data and documents for priority groundwater contamination sites through the end of the 4th Quarter of FY22,
- ❖ Collaboration and coordination with other agencies, including support of the Water Protection Advisory Board (WPAB) and the Office of Natural Resources Trustee through the end of the 4th Quarter of FY22,
- ❖ Contracting with the NM Bureau of Geology and Mineral Resources to provide an update to the Middle Rio Grande Basin Water Quality Study by the end of the 4th Quarter of FY22.

➢ Provide leadership and support of the Middle Rio Grande Endangered Species Collaborative Program (ESA Collaborative Program) through: 1) Participation in the Collaborative Program Executive Committee and 2) Participating in the development of adaptive management practices for the program.

➢ Complete acquisition of easements for additional storage in Abiquiu Reservoir by the end of the 4th Quarter of FY22. Continue towards permitting and environmental approvals for storage of native water in Abiquiu Reservoir through the 4th Quarter of FY22.

➢ Initiate, site, drill, install, and sample a groundwater monitoring well at the northernmost extent of groundwater contamination at the Kirtland Air Force Base (KAFB) Bulk Fuels Facility jet fuel leak site by 4th Quarter of FY22. Construction of this well will include the development of a work plan and sampling and analysis plan (SAP) with New Mexico Environment Department (NMED) input. Work with Water Authority Public Information Office to coordinate neighborhood communications around the need for and drilling of the well.

FY22 WATER RESOURCES HIGHLIGHTS

Water Resources-Conservation will begin their Watersmart Academy for professional landscapers. Classes will count towards licenses. Staff will produce and publish a new Efficient Irrigation Customer Guide, which will build on input provided in the Customer Conversations meetings.

The education program will complete the fish monitoring activity for high school students and create a new field trip for 7th grade students involving citizen science and data collection and analysis. Staff will continue its collaboration with Explora to design water exhibits for the new STEM education wing of the museum which is scheduled to open in 2021.

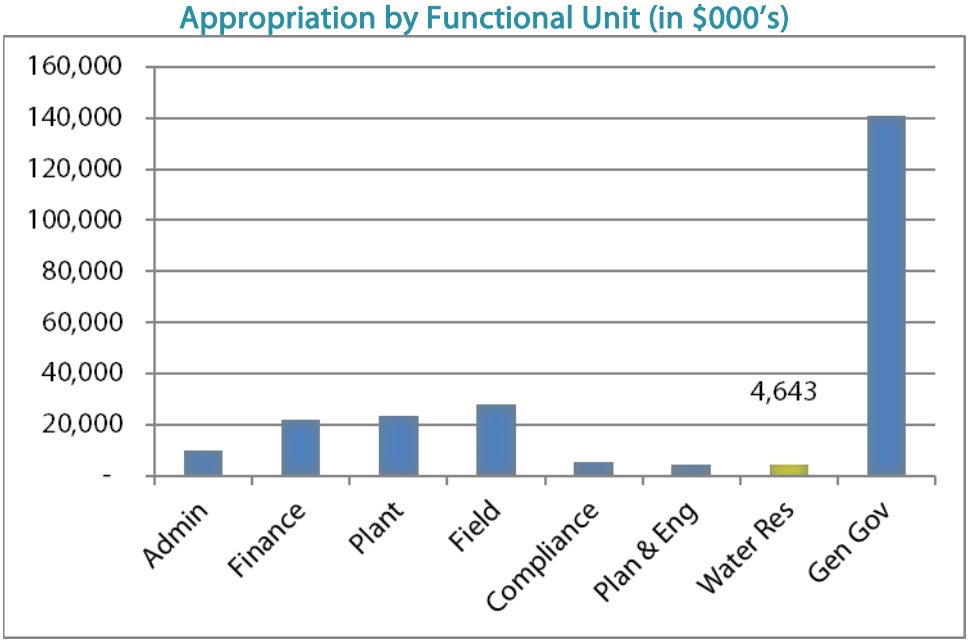
The capture analysis was completed in FY21 and the next steps, based on the information collected will be: defining realistic source water protection areas, updating the potential source of contamination inventory, and updating the source water assessments.

Staff will work to get the remaining permanent easements around Abiquiu reservoir, which is an important step to increasing the storage at this facility from 170,000 acre-feet to 238,000 acre-feet. Staff will begin the analysis and evaluation for storage of San Juan-Chama or native water at locations in the Middle Rio Grande. Staff will work with Central Engineering, Operations, and Compliance to develop a guidance and flowcharts for evaluating, building and managing future joint projects to include: aquifer storage and recovery projects, reuse projects and updates to *Water 2120*.

Water Resources staff have committed leadership and support of the Endangered Species Act-Collaborative Program. The program has developed a timeline with milestones for completion of a Science & Adaptive Management Plan and a Long-Term Plan.

The 2004 Water Authority Biological Opinion – 2020 Amendment covers sediment management at the SJC diversion facility and potential future

installation of a mechanical rake system. The amendment also renews the BioPark funding commitment and egg monitoring for 10 years.

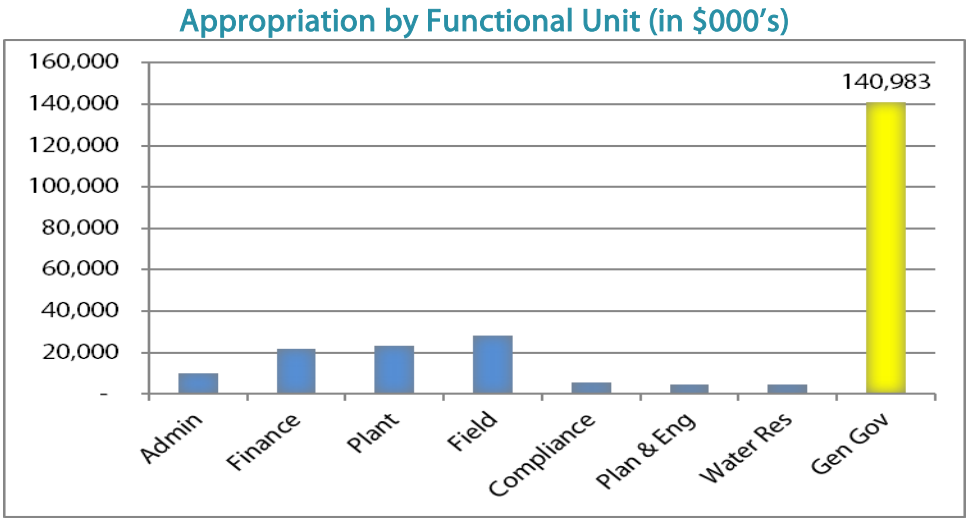


Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Water Resources Planning						
Personnel	501	556	556	582	563	6
Operating	1,334	1,286	1,286	538	1,284	(2)
Total	1,835	1,842	1,842	1,119	1,846	4
Conservation						
Personnel	494	595	595	559	632	37
Operating	980	1,566	1,566	1,139	1,566	-
Total	1,473	2,161	2,161	1,697	2,198	37
Groundwater Protection						
Personnel	65	176	176	96	179	3
Operating	282	388	388	340	388	-
Total	348	564	564	436	567	3
Arsenic Removal						
Personnel	-	-	-	-	-	-
Operating	-	32	32	-	32	-
Total	-	32	32	-	32	-
Total Division	**3,656**	**4,599**	**4,599**	**3,253**	**4,643**	**44**
Staffing (FTE)	12	13	13	14	14	1

GENERAL GOVERNMENT

GENERAL GOVERNMENT DIVISION

The General Government Division was developed to appropriate the expenses that are Authority-wide and not specific to any one department or division. The departments in this division include: Power & Chemicals, Taxes, Overhead (includes retirement payouts), San Juan-Chama loan, and Interfund Transfers.



Expenses by Department ($000's)	Audited Actual FY20	Original Budget FY21	Revised Budget FY21	Estimated Actual FY21	Approved Budget FY22	Appr 22/ Rev 21 Chg
Power & Chemicals						
Operating	23,279	21,487	21,487	22,357	21,487	-
Total	23,279	21,487	21,487	22,357	21,487	-
Taxes						
Operating	284	656	656	1,007	656	-
Total	284	656	656	1,007	656	-
Overhead						
Personnel	378	495	495	448	500	5
Operating	874	1,160	1,160	1,149	1,160	-
Total	1,252	1,655	1,655	1,597	1,660	5
Total Program	**24,815**	**23,798**	**23,798**	**24,962**	**23,803**	**5**
San Juan Chama						
Operating	2,444	2,747	2,747	2,679	2,747	-
Total	2,444	2,747	2,747	2,679	2,747	-
General Government						
Interfund Transfers	111,029	115,433	118,233	111,029	114,433	(3,800)
Total Division	**138,287**	**141,978**	**144,778**	**138,669**	**140,983**	**(3,795)**

CAPITAL BUDGET

Approved
Operating Budget
FY22

CAPITAL BUDGET

What are Capital Improvements?

Capital Improvements include the purchase, construction, replacement, addition, or major repair of public facilities, infrastructure, and equipment. The selection and evaluation of capital projects involves analysis of Water Authority requirements, speculation on growth, the ability to make estimates, and the consideration of historical perspectives. A "Capital Project" has a monetary value of at least $5,000, has a useful life of more than two years, and results in the creation or revitalization of a fixed asset. A capital project is usually relatively large compared to other "capital outlay" items in the annual operating budget.

San Juan-Chama Drinking Water Plant

How are Capital Improvements Funded?

The Water Authority's Capital program is comprised of different categories of projects, each with its own funding rules. The Basic Program is funded by recurring revenues generated from the water/wastewater rate structure. Special Projects are done outside of the Basic Program but are funded from the same revenue stream that funds the Basic Program.

The current Rate Ordinance states that, on average, 50 percent of the cost of capital projects which constitute the normal (Basic) capital program of the water and sewer system shall be paid with cash rather than from borrowed funds.

The balance of capital funding is obtained through revenue bond or loan financing.

The rate structure is designed to provide sufficient revenue to meet the cash requirement and to meet the debt service obligations incurred to finance the remainder of the Basic Program.

System growth projects are funded through Utility Expansion Charge (UEC) revenues, either by reimbursing capital investments made under the terms of a Developer Agreement, or by direct appropriation to Water Authority capital projects. UEC revenue is considered cash for purposes of meeting the cash test.

The Water Authority has increased in recent years its utilization of state and federal grants to fund some Capital Improvement Projects in part or in whole.

CAPITAL BUDGET

What is the Capital Improvement Plan (CIP)?

The CIP is a multiyear plan used to identify and coordinate capital needs in a way that maximizes the return to the ratepayers. Advanced planning of all Water Authority projects helps the Board, staff, and public make choices based on rational decision-making, rather that reacting to events as they occur. The CIP represents improvements that are viewed as urgent and can be funded from available revenue and/or reserve sources. The system of CIP management is important because: (1) the consequences of investments and capital improvements extend far into the future; (2) decisions to invest are often irreversible; (3) such decisions significantly influence a community's ability to grow and prosper.

The CIP Process

The development and update of the CIP is an ongoing activity. It is part of the overall budgeting process since current year capital improvements are implemented through adoption of the annual budget. Specific activities in the process are:

- **Establishing Timetables, Goals, and Objectives:**
  At the onset of the budgeting process, the CIP update begins with formal budget planning decisions between management and department heads. Timetables are set that extend through development and final adoption of the budget. Water Authority goals and objectives are reviewed to ensure that they are being met through the budget cycle.
- **Taking Inventory and Developing Proposals:**
  Staff gathers information about the Water Authority's capital facilities and equipment to assess the condition of each. Staff carefully considers construction, repair, replacement, and additions. From there, a list of proposed projects and equipment is developed.
- **Conducting Financial Analysis:** Finance staff conducts financial analysis of historic and projected revenues and expenses to estimate the Water Authority's cash flow and long term financial condition. Capital financing alternatives are identified and recommendations are prepared to match the type of funding most appropriate for specific capital improvements.

The CIP Ten-Year (Decade) Plan

The blueprint for the Water Authority's Basic Program is its Decade Plan, a ten-year capital plan required to be updated biennially in even numbered fiscal years with two, four, six, eight and ten-year planning elements. The Decade Plan includes detailed requirements for program development and project scope, schedule, budget, justification and alternatives. The Decade Plan requires approval by the Water Authority Board with at least one public hearing and due deliberation. In those fiscal years where the Decade Plan must be updated, the new Decade Plan must be approved by the Water Authority's Board before that year's Capital Program budget can be approved. This policy ensures there is always an approved two-year planning element in place for every approved annual Basic Program budget. FY22 is the first year of the two-year planning element included in the FY22 – FY31 Decade Plan to be approved by the board in April 2021.

The electronic version of the FY2022-2031 CIP Decade Plan can be found at the Water Authority's website:

http://www.abcwua.org/your-water-authority-finances/

Operating Cost/Saving Impacts

The potential operating cost/saving impacts of the projects are listed on the Project Summary Sheets in the FY22 – FY31 Decade Plan.

Demonstrated on the following page is the planned funding allocation by category for a ten-year period in ($000's).

Decade Plan FY 2022 - 2031: Summary of Projects

Category No.	Category Descriptions	Projected Fiscal Year Revenue by Category ($1000's) 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Priority Renewal Projects:												
100	Sanitary Sewer Pipelines	12,150	15,500	20,850	23,750	25,100	20,600	21,600	21,600	32,600	32,600	**226,350**
200	Drinking Water Pipelines	6,475	6,150	11,275	11,475	11,225	11,225	11,225	11,225	11,225	11,225	**102,725**
300	Southside Water Reclamation Plant	27,750	19,150	14,100	11,150	6,650	6,500	7,500	14,000	6,500	6,500	**119,800**
400	Soil Amendment Facility (SAF)	50	350	50	50	50	50	50	50	50	50	**800**
500	Lift Station and Vacuum Station	1,548	3,420	2,020	1,420	1,420	1,780	1,420	1,150	1,150	1,150	**16,478**
600	Odor Control Facilities	200	50	850	50	50	50	50	50	50	50	**1,450**
700	Drinking Water Plant: Groundwater	7,850	7,850	5,792	10,206	14,929	22,474	20,606	17,190	14,630	13,056	**134,583**
800	Drinking Water Plant: Treatment	1,875	5,000	5,450	3,350	3,350	1,350	1,250	1,150	1,150	1,150	**25,075**
900	Reuse Line and Plant	1,800	200	200	200	200	200	200	200	200	200	**3,600**
1000	Compliance	365	365	365	365	365	365	365	365	365	365	**3,650**
1100	Shared Renewal	4,482	4,686	3,051	3,294	3,468	3,628	2,475	390	140	390	**26,004**
1200	Franchise Agreement Compliance	4,200	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	**40,200**
1300	Vehicles and Heavy Equipment	2,988	2,921	2,941	3,835	4,029	3,778	5,259	4,630	3,940	5,264	**39,584**
	Total Priority Renewal Projects	**71,733**	**69,642**	**70,944**	**73,145**	**74,836**	**76,000**	**76,000**	**76,000**	**76,000**	**76,000**	**740,300**
Water 2120 Projects:												
8000	All Water 2120 Projects	435	235	635	635	635	635	635	635	635	635	**5,750**
	Total Special Projects	**435**	**235**	**635**	**635**	**635**	**635**	**635**	**635**	**635**	**635**	**5,750**
Special Projects:												
9400	All Special Projects	10,923	5,350	7,550	3,350	3,350	3,350	3,350	3,350	3,350	3,350	**47,273**
	Total Special Projects	**10,923**	**5,350**	**7,550**	**3,350**	**3,350**	**3,350**	**3,350**	**3,350**	**3,350**	**3,350**	**47,273**
Priority Growth Projects:												
2400	Land and Easement Acquisition	10	10	10	10	10	10	10	10	10	10	**100**
2700	Development Agreements	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	**12,500**
2800	MIS/GIS	3,425	4,430	2,490	2,410	2,450	2,490	2,450	2,410	2,490	2,490	**27,535**
3100	Master Plans	75	50	-	80	40	-	40	80	-	-	**365**
3200	Miscellaneous	250	250	250	250	250	250	250	250	250	250	**2,500**
	Total Priority Growth Projects	**5,010**	**5,990**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**43,000**

Policy for the Budget Development, Monitoring and Amendment of the Capital Improvement Program

The development and update of the Capital Improvement Program (CIP) is an ongoing activity. It is part of the overall budgeting process since current year capital improvements are implemented through adoption of the annual budget.

Specific activities in the process are:

- **Establishing Timetables, Goals, and Objectives:**
  At the onset of the budgeting process, the CIP update begins with formal budget planning decisions between management and department heads. Timetables are set that extend through development and final adoption of the budget. Water Authority goals and objectives are reviewed to ensure that they are being met through the budget cycle.
- **Taking Inventory and Developing Proposals:**
  Staff gathers information about the Water Authority's capital facilities and equipment to assess the condition of each. Staff carefully considers construction, repair, replacement, and additions. From there, a list of proposed projects and equipment is developed.

Conducting Financial Analysis: Finance staff conducts financial analysis of historic and projected revenues and expenses to estimate the Water Authority's cash flow and long-term financial condition. Capital financing alternatives are identified, and recommendations are prepared to match the type of funding most appropriate for specific capital improvements.

FY22 Water Authority Capital Improvement Program Budget

The FY22 capital program appropriation totals $80.4 million. $71.7 million is appropriated for the level one priority basic capital programs, $5.0 million for growth related projects, $3.4 million for special projects, and $0.3 million from the Water Resource Charge revenue. The $3.4 million for special projects is comprised of $2.0 million of Automated Meter Infrastructure (AMI), $1.0 million for steel water line replacement, and $0.4 million for various renewable energy projects. There are no appropriations in the FY22 CIP budget for projects that will be funded with revenues from FY23 or later.

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.

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.

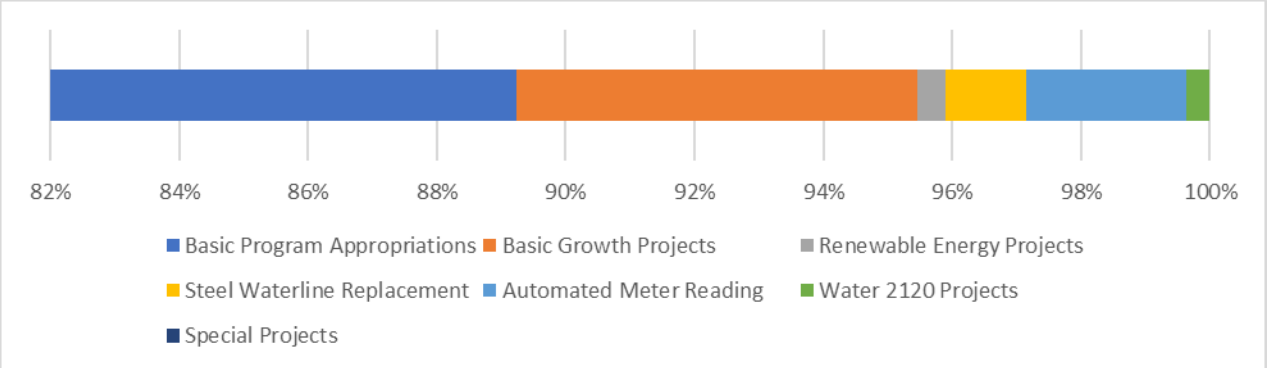
Demonstrated in the table and charts on the following page, are planned improvements listing of all the Level 1 priority renewal projects, special projects, and growth-related projects. ($000's).

CAPITAL BUDGET

Project Description	(000's)	FY19 Actual	FY20 Actual	FY21 Budget	FY22 Budget
Basic Program Appropriations:					
Sanitary Sewer Pipeline Renewal		$ 9,801	$ 12,064	$ 11,000	$ 12,150
Drinking Water Pipeline Renewal		5,372	8,450	6,050	6,475
Southside Water Reclamation Plant Renewal		17,163	22,084	23,340	27,750
Soil Amendment Facility (SAF) Renewal		103	117	50	50
Lift Station and Vacuum Station Renewal		2,006	7,474	3,205	1,548
Odor Control Facilities Renewal		661	475	250	200
Drinking Water Plant Groundwater System Renewal		2,670	10,091	8,125	7,850
Drinking Water Plant Treatment Systems Renewal		3,294	6,430	3,900	1,875
Reuse Line and Plant Rehab		70	211	150	1,800
Compliance		297	430	390	365
Shared Renewal		28	108	40	4,482
Franchise Agreement Compliance		4,249	4,942	3,500	4,200
Vehicles and Heavy Equipment		5,143	4,104	1,000	2,988
BASIC PROGRAM TOTAL		**$ 50,857**	**$ 76,980**	**$ 61,000**	**$ 71,733**

Project Description	(000's)	FY19 Actual	FY20 Actual	FY21 Budget	FY22 Budget
Special Projects Appropriations:					
Steel Waterline Rehab		$ 1,000	$ 1,294	$ 1,000	$ 1,000
Automated Meter Infrastructure (AMI)		421	1,584	2,000	2,000
Renewable Energy Projects		323	552	350	350
Issuance Costs		629	665	-	-
Miscellaneous		4,552	21,625	2,683	-
SPECIAL PROJECTS TOTAL		**$ 6,925**	**$ 25,720**	**$ 6,033**	**$ 3,350**
COMBINED BASIC PROGRAM/SPECIAL PROJECTS		**57,782**	**102,700**	**67,033**	**75,083**
Growth Projects Appropriations:					
Drinking Water Plant Facilities Growth		$ 5,184	$ 240	$ -	$ -
Land & Easment Acquisition		14	2	500	10
Development Agreements		416	443	1,440	1,250
Management Information Systems/Geographical Information Systems (MIS/GIS)		4,040	2,974	2,000	3,425
Master Plans		235	225	-	75
Miscellaneous Growth		35	44	60	250
GROWTH PROJECTS TOTAL		**$ 9,924**	**$ 3,928**	**$ 4,000**	**$ 5,010**
Water 2120 Projects Appropriations:					
Water 2120 Plan		$ 51	$ 45	$ 637	$ 300
WATER 2120 PROJECTS TOTAL		**$ 51**	**$ 45**	**$ 637**	**$ 300**
GRAND TOTAL		**$ 67,757**	**$ 106,673**	**$ 71,670**	**$ 80,393**

Demonstrated in the graph below is the overall percentage of each Capital Improvements Project category:



FY22 CIP Project Highlights

The Water Authority CIP includes projects to improve the overall efficiency of the Water Authority and to enhance the Water Authority's ability to provide services to its customers. The projects included in this CIP are intended to accomplish these objectives in the most efficient and cost-effective manner.

The Water Authority will continue to spend $250 million to upgrade its wastewater treatment plant and add an additional $36 million per year to Capital Improvement Program (CIP) funding to cover the costs of routine replacement of aging pipes, pumps and other infrastructure as recommended in the most recent asset management study commissioned by the Water Authority.

The Water Authority intends to enhance the water and sewer infrastructure with several targeted projects included in the 2022-2031 Decade Plan. Some of the major projects are listed below:

- ✓ Inspection and Rehabilitation of Steel Waterlines
- ✓ Upgrade of Automatic Metering Infrastructure (AMI)
- ✓ Improvements to Information Technology to include Supervisory Control and Data Acquisition (SCADA) system replacement at Plant facilities
- ✓ Sanitary Sewer Pipeline Renewal
- ✓ Small and Large Diameter Water Pipeline Renewal
- ✓ Southside Water Reclamation Plant Facility Renewal
- ✓ Groundwater System Renewal
- ✓ San Juan-Chama Drinking Water Plant System Renewal

Some of the major project details include:

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. 46-percent (approximately 111 miles) of the current interceptors within 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. The FY22 budget reflects an increase of $1.1 million from FY21 that will be used to continue to evaluate, plan, design, and construct for sanitary sewer interceptor rehabilitation or complete removal and replacement of severely deteriorated sewer interceptor lines that are beyond feasible rehabilitation.

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.

The Supervisory Control and Data Acquisition (SCADA) system hardware replacement and software upgrade will continue in FY22. The SCADA process computers provide continuous operations 24 hours a day 365 days a year. Due to the age of the process control computers, Dell warranties are no longer valid. If the SCADA equipment should fail, it would be extremely difficult to produce, treat or distribute water manually.

At the Southside Water Reclamation Plant (SWRP), funding will continue to be used to rehabilitate and make improvements to the existing primary clarifiers. Covered Primary Clarifiers 1-4 and upgraded PH1/PH2 will allow Primary Clarifiers 5-8 to be taken out of service periodically for maintenance, with no treatment process impact, and no Odor problems. This also will include repair of structural concrete and replacement of the mechanical scraper mechanisms. In addition, covers will be added to assist in combating offensive odors.

The South Aeration Basins 5 & 6 Rehab – Construction project will resolve diffuser/piping repairs/replacement plus relocation of valves above the mixed liquor level are necessary to maintain and operate these aeration basins effectively. Rehab of the aeration basins ensures effective DO transfer in the basins, allowing SWRP Ops to make proper process changes to achieve WQ discharge criteria. Effective aeration and accessible equipment will decrease effort required for O&M activities.

The Information Technology/GIS funding allocations will be utilized to purchase new/upgrade all hardware and software applications and the databases that support those applications. Applications include Finance Enterprise (formerly know as OneSolution), Kronos, LIMS, and GIS, among others. Funding will be used to address the mobile, security and telecommunications environments and to provide continual efficiencies to reduce costs and maintain backups of mission critical systems.

The Water Authority has been awarded various Capital Outlay Projects from the 2021 NM State Legislative Session in the amount of $1.7 million; $0.4 million Bosque Non-Potable Water Reclamation Plant and Reuse System; $0.8 million Kirtland Air Force Base Bulk Fuels Facility Data Gap Groundwater Monitoring Well-Design/Construction; $0.2 million Water & Wastewater System Upgrade (Carnuel); and $0.3 million Southside Water Reclamation Plant (SWRP) Outfall Realignment.

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.

Capital Improvement Project Descriptions for Basic Programs

100 – Sanitary Sewer Pipeline Renewal ($12,150,000) this program provides funding for evaluation, planning, design, construction, and related activity necessary for sanitary sewer interceptor rehabilitation or complete removal and replacement of severely deteriorated sewer interceptor lines that are beyond feasible rehabilitation.

200 – Drinking Water Pipeline Renewal ($6,475,000) this program provides funding for evaluation, planning, design, and construction, and related activity necessary for the rehabilitation or replacement of water lines that have deteriorated and are past their useful life. 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 is over 500-miles of pipe that is deficient either in wall integrity or size that poses potential threats to the utility. As older steel or cast iron lines become deficient, the Water Authority will often respond to numerous leaks. These leaks, if gone unnoticed, have the potential, under certain circumstances, to become sinkholes which destroy entire roadways and could create a liability for the Water Authority.

300 – Southside Water Reclamation Plant Renewal ($27,750,000) the Solids Dewatering Facility (SDF) removes water from all the plant's sludge prior to transport to the Soils Amendment Facility (SAF) for disposal. The existing SDF has been in use for over 25 years and requires renewal. During FY15, an evaluation was completed to determine if it would be more cost effective in terms of life-cycle costs to rehab the existing SDF or construct a brand new facility. The results of this evaluation determined that a rehab alternative is the most efficient and cost effective method in moving forward with this project. Funding will be used to design and construct improvements to the SDF. The improvements will provide a safer work environment, better and more reliable solids dewatering performance.

Existing Solids Dewatering Facility

400 – Soil Amendment Facility (SAF) Renewal ($50,000) The SAF is an important element in the Water Authority's wastewater treatment systems. The Southside Water Reclamation Plant (SWRP) generates approximately 60 tons of solids per day. The solids are land applied and composed of at the SAF. The composed solids are sold and generate income for the Water Authority. Without the SAF, the Water Authority would have to pay to dispose of the solids in a landfill. Funding allows for rehabilitation of the existing fixed equipment and facilities at the SAF. This includes buildings, pumping systems, and grounds.

500 – Lift Station and Vacuum Station Renewal ($1,548,000) This project provides funding for the planning, design, engineering services, contract and/or in-house service related to general lift stations. The Water Authority owns, operates, and maintains vacuum networks of vacuum sewers, which provide service to residences, businesses, and other facilities in the North and South Valleys. The sanitary sewage is drawn to ten vacuum stations. From there it is pumped through force mains to connections to the Water Authority's gravity flow sewer system and then conveyed from treatment at the Southside Water Reclamation Plant (SWRP). Funding for vacuum stations will be used for house pumps, tanks, and other equipment used to collect and convey the sanitary sewage. This will help maintain the level of service by the customers.

Lift Station #20 Force Main Header

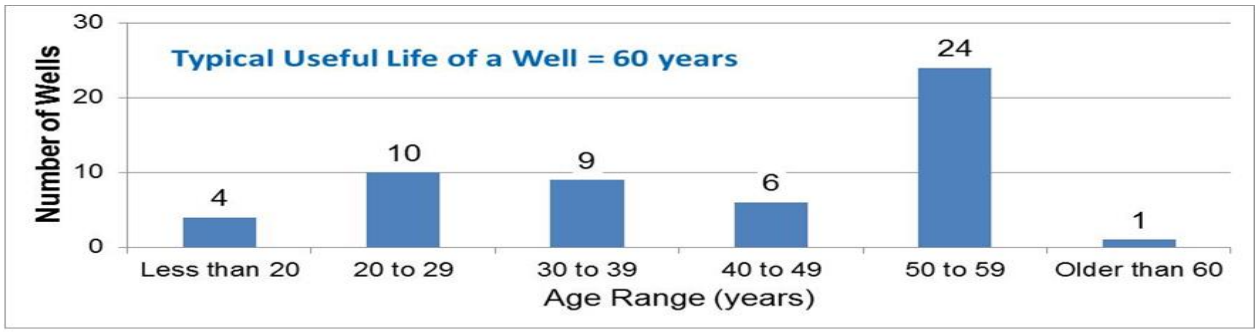
Vacuum Station 66

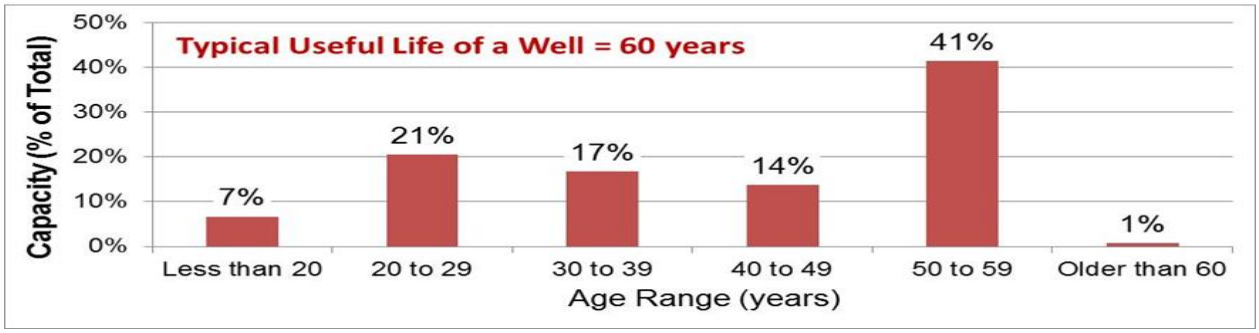
600 – Odor Control Facilities Renewal ($200,000) This project provides funding for evaluation, planning, design, construction, and related activity necessary for odor control in the collection system. Hydrogen sulfide is the primary gas that causes offensive odors from the sewer system. These gases are naturally generated through biological activity in the sewer. Larger sewers, known as interceptors, are the primary odor generators in the collection pipe system and the primary focus for funding is controlling interceptor odors. Funding will also be used to address collection system odors from all sources including small diameter pipes, pump stations, and manholes.

700 – Drinking Water Plant - Groundwater ($7,850,000) The Water Authority must maintain a full capacity groundwater supply system even with the San Juan - Chama Drinking Water Project. At times, river water may not be available for diversion, so the Water Authority will have to rely fully on its wells to provide groundwater for delivery to customers. Also, the wells are needed to provide peak capacity during the high demand periods of the year (i.e., warm weather months).

Demonstrated on the next page shows over 40 percent of the Water Authority's wells are older than 50 years. These wells should be replaced in the next decade. Sixty years is the typical maximum life of a well before it needs to be replaced. Some wells fail sooner than this and some last longer.

This multiyear funding will be used to hire a consultant to advise the Water Authority on where to locate replacement wells and to start well replacements. An approximate cost for a replacement well is $2 million. The level of funding shown is anticipated to allow for approximately 12 well replacements. As more funding becomes available, the rate of well replacement will be increased. Funding is also provided to continue the evaluation of the Alameda Trunk Arsenic Project for delivering water from wells in the Alameda Trunk and adjacent Montgomery trunk to the San Juan Chama Water Treatment Plant for arsenic removal.





Also, there are three arsenic removal treatment systems in the Corrales area Trunk. This system use granular ferric hydroxide media, which requires periodic replacement. Funding will be used to replace the arsenic removal media from the different pressure vessels. This is necessary to restore the ability of these systems to remove arsenic from the well water prior to distributing the water to Water Authority customers. Without periodic replacement, the treated water arsenic level would exceed the federal and state drinking water maximum contaminant level of 10 parts per billion (ppb).

Granular ferric hydroxide arsenic removal media

800 – Drinking Water Plant - Treatment ($1,875,000) This project is to provide funding for improvements to the bar screens at the San Juan Chama Water Project Diversion Structure.

The manual bar screens are designed to remove sticks and other debris from the water being withdrawn from the Rio Grande prior to pumping it to the San Juan Chama Water Treatment Plant. Currently, the bar screens have to be manually cleaned up to three times per day by the plant maintenance staff, although the screens were not actually designed to accommodate this type of cleaning. Therefore, the manual cleaning operation takes important operator time and effort to perform these duties when other more important duties may be needed. As the SJCWTP is used at higher flow rates, the clogging problems will be increased due to higher flow rates and more flow volume per day.

The funding is intended to hire a design consultant to evaluate the problems and make recommendations for design changes. It is anticipated that it will be necessary to retrofit the facility with mechanical bar screen cleaning equipment. The estimated cost of constructing the improvements will be developed as part of the

consultant's work. There is a positive impact on operating costs by decreasing the labor hours needed to manually clean the bar screens.

900 – Reuse Line and Plant Rehab ($1,800,000) This project is to provide funding for general renewal of reclaimed (recycled) water field and plant assets, including pipelines, buried valves, treatment facilities, pumping stations, and storage reservoirs. Using reclaimed water reduces demand on the Water Authority's potable water system. These expenses will be offset by revenues from non-potable water sales.

1000 – Compliance ($365,000) This project is to provide funding for renewal of laboratory equipment at the Water Authority's Water Quality Lab. The Water Quality Lab supports the operation of the Southside Water Reclamation Plant and the drinking water system. In order to maintain the capability for scientifically valid and reliable monitoring and analysis, deteriorating analytical instruments must be replaced when performance degrades to a level that compromises data quality.

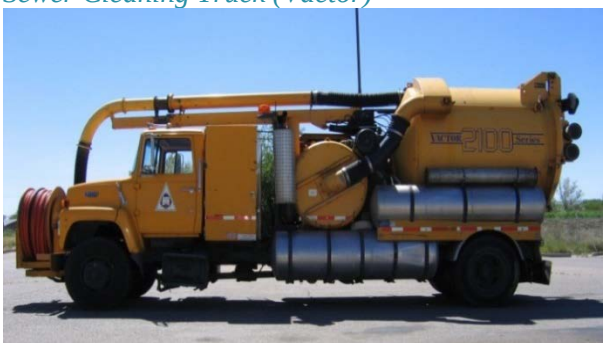
Funding will also provide for rehabilitation of equipment, facilities, and computer software used by staff for compliance with the National Pollutant Discharge Elimination System (NPDES) Program and for the Drinking Water Quality Program.

1200 – Franchise Agreement Compliance ($4,200,000) This project provides funding for compliance with the Water Authority's Franchise Ordinance between the City of Albuquerque and the Water Authority within the municipal limits of the service area. This is used for relocating water and sanitary sewer pipelines and for adjusting the height of manholes and valve boxes as part of street resurfacing projects.

24" Concrete Cylinder Water Line

1300 – Vehicles and Heavy Equipment ($2,988,000) The Water Authority has over 2,400 miles of sewer pipes that are used to convey sanitary sewage to the Southside Water Reclamation Plant (SWRP). Field heavy equipment is used daily to clean different sections of the collection system. Work is primary done with the use of Vactor (vacuum cleaning) trucks. The Water Authority has a fleet of 12 trucks. Funding will allow renewal of the fleet and their associated accessories. There is a projected positive impact on maintenance operating costs by replacing these units with more efficient equipment.

Sewer Cleaning Truck (Vactor)



Capital Improvement Project Descriptions for Special Projects

9401 – Steel Waterline Rehab ($1,000,000) There are over 60 miles of small diameter steel water lines (12" and less) that serve the Water Authority distribution system. These lines are among the small diameter water lines that provide metered water service, fire protection, and irrigation for customers. Steel lines in general are the oldest water lines (greater than 50 years) and most prone to numerous leaks due to deterioration and corrosion of the thin steel wall.

Steel line leakage is highly problematic, with water waste and repeated repairs causing disruption of service and traffic. Undetected leakage can be catastrophic: a sinkhole can destroy an entire roadway segment. Or a leak can surface as a geyser, with resulting projectiles causing extensive damage and/or threat to life. Finding the lines that have the highest leak potential and replacing them prior to catastrophic failure is essential to reducing the Authority's exposure to life- and property-threatening risk.

This program provides funding for evaluation, planning, design, construction, and related activity necessary for the rehabilitation or replacement of steel water lines which tend to be the oldest water lines in the system and typically past their useful life. Operating costs are expected to decrease due to fewer leak repairs.

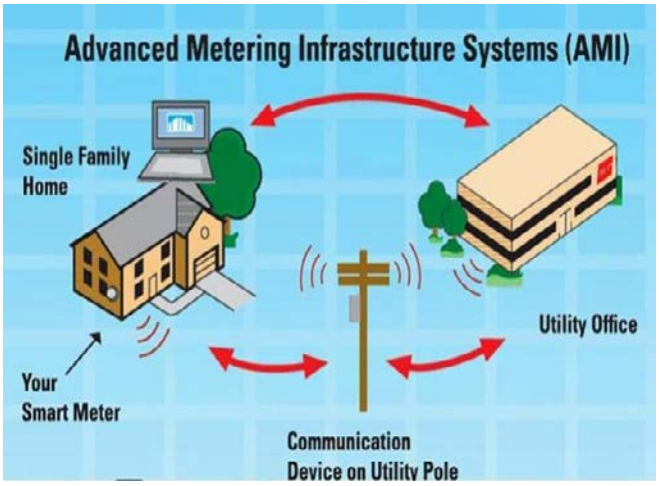
Corroded Steel Pipe

9403 – Automated Meter Infrastructure (AMI) ($2,000,000) This project funds replacement of existing revenue meters with AMI equipped "smart" meters and the infrastructure needed to capture meter reading information. AMI utilizes a fixed communication infrastructure of licensed or unlicensed radio frequency (RF) technology to transmit daily or more frequent meter reads from the meter to the utility. No personnel are required to leave the utility offices to acquire meter reads. AMI offers enhanced functionality and customer benefits including of off-cycle reads along with all associated field visits. Benefits from the access to increased customer usage information (interval usage at a minimum of four reads per day) includes tamper/theft detection, flow profiling, meter right sizing and leak detections on a meter by meter basis or system-wide level.

Funding provides for the planning, design, engineering services, construction, contract services, equipment and related activities necessary to provide Automated Meter Infrastructure (AMI) throughout the water service area, including meter replacements, as appropriate.

There is a projected positive impact on maintenance operating costs by replacing revenue meters with Automated Meter Infrastructure.

AMI Illustration



9404 – Renewable Energy Projects ($350,000) The Water Authority needs to become less reliant upon non-renewable energy supplies such as fossil fuel generated electricity and natural gas. Recently, the Water Authority started up a solar array project at the Southside Water Reclamation Plant (SWRP) to generate electricity. The SWRP continues to use biogas for generating electricity to power the plant. Excess power is sold to Public Service Company of New Mexico (PNM). More projects such as these are needed to allow the utility to become more sustainable and more energy efficient so as to reduce its reliance on generated electrical energy. This effort will reduce operational costs and make the utility more sustainable.

This funding will allow for the evaluation and implementation of additional renewable power projects such as enhancing biogas production at the SWRP to allow more electrical energy generation. Also, energy efficiency projects such as the use of light emitting diode (LED) lighting at Water Authority facilities can be pursued to lower the utilities total power needs to be provided by non-renewable supplies. This will create a positive impact on operating costs related to maintenance and electrical costs.

Capital Improvement Project Descriptions for Growth Projects

2700– Development Agreements ($1,250,000) In accordance with sound utility practice, the Water Authority requires developers of new service into undeveloped areas to construct the necessary major facilities. We then agree to reimburse the developer using funds from Utility Expansion Charges (UECs) as connections are made to those facilities. This causes the developer (not the current ratepayers) to assume the market risk for constructing major new facilities. One example of facilities built by a developer include the new Otto Reservoir within the Westland/ Suncal development area. Similar agreements are in force and planned in other surrounding areas. Includes Mesa Del Sol, Suncal, Don Reservoir, Volcano Cliffs, Alameda Trunk and NM Utilities, Inc.

This project provides for reimbursement of developer expenses to construct major facilities as the capacity of those facilities is utilized by development. This reflects funding from new customer UECs for reimbursement under development agreements for extending master plan infrastructure beyond existing serviceable areas and are subject to Water Authority approval.

New 6-inch Waterline Installation

2800– Management Information Systems and Geographical Information Systems (MIS/GIS) ($3,425,000) This project encompasses primarily new technology initiatives and the upgrade of hardware/software which is either approaching end-of-life or is unsupported by the vendor. Hardware life span is estimated between 3-5 years; with software life span of a current release level can range from 6 months to 2 years. As technology continues to increase in its support of business operations, it is critical to maintain its currency.

Servers and Databases (New and Upgrades): This category covers servers that house all software applications and the databases that support those applications. Applications include CC&B, Maximo, Kronos, LIMS and GIS, among others. Databases include Oracle and SQL Server and some that are no longer supported. It also includes networking equipment.

Applications (New and Upgrades): This category covers the purchase and upgrades of new software, both enterprise-wide and division specific. Examples include: CC&B, Maximo, SharePoint, LIMS, H2O Water Waste, and Kronos. On average, 2-4 service packs (including several patches) are released each year, with major releases occurring every 1-3 years.

Client Services (New and Upgrades): This category covers hardware and software at the clients desktop. It includes the ongoing upgrade of desktop computers, monitors, keyboards, etc. and the upgrades of Windows operating systems and Microsoft software. It also includes the purchase of new desktop equipment and software.

Geographic Information Systems (GIS – New and Upgrades): This category represents all purchases done within the GIS environment to include new software and software. It includes the purchase of GIS-related software for Maximo and mobile devices, including vehicle tracking.

Mobile, Security and Telecommunications (New and Upgrades): This new category addresses the mobile, security and telecommunications environment to include portable devices, phones, vehicle location

devices, radios, security cameras, etc. It is expected that category will expand over the
coming years due to the advancement of mobile, security and telecommunications technology.
The majority of items listed either provide for continual efficient running and backups of mission critical systems (CC&B, Maximo, Kronos, LIMS, GIS, Security) or provide ongoing improvements to overall operations to improve efficiencies and lower operational costs.

3200– Miscellaneous Growth ($250,000) The Water Authority has set aside funds to assist low income residents in obtaining basic sanitation and clean water services. This program is targeted for low income residents who are currently using septic tanks for wastewater and wells for drinking water, but who have not connect to available Water Authority service due to cost. The Water Authority will supplement up to 2/3rds of the cost for connection to the system.

This project provides funding for the cost of utility expansion for low income customers who meet established criteria. There is no projected impact on operating costs.

DEBT OBLIGATIONS

Approved
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DEBT OBLIGATIONS

The joint water and wastewater system (the "Water/Wastewater System") was owned by the City of Albuquerque, New Mexico (the "City") and operated by its Public Works Department until December 17, 2003. Revenue bond debt relating to the Water/Wastewater System continues to be outstanding. In 2003, the New Mexico Legislature adopted Laws 2003, Chapter 437 (Section 72-1-10, NMSA 1978) which created the Albuquerque Bernalillo County Water Utility Authority (the "Water Authority") and provided that all functions, appropriations, money, records, equipment and other real and personal property pertaining to the Water/Wastewater System would be transferred to the Water Authority. The legislation also provides that the debts of the City, payable from net revenues of the Water/Wastewater System, shall be debts of the Water Authority and that the Water Authority shall not impair the rights of holders of outstanding debts of the Water/Wastewater System. The legislation also required that the New Mexico Public Regulation Commission audit the Water/Wastewater System prior to the transfer of money, assets and debts of the Water/Wastewater System; the audit was completed December 2003. The policy-making functions of the Water/Wastewater System have been transferred to the Water Authority. The Water Authority and the City entered into a Memorandum of Understanding dated January 21, 2004, as amended April 7, 2004, under which the City continued to operate the Water/Wastewater System until June 30, 2007. In 2005, the New Mexico Legislature amended Section 7-1-10, NMSA 1978, to provide the Water Authority the statutory powers provided to all public water and wastewater utilities in the state and to recognize the Water Authority as a political subdivision of the State. On March 21, 2007 the Water Authority and City entered into a new MOU effective July 1, 2007. At that time the utility employees transitioned from the City and became employees of the Water Authority.

The outstanding Water/Wastewater System parity obligations are currently rated "AA" Outlook Positive by Fitch, "Aa2" by Moody's and "AAA" by S&P.

The total outstanding obligation indebtedness of the Water Authority as of July 1, 2021 is $578.082 million shown in the table on the next page.

DEBT OBLIGATIONS

FY22 DEBT SERVICE PAYMENTS

Ratings: AA/Aa2/AAA

	Basic Capital Bonds		New Mexico Finance Authority		
Issue	Principal	Interest	Principal	Interest	Total Issue
Bonds Series 2013A Basic	4,540,000.00	602,250.00			5,142,250.00
Bonds Series 2013B	5,980,000.00	726,500.00			6,706,500.00
Bonds Series 2014A	9,415,000.00	2,721,037.50			12,136,037.50
Bonds Series 2014B	8,235,000.00	1,913,125.00			10,148,125.00
Bonds Series 2015	17,380,000.00	6,931,347.50			24,311,347.50
Bonds Series 2017	4,455,000.00	3,583,568.76			8,038,568.76
Bonds Series 2018	5,550,000.00	3,351,250.00			8,901,250.00
Bonds Series 2020		3,472,000.00			3,472,000.00
Bonds Series 2020-A	1,170,000.00	595,668.53			1,765,668.53
NMFA Loan No. 04 1727-AD			544,771.00	106,302.30	651,073.30
NMFA Loan No. 07 2316-ADW			49,670.00	5,496.93	55,166.93
NMFA Loan DW4877			118,552.00	42,163.66	160,715.66
NMFA Loan DW5028				15,150.00	15,150.00
NMFA Loan WPF-5103					0.00
TOTAL	56,725,000.00	23,896,747.29	712,993.00	169,112.89	81,503,853.18

SCHEDULE OF BONDS & OTHER DEBT OBLIGATIONS

SENIOR DEBT OBLIGATIONS	Original	Outstanding	Basic Needs	Special Projects
Bonds Series 2013A	62,950,000	14,315,000	14,315,000	
Bonds Series 2013B	55,265,000	17,520,000	17,520,000	
Bonds Series 2014A	97,270,000	62,330,000	62,330,000	
Bonds Series 2015	211,940,000	167,880,000	167,880,000	
Bonds Series 2017	87,970,000	75,805,000	75,805,000	
Bonds Series 2018	75,085,000	69,800,000	69,800,000	
Bonds Series 2020	69,440,000	69,440,000	69,440,000	
Bonds Series 2020A	47,800,000	47,800,000	47,800,000	
NMFA Loan No. 07 2316-ADW	1,000,000	574,528		574,528
NMFA Loan DW4877	2,724,282	2,607,551		2,607,551
NMFA Loan DW5028	1,515,000	1,515,000		1,515,000
SUBTOTAL WATER AUTHORITY SENIOR DEBT OBLIGATIONS	**$ 712,959,282**	**$529,587,079**	**$ 524,890,000**	**$ 4,697,079**

SUBORDINATE DEBT OBLIGATIONS	Original	Outstanding	Basic Needs	Special Projects
Bonds Series 2014B	87,005,000	42,380,000	42,380,000	
NMFA Loan No. 04 1727-AD	10,426,232	5,315,115		5,315,115
NMFA Loan WPF-5103	800,000	800,000		800,000
SUBTOTAL SUBORDINATE DEBT OBLIGATIONS	**$ 98,231,232**	**$ 48,495,115**	**$ 42,380,000**	**$ 6,115,115**
GRAND TOTAL - WATER AUTHORITY DEBT OBLIGATIONS	**$ 811,190,514**	**$ 578,082,194**	**$ 567,270,000**	**$ 10,812,194**

DEBT OBLIGATIONS

Albuquerque Bernalillo County Water Utility Authority - Senior Lien Debt (Principal and Interest)

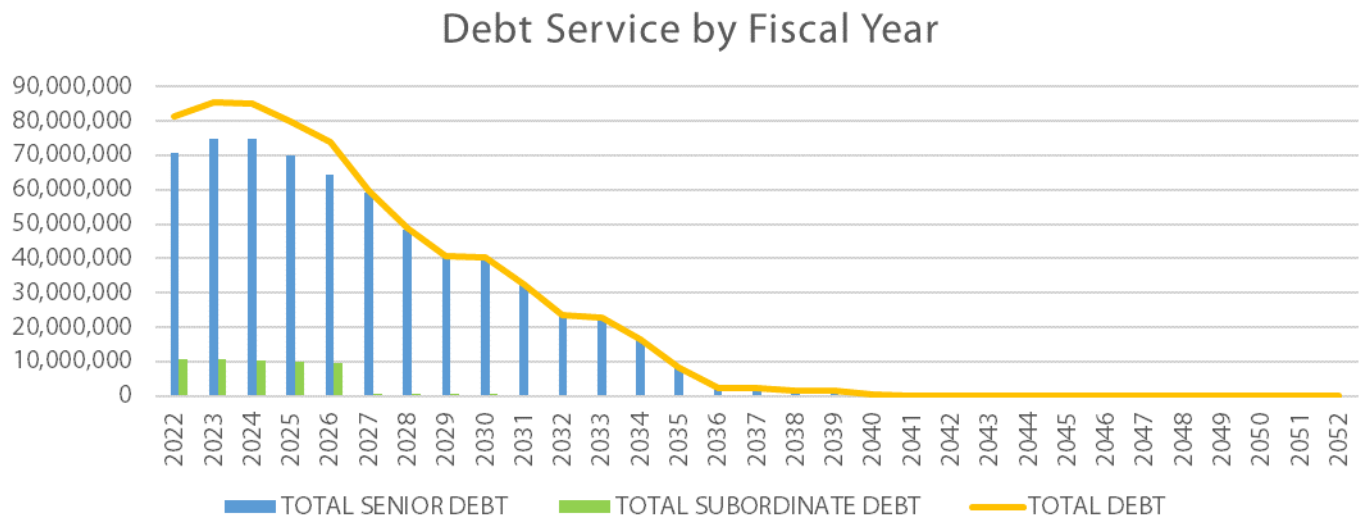
Fiscal Year	Series 2013A Bonds	Series 2013B Refunding	Series 2014A Bonds	Series 2015 Bonds	Series 2017 Bonds	Series 2018 Bonds	Series 2020 Bonds
2022	5,142,250	6,706,500	12,136,038	24,311,348	8,038,569	8,901,250	3,472,000
2023	5,139,500	6,748,750	12,236,456	17,987,223	8,035,194	8,891,875	9,322,000
2024	5,130,125	2,980,750	12,182,375	22,087,723	8,025,444	8,888,250	9,022,000
2025		2,480,500	12,164,750	21,920,973	8,023,694	8,879,625	9,097,375
2026			12,082,375	19,336,348	8,014,319	8,870,375	8,778,125
2027			10,461,375	20,866,723	8,006,819	8,859,750	8,458,875
2028				21,042,446	8,000,444	8,851,875	8,139,625
2029				12,990,008	7,994,444	8,845,750	7,815,500
2030				12,981,050	7,988,069	8,835,500	7,496,500
2031				8,245,640	5,947,694	8,825,250	7,177,500
2032				8,181,775	5,940,194		6,858,500
2033				8,172,900	5,930,444		6,539,500
2034				8,195,700	5,927,694		
2035					5,963,972		
TOTAL	15,411,875	18,916,500	71,263,369	206,319,854	101,836,991	88,649,500	92,177,500

Fiscal Year	Series 2020A Bonds		Loan No. 07 2316-ADW NMFA	Loan DW4877 NMFA	Loan DW5028 NMFA	TOTAL SENIOR DEBT
2022	1,765,669		55,167	160,716	15,150	**70,704,655**
2023	6,279,713		55,165	160,715	58,703	**74,915,293**
2024	6,280,390		55,162	160,714	58,703	**74,871,634**
2025	7,125,633		55,159	160,713	58,704	**69,967,125**
2026	7,117,649		55,157	160,712	58,703	**64,473,763**
2027	2,058,328		55,155	160,711	58,704	**58,986,439**
2028	2,061,839		55,152	160,710	58,703	**48,370,794**
2029	2,057,643		55,149	160,709	58,704	**39,977,905**
2030	2,055,680		55,147	160,707	58,703	**39,631,356**
2031	2,052,032		55,143	160,707	58,703	**32,522,669**
2032	2,051,168		55,143	160,705	58,704	**23,306,189**
2033	2,052,506			160,705	58,703	**22,914,758**
2034	2,051,365			160,704	58,703	**16,394,166**
2035	2,042,730			160,703	58,703	**8,226,108**
2036	2,135,913			160,702	58,704	**2,355,318**
2037	2,042,650			160,701	58,704	**2,262,055**
2038	1,166,153			160,699	58,703	**1,385,556**
2039	1,165,519			160,698	58,704	**1,384,921**
2040				160,697	58,703	**219,400**
2041					58,703	**58,703**
2042					58,703	**58,703**
2043					58,703	**58,703**
2044					58,704	**58,704**
2045					58,704	**58,704**
2046					58,704	**58,704**
2047					58,703	**58,703**
2048					58,703	**58,703**
2049					58,704	**58,704**
2050					58,703	**58,703**
2051					58,704	**58,704**
2052					58,703	**58,703**
TOTAL	53,562,578		606,699	3,053,427	1,776,252	653,574,544

DEBT OBLIGATIONS

Albuquerque Bernalillo County Water Utility Authority - Subordinate Lien Debt (Principal and Interest)

Fiscal Year	Series 2014B Bonds	Loan No. 04 1727-AD NMFA	Loan No. WPF-5103 NMFA	TOTAL SUB. DEBT	TOTAL DEBT
2022	10,148,125	651,073		10,799,198	81,503,853
2023	9,931,375	651,100	40,922	10,623,397	85,538,690
2024	9,577,875	651,128	41,199	10,270,202	85,141,836
2025	9,216,000	651,156	41,200	9,908,356	79,875,481
2026	8,850,875	651,185	41,199	9,543,260	74,017,023
2027		651,215	41,199	692,415	59,678,854
2028		651,245	41,200	692,445	49,063,239
2029		651,276	41,199	692,476	40,670,381
2030		651,308	41,199	692,507	40,323,863
2031			41,199	41,199	32,563,868
2032			41,199	41,199	23,347,388
2033			41,199	41,199	22,955,957
2034			41,200	41,200	16,435,366
2035			41,200	41,200	8,267,308
2036			41,200	41,200	2,396,518
2037			41,200	41,200	2,303,255
2038			41,199	41,199	1,426,755
2039			41,199	41,199	1,426,120
2040			41,199	41,199	260,599
2041			41,199	41,199	99,902
2042			41,200	41,200	99,903
2043					58,703
2044					58,704
2045					58,704
2046					58,704
2047					58,703
2048					58,703
2049					58,704
2050					58,703
2051					58,704
2052					58,703
TOTAL	47,724,250	5,860,688	823,710	54,408,647	707,983,191



Bond Series 2013A - $62,950,000 – Joint Water and Sewer System Improvement Revenue Bonds. Provide funding for capital improvements to the Southside Water Reclamation Plant and regular System improvements, expansion, maintenance, and upgrades.

Bond Series 2013B - $55,265,000 – Joint Water and Sewer System Refunding Revenue Bonds. Provide partial refunding of the Series 2004 New Mexico Finance Authority (NMFA) bonds.

Bond Series 2014A - $97,270,000 – Joint Water and Sewer System Improvement Revenue Bonds
Bond Series 2014B - $87,005,000 – Joint Water and Sewer System Improvement Refunding Bonds. Provide refunding of the Series 2005 Bonds, 2005 NMFA Loan, Series 2006A Bonds, Series 2001 New Mexico Environment Department (NMED) Loan, and various 2010 Drinking Water Loans.

Bond Series 2015 - $211,940,000 -Joint Water and Sewer System Refunding and Improvement Revenue Bonds. Provide refunding of the Series 2007 NMFA Loan, the Series 2008A Bonds, and partial refunding of the Series 2009A-1 Bonds; also provides funding for acquiring additional Water and Sewer system assets, and extending, repairing, replacing and improving the Water and Sewer System.

Bond Series 2017 - $87,970,000 – Joint Water and Sewer System Refunding and Improvement Revenue Bonds. Provide refunding of the Series 2009A-1 Bonds; also provides funding for acquiring additional Water and Sewer system assets, and extending, repairing, replacing and improving the Water and Sewer System.

Bond Series 2018 - $75,085,000 – Joint Water and Sewer System Improvement Revenue Bonds. Provide funding for acquiring additional Water and Sewer system assets, and extending, repairing, replacing and improving the Water and Sewer System.

Bond Series 2020 - $$69,440,000 – Joint Water and Sewer System Improvement Revenue Bonds. Provide funding for acquiring additional Water and Sewer system assets, and extending, repairing, replacing and improving the Water and Sewer System.

Bond Series 2020A - $47,800,000 – Joint Water and Sewer System Refunding Revenue Bonds, Taxable. Provide refunding of the Series 2011 NMFA Loan and the Series 2013A Bonds.

NMFA Loan No. 04 1727-ADW - $10,426,232 – Drinking Water State Revolving Loan Fund. Provide funding for the Santa Barbara Pump Station and Reservoir Project.

NMFA Loan No. 07 2316-ADW - $1,000,000 – Drinking Water State Revolving Loan Fund. Provide funding for upgrades and improvements to the water system including construction of Phase II of a water line extension to the community of Carnuel.

NMFA Loan DW4877 - $2,724,282 - Drinking Water State Revolving Loan Fund. Provide funding for acquiring additional Water and Sewer system assets, and extending, repairing, replacing and improving the Water and Sewer System, including acquisition and installation of water distribution lines for the Los Padillas community as part of the South Valley water project.

NMFA Loan DW5028 - $1,515,000 – Drinking Water State Revolving Loan Fund. Provide funding for Phase 2C of Carnuel Drinking Water Project.

NMFA Loan WPF-5103 - $800,000 – Water Project Fund Loan. Provide funding for replacing 16,000 water meters with Advanced Metering Infrastructure (AMI) meters and devices.

STATISTICAL
AND
SUPPLEMENTAL INFORMATION

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GENERAL FUND – 21 RESOURCES, APPROPRIATIONS, FUND BALANCE

LAST TEN FISCAL YEARS

(000's)	ACTUAL FY11	ACTUAL FY12	ACTUAL FY13	ACTUAL FY14	ACTUAL FY15
RESOURCES:					
Miscellaneous Revenues	3,064	2,554	1,188	3,843	4,143
Enterprise Revenues	157,276	175,505	178,942	180,228	190,099
Transfers from Other Funds	1,500	1,745	1,710	593	748
Total Current Resources	161,840	179,804	181,840	184,664	194,990
Beginning Working Capital Balance	(636)	(10,650)	(10,869)	(10,921)	(10,676)
TOTAL RESOURCES	**161,204**	**169,154**	**170,971**	**173,743**	**184,314**
APPROPRIATIONS:					
Enterprise Operations	96,243	95,371	102,310	110,291	109,430
Transfers to Other Funds	79,593	82,828	82,177	76,094	81,160
TOTAL APPROPRIATIONS	**175,836**	**178,199**	**184,487**	**186,385**	**190,590**
ADJUSTMENTS TO WORKING CAPITAL BALANCE	3,982	(1,824)	2,595	1,967	(2,445)
ENDING WORKING CAPITAL BALANCE	**(10,650)**	**(10,869)**	**(10,921)**	**(10,676)**	**(8,722)**

(000's)	ACTUAL FY16	ACTUAL FY17	ACTUAL FY18	ACTUAL FY19	ACTUAL FY20
RESOURCES:					
Miscellaneous Revenues	4,873	3,592	4,976	5,837	6,083
Enterprise Revenues	216,208	213,553	223,968	218,494	222,875
Transfers from Other Funds	792	793	943	-	-
Total Current Resources	221,873	217,938	229,887	224,331	228,958
Beginning Working Capital Balance	(8,722)	6,356	13,667	41,204	53,634
TOTAL RESOURCES	**213,151**	**224,294**	**243,553**	**265,535**	**282,592**
APPROPRIATIONS:					
Enterprise Operations	114,039	109,476	110,381	113,981	117,292
Transfers to Other Funds	87,842	91,628	101,158	98,856	111,029
TOTAL APPROPRIATIONS	**201,881**	**201,104**	**211,539**	**212,837**	**228,321**
ADJUSTMENTS TO WORKING CAPITAL BALANCE	(4,912)	(9,523)	9,190	936	642
ENDING WORKING CAPITAL BALANCE	**6,356**	**13,667**	**41,204**	**53,634**	**54,913**

DEBT SERVICE FUND – 31 RESOURCES, APPROPRIATIONS, FUND BALANCE

LAST TEN FISCAL YEARS

(000's)	ACTUAL FY11	ACTUAL FY12	ACTUAL FY13	ACTUAL FY14	ACTUAL FY15
RESOURCES:					
Miscellaneous Revenues	6,351	8,142	8,282	7,872	7,565
Transfers from Other Funds	65,337	66,727	66,362	72,094	69,160
Total Current Resources	71,688	74,869	74,644	79,966	76,725
Beginning Fund Balance	(2,689)	(2,972)	(2,392)	(2,476)	515
TOTAL RESOURCES	**68,999**	**71,897**	**72,252**	**77,490**	**77,240**
APPROPRIATIONS:					
Debt Service	65,202	70,450	72,670	75,245	35,203
Transfers to Other Funds	3,000	3,000	3,000	3,000	5,000
TOTAL APPROPRIATIONS	**68,202**	**73,450**	**75,670**	**78,245**	**40,203**
ADJUSTMENTS TO FUND BALANCE	(3,769)	(840)	942	1,269	11,760
ENDING FUND BALANCE	**(2,972)**	**(2,392)**	**(2,476)**	**515**	**48,798**

(000's)	ACTUAL FY16	ACTUAL FY17	ACTUAL FY18	ACTUAL FY19	ACTUAL FY20
RESOURCES:					
Miscellaneous Revenues	9,257	8,546	10,398	7,270	9,323
Transfers from Other Funds	72,842	70,628	70,908	72,267	79,421
Total Current Resources	82,099	79,174	81,306	79,537	88,743
Beginning Fund Balance	48,798	54,576	52,819	56,420	49,939
TOTAL RESOURCES	**130,897**	**133,750**	**134,125**	**135,957**	**138,683**
APPROPRIATIONS:					
Debt Service	71,906	75,747	70,189	82,176	83,888
Transfers to Other Funds	5,000	4,474	6,000	5,000	4,000
TOTAL APPROPRIATIONS	**76,906**	**80,221**	**76,189**	**87,176**	**87,888**
ADJUSTMENTS TO FUND BALANCE	586	(710)	(1,516)	1,159	(1,063)
ENDING FUND BALANCE	**54,576**	**52,819**	**56,420**	**49,939**	**49,731**

WATER USERS BY CLASS AND METER SIZE

LAST TEN FISCAL YEARS

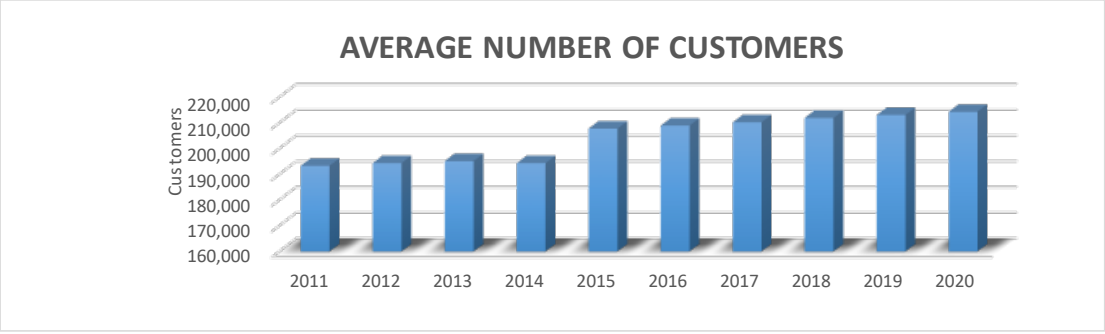
	Number of Customers by Fiscal Year									
Class	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Residential	184,919	183,942	183,018	181,814	187,479	186,461	174,193	174,909	174,277	173,339
Multi-Family	7,907	7,876	7,851	7,801	7,268	7,115	6,569	6,430	6,393	6,364
Commercial	12,159	12,100	12,023	11,913	11,901	11,923	11,303	11,321	11,287	11,226
Institutional	3,766	3,701	3,680	3,650	2,187	2,150	2,196	2,391	2,316	2,279
Industrial	119	121	122	119	110	113	99	99	102	99
Other metered	909	824	720	616						
Subtotal	209,779	208,564	207,414	205,913	208,945	207,762	194,360	195,150	194,375	193,307
SW	1,402	1,392	1,365	1,362						
Other non-metered	3,139	3,135	3,120	2,940						
Total	214,320	213,091	211,899	210,215						

History of Water Users by Meter Sizes:

Meter Size	Number of Customers by Fiscal Year									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
¾"	185,668	184,464	183,398	182,232	185,894	184,743	171,395	171,874	171,103	169,984
1" and 1 ¼ "	17,847	17,843	17,975	17,796	17,392	17,447	17,474	17,645	17,717	17,820
1 ½ "	2,522	2,522	2,467	2,381	2,300	2,269	2,238	2,249	2,221	2,195
2"	2,737	2,713	2,575	2,509	2,386	2,349	2,303	2,352	2,320	2,228
3"	609	626	606	603	590	575	578	634	634	714
4"	286	287	284	282	278	276	270	286	273	268
6"	66	66	66	68	64	63	60	63	61	58
8" and over	44	43	43	42	41	40	42	47	46	40
Subtotal	209,779	208,564	207,414	205,913	208,945	207,762	194,360	195,150	194,375	193,307
Other Non-metered	4,541	4,527	4,485	4,302						
Total	214,320	213,091	211,899	210,215						

(1) In Fiscal Year 2017, the water users by meter size are illustrated between metered and non-metered accounts.

Source: Water Authority Financial/Business Services Division

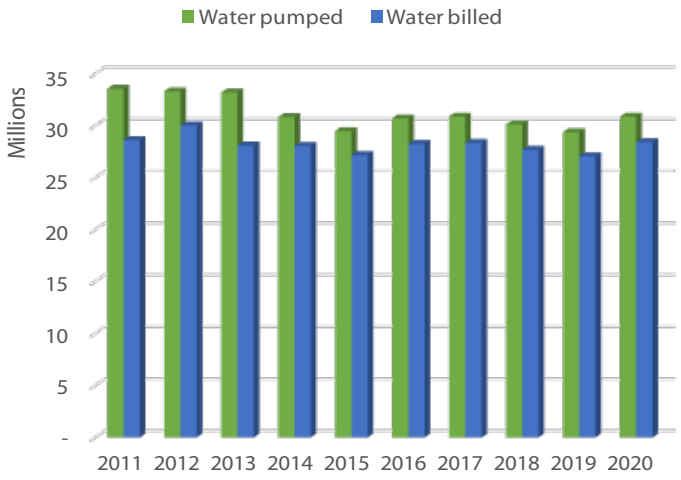


Source: ABCWUA Financial/Business Services Division

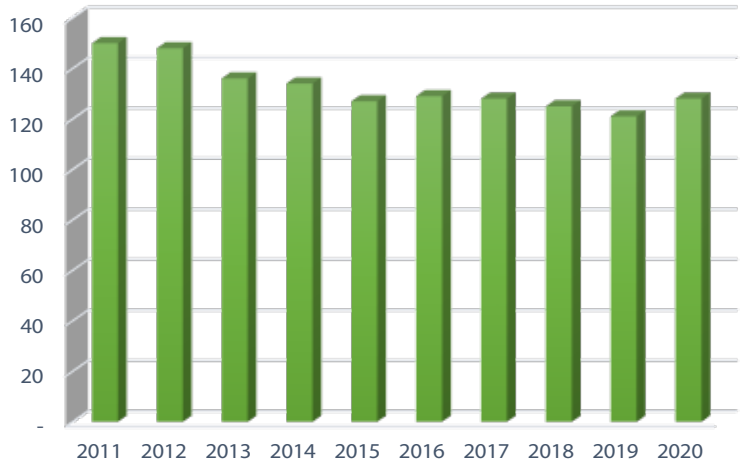
WATER CONSUMPTION

LAST TEN CALENDAR YEARS

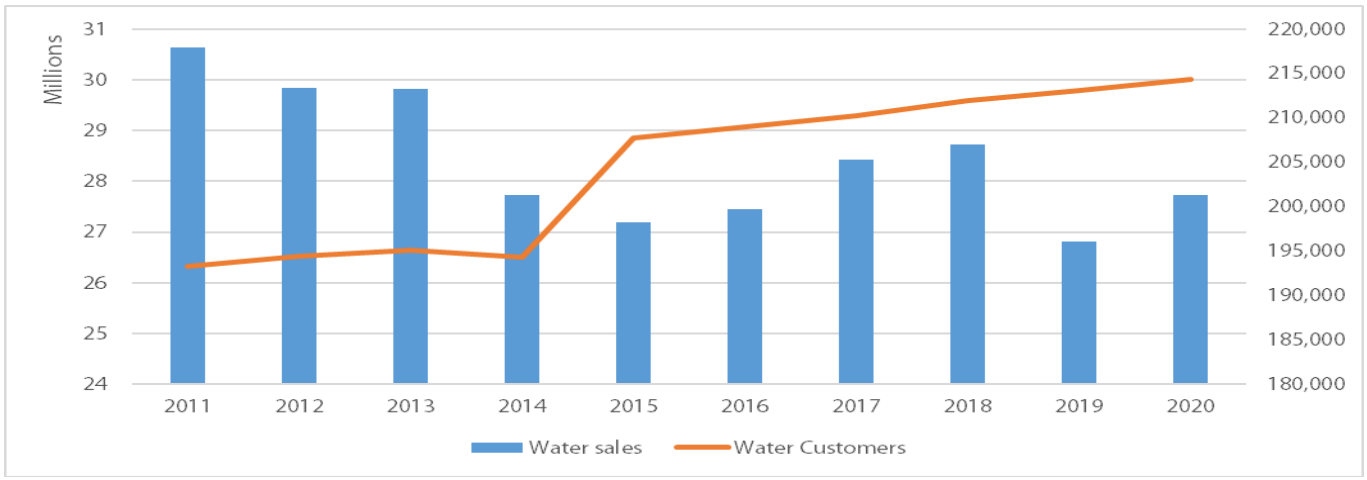
	Water Pumped	Water Billed	% Billed
2020	30,878,760	28,431,768	92.08%
2019	29,392,000	27,073,469	92.11%
2018	30,139,000	27,696,655	91.90%
2017	30,895,000	28,357,626	91.79%
2016	30,720,000	28,250,591	91.96%
2015	29,498,000	27,195,260	92.19%
2014	30,836,000	28,075,612	91.05%
2013	33,222,000	28,113,371	84.62%
2012	33,318,000	30,044,094	90.17%
2011	33,577,000	28,621,945	85.24%



Per Capita Water Usage



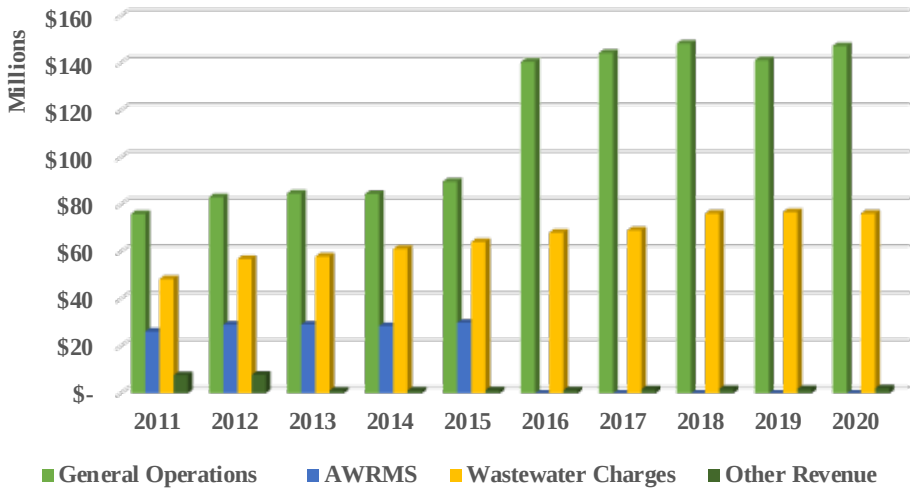
	Per Capita Water Usage
2020	128
2019	121
2018	125
2017	128
2016	129
2015	127
2014	134
2013	136
2012	148
2011	150



REVENUE FROM OPERATING REVENUE

LAST TEN FISCAL YEARS

Fiscal Year	Revenue from Water Charges		Wastewater Charges	Other Revenue	Total Operating Revenue
	General Operations	AWRMS (1)			
2020	147,244,774	-	76,231,345	2,133,000	225,609,119
2019	141,267,719	-	76,848,592	1,868,000	219,984,311
2018	148,315,450	-	76,253,042	1,828,000	226,396,492
2017	144,342,932	-	69,101,050	1,750,000	215,193,982
2016	140,551,140	-	68,166,636	1,339,000	210,056,776
2015	89,768,328	29,939,349	64,171,110	1,323,000	185,201,787
2014	84,500,221	28,561,586	61,327,115	1,232,000	175,620,922
2013	84,713,861	29,161,139	58,031,483	1,142,000	173,048,483
2012	83,145,457	29,096,281	56,982,228	7,830,724	177,054,690
2011	76,072,550	26,219,494	48,504,637	7,718,145	158,514,826

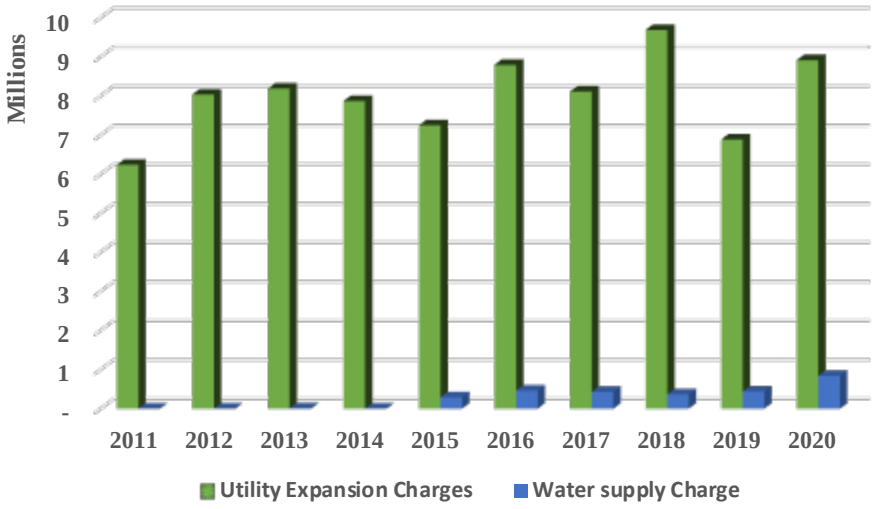


Source: ABCWUA Financial/Business Services Division
Note: In Fiscal Year 2016 the Albuquerque Water Resource Management Strategy (AWRMS) revenues were combined with General Operations revenue as part of the new rate ordinance structure.

REVENUE FROM UTILITY EXPANSION CHARGES

LAST TEN FISCAL YEARS

Fiscal Year	Utility Expansion Charges	Water Resource Charge
2020	8,916,871	838,525
2019	6,884,954	437,646
2018	9,685,634	363,963
2017	8,116,695	429,283
2016	8,795,436	461,502
2015	7,250,838	290,363
2014	7,872,237	0
2013	8,189,953	7,063
2012	8,035,123	0
2011	6,240,073	0



Source: ABCWUA Financial/Business Services Division

PRINCIPAL REVENUE PAYERS

CURRENT FISCAL YEAR AND NINE YEARS AGO

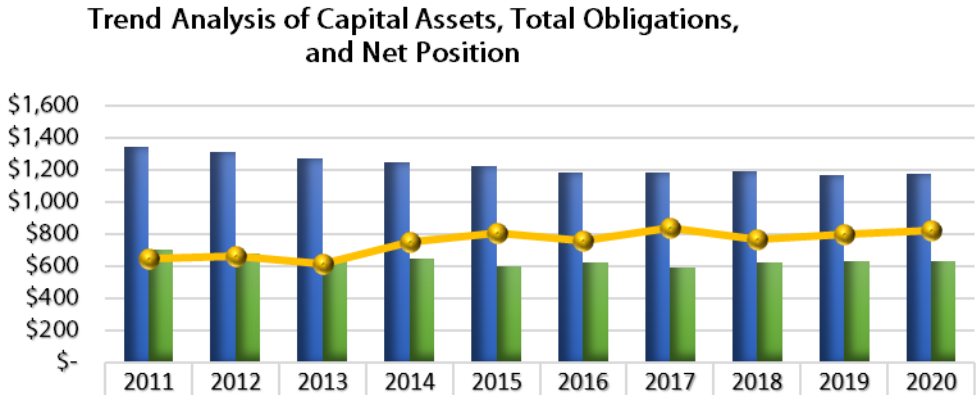
	2020				2011			
Water Customer Name	Water Revenue	Rank	% of Total Revenue	Consumption	Water Revenue	Rank	% of Total Revenue	Consumption
City of Albuquerque	$ 8,872,998	1	6.03%	2,748,296	$ 6,501,413	1	6.36%	2,767,271
Albuquerque Public Schools	2,809,882	2	1.91%	599,369	2,215,548	2	2.17%	705,396
University of New Mexico	1,231,529	3	0.84%	252,904	1,458,396	3	1.43%	290,259
Kirtland Air Force Base	704,399	4	0.48%	155,639	617,867	4	0.60%	221,818
Bernalillo County	669,947	5	0.45%	186,069	605,090	5	0.59%	235,721
Water Authority	339,259	6	0.23%	67,638	150,478	10	0.15%	77,221
Lovelace Health	276,781	7	0.19%	86,074	241,174	7	0.24%	119,489
Central NM Community College	271,155	8	0.18%	60,512	229,767	8	0.22%	74,363
Sumitomo	240,727	9	0.16%	97,083	245,814	6	0.24%	148,492
Albuquerque Academy	203,793	10	0.14%	97,078	182,936	9	0.18%	106,388
Total	$ 15,620,470		10.61%	4,350,662	$ 12,448,483		12.17%	4,746,418
Total Water System Revenue	$ 147,244,774				$ 102,292,044			

	2020				2011			
Wastewater Customer Name	Wastewater Revenue	Rank	% of Total Revenue	Consumption	Wastewater Revenue	Rank	% of Total Revenue	Consumption
Kirtland Air Force Base	$ 1,419,100	1	1.86%	743,835	$ 955,622	1	1.97%	743,391
University of New Mexico	1,183,083	2	1.55%	976,527	619,376	2	1.28%	553,371
Albuquerque Public Schools	777,457	3	1.02%	106,089	571,486	3	1.18%	154,980
City of Albuquerque	747,914	4	0.98%	106,294	405,371	4	0.84%	174,407
Creamland Dairies	550,353	5	0.72%	49,229	385,178	5	0.79%	50,887
Bernalillo County	160,972	7	0.21%	40,213	157,579	6	0.32%	94,585
Lovelace Health	161,032	6	0.21%	58,241	124,665	7	0.26%	102,045
Central NM Community College	124,815	8	0.16%	30,099	122,576	8	0.25%	28,534
Sandia Peak Services	98,256	9	0.13%	82,610	69,267	9	0.14%	87,068
Four Hills Mobile Home Park	83,686	10	0.11%	33,168	48,039	10	0.10%	35,486
			0.00%		-			-
			0.00%		-			-
Total	$ 5,306,668		6.96%	2,226,305	$ 3,459,159		7.13%	2,024,754
Total Wastewater System Revenue	$ 76,231,345				$ 48,504,637			

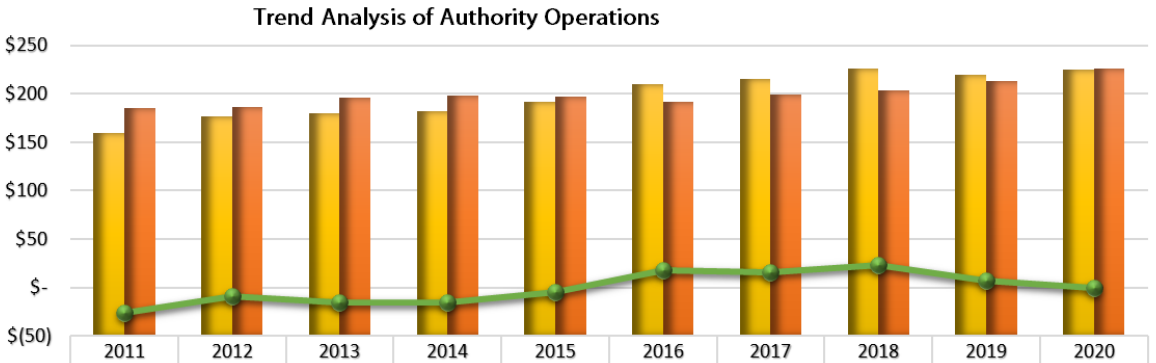
Source: ABCWUA Financial/Business Services Division

TREND ANALYSIS

LAST TEN FISCAL YEARS



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Assets	$1,340	$1,311	$1,271	$1,246	$1,220	$1,187	$1,182	$1,188	$1,168	$1,175
Net Position	701	683	653	646	600	622	591	623	634	633
Total Obligations	648	661	616	754	807	763	843	771	801	827



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Charges for services	$159	$177	$180	$182	$192	$210	$215	$226	$220	$225
Total operating expenses	185	186	196	198	197	192	199	203	213	226
Operating income (loss)	(26)	(9)	(16)	(16)	(5)	18	16	23	7	-0.1

Source: ABCWUA Financial/Business Services Division

OUTSTANDING DEBT RATIO

LAST TEN FISCAL YEARS

(In thousands of dollars)

Fiscal Year	Revenue Bonds	Notes from direct borrowings	Water Rights Contract	Lines of Credit	Un-amortized Premium	Total	Per Capita	Per Customer
2020	$ 595,930	$ 31,560	$ 3,960	$ -	$ 52,874	$ 684,324	1,008	3,193
2019	577,825	35,873	5,203	-	46,119	665,020	979	3,121
2018	551,950	39,938	6,409	-	48,088	646,385	955	3,050
2017	589,880	44,013	7,579	-	60,241	701,713	1,286	3,338
2016	566,455	54,819	8,715	-	58,712	688,701	1,232	3,296
2015	601,985	63,627	9,817	-	71,578	747,007	1,294	3,595
2014	515,450	131,515	10,887	-	23,864	681,716	1,204	3,507
2013	420,780	210,805	11,925	-	13,334	656,844	1,172	3,366
2012	443,015	229,644	12,932	-	17,400	702,991	1,267	3,617
2011	467,145	193,620	13,910	103	12,631	687,409	1,239	3,556

Note:
1. Per Capita is based on the estimated 2014 population provided by the US Census Bureau.
2. Per customer is based on the number of customers for the Authority.
3. This schedule was restated for the prior years due to adding un-amortized premium to the schedule

Source: ABCWUA Financial/Business Services Division

SENIOR LIEN DEBT COVERAGE

LAST TEN FISCAL YEARS

(In thousands of dollars)

SENIOR LIEN

Fiscal Year	Gross Revenues	Less: Operating Expenses	Net Available Revenue	Debt Service			Coverage	Coverage Required
				Principal[4]	Interest	Amortized Premium		
2020	$ 240,436	$ 120,498	$ 119,938	$48,054	$23,876	(9,233)	1.91	1.33
2019	235,645	115,118	120,527	45,093	25,534	(10,074)	1.99	1.33
2018	241,177	112,698	128,479	31,018	23,948	(10,447)	2.89	1.33
2017	227,044	111,326	115,718	37,497	23,899	(10,247)	2.26	1.33
2016	226,774	106,897	119,877	43,031	23,794	(10,477)	2.13	1.33
2015	203,834	107,597	96,237	33,819	22,579	(7,205)	1.96	1.33
2014	199,234	108,177	91,057	41,151	31,502	(4,684)	1.34	1.33
2013	184,338	96,611	87,727	39,732	23,773	-	1.38	1.33
2012	180,272	94,085	86,187	38,674	22,878	-	1.40	1.33
2011	166,652	88,790	77,862	37,329	29,146	-	1.17	1.33

SENIOR AND SUBORDINATE LIEN

Fiscal Year	Gross Revenues	Less: Operating Expenses	Net Available Revenue	Debt Service			Coverage	Coverage Required
				Principal[4]	Interest	Amortized Premium		
2020	$ 240,436	$ 120,498	$ 119,938	$56,782	$26,476	(10,455)	1.65	1.20
2019	235,645	115,118	120,527	53,691	28,485	(11,525)	1.71	1.20
2018	241,177	112,698	128,479	42,216	27,303	(12,153)	2.24	1.20
2017	227,044	111,326	115,718	46,901	27,673	(12,407)	1.86	1.20
2016	226,774	106,897	119,877	43,964	27,865	(12,866)	2.03	1.20
2015	203,834	107,597	96,237	34,491	25,746	(9,046)	1.88	1.20
2014	199,234	108,177	91,057	42,081	31,889	(4,684)	1.31	1.20
2013	184,338	96,611	87,727	41,265	24,197		1.34	1.20
2012	180,272	94,085	86,187	41,574	23,404		1.33	1.20
2011	166,652	88,790	77,862	38,270	32,089		1.11	1.20

Note:
1. Gross revenues include operating, non-operating, and miscellaneous revenues.
2. Operating expenses exclude depreciation, bad debt, and non-capitalized major repair.
3. Interest debt service is net of any premium and/or discounts.
4. Fiscal year 2006-2013 principal and interest are combined. Starting in fiscal year 2014, they are recognized separately.
5. Beginning in fiscal year 2014, revenues and expenses include franchise fees in accordance with the updated bond ordinance. In years prior, both franchise revenues and expenses and amortization were backed out of the calculation.

Source: ABCWUA Financial/Business Services Division

DEMOGRAPHIC/ECONOMIC STATISTICS

LAST TEN FISCAL YEARS

Year	Population Albuquerque MSA	Total Personal Income	Per Capita Personal Income	Unemployment Rate
2020	679,121	28,264,337	41.619	8.7%
2019	679,096	27,484,373	40,472	4.8%
2018	676,953	26,162,880	38,648	4.5%
2017	545,852	20,689,428	37,903	6.0%
2016	559,121	20,650,016	36,933	6.1%
2015	557,169	20,035,240	35,959	5.7%
2014	566,059	19,385,257	34,246	6.4%
2013	560,454	18,359,913	32,759	6.8%
2012	554,905	18,192,560	32,785	7.2%
2011	554,905	17,664,291	31,833	7.6%

Note:
1. Population number is for the Albuquerque Metropolitan Service Area (MSA).

Sources: US Census Bureau and the University of New Mexico Bureau of Business and Economic Research

TOP 10 MAJOR EMPLOYERS

CURRENT FISCAL YEAR AND NINE YEARS AGO

	2020			2011		
Employer	Number of Employees	Rank	% of Albuquerque MSA Employment	Number of Employees	Rank	% of Albuquerque MSA Employment
Albuquerque Public Schools	14,810	1	4.27%	14,000	3	3.52%
Kirtland Air Force Base (civilian)	10,125	2	2.92%	24,140	1	6.07%
Sandia National Laboratories	9,852	3	2.84%			
Presbyterian Hospital	7,310	4	2.11%	7,369	4	1.85%
UNM Hospital	6,021	5	1.74%	5,950	5	1.50%
City of Albuquerque	5,500	6	1.59%	5,940	6	1.49%
State of New Mexico	4,950	7	1.43%	5,910	7	1.49%
University of New Mexico	4,210	8	1.21%	15,890	2	4.00%
Lovelace Health System	4,000	9	1.15%	3,700	8	0.93%
Bernalillo County	2,425	10	0.70%	2,618	10	0.66%
Intel Corporation	-		0.00%	3,300	9	0.83%
Total	69,203		19.94%	88,817		22.34%
Total Employment			347,000			397,552

Source: University of New Mexico Bureau of Business and Economic Research (BBER) and www.livability.com/Albuquerque

ANALYSIS METHODOLOGY FOR COMPUTING LINE ITEM ADJUSTMENTS

Numerical Rounding

Budgets were developed using whole numbers. When program strategies were summarized, each was rounded to the nearest one thousand. Rounding makes for ease of reading when reviewing the document.

Salaries

- The wage and salary base was established for each filled or authorized-to-be-filled position.

- This base is increased or decreased for all wage adjustments for FY22 to incorporate current contractual increases.

- Employee benefits are calculated on wage and salary costs at the following rates: FICA - 7.65% regular, RHCA-2.00%, PERA – 24.45% for blue and white collar and management/professional, and 7.00% for temporary employees and some seasonal employees. Other employee benefits (group life, health insurance including retiree health insurance) – budgeted at family plan levels.

- A vacancy savings rate of 0.5% for the Water Authority is calculated into employee salaries.

Operating Expenses

Division managers were required to provide detailed information supporting FY22 budget requests. Other FY22 operating expenses were equal to FY21 appropriated amounts. One-time appropriations for FY21 were deleted.

- Inflationary adjustments were not granted as automatic across-the-board adjustments.

- For FY22, utilities (gas, electricity, and water) are budgeted based on historical expenses and anticipated needs.

- Power, chemicals and fuel will not exceed the CPI index and the cost of operating two water distribution systems will not exceed the consultant estimate.

- Beyond those stated above, line item increases needing special justifications include extraordinary price increases, increased workload, or a special need not previously funded.

- Workers' Compensation and insurance are treated as direct costs for FY22. These costs are identified by the Risk Management department, based on the historical experience and exposure factors relative to each specific program.

- Vehicle maintenance charges are estimated for FY22 according to the class of vehicle and historical cost of maintaining that class. These charges are designed to recover the costs of normal maintenance including a preventive maintenance program which schedules vehicles for periodic checks and needed repairs as determined by those checks.

Capital Expenses

New and replacement property items are included in the appropriate program appropriations within each of the funds.

ACRONYMS

A2LA – American Association for Laboratory Accreditation

ABCWUA – Albuquerque Bernalillo County Water Utility Authority

AEC – American Council of Engineering Companies

AFL-CIO – American Federation of Labor and Congress of Industrial Organizations

AFSCME - American Federation of State, County and Municipal Employees

AMI – Automated Meter Infrastructure

AMWA – Association of Metropolitan Water Agencies

ASR – Aquifer Storage and Recovery

AWRMS – Albuquerque Water Resource Management Strategy

AWWA – American Water Works Association

BBER – University of New Mexico, Bureau of Business and Economic Research

CC&B – Customer Care and Billing

CCTV – Closed Circuit Television

CIP - Capital Improvement Program

CMOM – Capacity Management Operations & Maintenance Program

COLA - Cost-of-Living Adjustment

COO – Chief Operating Officer

CPI - Consumer Price Index

CSD – Customer Services program

CWA – Clean Water Act

DFA – NM Department of Finance and Administration

DMD – City of Albuquerque Department of Municipal Development

DS - Debt Service

DWL – Drinking Water Loan

DWP – San Juan–Chama Drinking Water Project

EPA – Environmental Protection Agency

ERP – Enterprise Resource Planning

EUM – Effective Utility Management

FOG – Fats, Oils, & Grease

FSE – Food Service Establishment

FTE - Full-time Equivalent Position

FY - Fiscal Year

GASB - General Accounting Standards Board

GDP - Gross Domestic Product

GFOA - Government Finance Officers Association

GIS – Geographic Information System

GPCD – Gallons per capita per day

GPS – Global Positioning System

GW - Groundwater

HR – Human Resources

IDOH - Indirect Overhead

IEC – International Electrotechnical Commission

IHS – IHS Global Insight

ISO – International Organization for Standardization

ITD – Information Technology Program

KAFB – Kirtland Air Force Base

LED – Light Emitting Diode

LIMS – Laboratory Information Management System

MDC – Metropolitan Detention Center

MGD – Million Gallons per Day

ACRONYMS

MIS – Management Information System

MOU – Memorandum of Understanding

MRGCOG – Middle Rio Grande Council of Governments

MSA – Metropolitan Statistical Area

NACWA – National Association of Clean Water Agencies

NM – New Mexico

NMED – New Mexico Environment Department

NMFA – New Mexico Finance Authority

NMU – New Mexico Utilities

NPDES – National Pollution Discharge Elimination System

NWSA – Northwest Service Area

OERP – Overflow Emergency Response Plan

OPEB – Other Post-Employment Benefits

OSHA – Occupational Safety and Health Administration

P&I – Principal and Interest

PAFR – Popular Annual Financial Report

PERA - Public Employees Retirement Association

PNM – Public Service Company of New Mexico

PPCP – Pharmaceuticals and Personal Care Products

PTF – Preliminary Treatment Facility

RAPP – Rivers and Aquifers Protection Plan

REC – Renewable Energy Credit

RHCA – Retiree Health Care Association

RFP - Request for Proposal(s)

RRAMP – Reclamation Rehabilitation and Asset Management Plan

SAF – Soil Amendment Facility

SCADA – Supervisory Control and Data Acquisition

SDF – Solids Dewatering Facility

SDWA – State Drinking Water Act

SJC – San Juan-Chama

SJCWTP - San Juan–Chama Water Treatment Plant

SOP – Standard Operating Procedures

SRF – State Revolving Loan Fund

SSO's – Sanitary Sewer Overflows

SW – Solid Waste

SWRP - Southside Water Reclamation Plant

SWTP – Surface Water Treatment Plant

TCAC – Technical Customer Advisory Committee

UCMR4 –Unregulated Contaminant Monitoring Rule 4

UEC – Utility Expansion Charge

UNM – University of New Mexico

UOTF – EPA's Utility of the Future

UV – Ultra-Violet

WA - Water

WAF – Water Assistance Fund

WATS – Wastewater Aerobic/Anaerobic Transformations in Sewers Model

WAVES – Water Authority Virtual Education System

WQL – Water Quality Laboratory

WR – Water Resources department

WRMS – Water Resources Management Strategy

WTP – Water Treatment Plant

WW - Wastewater

YR - Year

SELECTED GLOSSARY OF TERMS

ACCRUED EXPENSES: Expenses incurred but not due until a later date

ADJUSTMENTS FOR POLICY DIRECTION CHANGES: Approved adjustment to the maintenance-of-effort budget both positive and negative which are considered major policy issues

AMERICAN WATER WORKS ASSOCIATION: An international nonprofit scientific and educational society dedicated to the improvement of water quality and supply and is the authoritative resource for knowledge, information, and advocacy to improve the quality and supply of water in North America

ANNUALIZED COSTS: Costs to provide full year funding for services initiated and partially funded in the prior year

APPROPRIATION: Legal authorization granted by the Water Authority Board to make expenses and to incur obligations for specific purposes within specified time and amount limits

APPROPRIATIONS RESOLUTION: Legal means to enact an appropriation request, e.g., annual operating budget

AUDIT: Official examination of financial transactions and records to determine results of operations and establish the Water Authority's financial condition

BASE BUDGET: Portion of an annual budget providing for financing of existing personnel, replacement of existing equipment, and other continuing expenses without regard for price changes

BONDED INDEBTEDNESS/BONDED DEBT: That portion of indebtedness represented by outstanding general obligation or revenue bonds

CAPITAL BUDGET: Plan of approved capital outlays and the means of financing them

CAPITAL EXPENSES: Expenses to acquire or construct capital assets

DEBT SERVICE FUND: Fund for the accumulation of resources to pay principal, interest, and fiscal agent fees on long-term debt

DEPARTMENT: A set of related functions that are managed below the Program Strategy level, and are the smallest unit of budgetary accountability and control

ENCUMBRANCES: Commitments of appropriated monies for goods and services to be delivered in the future

ENTERPRISE FUND: Fund established to account for services financed and operated similar to private businesses and with costs recovered entirely through user charges

FINANCIAL PLAN: See Operating Budget

FISCAL YEAR: For the Water Authority, a period from July 1 to June 30 where the financial plan (budget) begins the period and an audit ends the period

FRANCHISE FEE: A fee based upon gross revenue that results from an authorization granted to rent and use the rights-of-way and public places to construct, operate and maintain Water Authority facilities in the City of Albuquerque, Bernalillo County, the Village of Los Ranchos, and the City of Rio Rancho

FUND: Fiscal and accounting entity with self-balancing set of books to accommodate all assets and liabilities while conforming to designated parameters

FUND BALANCE: Fund equity of governmental funds. See also Working Capital Balance

GOALS: General ends toward which the Water Authority directs its efforts in terms of meeting desired community conditions. The Executive Director and Water Authority Board with input from the community, establish Goals for the Water Authority

INDIRECT OVERHEAD: Cost of central services allocated back to a department through a cost allocation plan

INTERFUND TRANSFER: Legally authorized transfers from one fund to another fund

INTERGOVERNMENTAL REVENUES: Revenues from other governments in the form of grants, entitlements, shared revenues, etc.

ISSUE PAPERS: Forms used in the budget process to track and request budget changes

MAINTENANCE OF EFFORT: Base budget plus allowances for cost-of-living wage adjustments and inflationary price increases, or within a limited time frame

MAXIMO: Maximo Enterprise's asset and service management software capabilities maximize the lifetime value of complex assets and closely align them with the Water Authority's overall business strategy

NON-RECURRING EXPENSES: Expenses occurring only once, or within a limited time frame, usually associated with capital purchases and pilot projects

NON-RECURRING REVENUES: Revenues generated only once

NORTHWEST SERVICE AREA: Water and wastewater service to approximately 17,000 accounts on Albuquerque's West Side. The 34-square-mile service area includes Paradise Hills and the Ventana Ranch subdivision

OPERATING EXPENSES: Term that applies to all outlays other than capital outlays

OPERATING BUDGET: Financial plan for future operations based on estimated revenues and expenses for a specific period

OPERATING REVENUES: Proprietary (enterprise service) fund revenues directly related to the fund's primary service activities and derived from user charges for services

PROGRAM STRATEGY: The unit of appropriations and expense that ties related service activities together to address a desired community condition(s) that pertains to one of the Water Authority's Goals

QUALSERVE: A voluntary, continuous improvement program offered jointly by the American Water Works Association and the Water Environment Federation to help water/wastewater utilities improve their performance and increase customer satisfaction on a continuing basis. The program evaluates all facets of the utility business including organization development, business operations, customer relations, and core water/wastewater operations. QualServe comprises of three components: Benchmarking, Self-Assessment, and Peer Review

RECURRING EXPENSES: Expenses generally arising from the continued operations of the Water Authority in a manner and at a level of service that prevailed in the last budget, or new and/or increased services expected to be provided throughout the foreseeable future

RECURRING REVENUES: Revenues generated each and every year

RATE RESERVE: A reserve set aside as restricted cash to be used as revenue in years when revenue is down to offset potential rate increases

RESERVE: Portion of fund balance earmarked to indicate its unavailability or to indicate portion of fund equity as legally segregated for a specific future use

REVENUES: Amounts received from user fees, taxes and other sources during the fiscal year

REVENUE BONDS: Bonds whose principal and interest are payable exclusively from earnings of the Water Authority, and are thereby not backed by the full faith and credit of the issuer

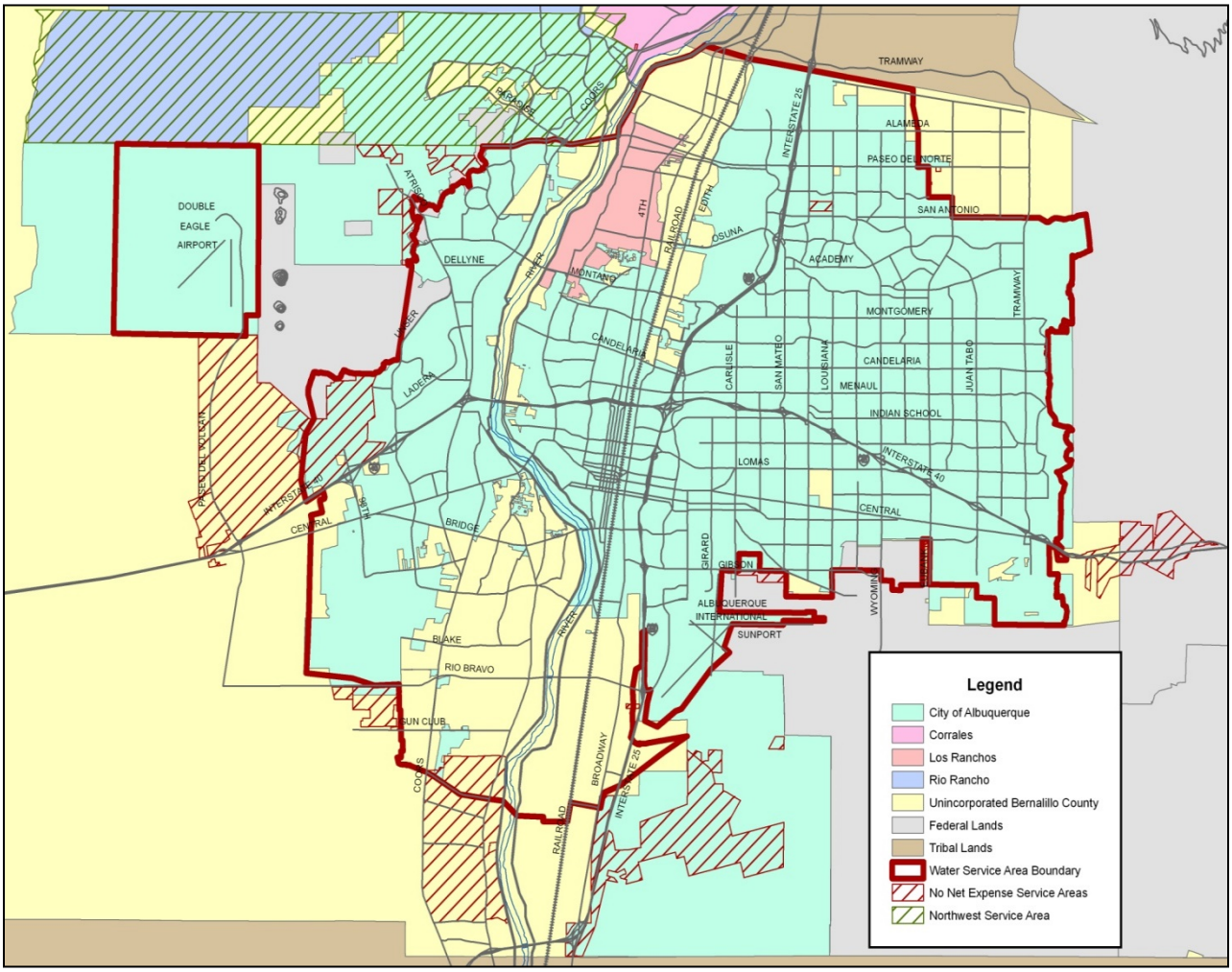
STATE ENGINEER PERMIT 4830: The permit allows the Water Authority to divert 97,000 acre-feet annually from the Rio Grande consisting of an equal amount of Water Authority San Juan-Chama water and native Rio Grande water. The native Rio Grande water is required to be simultaneously released from the Southside Water Reclamation Plant. The State Engineer's permit is the foundation of the Drinking Water Project from a water rights perspective

UNACCOUNTTED FOR WATER: The difference between the quantities of water supplied to the Water Authority's network and the metered quantity of water used by the customers. UFW has two components: (a) physical losses due to leakage from pipes, and (b) administrative losses due to illegal connections and under registration of water meters

UTILITY EXPANSION CHARGES: assessed by the Water Authority to compensate for additional costs associated with the type and location of new development

WORKING CAPITAL BALANCE: Remaining current assets in a fund if all current liabilities are paid with current assets

WATER SERVICE AREA MAP



Major Assets:

- 92 MGD San Juan-Chama Surface Water Treatment Plant
- Adjustable diversion dam, intake structure and raw water pump station on the Rio Grande
- 60 ground water supply wells (255 MGD)
- 61 water supply reservoirs providing both mixed surface and groundwater including non-potable reservoirs
- 45 pump stations including non-potable facilities
- 130 booster pumps
- 3,103 miles of water supply pipeline
- 4 arsenic removal treatment facilities (15 MGD)

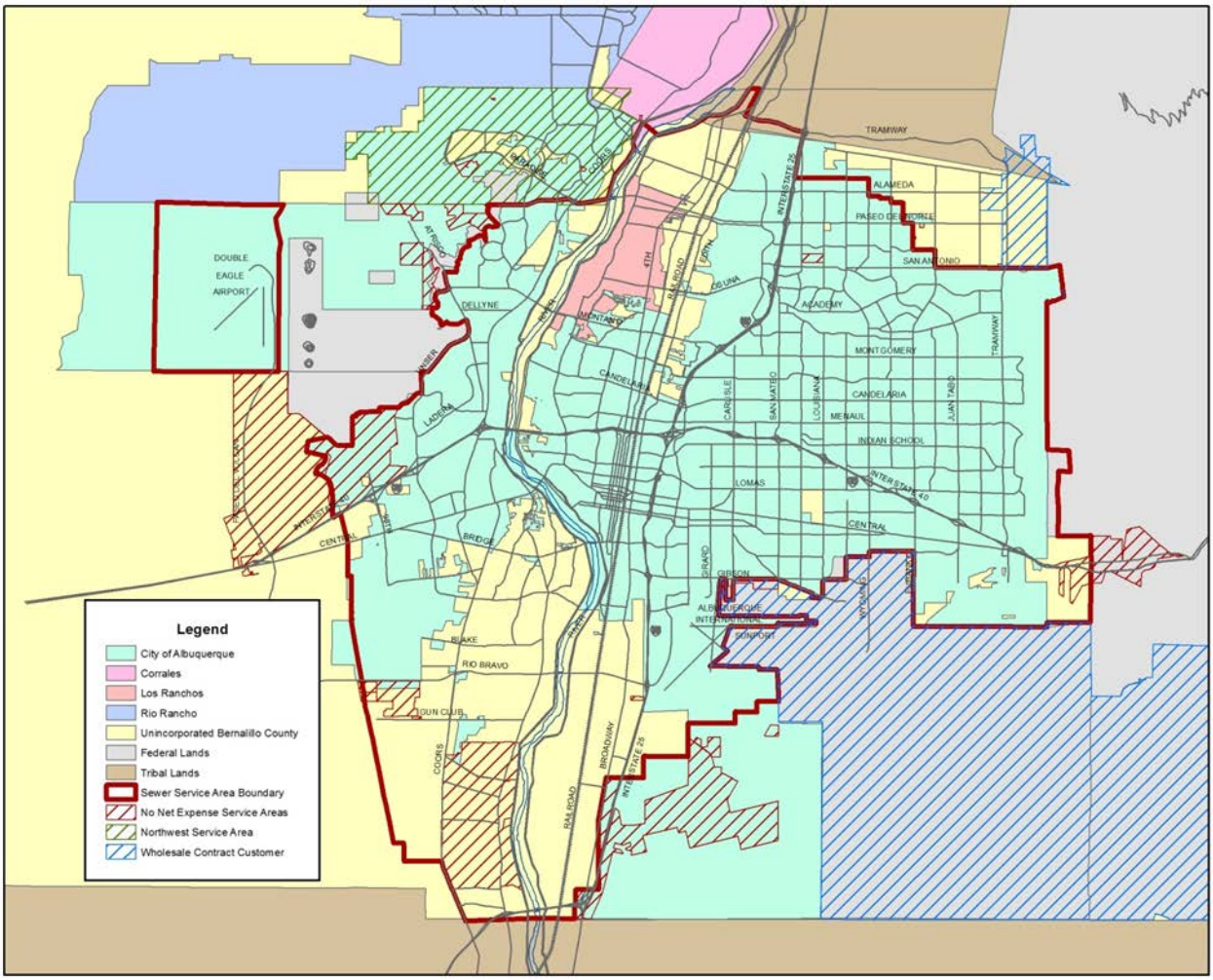
WATER SERVICE AREA MAP

The Water System provides water services to approximately 687,405 residents comprising approximately 95% of the residents of the County. About one-third of unincorporated County residents are customers of the Water System. As of June 30, 2021, service is provided to approximately 215,542 customer accounts, including 185,889 residential and 29,653 multi-family, commercial, institutional and industrial accounts. Approximately 71% of the water sales are for residential uses.

Surface water from the San Juan-Chama Project that is utilized through the San Juan-Chama Drinking Water Project is the primary source of potable water supply for the Water Authority. Groundwater is used to supplement surface water supplies to meet peak demands and to provide supply during drought periods or other times when surface water is not available. The Water Authority also owns and operates two non-potable water systems to provide irrigation and industrial water in the service area. In calendar year 2020, the Water Authority's potable water resources use consisted of 68% from groundwater and 32% from San Juan-Chama surface water. The non-potable water supply is derived from 4% of reuse of treated effluent and non-potable for irrigation. The groundwater supply is produced from sixty (60) wells grouped in seventeen (17) well fields located throughout the metropolitan area and the San Juan-Chama surface water is diverted from the Rio Grande. Total well production capacity is approximately 255 million gallons per day ("MGD"). Eliminating high arsenic wells (those greater than ten (10) parts per billion arsenic) results in available production capacity of 179 MGD. Peak day demand for 2020 was 141 MGD. The Water Authority also has four (4) arsenic treatment facilities that remove naturally occurring arsenic from groundwater. Each well field includes chlorination for disinfection as required by the Safe Drinking Water Act.

Water storage reservoirs provide for fire, peak hour and uphill transfer storage. Water is distributed from higher to lower elevations through a 115-foot vertical height pressure zone to provide minimum static pressures of fifty (50) pounds per square inch ("psi") for consumers. Sixty-one (61) reservoirs are located throughout the service area, with a total reservoir storage capacity of two hundred forty-five (245) million gallons. If demand requires, reservoir water can also be transferred to a higher zone or across zones through an east-west series of reservoirs by means of pump stations sited at the reservoirs. There are a total of forty-five (45) pump stations housing one hundred thirty (130) booster pumps, with a total capacity of 748 MGD, available for water transfers between reservoirs. These reservoirs are interconnected by three thousand one hundred three (3,103) miles of pipelines, consisting of active distribution mains, transmission mains, well collector and hydrant legs, and are situated at various locations east and west of the service area to provide multiple sources of supply to customers and for operating economies. The Water System takes advantage of the unique topography of the Water Authority's service area which allows ground level storage while simultaneously providing system pressure by gravity. Control of the Water System is provided by remote telemetry units distributed throughout the Water System for control from a central control facility.

WASTEWATER SERVICE AREA MAP



Major Assets:

- Southside Water Reclamation Plant
- 45 Lift Stations
- 2,400 miles of collection pipeline

WASTEWATER SERVICE AREA MAP

The System's wastewater component consists of small diameter collector sewers, sewage lift stations, and large diameter interceptor sewers conveying wastewater flows by gravity to the Southside Water Reclamation Plant. The wastewater treatment plant provides preliminary screening, grit removal, primary clarification and sludge removal, advanced secondary treatment including ammonia and nitrogen removal, final clarification, and effluent disinfection using ultraviolet light prior to discharge to the Rio Grande.

Treatment plant capacity is based upon 76 MGD hydraulic capacity. Existing flows at the plant have averaged 50.4 MGD over the past five (5) years, but these figures do not reflect the amount of non-potable water being reused for irrigation and industrial use at the Southside Water Reclamation Plant. The Water Authority has an operational industrial pretreatment program approved by the EPA. The EPA recognized that the Water Authority's pollution prevention efforts have been largely responsible for the Water Authority maintaining compliance with strict standards contained in NPDES Permit #NM0022250. The Water Authority's wastewater effluent discharge consistently meets all NPDES permit requirements. In February 2017, the Water Authority submitted a NPDES permit renewal application. In February 2018, EPA issued a Proposed NPDES Permit and the Water Authority provided comments to EPA on June 25, 2018. On October 10, 2019, the Water Authority received the final NPDES Permit. The re-issued permits were effective December 1, 2019.

The Water Authority received an Administrative Order (an "AO") from the EPA for violations of the NPDES permit associated with sanitary sewer overflows, laboratory reporting issues, and plant violations from 2001 to 2010. The Water Authority received two additional AOs for an overflow which occurred on February 27, 2015 as a result of a major power failure. The first 2015 AO required that the Water Authority implement electrical and other improvements to prevent another power failure and the potential for another spill. All of that work was completed in 2015 and a project completion report was filed with EPA. The second 2015 AO includes adoption of the Corrective Action Plan items that were scheduled to be completed by 2020. All projects in the second 2015 AO were completed and a project completion report was submitted to EPA in June 2018.

Since January 2003, the treatment plant has had a 6.6 mega-watt cogeneration facility to provide most of its power needs. The cogeneration facilities are complemented by a one mega-watt solar energy plant that began service in December 2012. These on-site power generating facilities normally supply 100% of the treatment plant's present electrical needs, along with providing heating of various buildings and sludge digesters. The engines are fueled by methane produced in the digesters and by natural gas purchased through a contract carrier. The Southside Water Reclamation Plant currently generates electricity from the bio-gas produced in the digesters. In accordance with the State's Energy Transition Act, the Water Authority permanently retired the Renewable Energy Certificates ("REC") associated with digester gas. Over the past three (3) years, they had no marketable value.

The Water Authority currently manages wastewater sludge using two methods: surface disposal and production of compost. The Water Authority sells the compost, primarily to the State Department of Transportation. A 660-acre dedicated surface disposal site is used when seasonal market conditions are not favorable for sale of compost product. During Fiscal Year 2020, 27% of all sludge produced at the treatment plant was beneficially recycled into compost and sold. The Water Authority's Compliance Division operates a water quality laboratory, providing analytical support for process control and regulatory compliance for wastewater, drinking water, groundwater, storm water, surface water, the zoological park, residuals management and environmental health programs. The laboratory is internationally accredited under International Standards Organization Standard 17025 for inorganic chemistry and microbiology testing. The entire laboratory is also accredited by the American Association for Laboratory Accreditation. The Water Authority reduces expenses by analyzing a majority of the bacteriological samples at the Water Authority's internal water quality lab.

LEGISLATION

Approved
Operating Budget
FY22

PASSED AND ADOPTED THIS 19th DAY OF May , 2021

BY A VOTE OF: 6 FOR 0 AGAINST.

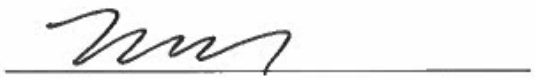
Yes: Benson, Davis, Jones, Peña, Pyskoty and Quezada

No:

Excused: Nair

Steven Michael Quezada, Chair

ATTEST:



Mark S. Sanchez, Executive Director

R-21-8

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-21-8

RESOLUTION

APPROPRIATING FUNDS FOR OPERATING THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR THE FISCAL YEAR BEGINNING JULY 1, 2021 AND ENDING JUNE 30, 2022

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

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

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

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

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

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

BE IT RESOLVED BY THE WATER AUTHORITY:

Section 1. That the following amounts are hereby appropriated to the following funds for operating The Albuquerque Bernalillo County Water Utility Authority during Fiscal Year 2022:

GENERAL FUND – 21	239,330,000
This appropriation is allocated to the following programs:	
Administration	1,797,000
Risk	5,643,000
Legal	799,000
Human Resources	1,778,000
Finance	7,984,000

Customer Services	5,226,000
Information Technology	8,728,000
Wastewater Plant	11,869,000
San Juan-Chama Water Treatment Plant	4,570,000
Groundwater Operations	6,883,000
Wastewater Collections	7,571,000
Water Field Operations	20,729,000
Compliance	5,682,000
Central Engineering	3,178,000
Asset Management	601,000
Planning & Utility Development	666,000
Water Resources	4,643,000
Power & Chemicals	21,487,000
Taxes	656,000
Authority Overhead	1,660,000
San Juan-Chama	2,747,000
Transfers to Other Funds:	
Rehab Fund (28)	36,618,000
Debt Service Fund (31)	77,815,000

DEBT SERVICE FUND – 31 85,754,000

This appropriation is allocated to the following programs:

Debt Service	81,754,000
Transfer to Other Funds:	
Growth Fund (29)	4,000,000

Section 2. The Executive Director is authorized to develop and establish a nonrecurring safety/performance incentive program and a COVID vaccination incentive. Each of these will provide employees with an incentive based on cost reductions or performance enhancements resulting in operating efficiencies and/or a reduction in work related losses. Funding for this program is contingent on savings in the same or a greater amount.

Section 3. The Water Authority shall continue its partnership with non-profit affordable housing developers under contract with local government whereby the first-time homebuyer will not be required to pay the Utility Expansion Charge until the

property is sold. No more than 50 units per year will be authorized under this program. The Water Authority will secure its position with a second mortgage.

Section 4. If working capital balance exceeds 1/12 of operating expenses, and debt service payments and debt service coverage are met, the remaining working capital balance shall be reserved for capital projects.

Section 5. The Executive Director is authorized to carry out all appropriations contained in this budget in accordance with established policies and procedures.

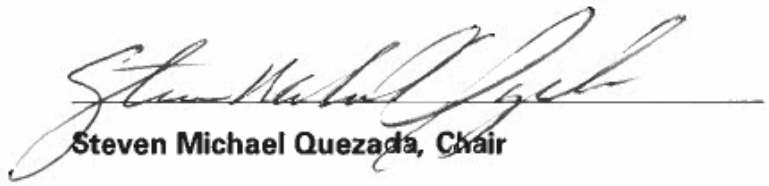
PASSED AND ADOPTED THIS 19th DAY OF May , 2021

BY A VOTE OF: 6 FOR 0 AGAINST.

Yes: Benson, Davis, Jones, Peña, Pyskoty and Quezada

No:

Excused: Nair



Steven Michael Quezada, Chair

ATTEST:

Mark S. Sanchez, Executive Director

R-21-9

ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

BILL NO. R-21-9

RESOLUTION

APPROPRIATING FUNDS FOR THE CAPITAL IMPLEMENTATION PROGRAM FOR THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY FOR THE FISCAL YEAR BEGINNING JULY 1, 2021 AND ENDING JUNE 30, 2022

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

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

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

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

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

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

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

BE IT RESOLVED BY THE WATER AUTHORITY:

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

Basic Program Appropriations:

Sanitary Sewer Pipeline Renewal	12,150,000
Drinking Water Pipeline Renewal	6,475,000
Southside Water Reclamation Plant Renewal	27,750,000
Soil Amendment Facility (SAF) Renewal	50,000

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

Lift Station and Vacuum Station Renewal		1,548,000
Odor Control Facilities Renewal		200,000
Drinking Water Plant Groundwater System Renewal		7,850,000
Drinking Water Plant Treatment Systems Renewal		1,875,000
Reuse Line and Plant Rehab		1,800,000
Compliance		365,000
Shared Renewal		4,482,000
Franchise Agreement Compliance		
4,200,000		
Vehicles and Heavy Equipment		2,988,000
Special Projects:		
Steel Waterline Rehab		1,000,000
Automated Meter Infrastructure (AMI)		2,000,000
Renewable Energy Projects		350,000
Growth:		
Development Agreements		1,250,000
Land & Easement Acquisition		10,000
MIS/GIS		3,425,000
Miscellaneous		325,000
Other:		
Water 2120 Project Fund		300,000

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

APPENDIX - PERFORMANCE PLAN

Approved Operating Budget FY22

Fiscal Year 2022
Performance Plan

Albuquerque Bernalillo County
Water Utility Authority

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Executive Summary

The Albuquerque Bernalillo County Water Utility Water Authority's (Water Authority) Budget Ordinance requires that a Performance Plan be connected to the Five-Year Goals and contain performance measures that help guide the operating and capital budgets in allocating the Water Authority's financial resources. The FY22 Performance Plan assesses the performance of the Water Authority using a set of identified and tested, high-level performance measures. These measures are designed to help the Water Authority improve its operational efficiency and effectiveness by identifying areas of improvement. The measures also provide a mechanism to conduct comparative analyses in order to implement quality improvement processes and enhance decision-making.

The Performance Plan contains three years of actual prior year data which establishes a baseline as well as projected performance targets that drive financial and budgetary policies. In addition to assessing its performance year to year, the Water Authority assesses its performance in relation to the other utilities.

The Performance Plan contains 27 key performance measures organized by the Water Authority's Five-Year Goal areas. The following table summarizes the Water Authority's performance compared to it targets and tracks the Water Authority's progress of baseline, current, and target performance.

Goal	Performance Measure	Baseline	Current	Target
Water Supply & Operations	Drinking Water Compliance Rate	▲	▲	▲
	Distribution System Water Loss	▲	▲	▲
	Water Distribution System Integrity	■	■	■
	Operations and Maintenance Cost Ratios	▲	▲	▲
	Planned Maintenance Ratio	■	■	■
	Water Use per Capita Consumption	■	■	▲
Wastewater Collection & Operations	Sewer Overflow Rate	■	■	■
	Collection System Integrity	■	■	■
	Wastewater Treatment Effectiveness Rate	■	■	■
	Operations and Maintenance Cost Ratios	▲	▲	▲
	Planned Maintenance Ratio	■	■	■
Customer Services	Customer Service and Technical Quality Complaints	▲	▲	▲
	Customer Service Cost per Account	■	■	■
	Billing Accuracy	■	■	■
	Call Center Indicators	■	▲	▲
	Residential Cost of Water/Sewer Service	■	■	■
	Stakeholder Outreach Index	▲	▲	▲
Business Planning & Management	Debt Ratio	■	■	■
	Return on Assets	■	■	■
	System Renewal/Replacement Rate	■	■	■
	Triple Bottom Line Index	■	■	■
Organization Development	Employee Health and Safety Severity Rate	▲	▲	▲
	Training Hours per Employee	■	▲	■
	Customer Accounts per Employee	▲	▲	▲
	Employee Turnover	▲	■	▲
	Retirement Eligibility	▲	▲	▲
	Organizational Best Practices Index	▲	▲	▲

Performance Key

▲ **Excellent** ■ **Good** ■ **Fair** ▼ **Poor**

Introduction

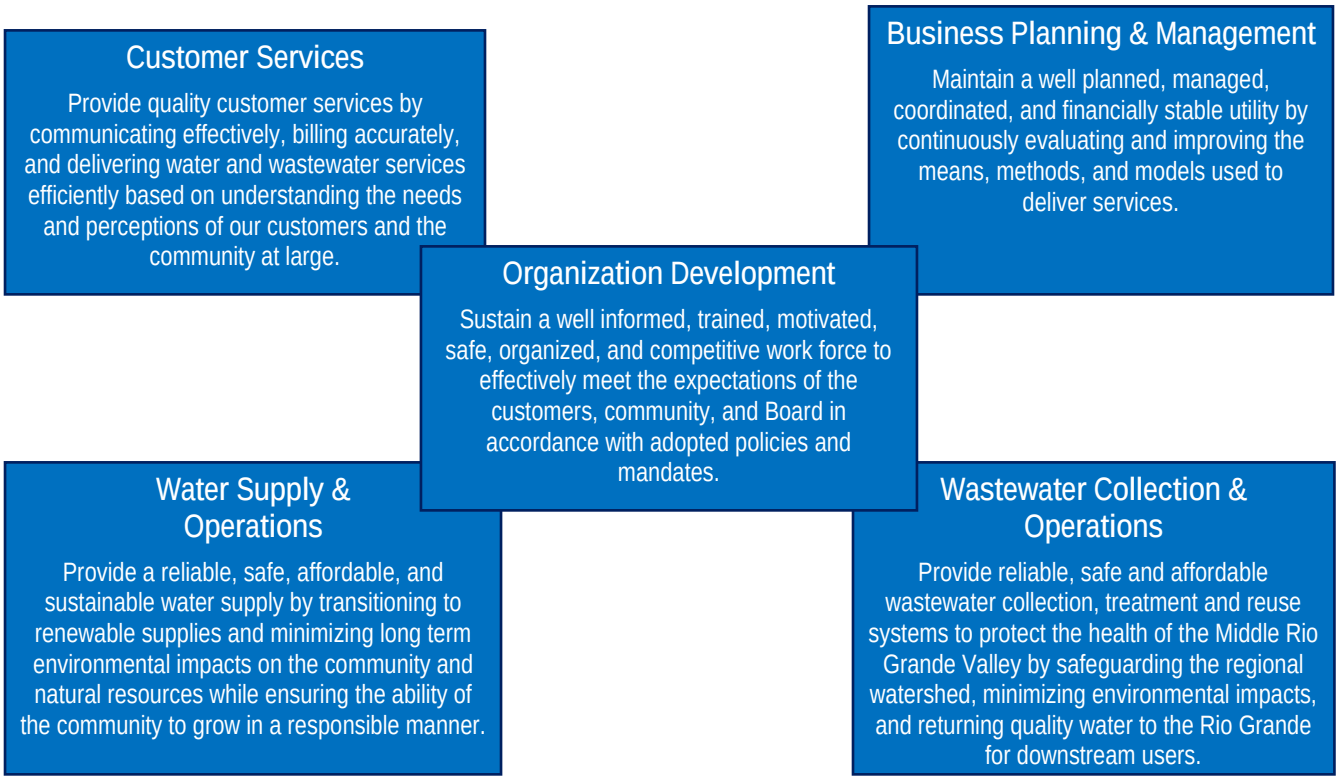
The Albuquerque Bernalillo County Water Utility Water Authority's (Water Authority) Budget Ordinance requires that a Performance Plan be connected to the Five-Year Goals and contain performance measures that help guide the operating and capital budgets in prioritizing and allocating the Water Authority's financial resources. The Water Authority uses these measures to help improve its operational efficiency and effectiveness by identifying areas of improvement. The measures also provide a mechanism to conduct comparative analyses in order to implement quality improvement processes and enhance decision-making.

The Water Authority utilizes the *American Water Works Association's (AWWA) Benchmarking Performance Indicators Survey* (Survey) in developing its Performance Plan. The Survey provides utilities an opportunity to collect and track data from already identified and tested performance measures, based on the same collection process and definitions. The most recent survey data was compiled in 2019 by AWWA from 144 different utilities. The Performance Plan uses the survey data as a basis for its performance measures to track the Water Authority's performance with that of other utilities.

Five-Year Goals

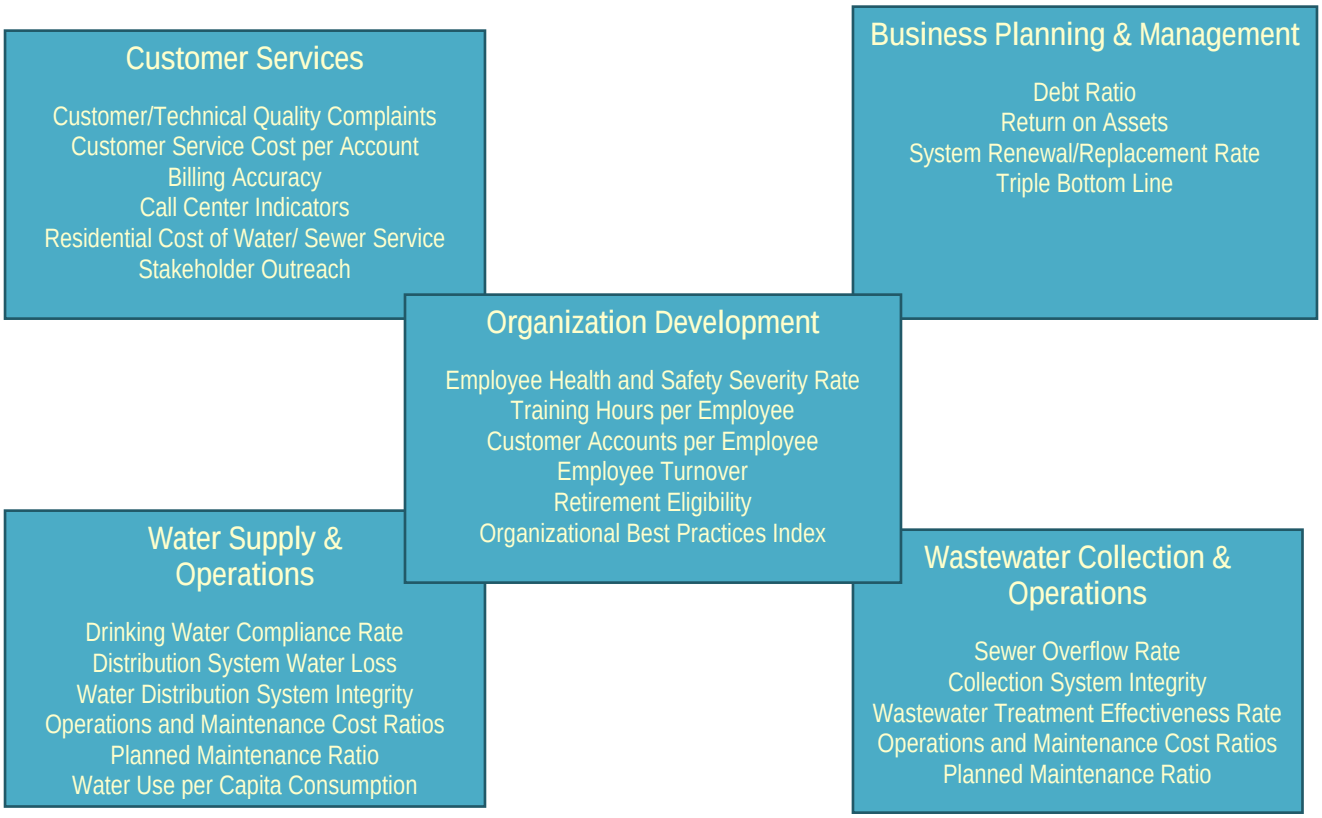
The Water Authority's Performance Plan is organized by the Water Authority's Five-Year Goal areas which are modeled after AWWA's business model. This model is based on fifteen successful quality achievement programs, including the Malcolm Baldridge National Quality Award Program, the Deming Award, and the International Standards Organization series of quality standards. The model characterizes the work of the typical water and wastewater utility around five business systems. Figure 1 shows the Water Authority's Five-Year Goals which parallels the AWWA model. The Water Authority also developed guiding goal statements for each goal area which explains the long-term desired result for each goal.

Figure 1: Water Authority's Five-Year Goals & Guiding Goal Statements



The Performance Plan contains 27 key performance measures. The performance measures are organized by the Water Authority's Five-Year Goal areas shown in Figure 2. The performance measures are linked to the Goal areas in that the tracking of the metric is used to achieve the long-term desired result for that goal.

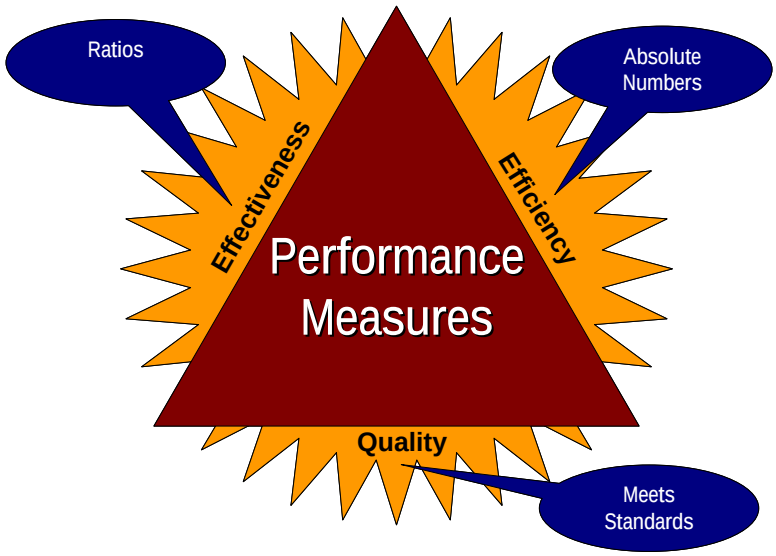
Figure 2: Performance Measures by Goal Area



Performance Measure Types

The Plan's performance measures fall into three main categories: Quality, Effectiveness and Efficiency. Quality measures are presented as standards. Effectiveness measures are presented as ratios. Efficiency measures are presented as absolute numbers.

(1) *Standards*, such as meeting drinking water quality standards
(2) *Ratios*, such as operation and maintenance costs per million gallons of water or wastewater processed
(3) *Absolute numbers*, such as the monthly bill for a residential water or wastewater customer



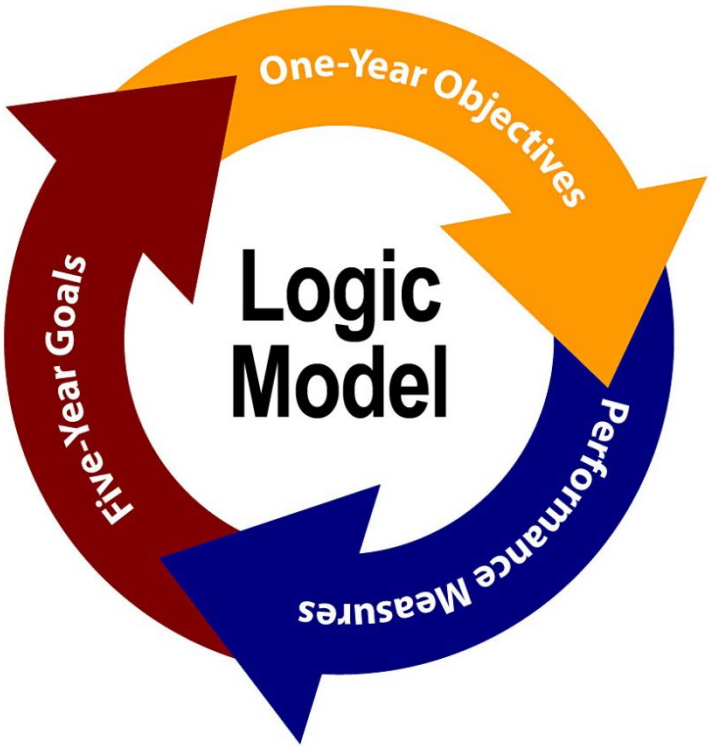
Performance Plan Logic Model

The Performance Plan presents each performance measure through an *evaluation logic model*. The logic model is a systematic and visual method that shows how performance measures quantify what is being done (inputs), how well it is being done (outputs), and why it is being done (outcomes). *Inputs* are the specific data needed to construct and calculate each performance measure. These resources may include dollars, hours, people or material resources used to produce an output. *Outputs* are the product of the calculation of the inputs and describe the level of effectiveness of each performance measure. The outputs are the metrics that are benchmarked with other utilities. *Outcomes* are the desired result of the performance measure that the Water Authority would like to achieve in connection with its long-range goals and with its shorter-term objectives. The logic model is used to show where the organization wants to be and how it can get there.

Simply stated, the performance measures identify gaps in service delivery or performance. They are used to help monitor the Water Authority's performance and to develop performance targets. The Water Authority sets performance targets that are aligned with the desired outcomes to determine how effective or efficient the utility is in achieving the desired outcome. The Water Authority uses the desired outcomes to create an ongoing discussion with its stakeholders and show why decisions are made in prioritizing and allocating financial resources.

The Five-Year Goals and One-Year Objectives are incorporated into the logic model. Figure 3 shows the alignment between the goals, objectives and performance measures in the logic model. With the performance measures being used to identify gaps, the One-Year Objectives which are policy directives from the Water Authority Board are used to close performance or service delivery gaps and improve performance levels. It should be noted that not all One-Year Objectives are tied to performance measures or have a measurable component. Some Objectives are related to completing projects or improving or implementing programs.

Figure 3: Logic Model Alignment of Goals, Objectives and Performance Measures



Benchmarking and Industry Peer Group

The Performance Plan contains three years of actual prior year data (FY18 through FY20) which establishes a baseline. The Plan also includes estimated current fiscal year performance measures (FY21) as well as projected performance in the proposed budget year (FY22). The Plan allows the Water Authority to benchmark its performance from year to year and to determine how its current and projected performance compare to baseline past performance. Overall, the Performance Plan's logic model incorporates five years of data in determining its performance, evaluating trends, and determining projected performance.

In addition to assessing its performance year to year, the Water Authority also compares its performance with that of other utilities in its *industry peer group*. As stated in the Introduction section, the Water Authority obtains its comparative data from the AWWA Benchmarking Performance Indicators Survey. By benchmarking with other utilities, the Water Authority is able to assess its performance relative to other high-performing utilities. For each performance measure, the industry peer group is presented throughout the Plan.

Industry Peer Group	
1)	**Combined Water/Sewer** Represents those utilities designated as providing both water and wastewater services
2)	**Populations greater than 500,000** Utilities that serve populations greater 500,000
3)	**Region 4** Utilities in the following States: AR, AZ, CO, ID, KS, LA, MO, NE, NM, OK, TX, UT, WY

Strategic Planning, Budgeting and Improvement Process

The Performance Plan is a component of the *Strategic Planning, Budgeting and Improvement Process* that is discussed in the Financial Plan. This Process drives the development of the annual operating and capital budgets by providing data used to set performance goals, as well as allocate and prioritize resources. Performance measures provide an approach for strategically allocating and prioritizing resources to balance the level and cost of services with customer expectations. For example, higher treatment costs may be the desired outcome to improve customer satisfaction.

As a part of the Strategic Planning, Budgeting and Improvement Process, the Five-Year Goals, One-Year Objectives, and performance measures are integrated through the use of the logic model in order to achieve service delivery and performance improvement. A good example of the integration between performance measures and objectives is the Employee Health and Safety Severity Rate (see pages 115-117) which measures the rate of employee days lost from work due to illness or injury. Since starting the benchmarking process, the Water Authority noticed that its lost workdays were on average fifteen times higher than other utilities. As a result, the Water Authority has used the Objectives to implement several programs including safety incentive bonuses to reduce the number of employee lost days. Overall, the integration of the performance measures and objectives are used to achieve the long-term desired results of the Water Authority's Five-Year Goals.

Performance Accountability & Budgeting

Each Water Authority division manager is responsible for their respective goal areas and objectives and for tracking their performance. The Executive Director, who is the champion and supportive leader of the performance management process, meets with the division managers and their staff to review progress reports on the performance measures and objectives.

A biennial customer opinion survey is conducted to assess the utility's performance from the customer's viewpoint. Results of a customer opinion survey are presented to the Board. The survey allows the Water Authority to track customer satisfaction on the programs, policies, and operational performance of the organization. Several survey questions are tied to the performance measures and levels of service. In this way, the survey provides qualitative data that relates to quantitative data from the benchmarking to ensure that the Water Authority is balancing performance improvement with customer expectations.

The Water Authority also uses performance measures and performance targets in conjunction with the review of the annual budget. The Executive Director and Division Managers integrate performance reporting into the budget process in order to focus the budget discussion on the allocation of resources and to address performance gaps. Budget requests are tied either to performance measure targets or objectives in terms of providing a justification for their purpose. By integrating the objectives and performance measures into the budget process, the Water Authority has moved from just measuring performance to managing performance and how and what it what it wants to achieve. As a result, the Water Authority has become more transparent and accountable to its customers and the governing board.

Performance Measurement Linkage to Asset Management Planning

The Water Authority has established an asset management program based on a business model that helps the Water Authority make better acquisition, operations and maintenance, renewal, and replacement decisions. The principles of asset management were developed to address the critical problem of aging public infrastructure and changing utility business environment. The Water Authority has completed an Asset Management Plan (AMP) which provides a 30-year projection that will allow the Water Authority to budget for renewals and replacements into the future. The Water Authority uses performance measures, performance targets, and the customer opinion survey to develop its levels of service to deliver the defined services at the lowest life-cycle cost. In quantifying its performance, the Water Authority has begun to balance its performance with the levels of service, cost of service, customer expectations, and business risk. As a part of its AMP, the Water Authority has developed its levels of service to coincide with its performance measures at the Goal level. Moreover, a quarterly key performance indicator report is presented to the governing board which provides a snapshot of utility performance by service level categories.

Performance Measurement Linkage to Effective Utility Management

The Effective Utility Management (EUM) was developed by the Environmental Protection Agency and several water and wastewater associations and research foundations. EUM is designed to help water and wastewater utilities comprehensively assess current operations and identify a path to improving in key areas that are the highest priorities. The Water Authority uses EUM to make informed decisions and practical, systematic changes to achieve excellence in utility performance in the face of everyday challenges and long-term needs for the utility and the community it serves.

The Water Authority uses the EUM guidebook to help identify and address its most pressing needs through an incremental, continual improvement management approach. This guidebook, called the Primer, contains *Ten Attributes of Effectively Managed Utilities* which helps the utility maintain a balanced focus on the ten operational areas. Figure 4 provides a performance relationship matrix between the Five-Year Goals and the EUM Attributes. The Water Authority uses performance benchmarking data from both the AWWA and EUM frameworks to select priorities for improvement, based on the utility's strategic objectives and the needs of the community it serves.

Figure 4: Performance Relationship Diagram of Goals and EUM Attributes

EUM Attribute	Water Supply & Operations	Wastewater Collection & Operations	Customer Services	Business Planning & Management	Organization Development	Attribute Score
 CUSTOMER SATISFACTION			■			■
 EMPLOYEE AND LEADERSHIP DEVELOPMENT					▲	▲
 ENTERPRISE RESILIENCY	■	■			■	■
 FINANCIAL VIABILITY			■	■		■
 INFRASTRUCTURE STRATEGY AND PERFORMANCE	■	■		■		■

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

Figure 4: Performance Relationship Diagram of Goals and EUM Attributes (continued)

EUM Attribute	Water Supply & Operations	Wastewater Collection & Operations	Customer Services	Business Planning & Management	Organization Development	Attribute Score
 OPERATIONAL OPTIMIZATION	■	■			■	■
 PRODUCT QUALITY	▲	■				■
 STAKEHOLDER UNDERSTANDING AND SUPPORT			▲			▲
 COMMUNITY SUSTAINABILITY				■	■	■
 WATER RESOURCE SUSTAINABILITY	▲			▲		▲
Goal Score	■	■	■	■	■	■

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

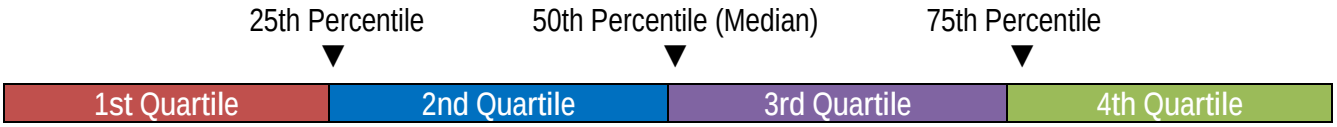
Communicating Performance Measurement

Performance measurement results and progress in meeting performance targets are communicated to elected officials and customers through this report, and to employees through-out the organization. Increasing employee understanding of the performance measures and the organization's long-term goals is a critical step in achieving the Water Authority's long-term goals. The Employee Health and Safety Severity Rate is a good example how the Water Authority educated the importance of meeting its goals and making safety a high priority in the organization. Employee annual performance reviews are aligned with the policy strategic objectives which have helped to educate employees about the utility's core values, goals and annual objectives. It has engaged employees by creating awareness or by specifically allowing employees to be more accountable in improving the utility's performance as measured through its key performance indicators.

Presentation of Data

The Performance Plan's comparative data is presented in quartile rankings. The top quartile reflects the 75th percentile, and the bottom quartile reflects the 25th percentile. The median is the 50th percentile value. Figure 5 illustrates the four quartiles. Data in the 2nd and 3rd quartiles is described as the "Interquartile Range" which includes 50% of all the values submitted for each performance measure. This range is considered nominal or representative of the majority of the data.

Figure 5: Percentile/Quartile Illustration



Layout of Performance Plan

The performance measures are categorized by the Water Authority's Five-Year Goal areas.

- Each Goal area section provides an overview of the Goal with a Guiding Goal Statement and Goal Performance Scorecard for each performance measure.
- Each Goal area section shows how the Objectives are linked to the performance measures and their scorecard status.
- Each performance measure is presented through a logic model of inputs, outputs and outcomes as well as comparative statistics and charts to illustrate how the Water Authority is performing year to year and how it is performing compared to the industry peer group.

A results narrative includes a discussion and analysis of how the performance measure meets anticipated performance targets and long-range goals. If the targets are not being met, an explanation is provided for the reason and what is expected in the future. The Performance Plan also indicates if there are One-Year Objectives related to a performance measure to show how policy directives are used to improve service delivery and/or minimize performance gaps. In addition, the Performance Plan provides customer opinion survey statistics to show how customer expectations relate to the performance measure.

Goal 1
Water Supply and Operations

Guiding Goal Statement

Provide a reliable, safe, affordable, and sustainable water supply by transitioning to renewable supplies and minimizing long term environmental impacts on the community and natural resources while ensuring the ability of the community to grow in a responsible manner.

Goal Performance Scorecard

Ref #	Performance Measure	Status	Trend
1-1	Drinking Water Compliance Rate	▲	▲
1-2	Distribution System Water Loss	▲	▲
1-3	Water Distribution System Integrity	■	■
1-4	O&M Cost Ratios: O&M Cost per account	▲	▲
1-4	O&M Cost Ratios: O&M Cost per MG processed	■	■
1-4	O&M Cost Ratios: Direct cost of treatment per MG	■	■
1-5	Planned Maintenance Ratio	■	■
1-6	Water Use per Capita Consumption	■	■
	Overall Goal Status	■	■

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

Linkage of Objectives to Performance Measures

FY22 Objectives	Measure Reference
Implement the Rivers and Aquifers Protection Plan (RAPP), the Water Authority's source water protection plan, through: • Complete source water assessments for surface water and groundwater by 2nd Quarter of FY22. The source water assessments will utilize the source water protection areas (SWPAs) developed from the capture analysis and the updated potential sources of contamination (PSOC) inventory from FY21. Review the results of the source water assessments to determine if changes are required to the Rivers and Aquifers Protection Plan (RAPP) and protection measures. • Tracking and review of site data and documents for priority groundwater contamination sites through the end of the 4th Quarter of FY22; • Collaboration and coordination with other agencies, including support of the Water Protection Advisory Board (WPAB) and the Office of Natural Resources Trustee through the end of the 4th Quarter of FY22; and • Contracting with the NM Bureau of Geology and Mineral Resources to provide an update to the Middle Rio Grande Basin Water Quality Study by the end of the 4th Quarter of FY22.	**1-1**
Develop a long-term strategy for utilizing existing wells that are currently out of service within the water system by the end of the 4th Quarter of FY22.	**1-1**
As part of the water distribution system preventative maintenance program, implement a flushing program that uses a systematic approach to flush water lines, filtering the water using the new NoDes system before returning it to distribution by the end of the 4th Quarter of FY22. Continue monitoring and reporting the occurrence of complaints before and after flushing to evaluate whether the flushing program improved water quality in the pilot area. Identify metrics to be used for measuring the effectiveness of this process moving forward. Utilize the new unidirectional flushing (UDF) module of the InfoWater hydraulic model to assist the pilot program by the end of the 4th Quarter of FY22.	**1-1**
To improve the validated water audit inputs for apparent water loss, test a minimum of 300 small meters to support the water audit and strategic water loss plan by the end of the 4th Quarter of FY22. Test small meters in accordance with the recommendations of the water audit recently conducted by the Southwest Environmental Finance Center.	**1-2**
Work with the Non-Revenue Water Loss Committee on the implementation of water loss control strategies by identifying areas of improvement recommended in the water loss report and reporting activities through the end of the 4th Quarter of FY22.	**1-2**
Locate water leaks by 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 FY22; Track, evaluate, and report on pilot-scale Echologics acoustic leak detection system on a quarterly basis in FY22.	**1-2** **1-3**
To improve energy efficiency and reduce operation and maintenance costs, continue deployment of automated meter infrastructure pressure monitoring infrastructure in all pressure zones by the end of the 4th Quarter of FY22. Work with the vendor on software development to improve functionality. Through hydraulic modeling assess opportunities for operational efficiency by eliminating redundant pressure reducing stations in pressure zone 4ER by the end of the 4th Quarter of FY22.	**1-3**
Identify a new aquifer storage and recovery (ASR) project location. Work with the New Mexico Environment Department and Office of the State Engineer to begin ASR permitting by the end of the 4th Quarter of FY22.	**1-3**
Initiate, Site, drill, install, and sample a groundwater monitoring well at the northernmost extent of groundwater contamination at the Kirtland Air Force Base (KAFB) Bulk Fuels Facility jet fuel leak site by 4th Quarter of FY22. Construction of this well will include the development of a work plan and sampling and analysis plan (SAP) with New Mexico Environment Department (NMED) input. Work with Water Authority Public Information Office to coordinate neighborhood communications around the need for and drilling of the well.	**1-3**

FY22 Objectives	Measure Reference
Submit annual treatment data to the Partnership for Safe Water - Treatment program for inclusion in the program's annual report of aggregated system water quality data. Maintain individual and combined filter effluent turbidity less than 0.1 nephelometric turbidity unit (NTU) more than 95% of time in operation. Continue work on items identified from the Phase 3 Self-Assessment that are not yet considered optimized and submit a progress report to American Water Works Association (AWWA) by the end of the 4th Quarter of FY22. Continue working towards the application for the Phase IV Excellence in Water Treatment Award in the Partnership for Safe Water -Treatment.	**1-4**
Submit annual distribution data to the Partnership for Safe Water - Distribution 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 American Water Works Association (AWWA) by the end of the 4th Quarter of FY22.	**1-4**
Complete Ground Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.	**1-5**
Complete Surface Water Plant Preventive Maintenance to Corrective Maintenance ratio to at least 60% of all completed maintenance labor hours by the end of the 4th Quarter of FY22.	**1-5**
To prepare for increased climate variability, encourage installation of water conservative landscaping, while working towards the Water 2120 conservation goal of 110 gallons per capita per day (gpcd) by 2037 by implementing one or more of the following activities: • Perform a smart controller field performance study on the top 5% of residential customers. • Increase smart controller rebate adjustments and Xeriscape square feet conversions by comparing current fiscal year to prior fiscal years. • Increase the amount of commercial class customers rebate adjustments by comparing from baseline (prior fiscal year) to current fiscal year. • Work with the Public Information Officer to develop outreach targeting water use messaging that incorporates climate variability. Present the new messaging to management by the end of the 3rd Quarter of FY22. • Develop a Landscape Irrigation guide to educate customers about the importance of efficient irrigation and how to efficiently water landscapes by the end of the 4th Quarter of FY22.	**1-6**
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) two Water Conservation Open House Meetings by the end of the 4th Quarter of FY22.	**1-6**
To better educate children on the importance of water and resource planning, continue to collaborate with ¡Explora! to design interactive water exhibits for the new Science Technology Engineering Mathematics (STEM) center which is planned to open in Q2 of FY22.	**1-6**
Provide leadership and support of the Middle Rio Grande Endangered Species Collaborative Program (ESA Collaborative Program) through: 1) Participation in the Collaborative Program Executive Committee and 2) Participating in the development of adaptive management practices for the program.	**1-6**
Complete acquisition of easements for additional storage in Abiquiu Reservoir by the end of the 4th Quarter of FY22. Continue towards permitting and environmental approvals for storage of native water in Abiquiu Reservoir through the 4th Quarter of FY22.	**1-6**

Performance Measure Division Responsibility

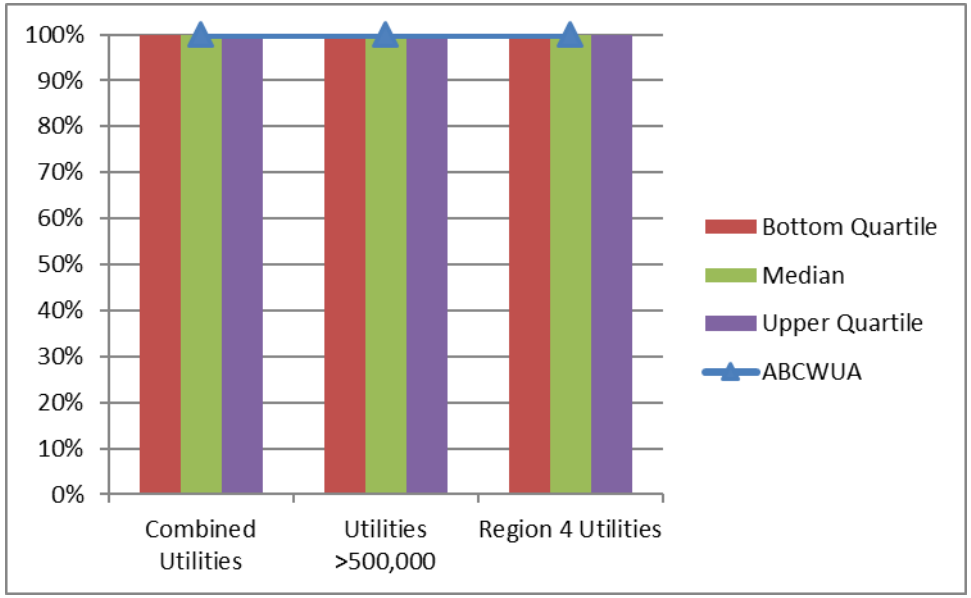
Ref #	Performance Measure	Operations Plant	Operations Field	Operations Compliance	Operations Water Resources, Engineering & Planning
1-1	Drinking Water Compliance Rate	✓		✓	
1-2	Distribution System Water Loss		✓		✓
1-3	Water Distribution System Integrity		✓		✓
1-4	O&M Cost Ratios: O&M Cost per account	✓	✓		
1-4	O&M Cost Ratios: O&M Cost per MG processed	✓			
1-4	O&M Cost Ratios: Direct cost of treatment / MG	✓			
1-5	Planned Maintenance Ratio	✓	✓		✓
1-6	Water Use per Capita Consumption				✓

1-1 Drinking Water Compliance Rate

Performance Results

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Quality	Quantify the percentage of time each year that the Water Authority meets all of the health related drinking water standards in the US National Primary Drinking Water Regulations	Number of days in full compliance	100%	100%	100%	100%	100%	100%	Provide safe and reliable drinking water to our customers 100% of the time

Industry Benchmark



Results Narrative

The drinking water compliance rate indicates the percent of time that a drinking water utility is in full compliance with all of the water quality contaminants and treatment techniques mandated for public water systems in the United States. A utility measures its compliance relative only to those primary maximum contaminant levels and treatment techniques that apply to its operations. The drinking water compliance rate uses simple tests of "in compliance" and "not in compliance." As a performance measure for comparative analysis, the drinking water compliance rate allows a utility to gauge its compliance with health-related drinking water parameters relative to other water utilities reporting data into the comparative analysis system.

Measurement Status

The Water Authority has been in 100% compliance for the past three fiscal years and is on-target to meet 100% compliance for the next two fiscal years.

For FY12, the Water Authority developed several policy objectives to improve the processes and procedures for water quality compliance reporting. The Water Authority created a new Compliance Division in FY10 to better improve and consolidate all its compliance functions. In FY13, the Compliance Division developed and implemented a reporting system and environmental monitoring program.

In FY20, the Water Authority received recognition from the Partnership for Safe Water for treatment and distribution system operations. The Partnership for Safe Water provides self-assessment and optimization programs so that utilities have the tools to optimize water utility operation and help ensure public health protection. As a part of this program, a target was established to maintain filter effluent turbidity less than 0.1 NTU more than 95% of time in operation.

Also, in FY19, the Water Authority revised its Water Quality Report with an updated design. The updated report has an easier-to-read design that was developed with input from ratepayers via the utility's Customer Conversations program. The report, a requirement of the EPA, provides information about where our drinking water originates, how it is made safe to drink, and water quality regulations. It also includes the results of EPA-required sampling and testing.

2020 Customer Opinion Survey

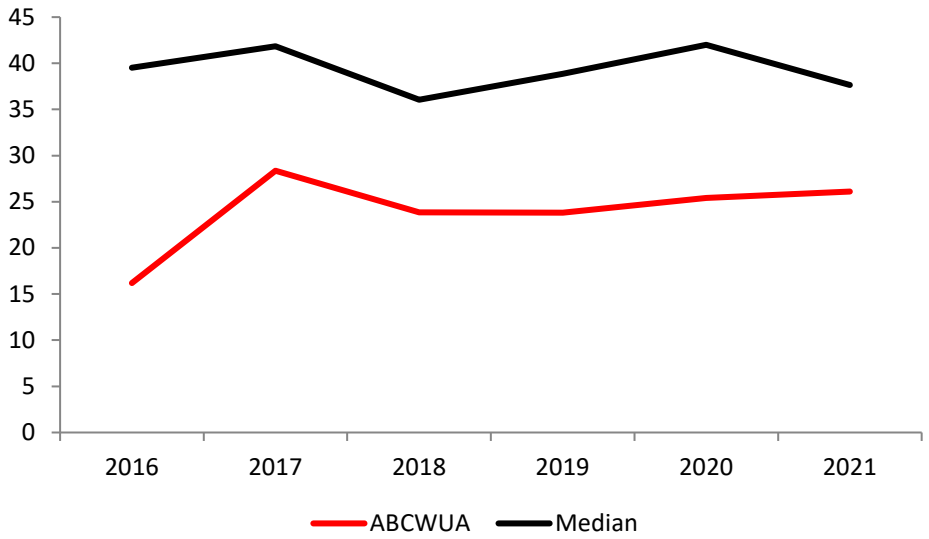
- 97% of customers are either very or somewhat satisfied with the reliability/availability of water
- 77% of customers are either very or somewhat satisfied with the safety and purity of drinking water
- 79% of customers are either very or somewhat satisfied with the quality (taste, smell, appearance) of drinking water

1-2 Distribution System Water Loss

Performance Results (Real Losses – gallons per service connection per day)

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				2018	2019	2020	2021	2022	
Efficiency	Quantify the amount of produced water that fails to reach customers and cannot otherwise be accounted for through authorized usage	Total water loss from leakages, total water distributed	24.3	23.8	23.8	25.4	26.1	25.2	Improve water use efficiency and recover lost revenue

Industry Benchmarks



Lower Values Desirable

Results Narrative

Distribution system water loss is the difference between the volume of water distributed for use by all customer classes and the volume of water actually consumed by authorized users. There are many factors contributing to distribution system water loss. The major ones are leakage, metering inaccuracies, and unauthorized consumption. Among these, only leakage is a true loss of water. Metering inaccuracies affect the utility's capability for measuring true loss, but such inaccuracies can lead to both overstatements and understatements of the true loss. Because water losses impact revenues, it is important that a utility have practices in place to understand the specific causes of losses in its system. Tracking water losses will help the Water Authority understand the condition of distribution system infrastructure and the effects of its operation, maintenance, and replacement practices. This measure provides opportunity for the Water Authority to compare the distribution system water loss against that in the distribution systems of other utilities.

Measurement Status

Compared to its industry peers, the Water Authority has been successful in maintaining very low real water losses. In FY09, the Water Authority began its leak detection program that focused on finding water line leaks before they surface, fixing leaking hydrants, and improving meter inaccuracy.

In the past six years, the Water Authority has utilized the AWWA Water Audit methodology in determining its apparent and real water losses. In FY19, the utility's water audit was validated. In FY20, the Water Authority improved the validated water audit inputs for apparent water loss, conducted a statistically significant number of small meter tests to support the water audit and strategic water loss plan. The utility also conducted an apparent loss forensic analysis and identify areas of improvement for reducing water loss. In FY21, the utility will validate the water audit and evaluate strategies to reduce both apparent and real water losses.

2020 Customer Opinion Survey

- 70% of customers are either very or somewhat satisfied with the condition of the water lines in the number of leaks that they may observe surfacing

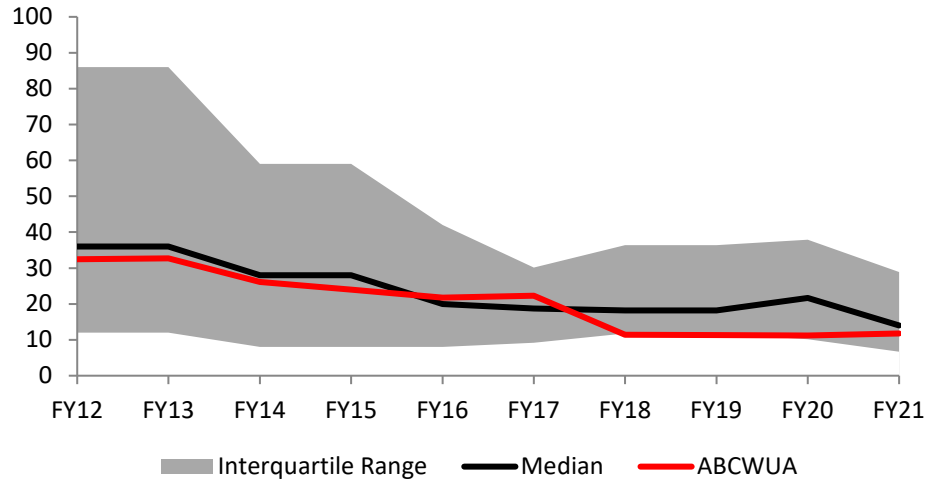
1-3 Water Distribution System Integrity

Performance Results

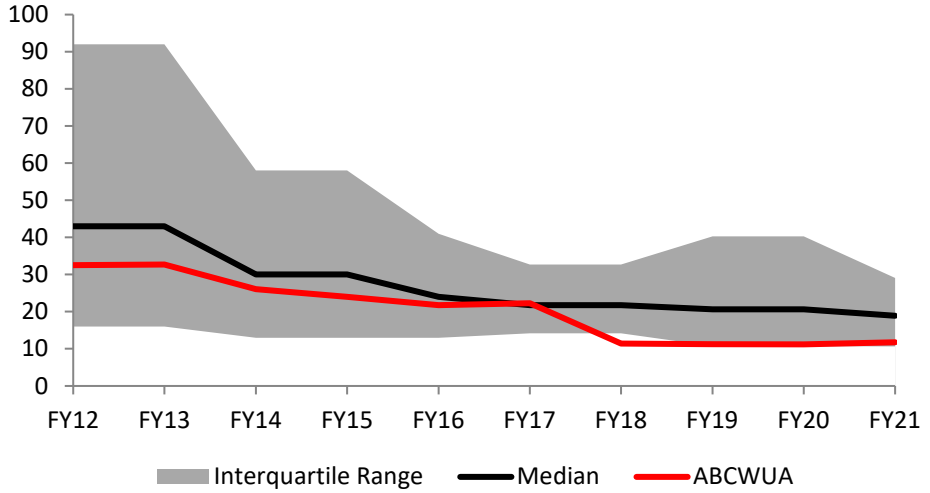
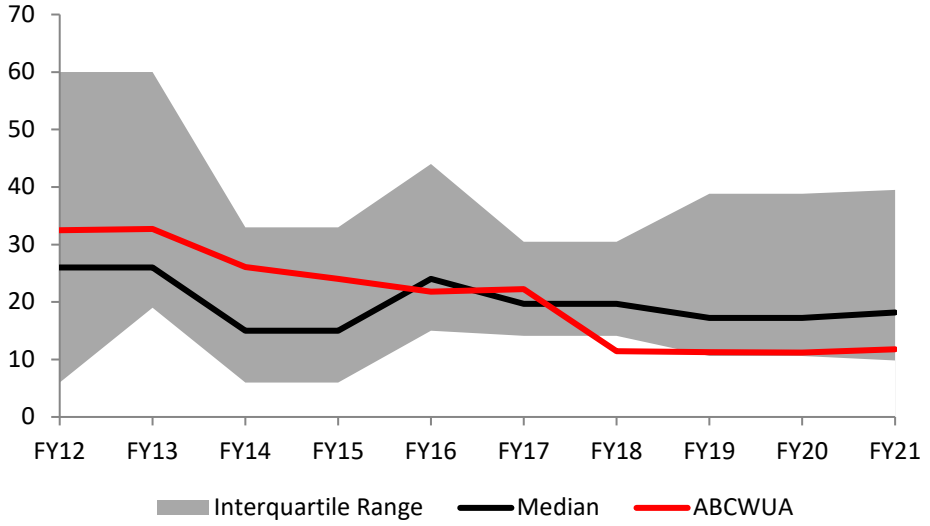
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the condition of the water distribution system	Number of leaks per 100 miles of distribution piping	11.3	11.4	11.3	11.2	11.8	11.9	Improve the condition and reliability of the water distribution system and reduce emergency repairs and water supply interruptions

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

For a water utility, distribution system integrity has importance for health, customer service, operations, and asset management reasons. Excessive leaks and breaks result in increased costs due to an increased number of emergency repairs. Utilities use operational and maintenance (O&M) procedures designed to reduce the value of this measure. The cost of these (O&M) programs must be balanced against the cost of emergency repairs and the consequences of water supply interruptions. Comparing the value of this measure with other utilities can provide information on the rate that many utilities may find acceptable.

Measurement Status

The Water Authority's performance in this measure has been below the median for the past three fiscal years. The Water Authority has adopted policy objectives for the past four fiscal years to increase spending on water line rehabilitation which will help reduce emergency repairs and water supply interruptions. Since FY08, the Water Authority has invested $1 million in steel water line rehabilitation in addition to planned water line rehabilitation spending. The purpose for this objective is to target steel lines because they have a higher frequency of leaks than other material types in the system. The Water Authority included as an objective for FY22 to continue spending an additional $1 million in steel water line rehabilitation. In FY11, the Water Authority completed a ten-year asset management plan for its small diameter water lines. This plan has been utilized in its capital planning in order to replace water lines that are past their useful life and have had multiple leaks on the same line segment.

2020 Customer Opinion Survey

- 75% of customers are either very or somewhat satisfied with the effectiveness of the Water Authority to repair leaks and the response time for restoring service

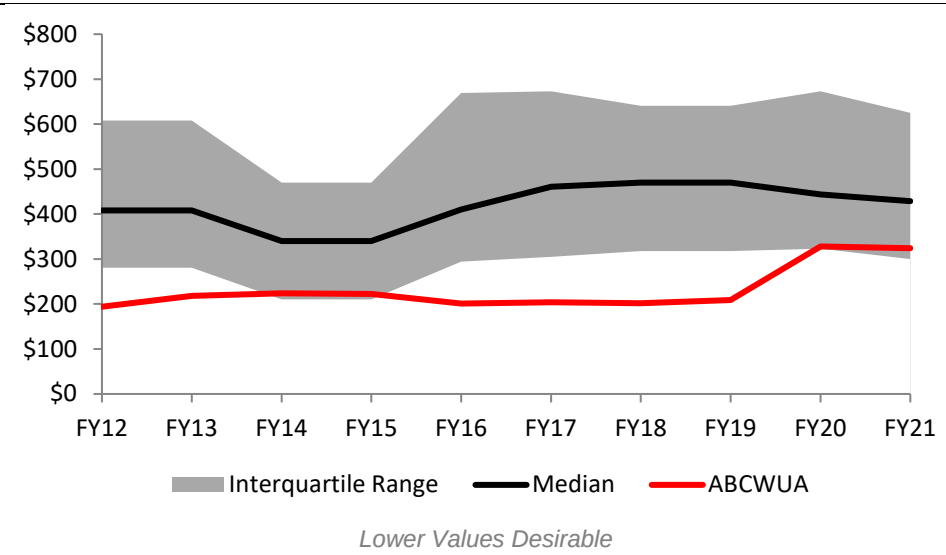
1-4 Operations and Maintenance Cost Ratio

Performance Results for O&M Cost per Account

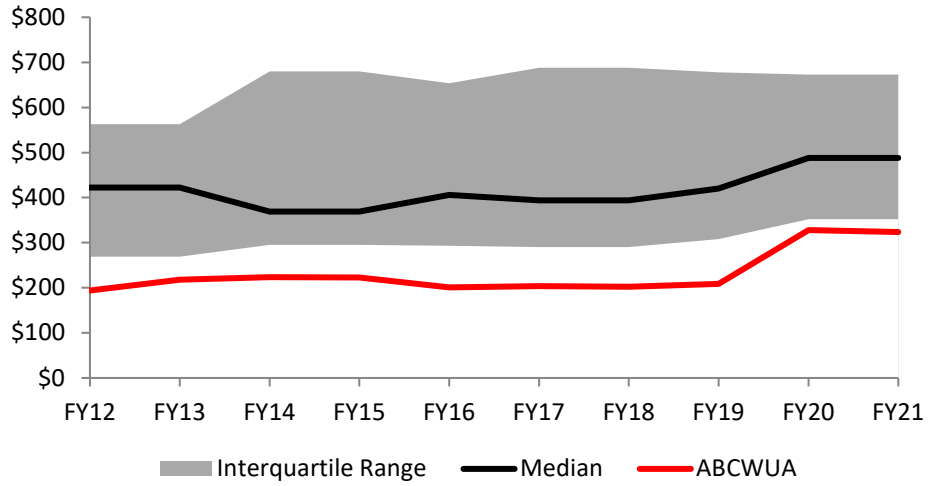
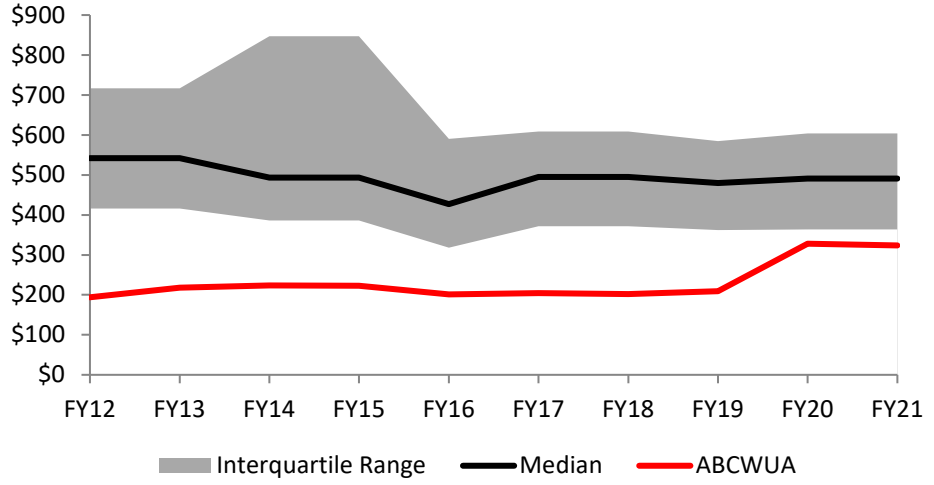
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total O&M costs and total number of active customer accounts	$246	$202	$209	$328	$324	$350	Maintain lower O&M costs without reducing customer level of service

Industry Benchmark for O&M Cost per Account

Combined Water/ Wastewater Utilities



Lower Values Desirable

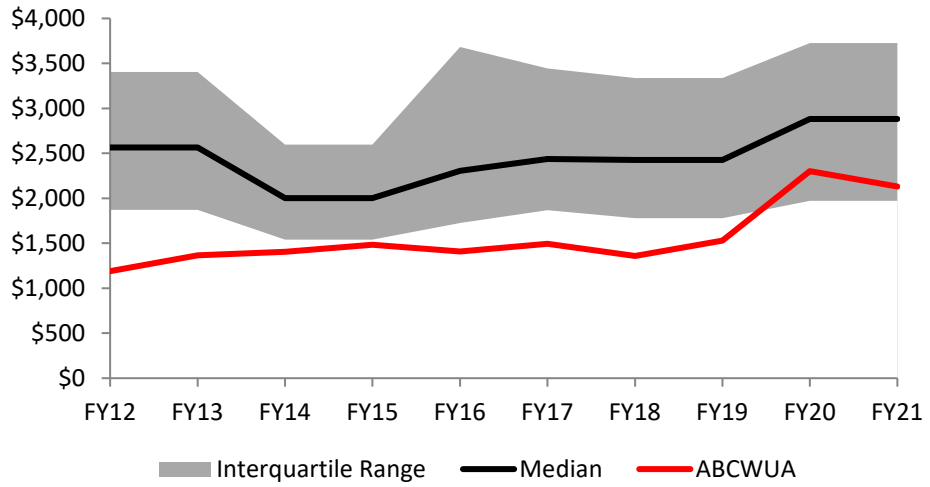
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results for O&M Cost per MG Distributed

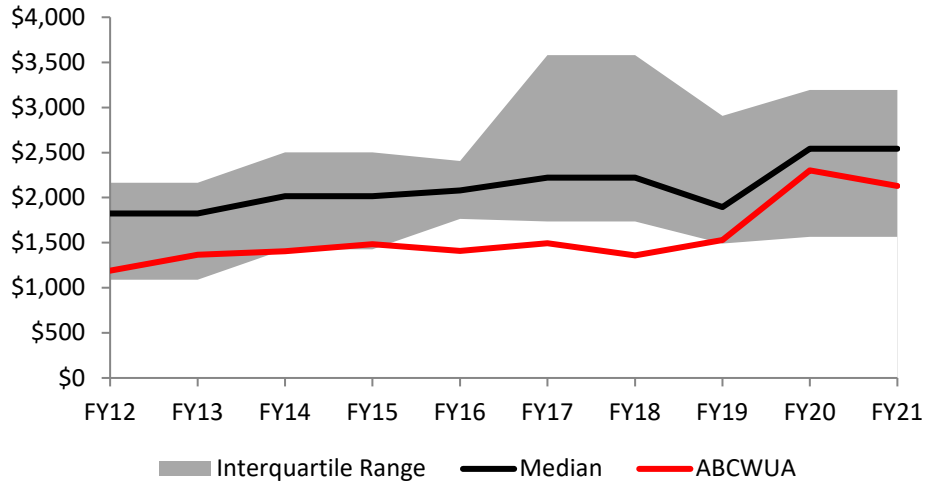
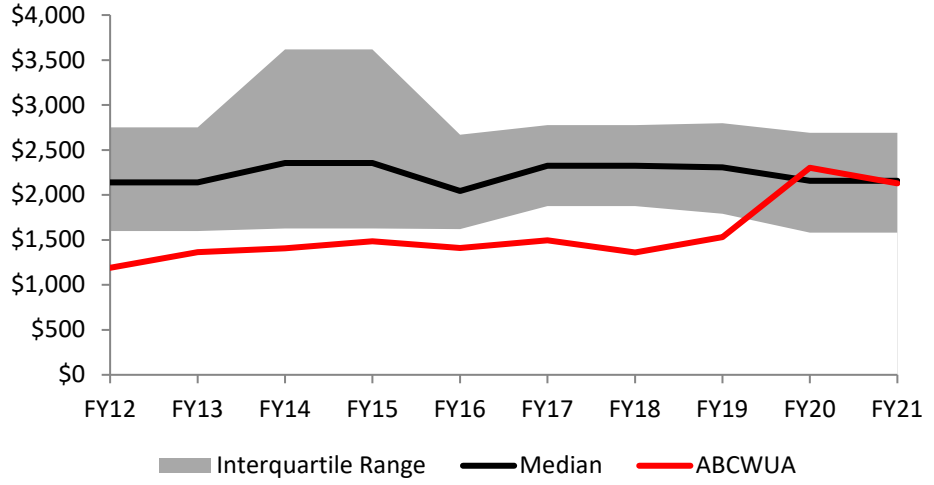
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total O&M costs and total volume of water distributed	$1,731	$1,359	$1,531	$2,302	$2,130	$2,175	Maintain lower O&M costs without reducing customer level of service

Industry Benchmark for O&M Cost per MG Distributed

Combined Water/ Wastewater Utilities



Lower Values Desirable

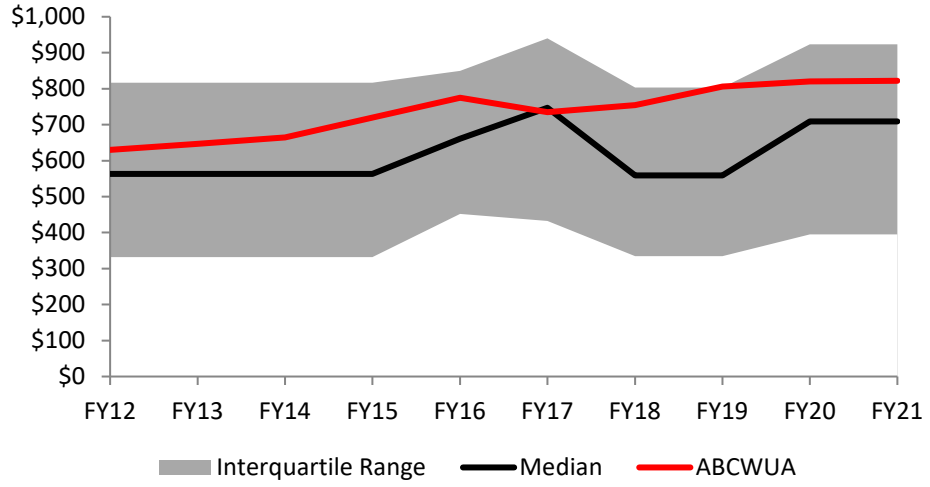
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results for O&M Cost of Treatment per MG

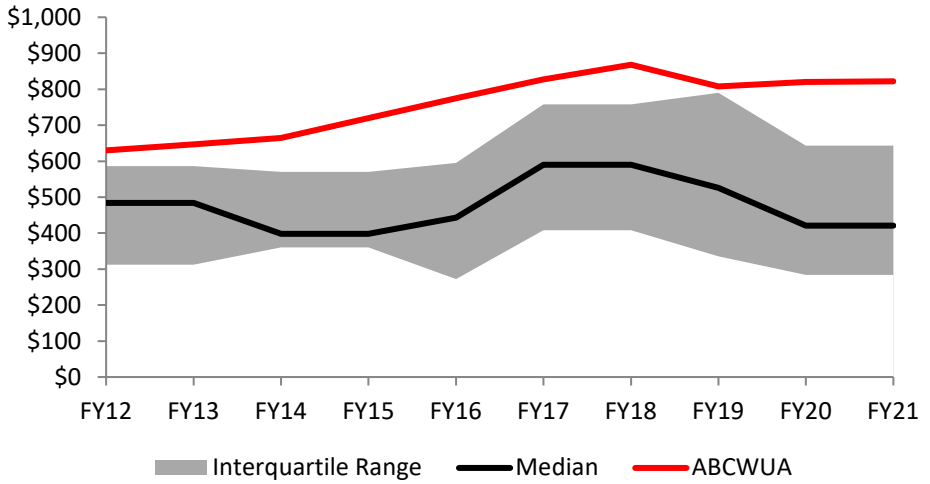
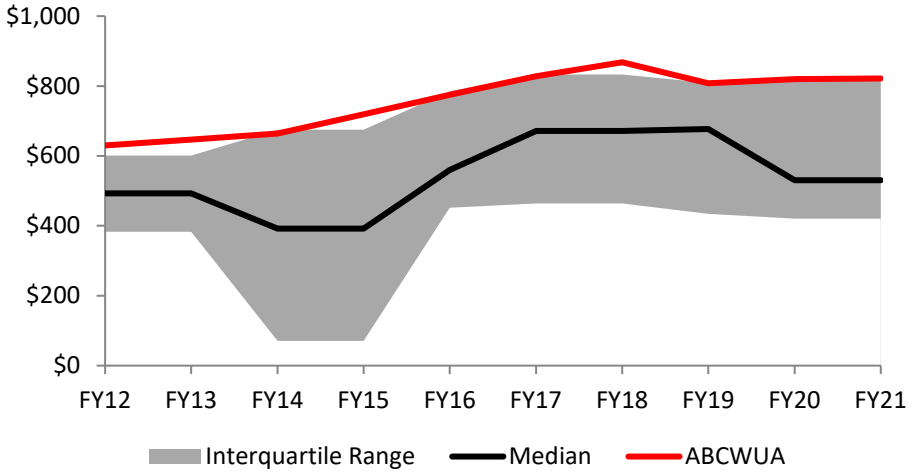
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total Direct O&M costs and total volume of water treated	$793	$754	$806	$820	$822	$840	Maintain lower O&M costs without reducing customer level of service

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative
These related measures tally the cost of O&M per account and per million gallons of water processed. Comparing the value of this measure with other utilities can provide information regarding the status of current accepted practices.

Measurement Status
The Water Authority's performance in this measure has been above the median range for the past three fiscal years with the exception of Treatment O&M. Treatment O&M costs have increased with operating both surface and ground water supply systems which provides more sustainability and reliability to customers. The Water Authority has also installed solar arrays to generate 7.5 MW in electricity for its two treatment plants (drinking water and wastewater). The renewable energy produced by these facilities, plus participation in the local energy utility's peak electrical demand response program, saves about $2 million annually. For FY22, the Water Authority will continue to work on the Partnership for Safe Water program to optimize its system operations and performance.

Another FY22 Objective is to continue deployment of automated meter infrastructure pressure monitoring infrastructure in order to improve energy efficiency and reduce operation and maintenance costs in reduced pressure zones. Through hydraulic modeling, opportunities will be assessed for operational efficiency by eliminating redundant pressure reducing stations in pressure zone 4ER.

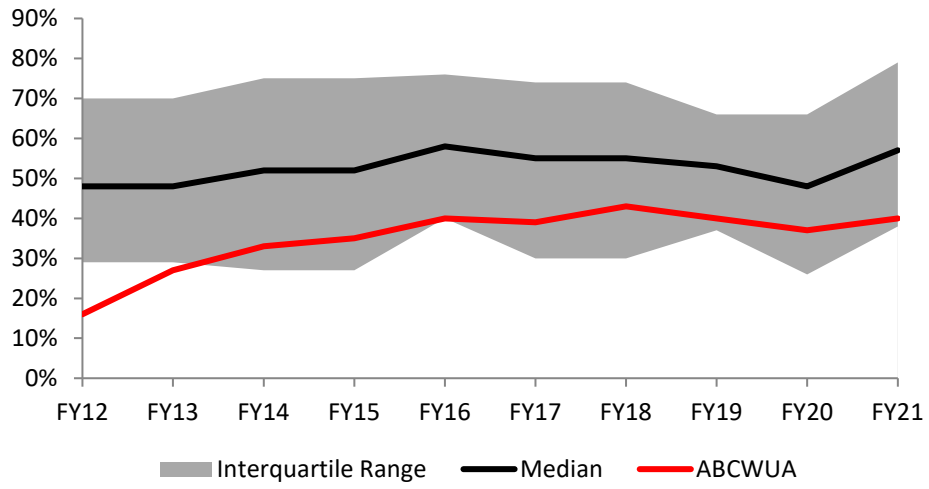
1-5 Planned Maintenance Ratio

Performance Results

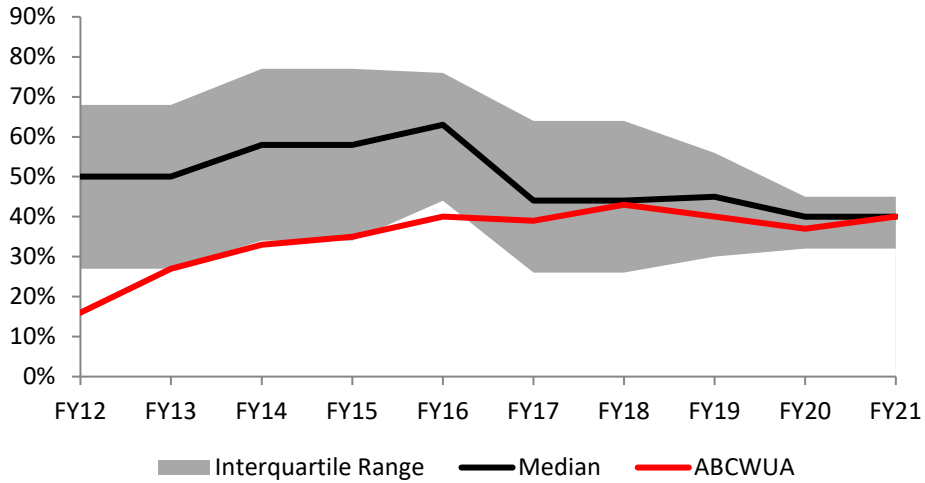
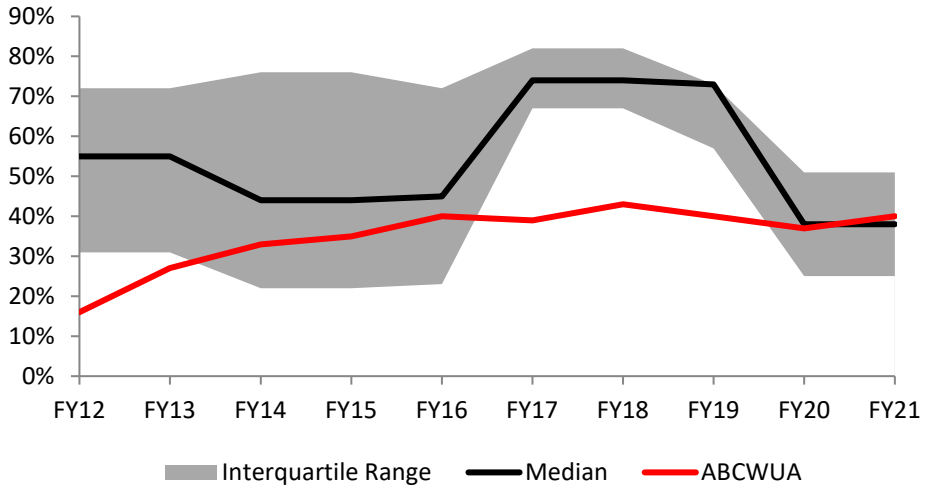
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Comparison of how effectively the Water Authority is in investing in planned maintenance	Hours of planned maintenance compared to hours of corrective maintenance	40%	43%	40%	37%	40%	40%	Reduce emergency maintenance from system malfunctions

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

Planned maintenance includes preventive and predictive maintenance. Preventive maintenance is performed according to a predetermined schedule rather than in response to failure. Predictive maintenance is initiated when secondary monitoring signals from activities indicate that maintenance is due. All other maintenance is categorized as corrective (i.e., maintenance resulting from an asset that is no longer providing reliable service such as a breakdown, blockage, or leakage). Planned maintenance is preferable for assets for which the cost of repairs is high relative to the cost of corrective maintenance. The avoided cost includes both the cost of repair and the cost consequences of the service disruption, with the latter including an allowance for customer costs. Many utilities want to increase their percentage of planned maintenance activities and reduce their percentage of corrective maintenance activities. A higher ratio may indicate a reduction in emergency maintenance resulting from system malfunctions (e.g., pipeline breaks or pump failures).

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years. Since FY08, the Water Authority has used this performance measure to identify gaps in planned/preventative maintenance activities. Over the past six fiscal years, the Water Authority has focused on increasing water operations planned maintenance for its groundwater facilities and the surface water plant. For the distribution system, the Water Authority will be increasing planned maintenance through its leak detection program mentioned in Performance Measure 1-2, Distribution System Water Loss. For FY22, there are two policy objectives with planned maintenance targets for both the ground and surface water facilities and the water distribution system.

Planned maintenance is a key component to the Water Authority's asset management program. In FY18, the Water Authority upgraded its work order system to integrate with the Water Authority's asset management program in order to collect and track its asset information. The purpose for this upgrade was to obtain better information to make better decisions on the Water Authority's assets.

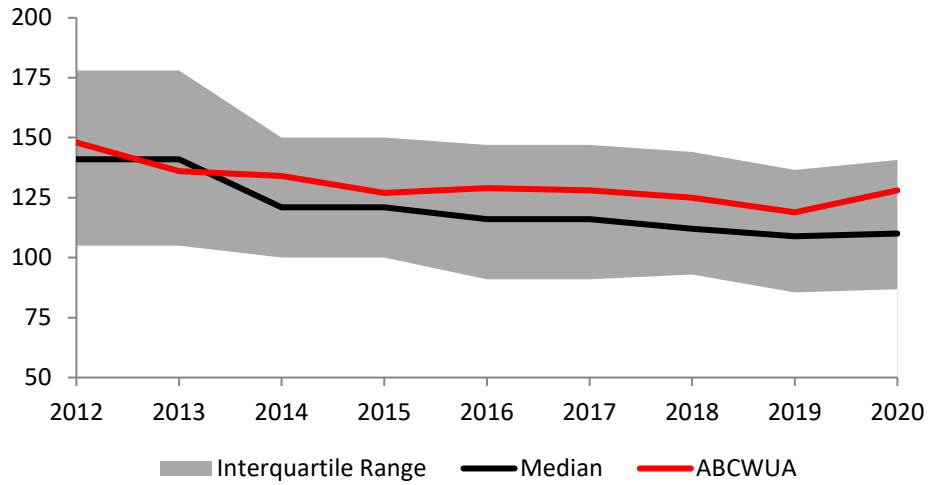
1-6 Water Use per Capita Consumption

Performance Results

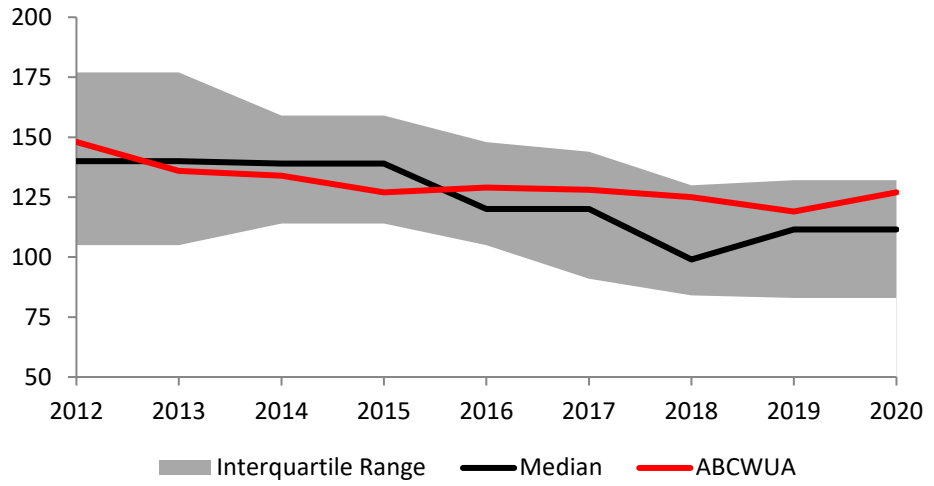
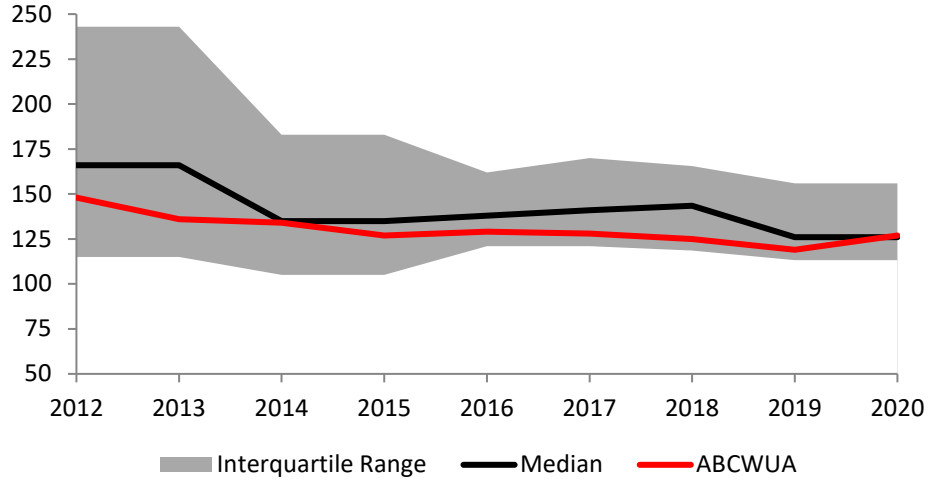
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				2017	2018	2019	2020	2021	
Effectiveness	Measure water savings by comparing the annual consumption and account growth by customer class and system-wide per capita usage	Gallons per person per day (GPCD)	125	128	125	121	128	125	Reduce water consumption to extend water resources and minimize environment impacts

Industry Benchmarks

Combined Water/ Wastewater Utilities

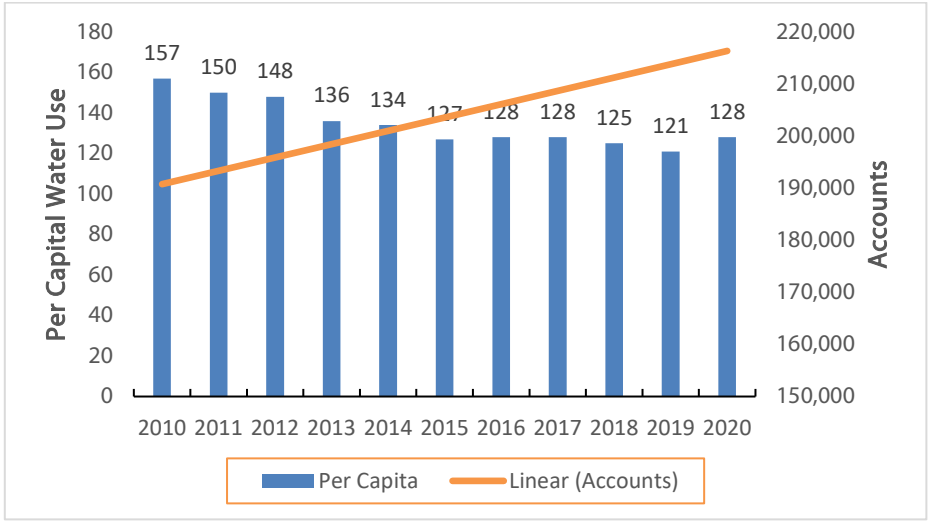


Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

Water use has declined from 40 billion gallons in the mid-1990s to 30 billion gallons in 2019. Even though accounts have increased, water use declined by 50 percent. The graph to the right shows per capita water use compared to account growth from 2010 to 2020. The Water Authority is above its target water usage of 125 gpcd.



One reason for the success in water reduction is from the 1-2-3-2-1 "Water by the Numbers" program, which asks Water Authority customers to voluntarily limit their outdoor water usage to one day per week in March, two days a week in April and May and three days a week in the summer before ramping down in the fall. To the right is the diagram used to educate customers on the program.

2020 Customer Opinion Survey

- 72% of customers are either very or somewhat satisfied with the utility's conservation programs
- 62% of customers either strongly or somewhat agree that they follow the Water by the Numbers program when setting their irrigation schedule

Goal 2
Wastewater Collection & Operations

Guiding Goal Statement

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.

Goal Performance Scorecard

Ref #	Performance Measure	Status	Trend
2-1	Sewer Overflow Rate	■	■
2-2	Collection System Integrity	■	■
2-3	Wastewater Treatment Effectiveness Rate	■	■
2-4	O&M Cost Ratios: O&M Cost per account	▲	▲
2-4	O&M Cost Ratios: O&M Cost per MG processed	■	■
2-4	O&M Cost Ratios: Direct cost of treatment per MG	■	■
2-5	Planned Maintenance Ratio	■	■
	Overall Goal Status	■	■

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

Linkage of Objectives to Performance Measures

FY22 Objectives	Measure Reference
In accordance with the Capacity, Management, Operations and Management (CMOM) Plan, televise and assess the condition of approximately 5% of the small diameter sanitary sewer system by the end of the 4th Quarter of FY22. Confirm that CCTV ("video") inspection data is subsequently uploaded to Maximo and the ITpipes Repository. ITpipes reports that summarize the video data are then immediately available in various standard formats.	**2-1** **2-2**
In FY21, in accordance with the Collection System Odor and Corrosion Control Master Plan – Treatment Alternatives, dated August 12, 2019, the Water Authority identified primary chemical feed sites to improve odor and corrosion issues on the Tijeras Interceptor and the Westside Interceptors. In FY22, the Water Authority will develop conceptual level designs to verify the viability of the proposed locations. If verified, continue with design in FY22. If determined to be not viable by the end of the 2nd Quarter of FY22, return with explanation to Collection Section for revision of the siting study.	**2-1** **2-2**
Manage chemical usage to maintain collection system corrosion and odor control, with a goal of zero odors, while considering impacts on wastewater treatment operations and effluent quality. Utilize collections system and wastewater treatment monitoring data, winter-summer optimized chemical dosing recommendations from the Master Plan dated August 12, 2019, and sewer odor/corrosion modeling results applied as appropriate. Identify metrics for monitoring and reporting by the end of the 1st Quarter of FY22. Monitor and report metrics through the end of the 4th Quarter of FY22.	**2-2**
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. The compliance rate goal is 87% for each category through the end of the 4th Quarter of FY22. Evaluate the effectiveness of this metric by the end of the 2nd Quarter of FY22. Track and report data through the end of the 4th Quarter of FY22.	**2-2** **2-3**
Monitor compliance with the Water Authority's Cross Connection Prevention and Control Ordinance. Obtain a compliance rate goal of 75% through the end of the 4th Quarter of FY22.	**2-2** **2-3**
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, to coordinate efforts to reduce FOG discharges. Track and report the number of SSOs due to FOG compared with previous years through the end of the 4th Quarter of FY22.	**2-2** **2-3**
Limit overall permit excursions to no more than 5 operating discharge permit violations to comply with effluent quality standards through the end of the 4th Quarter of FY22.	**2-3**
Beneficially reuse biosolids by diverting 30% of the biosolids to compost through the end of the 4th Quarter of FY22.	**2-3**

FY22 Objectives	Measure Reference
Prepare a report on the status of the implementation of the Reclamation Rehabilitation Asset Management Plan (RRAMP) including activities completed and remaining work by the end of the 1st Quarter of FY22. Continue implementation of the RRAMP by planning, designing and constructing Southside Water Reclamation Plant (SWRP) improvements through the end of the 4th Quarter of FY22.	**2-3**
Continue work on the Partnership for Clean Water program for the Southside Water Reclamation Plant (SWRP) to optimize system operations and performance; Continue work on outstanding items identified from the Phase 3 Self-Assessment tha are not yet considered optimized and submit a progress report to American Water Works Association (AWWA) by the end of the 4th Quarter of FY22.	**2-4**
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 FY22.	**2-5**

Performance Measure Division Responsibility

Ref #	Performance Measure	Operations Plant	Operations Field	Operations Compliance
2-1	Sewer Overflow Rate		✓	
2-2	Collection System Integrity		✓	
2-3	Wastewater Treatment Effectiveness Rate	✓		✓
2-4	O&M Cost Ratios: O&M Cost per account	✓	✓	
2-4	O&M Cost Ratios: O&M Cost per MG processed	✓		
2-4	O&M Cost Ratios: Direct cost of treatment / MG	✓		
2-5	Planned Maintenance Ratio	✓	✓	

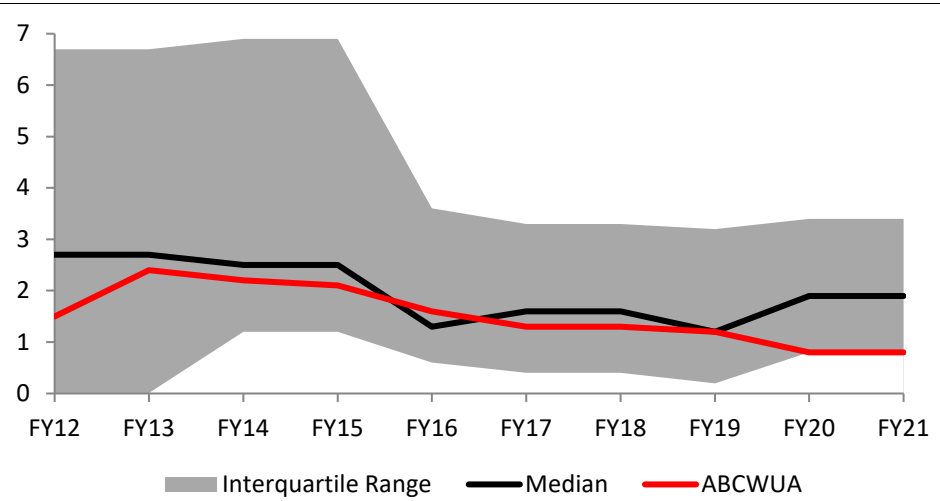
2-1 Sewer Overflow Rate

Performance Results

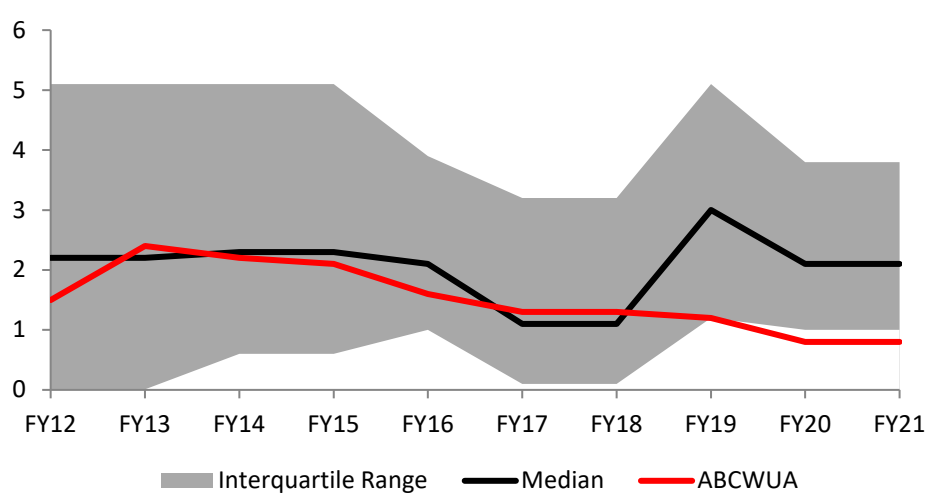
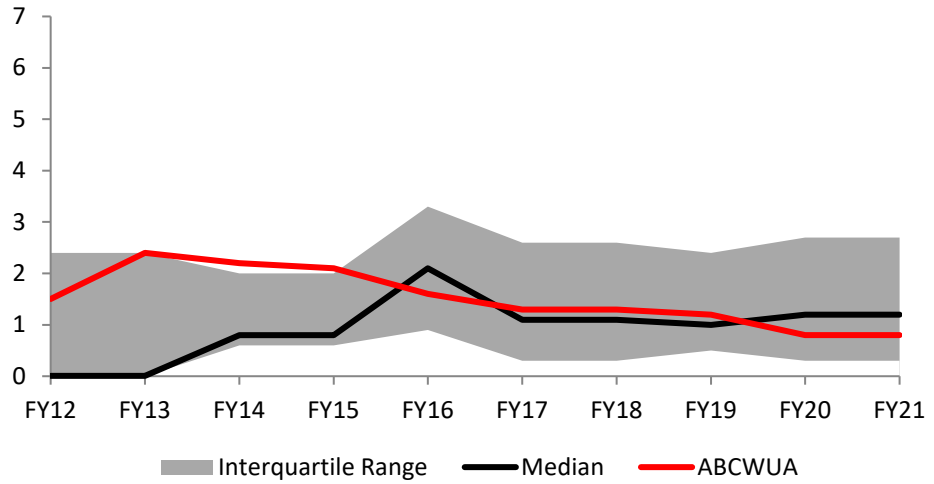
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the condition of the collection system and the effectiveness of routine maintenance	Number of sewer overflows per 100 miles of collection piping	1.1	1.3	1.2	0.8	0.8	0.8	Improve the condition and reliability of the collection system and reduce customer complaints

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

Overflows are good measures of collection system condition and the effectiveness of maintenance activities. This measure is intended to measure overflows created by conditions within collection system components under control of the utility. This measure does not include conditions which are deemed outside control of the utility such as general flooding from wet weather conditions.

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years and is on-target to maintain a very low overflow rate for the next two fiscal years. The Water Authority has been using its GIS in connection with its upgraded work order system based on asset management principles to analyze sanitary sewer overflows. For FY14, the Collection Section implemented the CMOM activities from the CMOM report completed in FY13. The FY22 Objectives will help to improve the monitoring, cleaning, and response procedures related to sewer overflows.

Every year, the Water Authority provides bill inserts reminding customers not to pour cooking grease down the drain as this causes backups and overflows in the collection system; this usually occurs during the holidays.

2020 Customer Opinion Survey

- 72% of customers are either very or somewhat satisfied with the condition of the sewer lines in the number of overflows that they may observe
- 70% of customers are either very or somewhat satisfied with the effectiveness of the Water Authority to respond to overflows or backups and the response time for restoring service

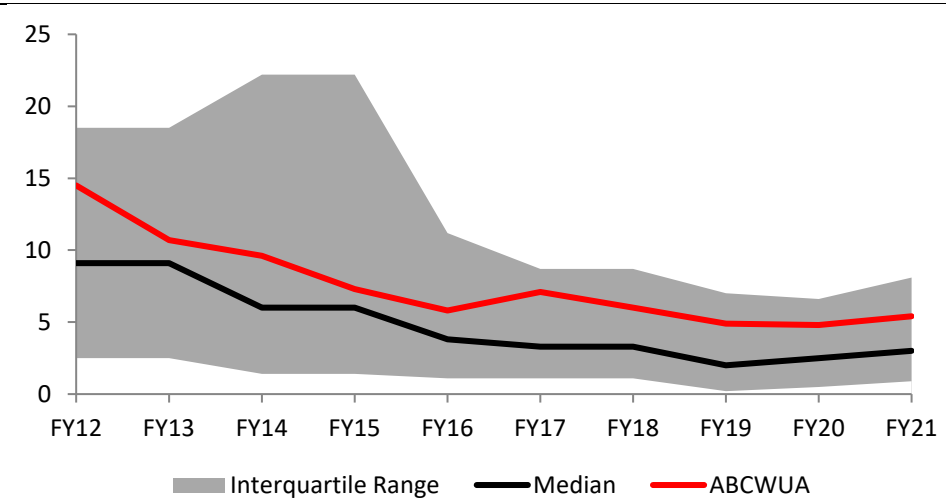
2-2 Collection System Integrity

Performance Results

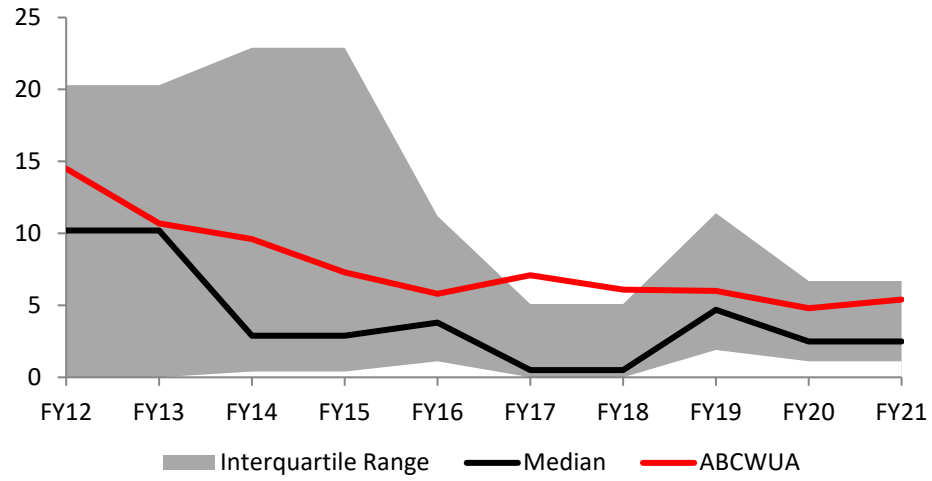
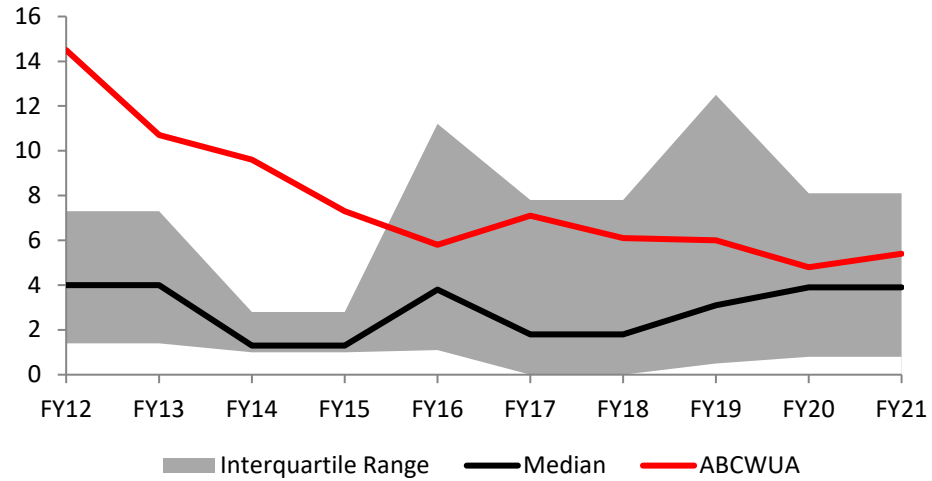
Measure Type	Purpose	Inputs	Outputs					Outcome
			Baseline	Prior Year Actuals		Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure of the condition of a sewage collection system	Number of collection system failures each year per 100 miles of collection system piping	5.3	6.0	4.9	4.9	5.3	5.1	Improve the condition and capacity of the collection system and minimize catastrophic failures

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

When tracked over time, a utility can compare its failure rate to those at other utilities and it can evaluate whether its own rate is decreasing, stable, or increasing. When data is maintained by the utility to characterize failures according to pipe type and age, type of failure, and cost of repairs, better decisions regarding routine maintenance and replacement/renewals can be made.

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years. For FY11, the Water Authority completed ten-year asset management plans for both its small and large diameter sewer lines. These plans will be utilized for the utility's capital planning in order to help minimize expensive catastrophic failures. For FY22, there is a policy objective to assess the condition of small diameter sanitary sewer lines as a part of the CMOM program.

2020 Customer Opinion Survey

- 95% of customers are either very or somewhat satisfied with the reliability of wastewater collection
- 79% of customers are either very or somewhat satisfied with the effectiveness of the Water Authority to control odors form sewer lines or treatment facilities

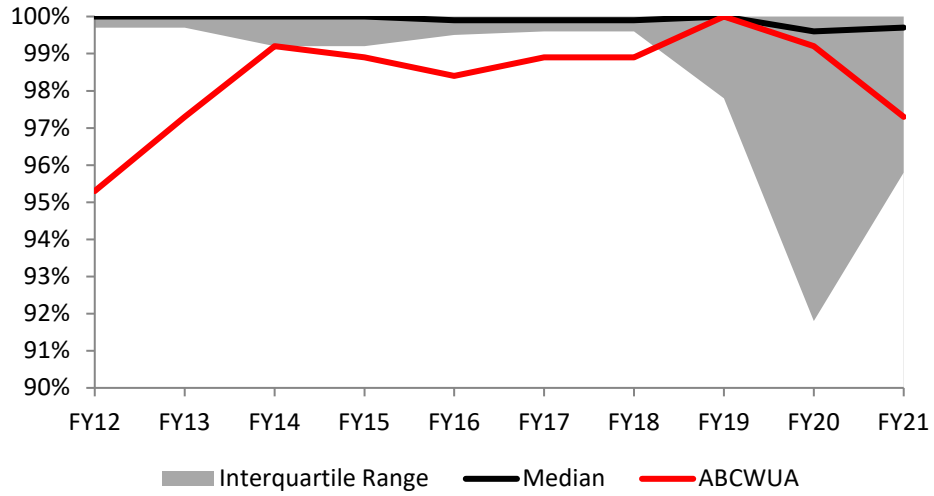
2-3 Wastewater Treatment Effectiveness Rate

Performance Results

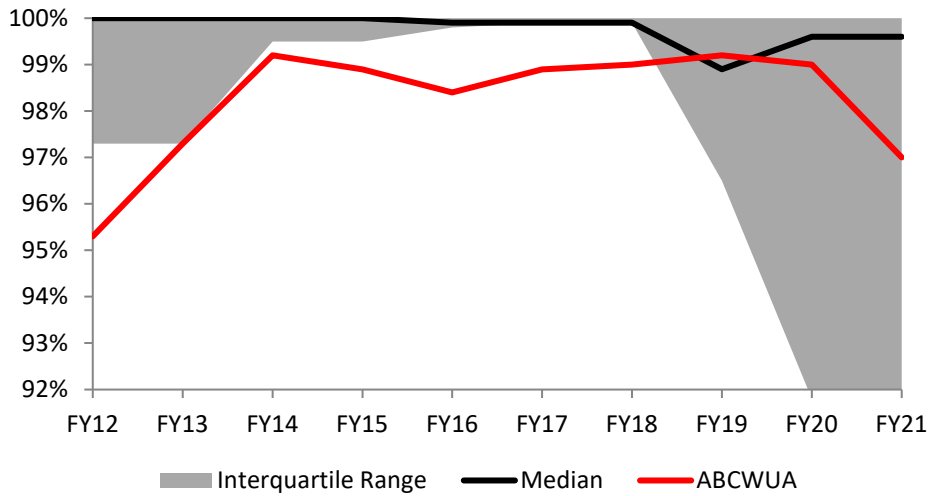
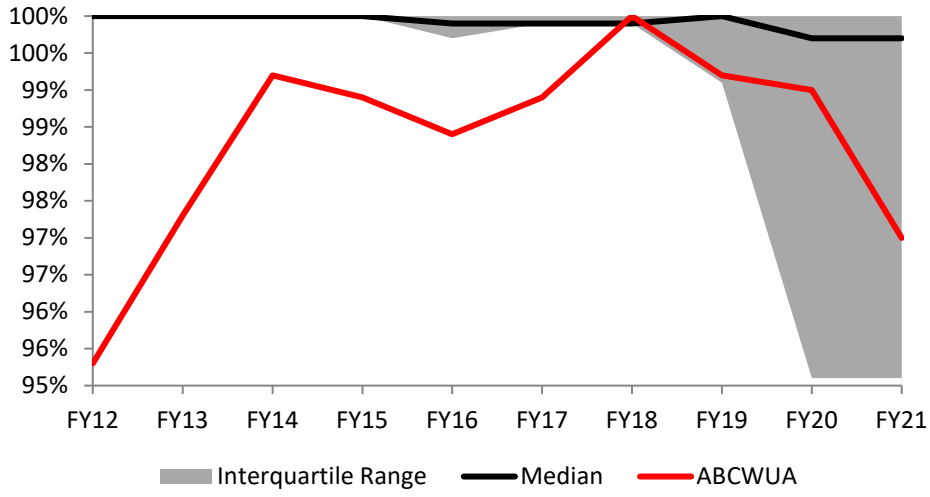
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Quality	Quantify the Water Authority's compliance with the effluent quality standards in effect at its wastewater treatment facilities	Percent of time each year that an individual wastewater treatment facility is in full compliance with applicable effluent quality requirements	99.5%	100.0%	99.2%	99.2%	97.3%	98.6%	Minimize environmental impacts to the river by returning high quality water to the river

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

The wastewater treatment effectiveness rate allows a utility to compare its treatment effectiveness rate for its facility with those at other utilities. It also can track its individual facility performances over time. Ideally, the percentage of days in a year that the treatment facility satisfies all discharge permit requirements should be 100%. A number lower than this indicates that a violation occurred during the year.

Measurement Status

The Water Authority's performance in this measure has been within the median range for last three fiscal years. The Water Authority's goal in for FY22 is to have no more than five non-compliance days. In FY11, the Water Authority completed conversion to ultraviolet disinfection to eliminate use of chlorine for safety, security and to protect river environment. The Water Authority will continue to meet its performance targets during major rehabilitation activities at the wastewater treatment plant over the next five fiscal years. The utility is close to completing a $250 million overhaul of the treatment plant.

Peak Performance AWARDS
NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES

The Water Authority received the NACWA **Silver** Peak Performance Award in 2013-2014, 2016-2019 which recognizes public wastewater treatment facilities for their outstanding compliance records.

2020 Customer Opinion Survey

- 84% of customers feel that it is very or somewhat important that the Water Authority should return high quality treated water back to the river

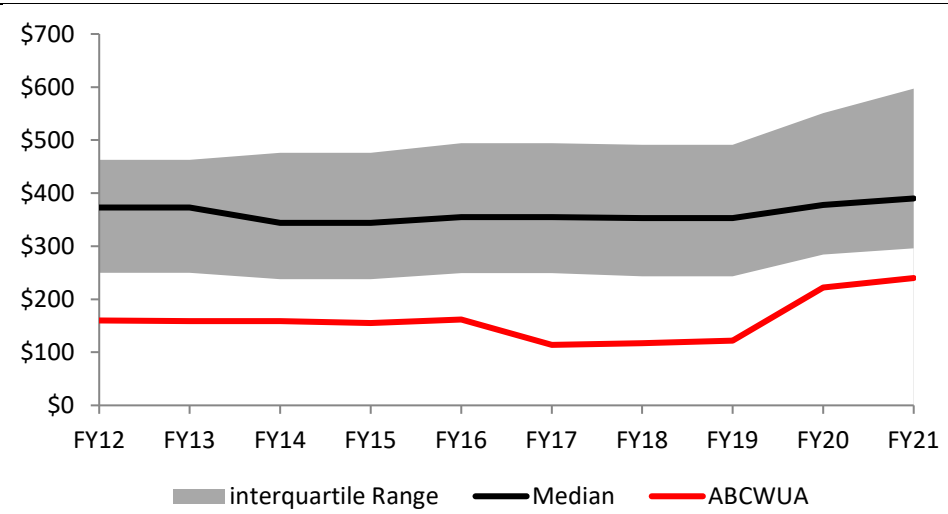
2-4 Operations and Maintenance Cost Ratio

Performance Results for O&M Cost per Account

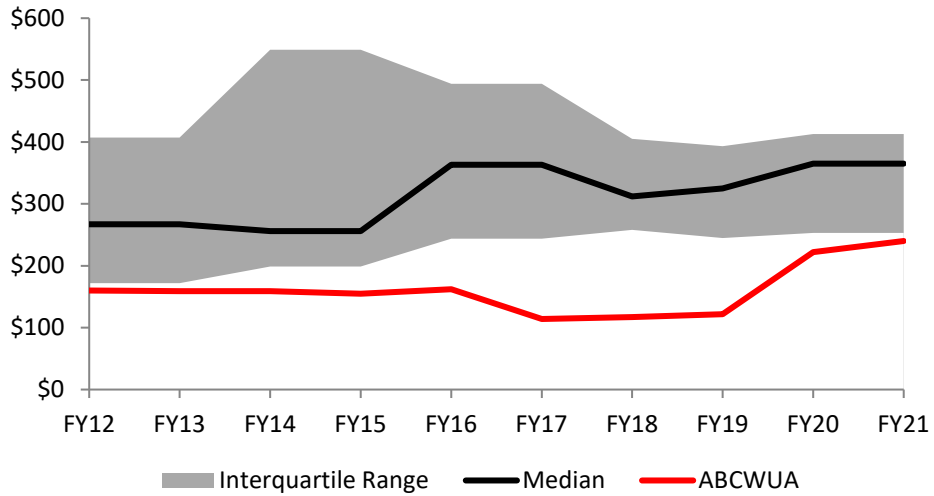
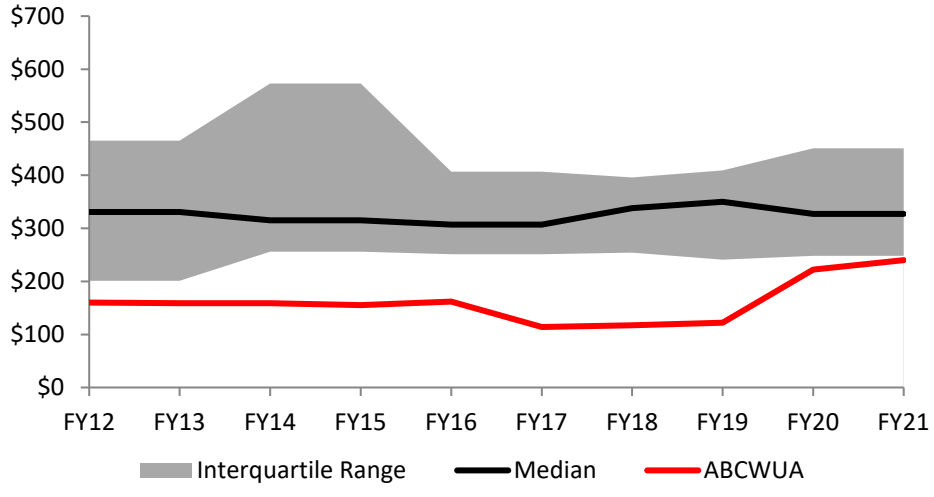
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total O&M costs and total number of active customer accounts	$154	$118	$122	$222	$240	$240	Maintain lower O&M costs without reducing customer level of service

Industry Benchmark for O&M Cost per Account

Combined Water/ Wastewater Utilities



Lower Values Desirable

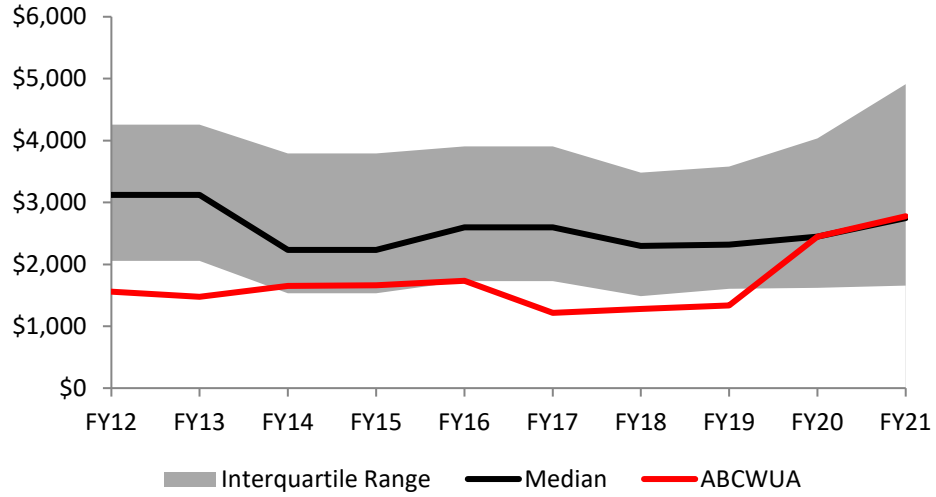
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results for O&M Cost per MG Collected

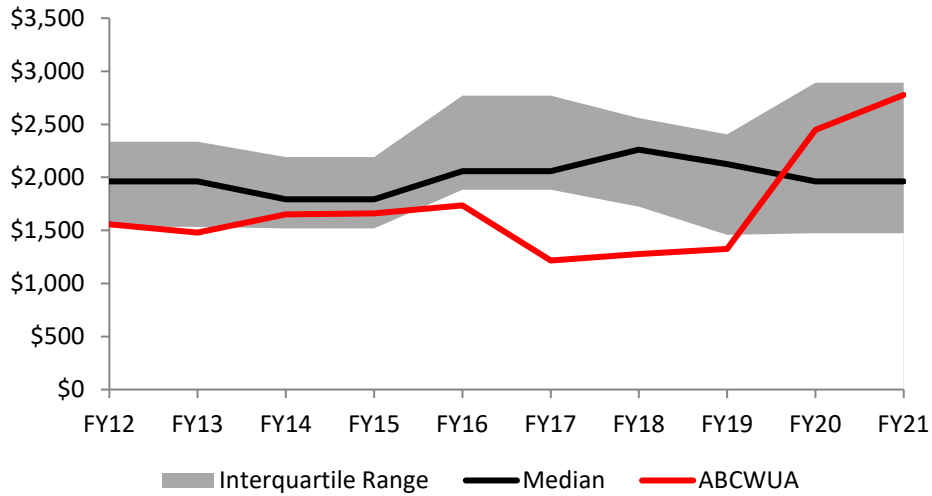
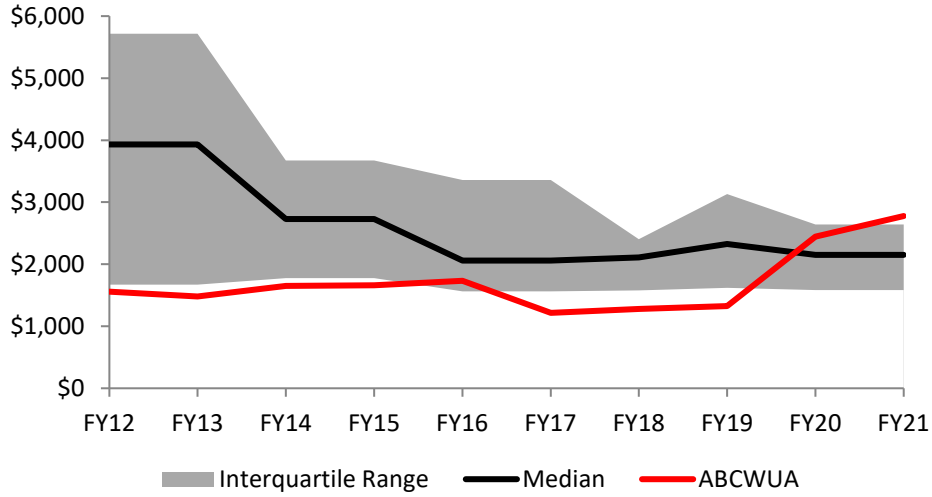
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total O&M costs and total wastewater collected	$1,686	$1,278	$1,334	$2,447	$2,777	$2,750	Maintain lower O&M costs without reducing customer level of service

Industry Benchmark for O&M Cost per MG Collected

Combined Water/ Wastewater Utilities



Lower Values Desirable

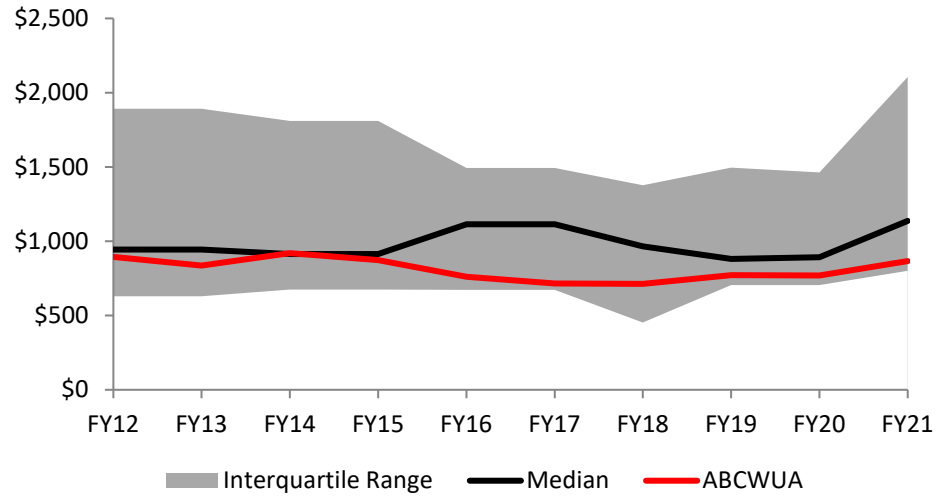
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results for O&M Cost of Treatment per MG

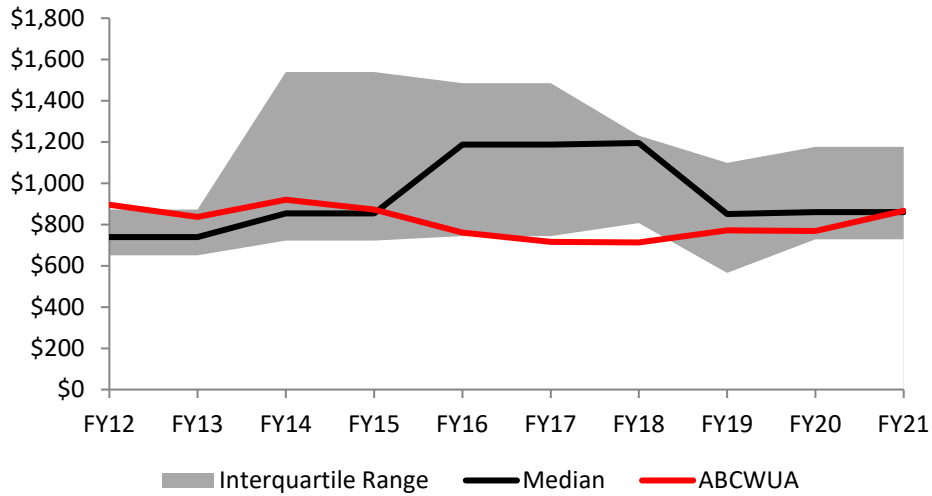
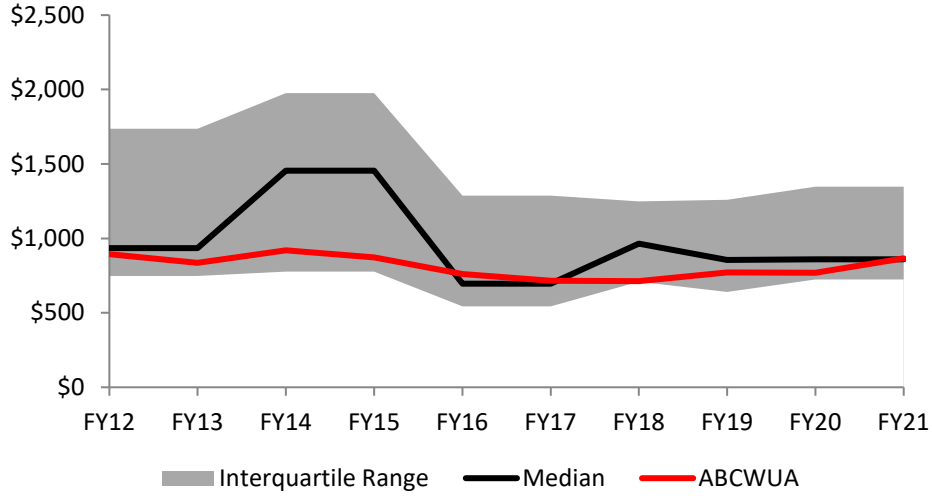
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify all utility costs related to operations and maintenance (O&M), with breakouts of those costs related to water treatment, as related to volumes processed and the number of active customers	Total Direct O&M costs and total wastewater treated	$752	$713	$772	$772	$821	$855	Maintain lower O&M costs without reducing customer level of service

Industry Benchmark for O&M Cost of Treatment per MG

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative
These related measures tally the cost of O&M per account and per million gallons of wastewater processed. Comparing the value of this measure with other utilities can provide information regarding the status of current accepted practices.

Measurement Status
The Water Authority's performance in this measure has been above or within the median range for the past three fiscal years and is on-target to maintain this performance for the next two fiscal years.

A FY10 policy objective involved constructing ultraviolet disinfection facilities and replacing the current chlorine gas for disinfection and sulfur dioxide gas for dechlorination at the wastewater treatment plant. This project was completed in FY11, and it has helped to reduce operation costs, provide cleaner water that is returned to the river, and meet effluent quality requirements.

In FY20, the Water Authority received recognition from the Partnership for Clean Water for treatment operations. The Partnership for Clean Water provides self-assessment and optimization programs so that utilities have the tools to optimize wastewater utility operation and help ensure public health protection. For FY22, the Water Authority will continue to work on the Partnership for Clean Water program to optimize its system operations and performance.

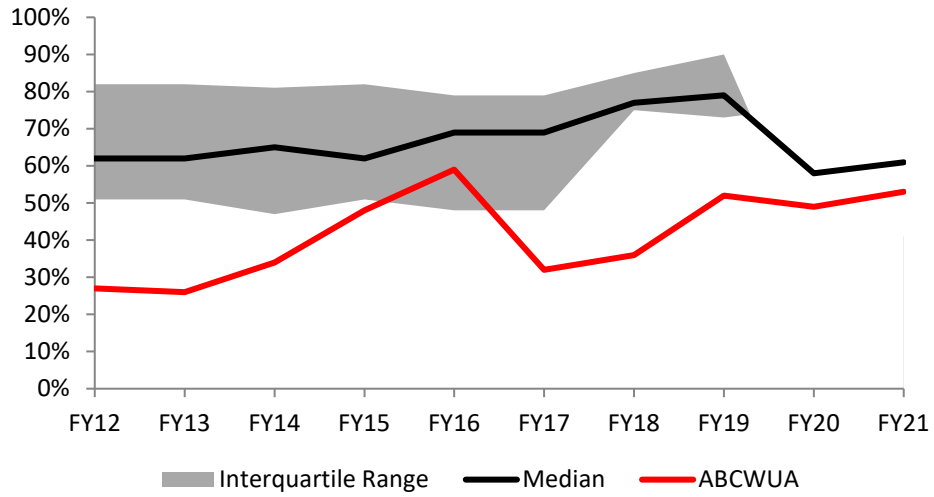
2-5 Planned Maintenance Ratio

Performance Results

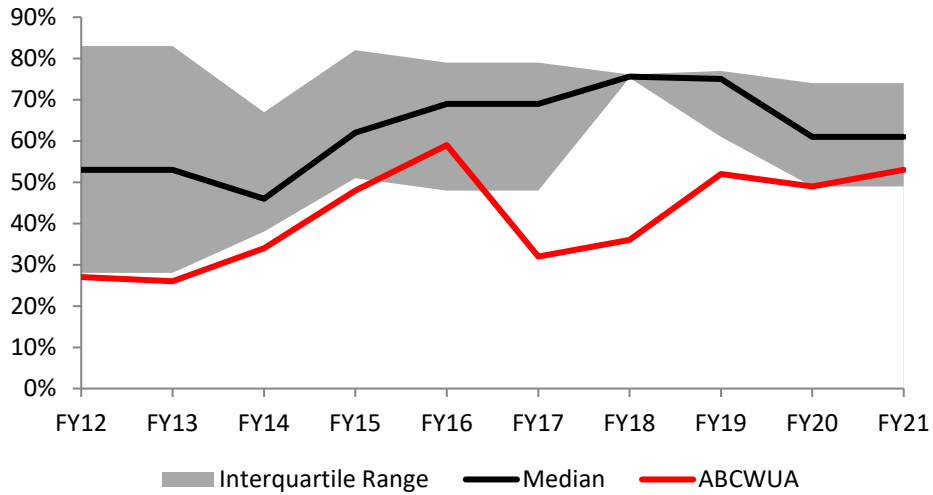
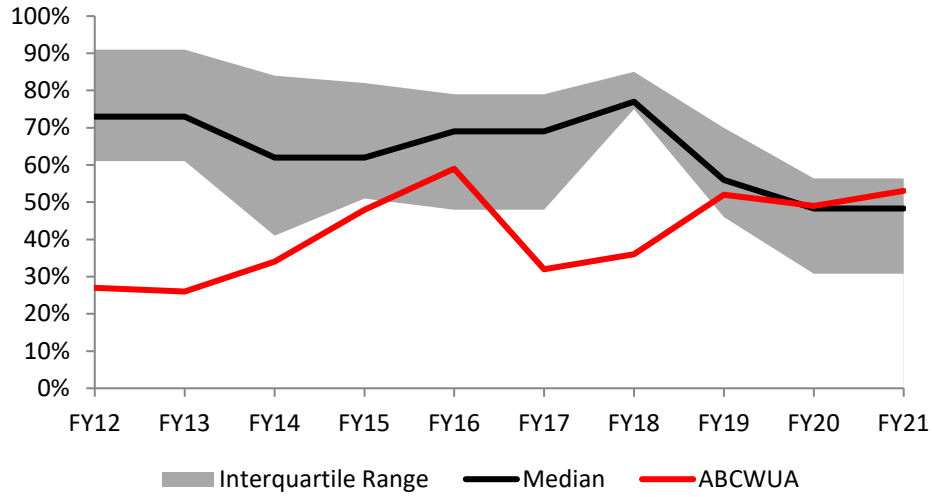
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Comparison of how effectively the Water Authority is in investing in planned maintenance	Hours of planned maintenance compared to hours of corrective maintenance	46%	36%	52%	49%	53%	53%	Reduce emergency maintenance from system malfunctions

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

Planned maintenance includes preventive and predictive maintenance. Preventive maintenance is performed according to a predetermined schedule rather than in response to failure. Predictive maintenance is initiated when secondary monitoring signals from activities indicate that maintenance is due. All other maintenance is categorized as corrective (i.e., maintenance resulting from an asset that is no longer providing reliable service such as a breakdown, blockage, or leakage). Planned maintenance is preferable for assets for which the cost of repairs is high relative to the cost of corrective maintenance. The avoided cost includes both the cost of repair and the cost consequences of the service disruption, with the latter including an allowance for customer costs. Many utilities want to increase their percentage of planned maintenance activities and reduce their percentage of corrective maintenance activities. A higher ratio may indicate a reduction in emergency maintenance resulting from system malfunctions.

Measurement Status

The Water Authority's performance in this measure has been below the median range for the past three fiscal years, but there has been gradual improvement with the Plant Division increasing its planned maintenance work. For the past six fiscal years, there have been objectives to increase planned maintenance work orders at the wastewater treatment plant. These objectives will also help the Water Authority meets its performance targets mentioned in Performance Measure 2-3, Wastewater Treatment Effectiveness Rate. For FY22, there is a policy objective with planned maintenance targets for the wastewater treatment plant.

Planned maintenance is a key component to the Water Authority's asset management program. In FY18, the Water Authority upgraded its work order system to integrate with the Water Authority's asset management program in order to collect and track its asset information. The purpose for this upgrade was to obtain better information to make better decisions on the Water Authority's assets.

Goal 3
Customer Services

Guiding Goal Statement

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.

Goal Performance Scorecard

Ref #	Performance Measure	Status	Trend
3-1	Customer Quality Complaints	▲	▲
3-1	Technical Quality Complaints	▲	▲
3-2	Customer Service Cost per Account	■	■
3-3	Billing Accuracy	■	■
3-4	Call Center Indicators	■	■
3-5	Residential Cost of Water & Wastewater Service	■	■
3-6	Stakeholder Outreach Index	▲	▲
	Overall Goal Status	■	■

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

Linkage of Objectives to Performance Measures

FY22 Objectives	Measure Reference
Continue implementation of the Automated Meter Infrastructure (AMI) project by replacing 30,000 aging water meters with smart meters to increase revenue, support conservation efforts, and provide better customer service by the end of the 4th Quarter of FY22.	**3-1** **3-4**
To improve reliability and reduce interrupted water service, exercise 4,000 isolation valves by the end of the 4th Quarter of FY22.	**NA**
Replace paper logs with electronic record of inbound calls to Dispatch by the end of the 4th Quarter of FY22.	**NA**
Improve customer satisfaction by achieving a billing accuracy ratio of less than 8 errors per 10,000 bills through the 4th Quarter of FY22.	**3-3**
Improve customer satisfaction and operational efficiency in achieving the call-center targets through the 4th Quarter of FY22: • Average Wait Time of less than 1:00 minute; • Average Contact Time of less than 4:00 minutes; • Abandoned Call Ratio of less than 3; • First Call Resolution of greater than 95%; • Average call quality of greater than 85%.	**3-4**
Develop and implement a Strategic Plan for Internal Communications through the end of the 4th Quarter of FY22 and report activities quarterly.	**3-6**
Conduct Customer Conversation meetings to engage customers and obtain input from customers on the Water Authority's activities through the end of the 4th Quarter of FY22.	**3-6**
Redesign the Water Authority web site, including the customer portal, resulting in a user-friendly, intuitive user experience that provides customers with the ability to complete tasks such as managing their account, monitoring water usage data, and start/stop services. All tasks will be completed and operational by the end of the 3rd Quarter of FY21.	**3-6**
Conduct a customer opinion survey in order to assess the Water Authority's performance from the customer's viewpoint from previous surveys by the end of the 4th Quarter of FY22.	**3-6**
Install the Spanish language add-in to provide Spanish translation on the new website by the end of the 1st Quarter of FY22.	**3-6**

Performance Measure Division Responsibility

Ref #	Performance Measure	Operations Field	Operations Compliance	Customer Services	Information Technology	Finance
3-1	Customer Service & Technical Quality Complaints		✓	✓		
3-2	Customer Service Cost per Account			✓		✓
3-3	Billing Accuracy			✓	✓	
3-4	Call Center Indicators			✓		
3-5	Residential Cost of Water & Wastewater Service					✓
3-6	Stakeholder Outreach Index			✓		

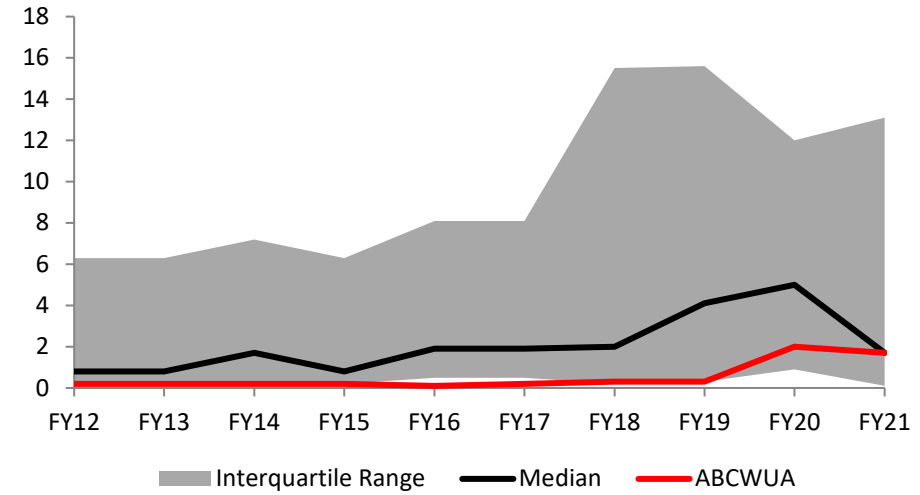
3-1 Customer Service Complaints and Technical Quality Complaints

Performance Results (Service Associated Complaints)

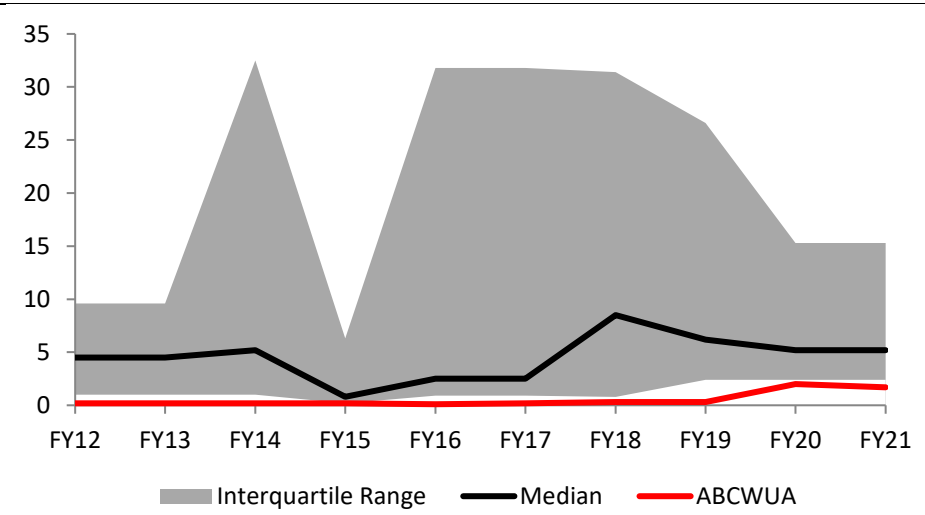
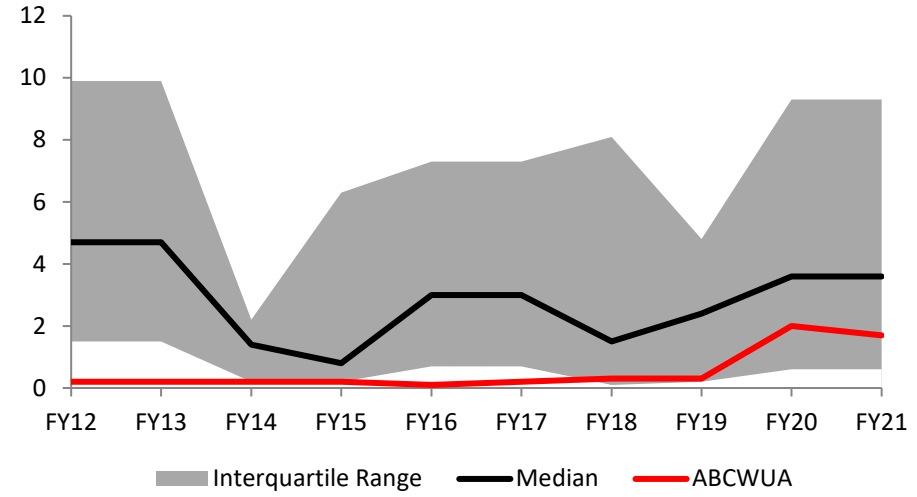
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure the complaint rates experienced by the Water Authority, with individual quantification of those related to customer service and those related to core utility services	Number of customer service complaints per 1,000 customer accounts	0.9	0.3	0.3	2.0	1.7	0.3	Improve customer satisfaction with service and product

Industry Benchmark (Service Associated Complaints)

Combined Water/ Wastewater Utilities



Lower Values Desirable

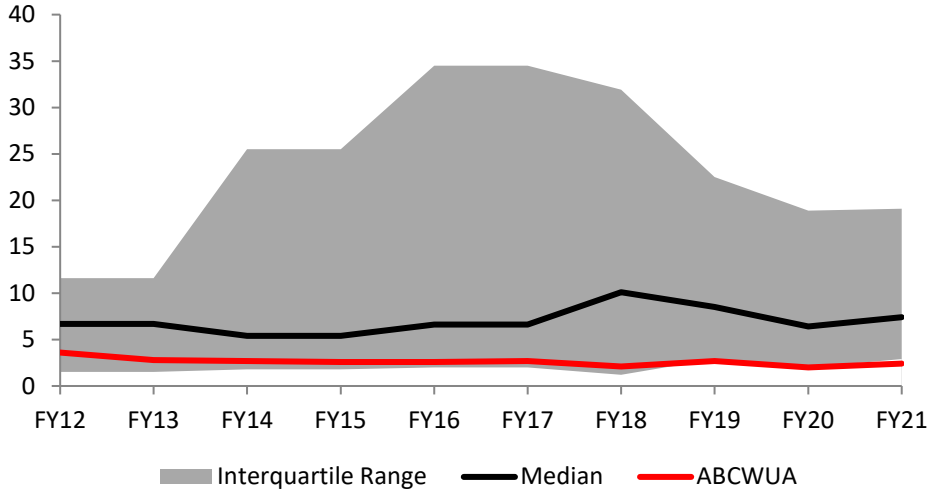
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results (Technical Quality Complaints)

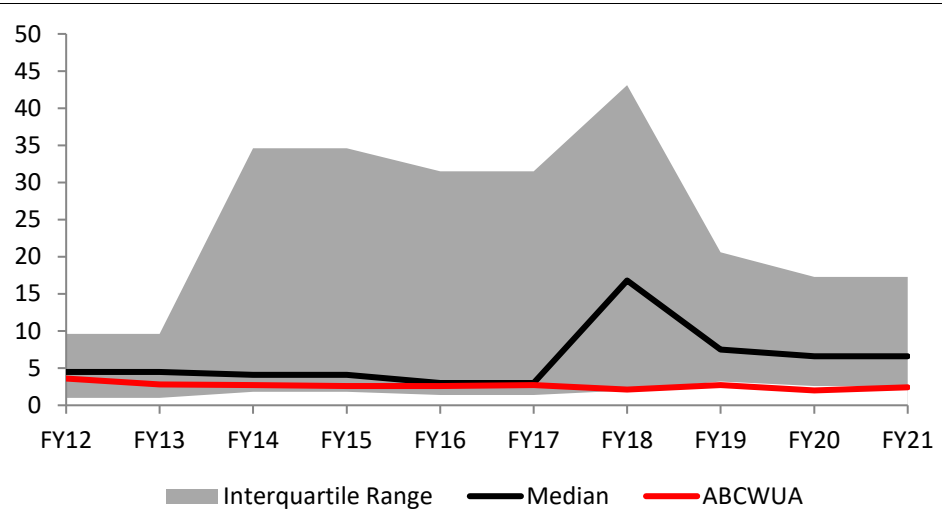
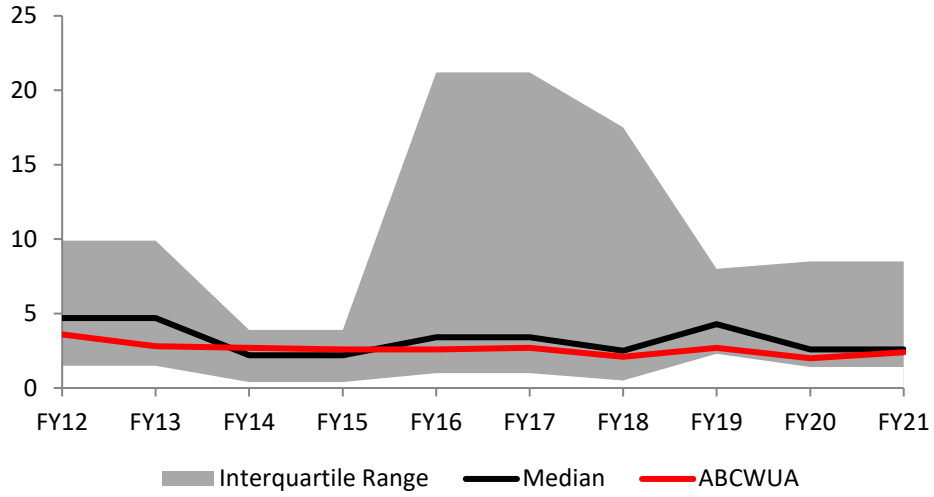
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure the complaint rates experienced by the Water Authority, with individual quantification of those related to customer service and those related to core utility services	Number of technical quality complaints per 1,000 customer accounts	2.3	2.1	2.7	2.0	2.4	2.5	Improve customer satisfaction with service and product

Industry Benchmarks (Technical Quality Complaints)

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

These pair of measures capture all complaints received by the utility, which are reported either as “service associated” or as “technical quality” complaints. The number of complaints is a good measure of customer service. The two categories allow a utility to track those that are people related and those that are product related.

Measurement Status

The Water Authority’s performance in this measure has been above the median range for the past three fiscal years for customer service complaints and within the median range for technical quality complaints. The Water Authority upgraded its call center phone systems to effectively track customer service performance; the new phone system also allows customers to pay their bills by phone and provide 24/7 service to billing, emergencies, and reporting water waste. Moreover, the Water Authority has developed and executed a customer-focused marketing and communications strategy with an emphasis on conservation, pollution prevention, and web self-service.

For FY22, the Water Authority will continue implementation of the Automated Meter Infrastructure (AMI) project by replacing 30,000 aging water meters with smart meters to increase revenue, support conservation efforts, and provide better customer service. Another objective is to begin a valve-exercising program to improve reliability and reduce interrupted water service, by exercising 4,000 isolation valves.

2020 Customer Opinion Survey

- 77% of customers are either very or somewhat satisfied with the safety and purity of drinking water
- 79% of customers are either very or somewhat satisfied with the quality (taste, smell, appearance) of drinking water
- 84% of customers are either very or somewhat important to returning high quality water back to the river

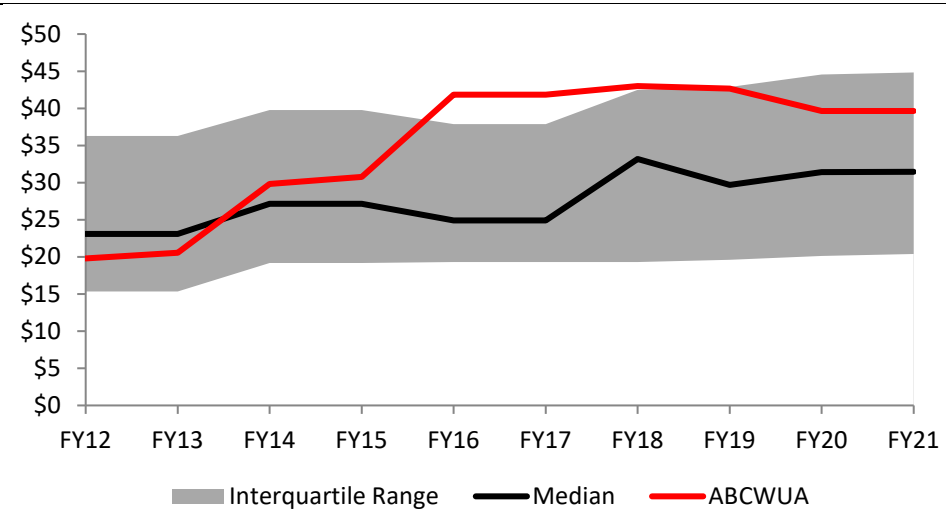
3-2 Customer Service Cost per Account

Performance Results

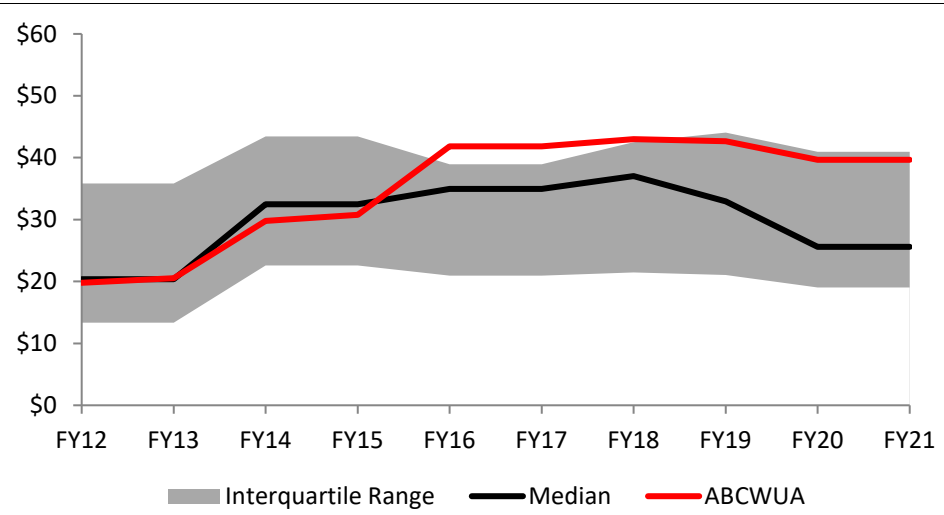
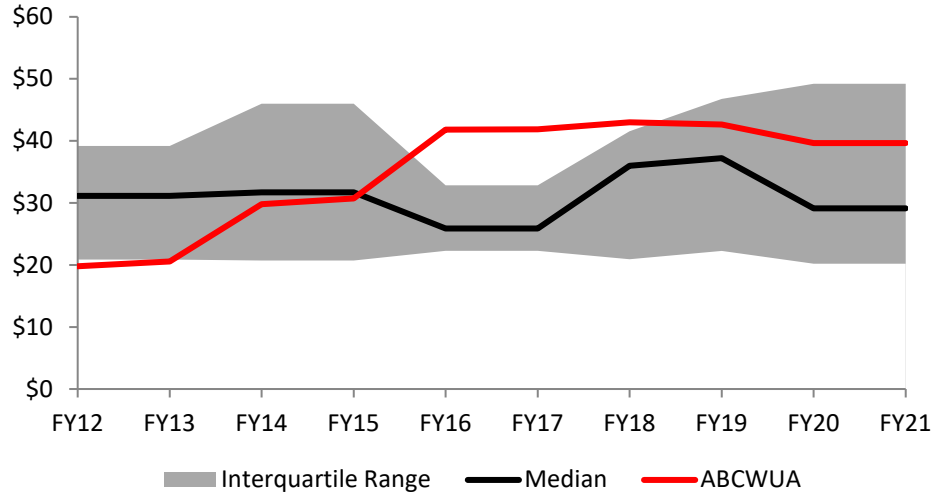
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Measure the amount of resources the Water Authority applies to its customer service program	Total customer service cost and the number of active accounts	$42.50	$41.85	$43.00	$42.66	$34.79	$33.07	Improve efficiency by reducing customer service cost per account while meeting customer expectations

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

The measure is expressed as the cost of managing a single customer account for one year. When viewed alone, it quantifies resource efficiency. Viewing in conjunction with other measures such as customer complaints gives the utility more information about operational performance.

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years. Customer service costs have increased from the result of implementing its Automated Meter Infrastructure program which is about 55% complete. Costs will decrease over time as more meters are replaced with smart meters which will increase revenue, support conservation efforts, and provide better customer service.

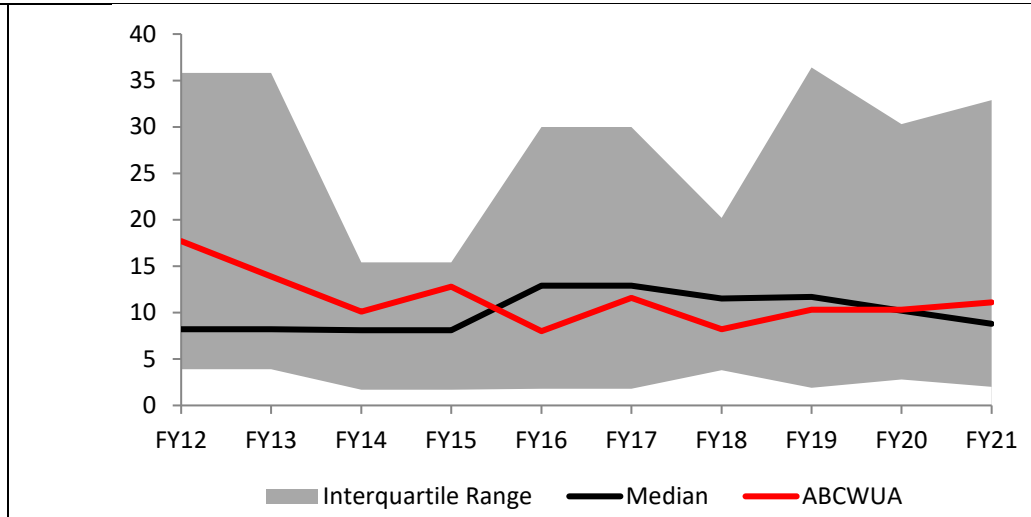
3-3 Billing Accuracy

Performance Results

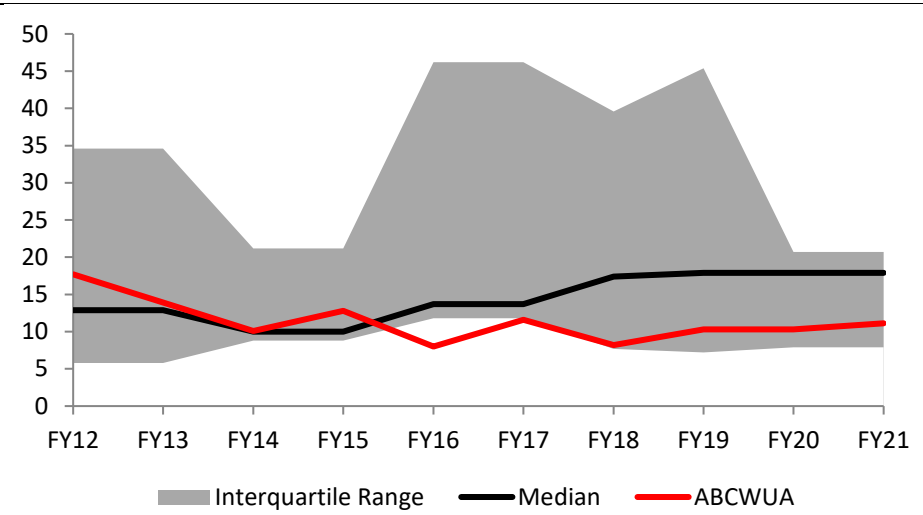
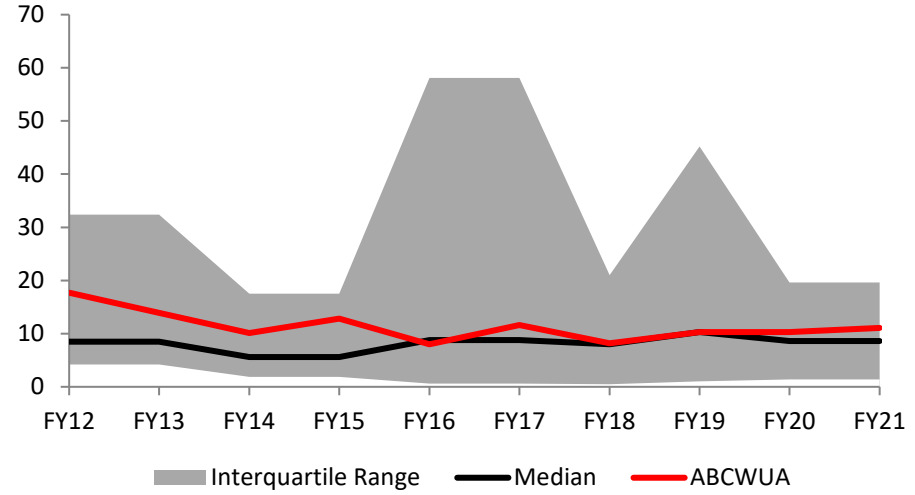
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure the effectiveness of the Water Authority's billing practices	Number of error-driven billing adjustments per 10,000 bills generated during the year	9.6	8.2	10.3	10.3	11.1	10.0	Improve billing accuracy to minimize customer complaints

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

Customers rarely think about their utility, unless they have a problem with service or billing. This measure helps a utility measure how effective its billing practices are relative to others.

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years. As the utility implements its Automated Metering Infrastructure (AMI) system, performance in this measure will improve. The purpose of the AMI Project is to replace the Water Authority's aging meters with modern smart meters in order to save money, deliver more accurate bills and encourage users to conserve water.

AMI customers will be able to view in real-time exactly how much water they consume and be able to use this information to actively manage and reduce their daily usage. They also can change their basic account data, create personal goals and budgets with reminders and updates, and download targeted educational material to learn about and enroll in resource-conservation programs. The technology will also allow the Water Authority to remotely review consumption levels across the service area, assisting with conservation and billing and identifying and repairing leaks before they become significant problems.

2020 Customer Opinion Survey

- 88% of customers are either very or somewhat satisfied with the accuracy of their bill
- 82% of customers are either very or somewhat satisfied with the bill format and water usage graph
- 88% of customers are either very or somewhat satisfied with the billing payment options

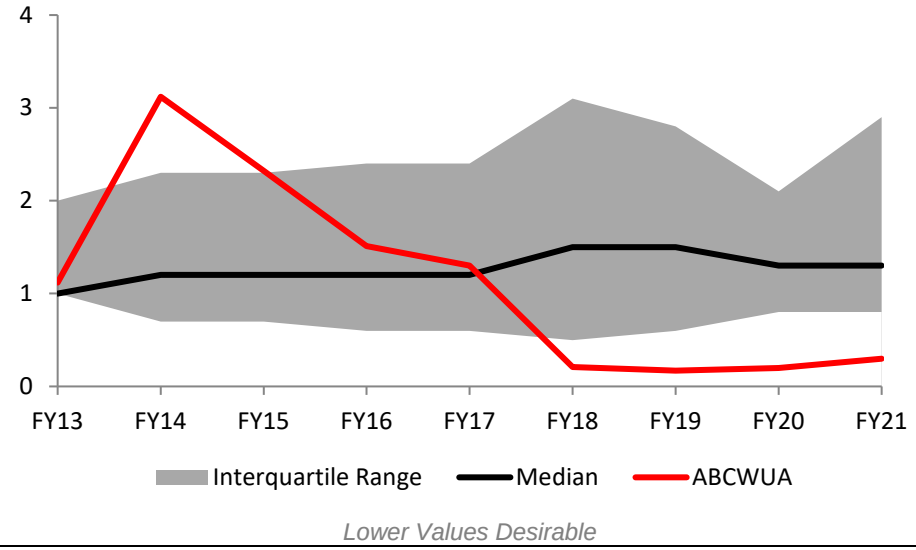
3-4 Call Center Indicators

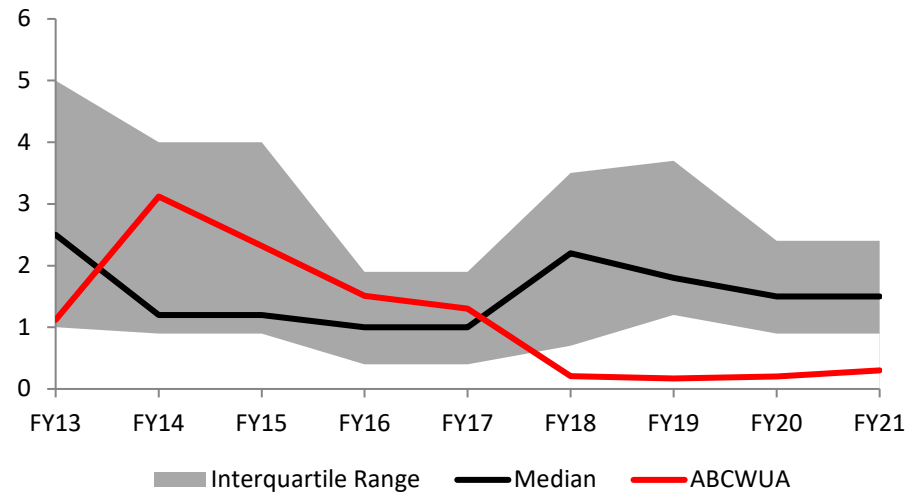
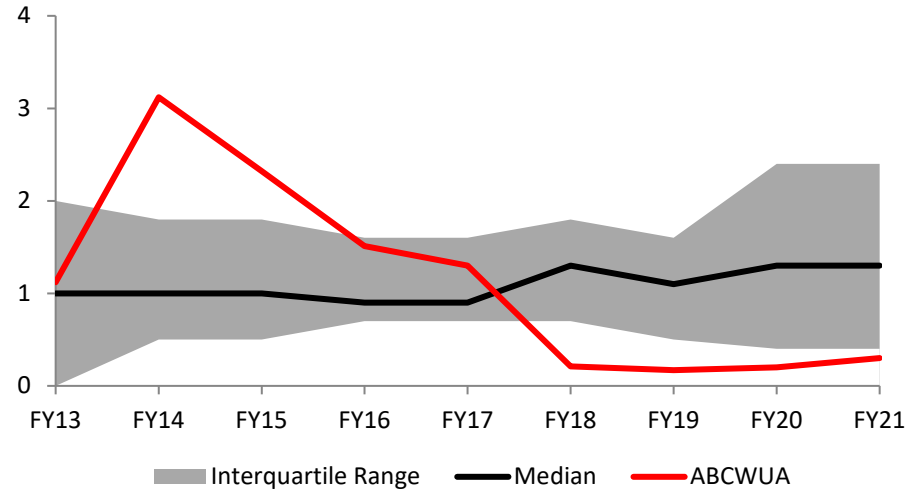
Performance Results Average Wait Time (minutes)

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY17	FY18	FY19	FY20	FY21	
Effectiveness	Quantify the call wait time experienced by Water Authority customers	Average time a caller must wait on hold before they can speak to an agent or customer service representative, not including time spent navigating through computerized menu options	0:57	1:30	0:21	0:20	0:30	0:15	Reduce call wait time and avoid customers hanging up

Industry Benchmarks

Combined Water/ Wastewater Utilities



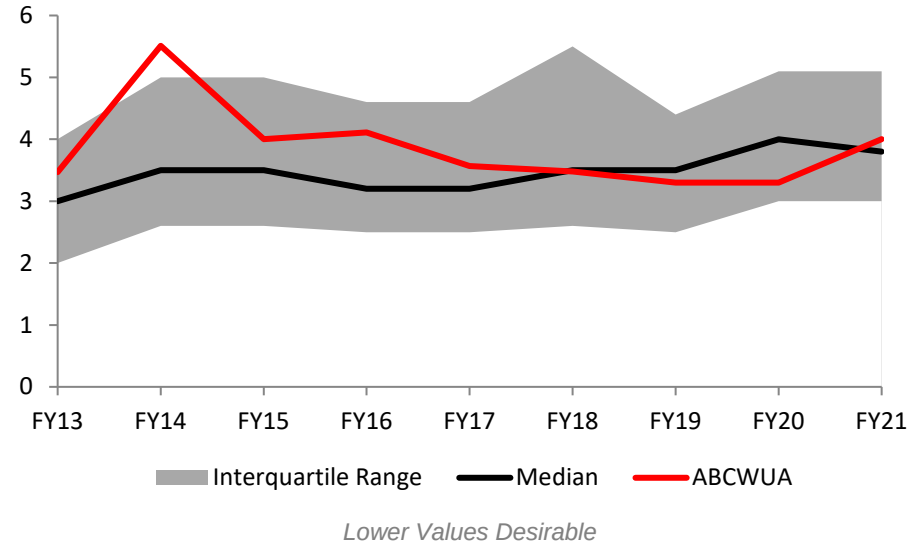
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results Average Total Call Time (minutes)

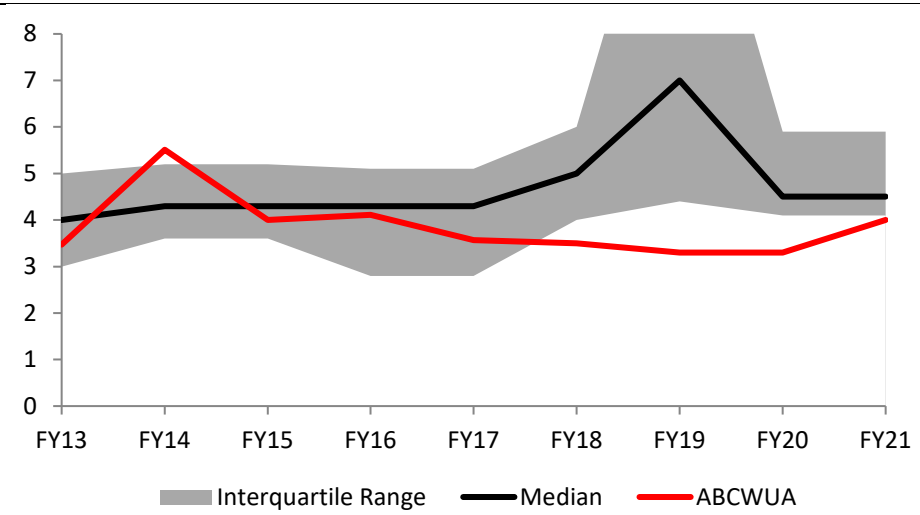
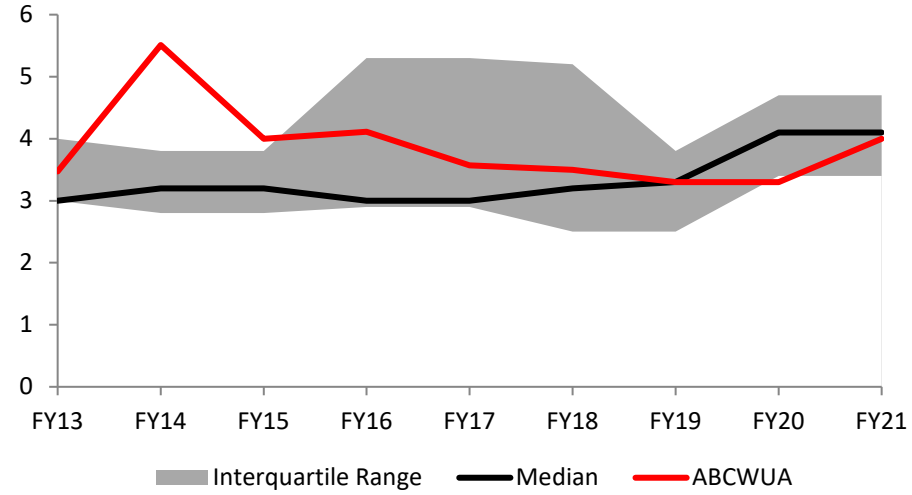
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current /Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the time spent to resolve the purpose of the phone call by Water Authority customers	Average time spent by a customer service representative on the phone with a customer	3:38	3:37	3:48	3:30	4:00	3:25	Reduce the average total call time to enable CSRs to handle more customer calls and reduce wait time

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

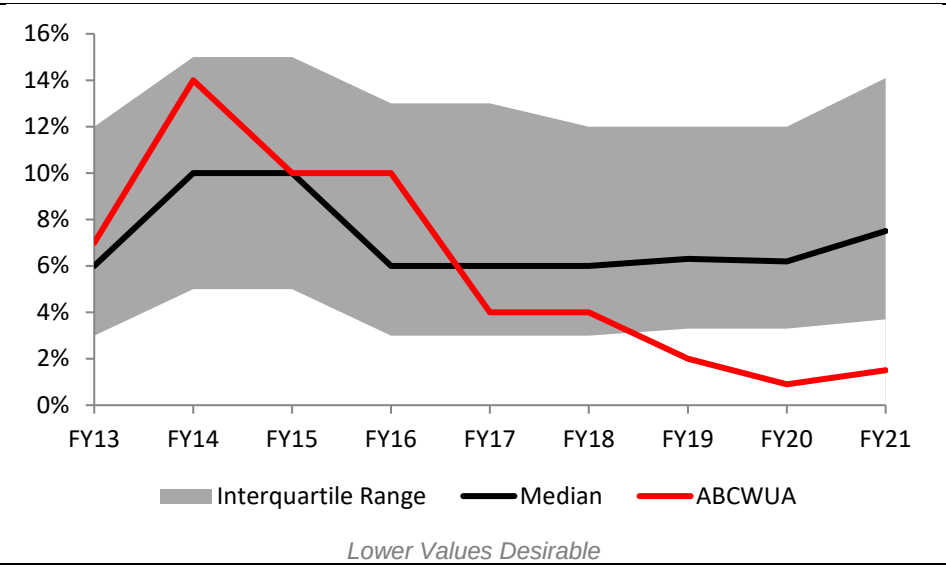
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results Abandoned Call Ratio

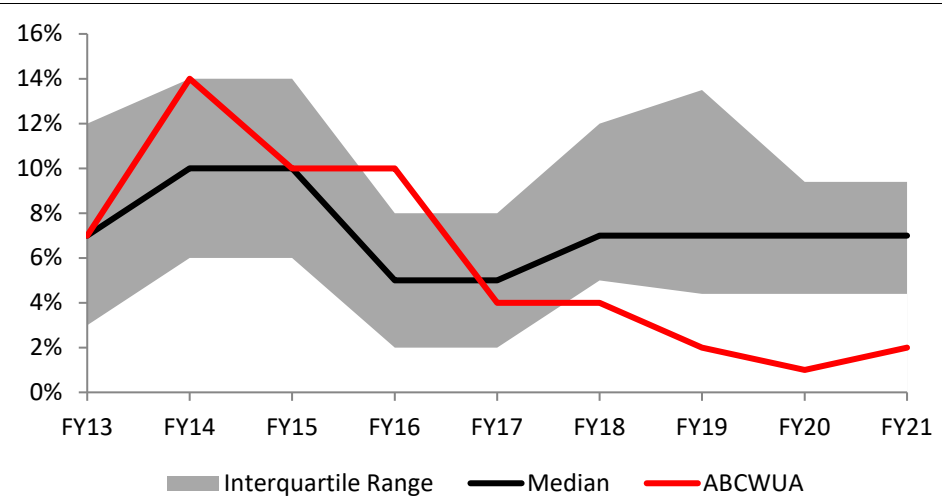
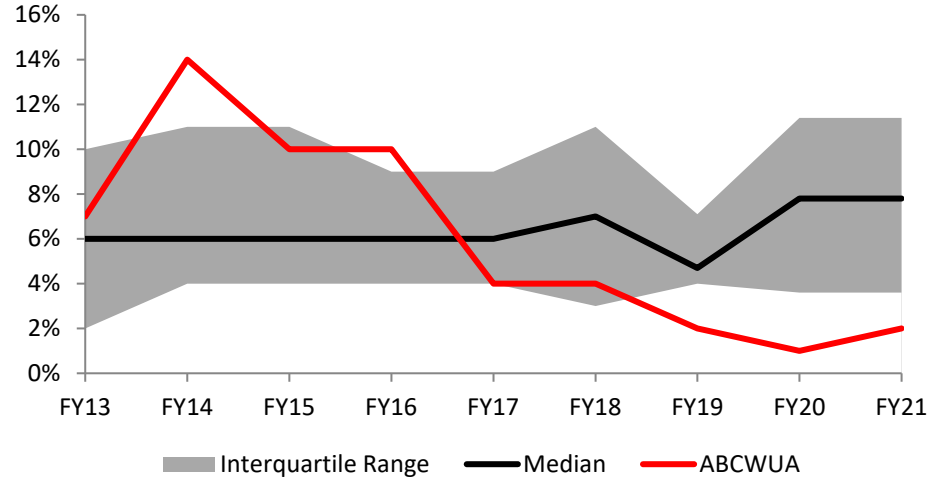
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the number calls abandoned from Water Authority customers	Total number of calls abandoned divided by the total number of calls received	2%	4%	2%	1%	2%	1%	Allow CSRs to effectively assist customers with their needs before they become impatient and hang up

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

The efficiency (cost) and effectiveness (outcomes) of call centers can be evaluated in many different ways. Utilities can track and compare their call center's average wait time, average talk time, and abandoned call ratio to better understand if expenses can be reduced while customer satisfaction is improved. Abandoned calls are those terminated by the calling party before being answered by an agent or customer service representative (CSR). The total number of calls received during the reporting period refers to the number of calls attempting to reach the contact center that are not blocked, incomplete, or denied.

Measurement Status

The Water Authority's performance in this measure has been within the median range for the set of Call Center Indicators. The Water Authority also recently upgraded its call center phone systems to effectively track customer service performance allowing the utility to benchmarking with industry peers. The new phone system also allows customers to pay their bills by phone and provide 24/7 service to billing, emergencies, and reporting water waste.

The Water Authority has begun tracking and setting targets for four customer service metrics. To improve customer satisfaction and operational efficiency, the following targets were established for FY223 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%; and 5) Average Call Quality of greater than 85%.

2020 Customer Opinion Survey

- 64% of customers gave either excellent or good rating on the overall quality of service provided by a customer service representative
- 84% of customers are either very or somewhat satisfied with the courtesy of the customer service representative
- 73% of customers are either very or somewhat satisfied with the knowledge and ability to answer your questions or resolve your issues
- 67% of customers are either very or somewhat satisfied with the length of wait to speak with a customer service representative

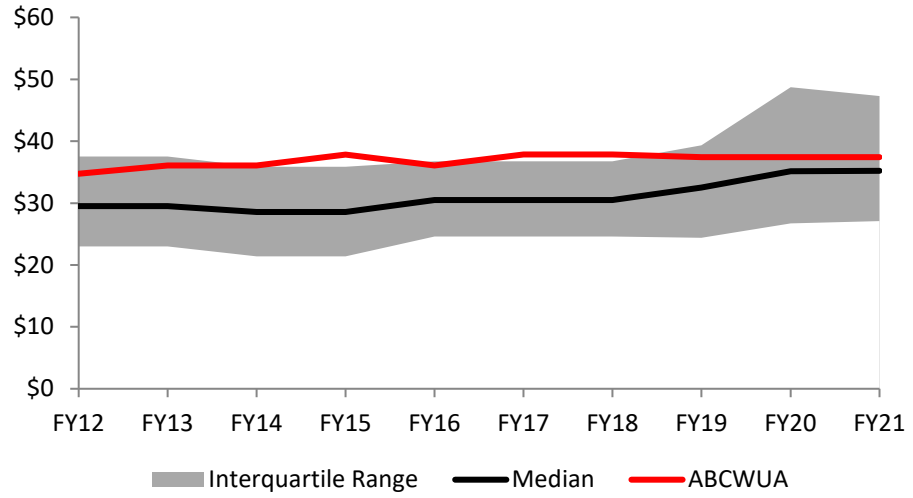
3-5 Residential Cost of Water and/or Sewer Service

Performance Results (Average Residential Water Service)

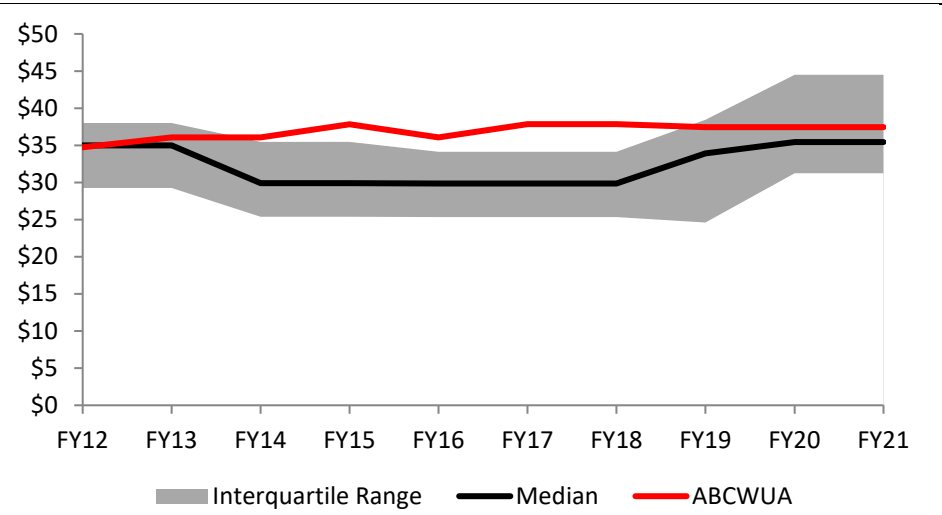
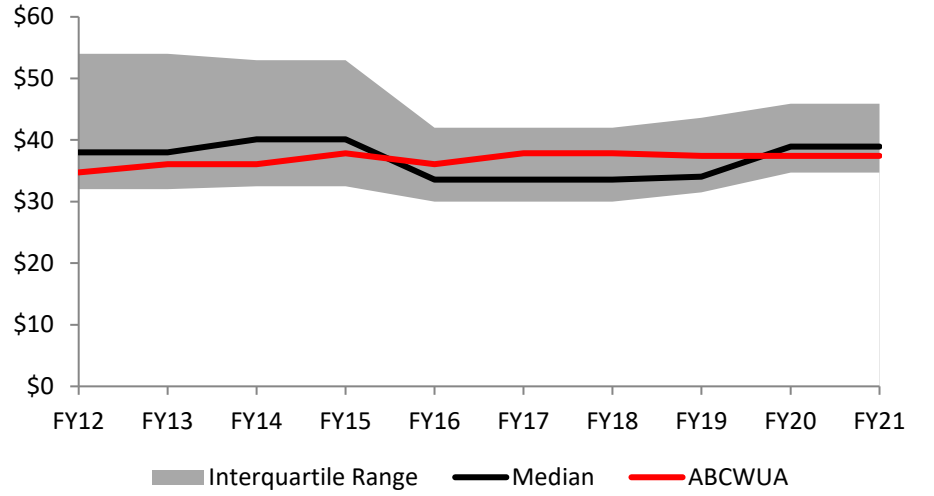
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Compare the residential cost of water and sewer service based on both a defined quantity of water use and the average residential bill amounts for those services	Bill amount for monthly residential water/sewer service and average residential water/sewer bill for one month of service	$37.57	$37.85	$37.43	$37.43	$37.43	$37.43	Provide affordable water and legally justifiable rates to our customers

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

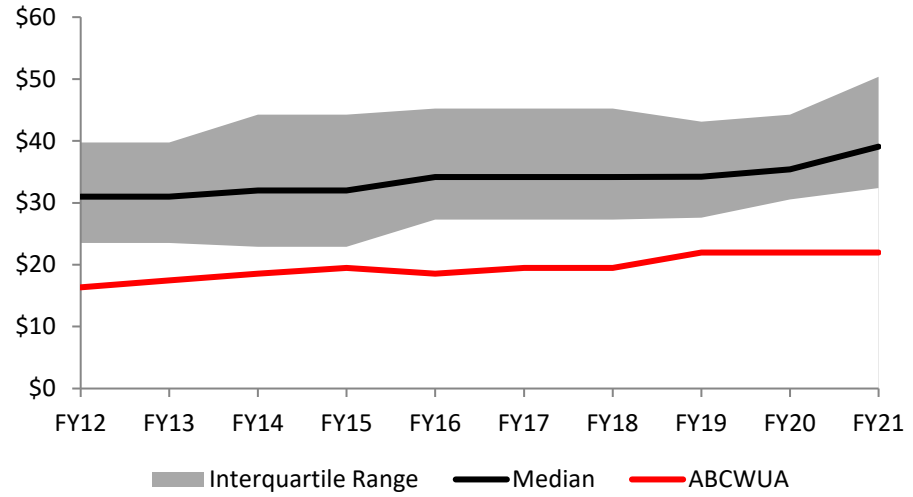
Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Performance Results (Average Residential Sewer Service)

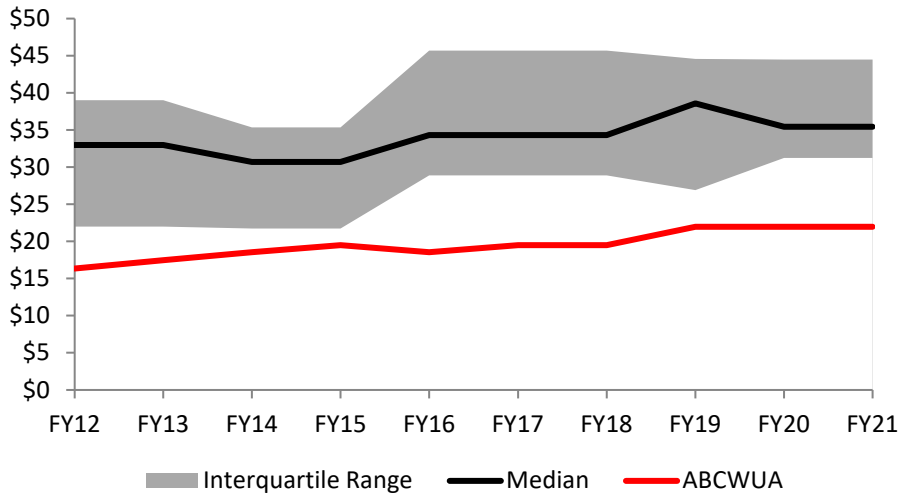
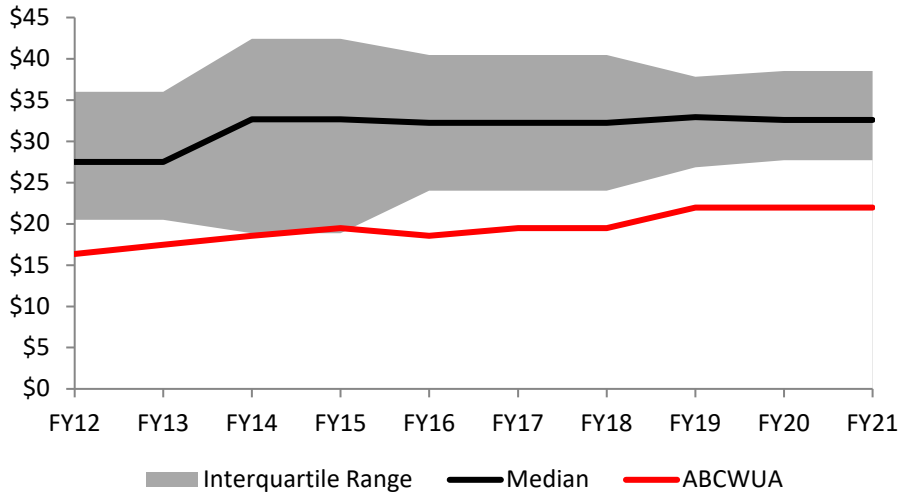
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Compare the residential cost of water and sewer service based on both a defined quantity of water use and the average residential bill amounts for those services	Bill amount for monthly residential water/sewer service and average residential water/sewer bill for one month of service	$21.14	$19.49	$21.97	$21.97	$21.97	$21.97	Provide affordable water and legally justifiable rates to our customers

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

This measure shows average residential water bill amount for one month of service for water and wastewater. The data provided is based on a bill amount for a typical residential customer served water through a 3/4 × 5/8-inch meter. Because each utility is unique, this measure is quite complex. In some places, rates may be artificially low or high in order for achieve non-utility objectives. In others, utilities may have rates controlled by public utility commissions.

Measurement Status

The Water Authority's performance in this measure has been below the median range for the past three fiscal years for average residential water service, and above the median range for the past three fiscal years for average residential sewer service. The Water Authority completed a comprehensive water and wastewater rate study in FY05 which had not been conducted since the early 1990s. The Water Authority adopted a policy objective for FY08 to update that rate study in order to include wholesale water rates. Another reason to update the rate study is to include a cost of services model for master planned communities so that these new large developments pay 100% of the cost for building master planned facilities.

In FY11, the water and sewer rate structures were evaluated to ensure equity within the structures. The FY12 rate ordinance also added a 200% tier to the extra use surcharge to promote conservation and increased the Low Use Water Discount from 20% to 30%. A 5% rate revenue increase was implemented in FY12, FY14, FY15, FY16, and FY18; another 5% rate increase is planned for FY23. The rate increases are a component of implementing the Finance Plan by incrementing increasing more capital funds to take care of increasing infrastructure needs. The FY15 rate adjustment was on exclusively on the fixed rate in order to meet infrastructure renewal needs.

The Water Authority completed a rate evaluation in FY21 and proposed no rate adjustment for FY22. The rate structure continues to balance conservation with rate stability and revenue sufficiency by moving more revenue recovery from the base charge than in previous years. Even with the adopted and planned rate increases, the Water Authority anticipates that it will continue to be within the median range over the next five years compared to industry peers.

2020 Customer Opinion Survey

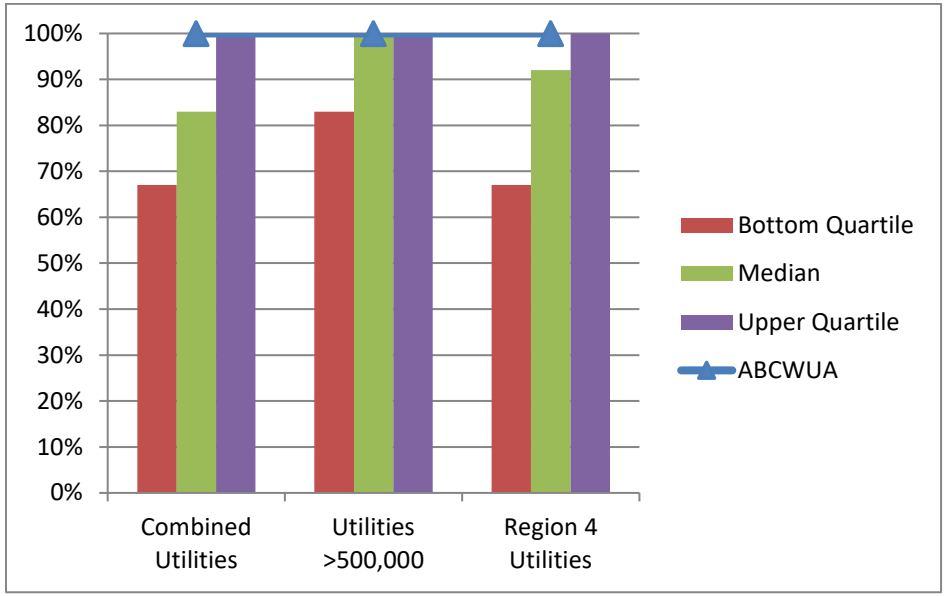
- 83% of customers either strongly or somewhat agree that water and sewer services are a good value for the amount of money paid
- 78% of customers either strongly or somewhat agree that because water is a scarce resource, water rates should be designed to reflect the value of water in our daily lives
- 60% of customers either strongly or somewhat agree that water rates should be increased to cover the cost of providing a reliable water supply for future generations

3-6 Stakeholder Outreach Index

Performance Results

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current /Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the utility's stakeholder outreach activities	Self-assessment based on Stakeholder Outreach Checklist	100%	100%	100%	100%	100%	100%	Assess the utility's outreach efforts with its stakeholders

Industry Benchmarks



Generally, higher values are desirable

Results Narrative

This indicator provides a measure of a utility's stakeholder outreach activities. It is calculated based on self-assigned points the various categories in the Stakeholder Outreach Checklist. The value assigned to each statement is based on evidence that existed during the reporting period to support the statement, as reviewed and rated by senior utility management. Total scores can range from 0 to 12 and are presented as a percentage of the maximum possible score of 12.

Measurement Status

The Stakeholder Outreach Index was recently included by AWWA in their benchmarking survey. The Water Authority has been measuring this Index for the last three fiscal years. In FY20, the Water Authority conducted a customer opinion survey in order to assess the Water Authority's performance from the customer's viewpoint from previous surveys. This was the eighth customer opinion survey conducted since the first survey in 2006 which allowed the Water Authority view trends of customer's opinions. The results of the 2020 survey have been incorporated into the Performance Plan as many questions or statements are connected to the benchmarks in the Performance Plan. A customer opinion survey will next be conducted in FY22.

In last seven fiscal years, the Water Authority has conducted quarterly customer meetings called Customer Conversations to engage its customers through topic forums. The Technical Customer Advisory Committee (TCAC) hosted each meeting and TCAC members attended these meetings to observe the process and listen to customers' discussions and comments. The purpose of these forums is to engage customers through interactive activities to allow customers to discuss issues with fellow customers and provide meaningful feedback to the utility. The feedback is very helpful in creating or amending programs, policies, or projects.

In 2016, the Water Authority received the Water Environment Federation's **Public Communication and Outreach Award**. In 2017, the utility received the National Association of Clean Water Agencies' **Public Information and Education Award**. These awards recognize the scope and achievements of the Water Authority's education program. The primary goal of the education program is to inform and inspire students (and the parents they in turn help educate) to conserve water and protect our limited water resources. The program has contributed to the tremendous progress Albuquerque has made in decreasing its per capita water use. By helping the community save 300 billion gallons of water, the Water Authority's education program – with its puppet shows, classroom activities, field trips, and wastewater plant tours – has played a critical role in supporting the overall mission of the Water Authority.

Goal 4
Business Planning & Management

Guiding Goal Statement

Maintain a well planned, managed, coordinated, and financially stable utility by continuously evaluating and improving the means, methods, and models used to deliver services.

Goal Performance Scorecard

Ref #	Performance Measure	Status	Trend
4-1	Debt Ratio		
4-2	Return on Assets		
4-3	System Renewal / Replacement Rate (Water)		
4-3	System Renewal / Replacement Rate (Wastewater)		
4-4	Triple Bottom Line Index		
	Overall Goal Status		

Performance Key

Excellent | Good | Fair | Poor

Linkage of Objectives to Performance Measures

FY22 Objectives	Measure Reference
Expend $64 million in water and wastewater capital rehabilitation and replacement programs to replace aging, high risk assets that are past their useful life by the end of the 4th Quarter of FY22. $1 million shall be dedicated and used for identifying and replacing steel water pipes in critical or poor condition by the end of the 4th Quarter of FY22.	**4-3**
Finalize Operating Plans for Centralized Engineering, Field, Water Resources, and Asset Management, to be used to inform/train new staff and for existing staff to use as resource by the end of the 4th Quarter of FY22.	**4-3**
Complete a comprehensive asset management plan to understand and document the asset condition, risk assessment, remaining useful life, and replacement cost for every asset by the end of the 4th Quarter of FY24. Input this information into the enterprise asset management system (EAMS) and begin life cycle cost accounting.	**4-3**
Coordinate with Bernalillo County to design and initiate construction of a force main to convey wastewater from the Municipal Detention Center (MDC) to the Water Authority collections system by the 4th Quarter of FY22.	**4-3**
Work with the Navajo Nation to design and construct water conveyance infrastructure to deliver water provided by the Navajo Nation to To'Hajiilee by the end of the 4th Quarter of FY22.	**4-3**
Implement at least one planned Interceptor Rehabilitation project in FY22, and complete at least one interceptor design package by the 4th Quarter of FY22; Implement at least one planned Small Diameter Sanitary Sewer Rehabilitation project in FY22.	**4-3**
Solicit feedback on the draft of the Utility Development Guide and incorporate feedback by the end of the 2nd Quarter of FY22. Circulate a final draft for review by the end of the 4th Quarter of FY22.	**NA**
Continue monitoring progress on the strategic asset management program (SAMP) and report quarterly through the end of the 4th Quarter of FY22. Track and report metrics on asset registry accuracy and report status towards achieving target(s) by the end of the 4th Quarter of FY22. • Assets Inventoried, Target = 40% • Asset Activity (Created, Decommissioned and Updated), Target = 5,000 • Assets with Purchase & Replacement Cost populated, Target = 5,000 • Work Orders without Assets, Target = < 50 • Assets missing Classifications & Attributes, Target = 50% • Assets missing required data fields, Target = 50% • Maximo Employee Training, Target = 200 HRs	**NA**
To promote a continued Culture of Security in accordance with the American Water Works Association (AWWA) G430 standard within the Water Authority, develop policies and procedures that include strategies for internal communication and trainings on security-related topics. Track and measure metrics that are directly related to National Infrastructure Protection Plan (NIPP) Water Sector-Specific Plan (SSP) and America's Infrastructure ACT (AWIA). Conduct at least 2 table-top exercises for security and cybersecurity that include representatives from across the organization. Based on the countermeasures identified in Phase 1 of the Water Authority's Final Security Plan implement at least 3 of the countermeasures by the end of the 4th Quarter of FY22.	**NA**

FY22 Objectives	Measure Reference
Complete the annual update and review of the Comprehensive Information Technology Security Plan and related policies that are aligned with the standards, guidelines, and best practices of the National Institute of Standards and Technology (NIST) Cybersecurity Framework by the end of the 4th Quarter of FY22. Track and measure metrics that are directly related to NIST standards. Incorporate specific standards and policies that directly relate to the utilities Supervisory Controls and Data Acquisition (SCADA) systems.	**NA**
Continue implementation of the SCADA Master Program; Implement both short-term and long-term goals directly tied to the sequencing of migrating to a single SCADA platform for surface water, ground water, wastewater treatment and collections systems by the end of the 4th Quarter of FY22. Specific FY22 projects include the Southside Water Reclamation Plant (SWRP) DCS HMI upgrade, Collection/Stormwater PLC replacement, and Network refresh for SWRP supervisory control and data acquisition (SCADA) network.	**NA**
Complete annual maintenance for all network and infrastructure items. This includes networks, firewalls, servers, telephony, mobility and data storage for both information technology (IT) and supervisory control and data acquisition (SCADA). Specific projects include the evaluation of the SCADA network and infrastructure for the Southside Water Reclamation Plant (SWRP) by the end of the 3rd Quarter of FY22. Begin installation and setup of such Infrastructure to upgrade the SWRP SCADA systems to mirror the IT infrastructure model that was installed at the Surface Water Treatment Plant by the end of the 4th Quarter of FY22.	**NA**
Upgrade and patch all enterprise applications to add enhancements for cyber-security purposes, support, and to leverage functionality enhancements to improve business processes, capture and use data intelligently, and create efficiencies.	**NA**
Complete a gap analysis and best practices review to identify current and future geographic information system (GIS) needs by the end of the 2nd Quarter of FY22. Follow up on action items and report status quarterly through the end of the 4th Quarter of FY22.	**NA**
Consistent with the effective utility management (EUM) continuous improvement process, complete the biennial attribute self-assessment using the EUM Benchmarking Assessment Tool by the end of the 2nd Quarter of FY22 and incorporate findings into the FY23 goals and objectives.	**NA**
Evaluate water and sewer rate structures to ensure equity within the structures by the end of the 4th Quarter of FY22. Complete an affordability study that utilizes the methodology described in the 2019 report titled “Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector”.	**NA**
Continue to identify opportunities to apply machine learning to assess current operations through the end of the 4th Quarter of FY22. Opportunities might include strategies that use predictive analytics on near real-time data for early warning of potential issues and opportunities to integrate capabilities of the Water Authority’s existing modeling tools. Expand usage of Splunk data analytics tool to implement functions for cyber-security, water quality, and/or asset management by the end of the 4th Quarter of FY22. Develop a strategy for the utilization of machine learning and analytics to predict failure of linear and vertical assets by the end of the 4th Quarter of FY22.	**NA**

FY22 Objectives	Measure Reference
Maintain the Compliance Division Regulatory Compliance 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, local laws ordinances, and issues involving emerging contaminants to identify and assess potential impacts on the Water Authority. Provide quarterly reports through the end of the 4th Quarter of FY22.	**4-4**
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). Maintain greater than 0.5 results reported per productive hour per quarter in each analytical section through end of the 4th Quarter of FY22. • Laboratory Productivity (results reported per productive hour, results sent to subcontract laboratories in lieu of in-house testing). Maintain greater than 2,000 results per quarter in each analytical section through end of the 4th Quarter of FY22. • Percentage of results reported late (turnaround time). Maintain less than 10 percent results reported late per quarter and provide quarterly results through end of the 4th Quarter of FY22.	**4-4**
Continue to develop LabVantage ("laboratory information management system") throughout FY22 to increase the automation of data entry to reduce data entry errors and reduce the amount paper used at the laboratory. Begin developing reports in LabVantage by the end of the 4th Quarter of FY22.	**4-4**
Utilize the Environmental Monitoring Program to monitor the reliability and consistency of results from Compliance field instrumentation and sample collection techniques. Conduct at least one internal audit per year. Conduct and report on internal audits of sampling procedures and report results as they pertain to regulatory requirements and standard operating procedures. Issue corrective action response requests as needed and track and report on their progress. Ensure Compliance Division field instruments are calibrated as necessary and that personnel demonstrate capability in sample collection and measurement. Monitor and report on corrective action response report (CARR) closure duration quarterly through the end of the 4th Quarter of FY22.	**4-4**
Maintain accreditation with the American Association for Laboratory Accreditation (A2LA) by addressing any changes resulting from the on-site assessment of the Water Quality Laboratory. Conduct internal audits, Standard Operating Procedure (SOP) revisions, and identify actions to address risks and opportunities as required by ISO/IEC 17025:2017. Implement any changes resulting from the 2019 Methods Update Rule. Track and report on corrective actions and risk assessment responses. Maintain a closure duration of less than 60 days per corrective action response report (CARR) and an average completion of less than 30 days for all CARRs per fiscal year through the end of the 4th Quarter of FY22.	**4-4**
Prepare for the Revised Lead and Copper Rule by developing a system for a lead service line inventory and to identify and track monitoring at all schools and child-care centers in the service area by the end of the 4th Quarter of FY22. The final rule was published in January of 2021 and must be implemented by the end of the 2nd Quarter of FY24.	**4-4**

Performance Measure Division Responsibility

Ref #	Performance Measure	Finance	Operations Water Resources, Engineering & Planning
4-1	Debt Ratio	✓	
4-2	Return on Assets	✓	
4-3	System Renewal / Replacement Rate (Water)	✓	✓
4-3	System Renewal / Replacement Rate (Wastewater)	✓	✓
4-4	Triple Bottom Line Index		✓

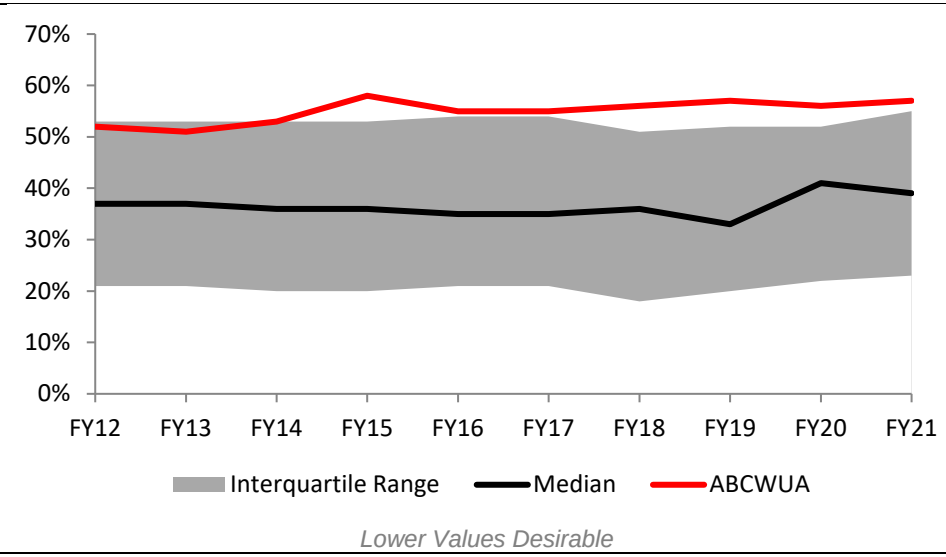
4-1 Debt Ratio

Performance Results

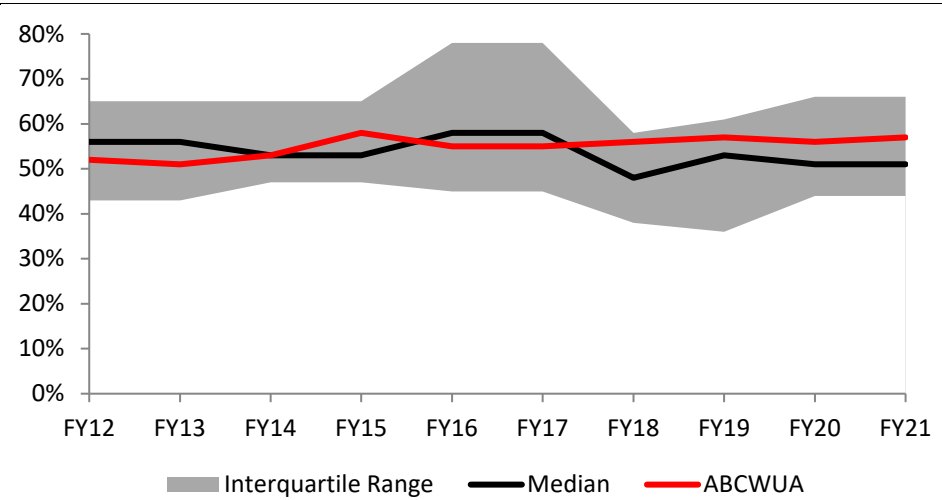
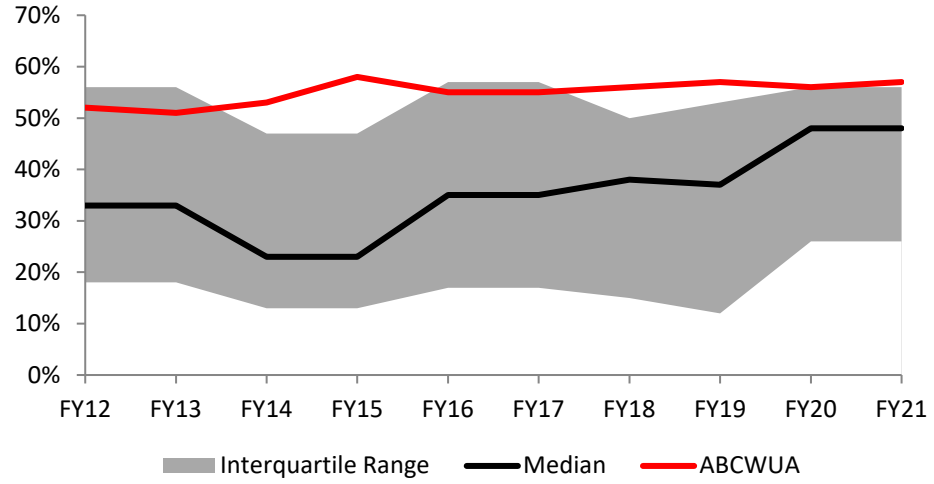
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY222	
Effectiveness	Quantify the Water Authority's level of indebtedness	Total liabilities and total assets	56%	56%	57%	56%	57%	57%	Maintain low debt burden and communicate fiscally responsible to our customers

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

The higher the calculated debt ratio, the more dependent the utility is on debt financing. Many utilities use this measure as an internal measure of performance. Debt equity ratio is an important measure because a high debt burden brings larger costs for interest and capital repayments.

Measurement Status

The Water Authority's performance in this measure has been below the median range for the past three fiscal years.

The Water Authority has borrowed a significant amount of funds to pay for a new surface drinking water treatment plant as part of the $500 million San Juan Chama Drinking Water Project. The Water Authority has approximately $583.1 million in outstanding debt which is primarily attributed to carrying out the Water Resources Management Strategy projects, including the San Juan Chama Drinking Water Project. In addition, the Water Authority has secured its water supply for the long term compared to most utilities which must invest a significant amount of capital in securing a water supply. The Water Authority has never managed for a high rating from the three rating agencies. The cost of the new facilities, rehabilitation of existing facilities and asset management plan implementation will continue to require significant capital financing. The only way to improve this category would be to not invest in the required capital improvements and/or have significant rate increases to improve cash on hand. The long-term outlook for the Water Authority is above peer given the capital investments which will be made and the rapid retirement of debt. The Water Authority has a bond rating of Aa2 by Moody's and AAA by Standard and Poor's. In 2018, S&P upgraded the utility's rating to AAA citing the utility's strong financial management policies and practices, robust planning efforts, and strong levels of pay-as-you-go funding.

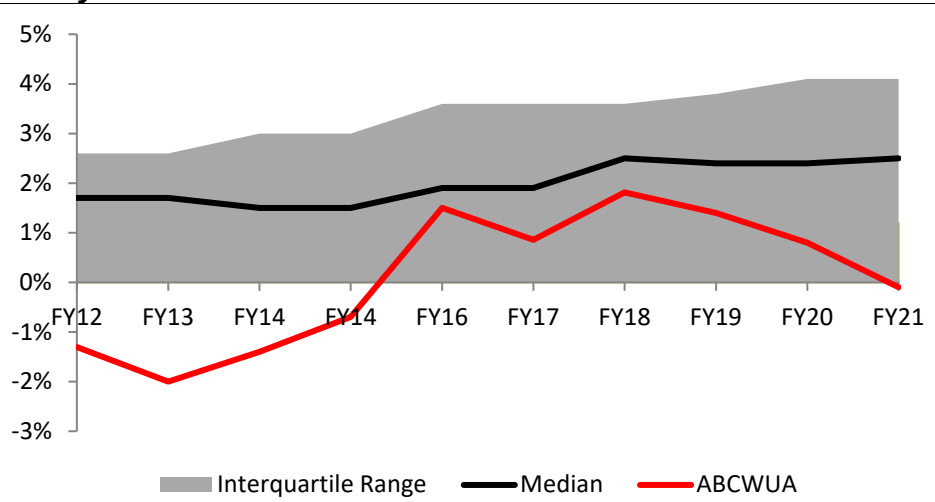
4-2 Return on Assets

Performance Results

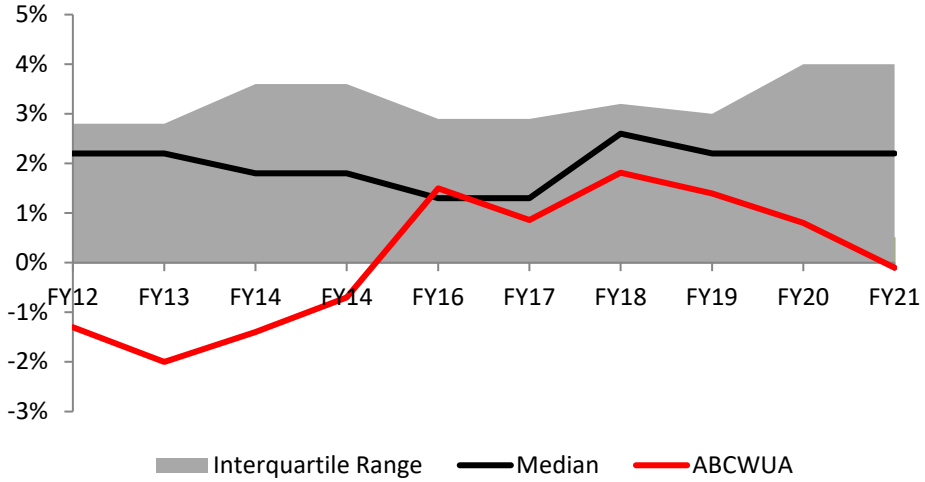
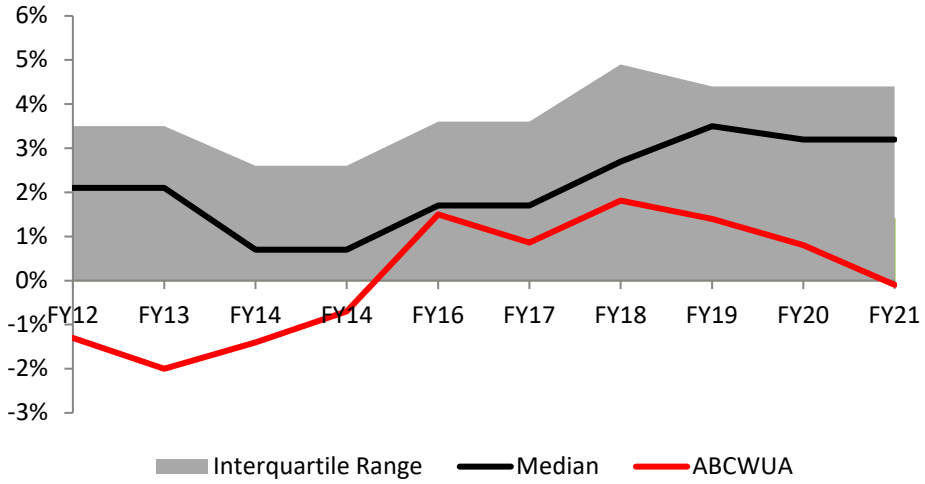
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure the financial effectiveness of the Water Authority	Net income and total assets	1.3%	1.8%	1.4%	0.8%	-0.1%	1.4%	Improve the financial health of the Water Authority

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

The return on assets ratio measures how well a utility's management team is doing its job. A comparison of net income and average total assets, the return on assets ratio reveals how much income management has been able to squeeze from each dollar's worth of a utility's assets. All utilities are interested in their financial health and are particularly sensitive to this measure, seeking higher ratios where possible.

Measurement Status

The Water Authority's performance in this measure is within the median range for the last three fiscal years. The San Juan Chama Drinking Water Project has had a major impact on depreciation and interest expenses. The Water Authority has developed and implemented a long-term financial plan which anticipates revenue needs and allows for financial stability, ongoing system improvements and rate stability for customers. It has also ensured conservative financial policies, including a 12-year financing on basic capital with 50% cash. In addition, $40 million must be invested in system rehabilitation and replacement. The utility has also established rate reserve fund to mitigate revenue fluctuations and postpone rate increases ($2 million per year contributed).

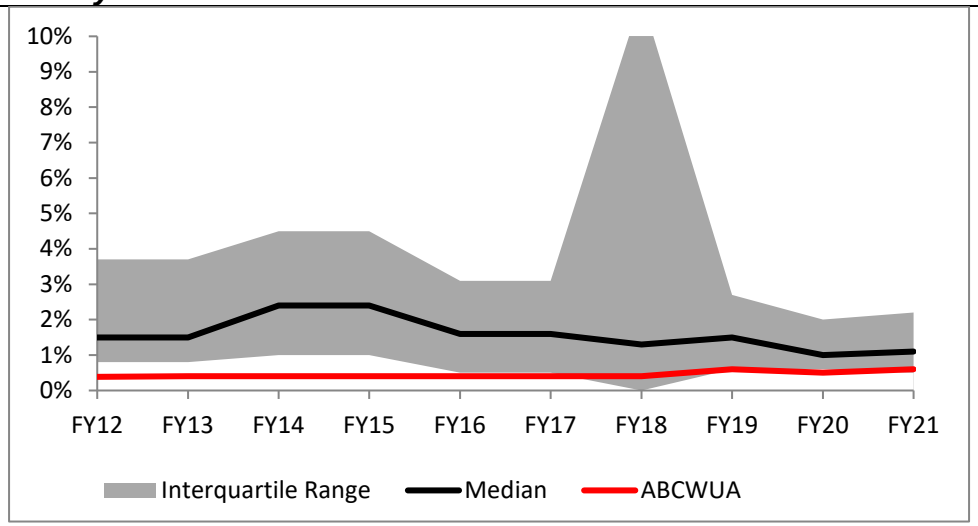
4-3 System Renewal / Replacement Rate

Performance Results (Water Pipeline & Distribution)

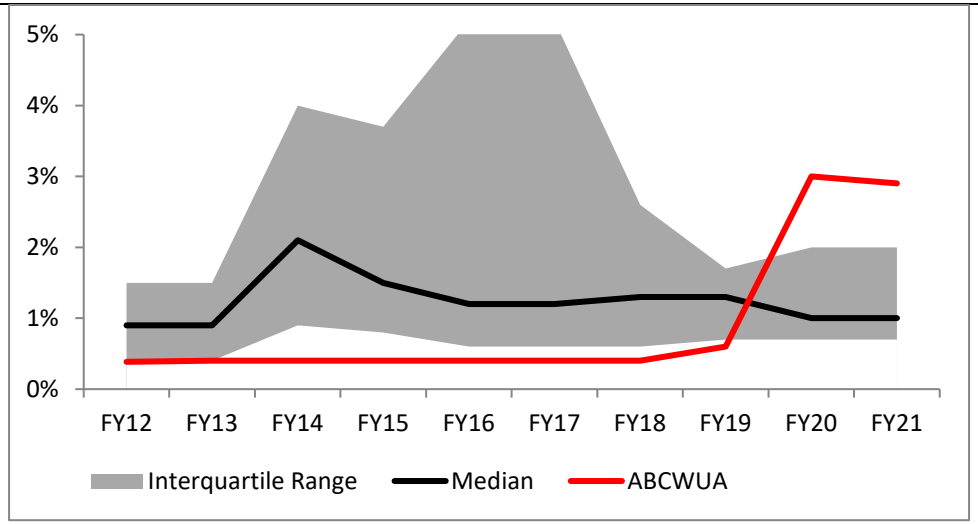
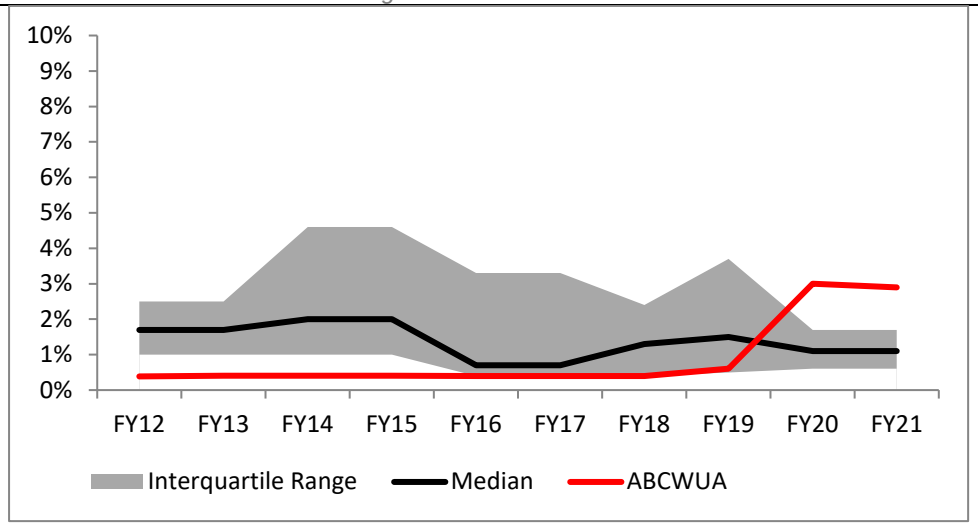
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the rate at which the Water Authority is meeting its individual need for infrastructure renewal or replacement	Total actual expenditures reserved for renewal and replacement and total present worth for renewal and replacement needs for each asset group	0.5%	0.4%	0.6%	0.5%	0.6%	0.6%	Reduce corrective maintenance by investing in infrastructure improvements to the system

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

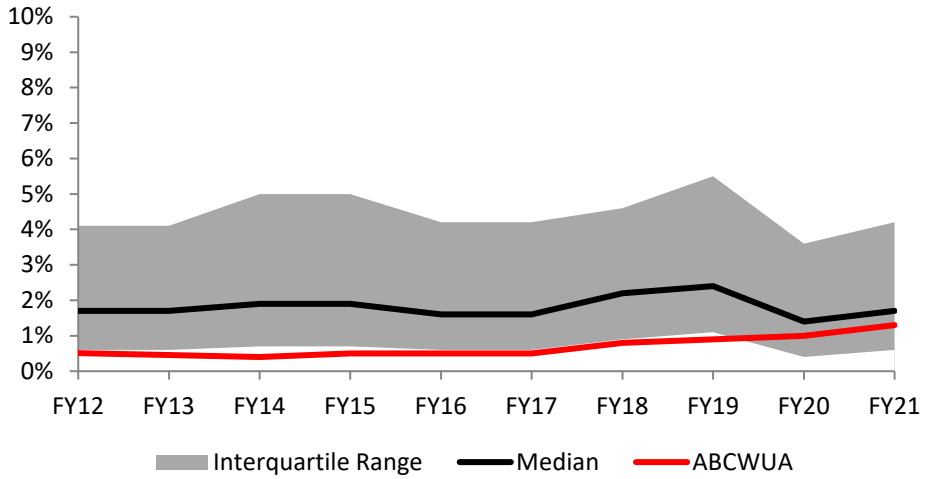
Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Performance Results (Water Facility & Pumping)

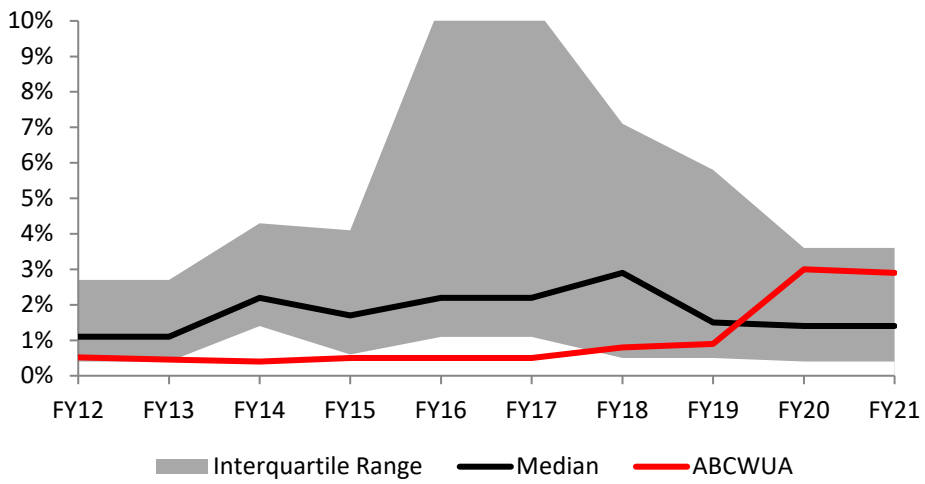
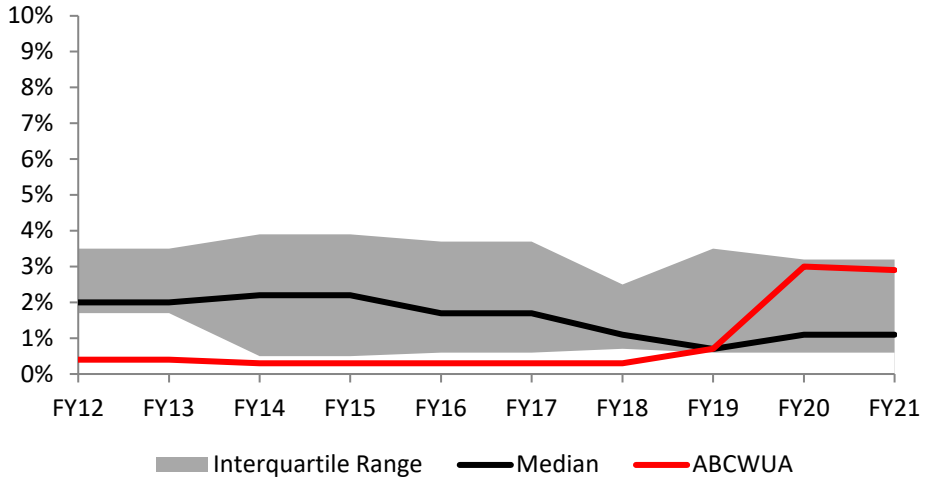
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the rate at which the Water Authority is meeting its individual need for infrastructure renewal or replacement	Total actual expenditures reserved for renewal and replacement and total present worth for renewal and replacement needs for each asset group	1.0%	0.8%	0.9%	1.3%	1.3%	1.3%	Reduce corrective maintenance by investing in infrastructure improvements to the system

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

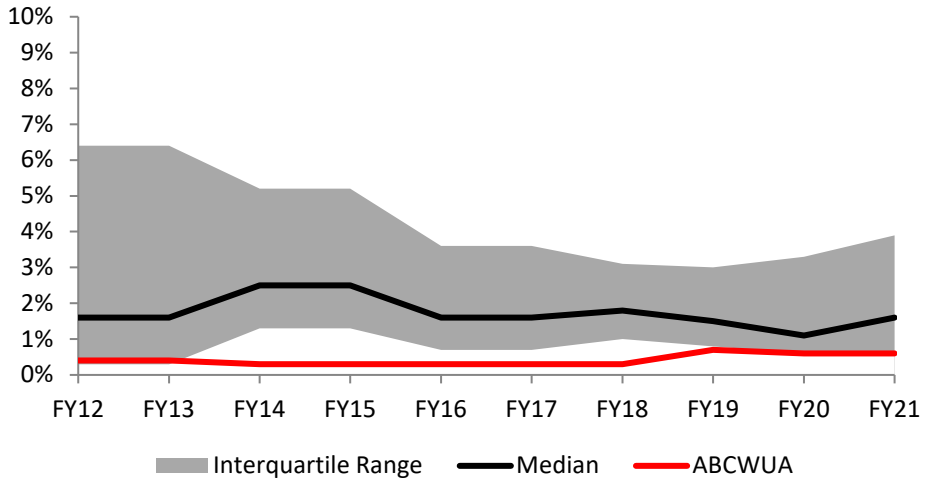
Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Performance Results (Wastewater Pipeline & Collection)

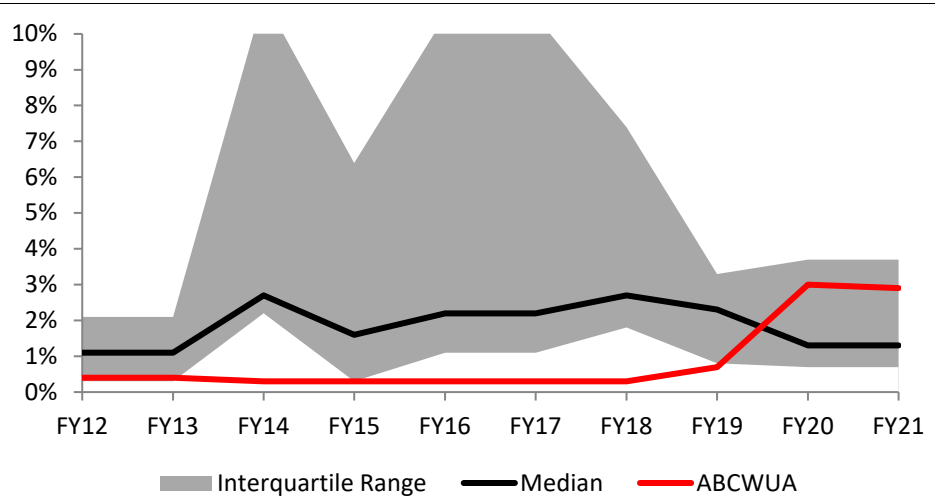
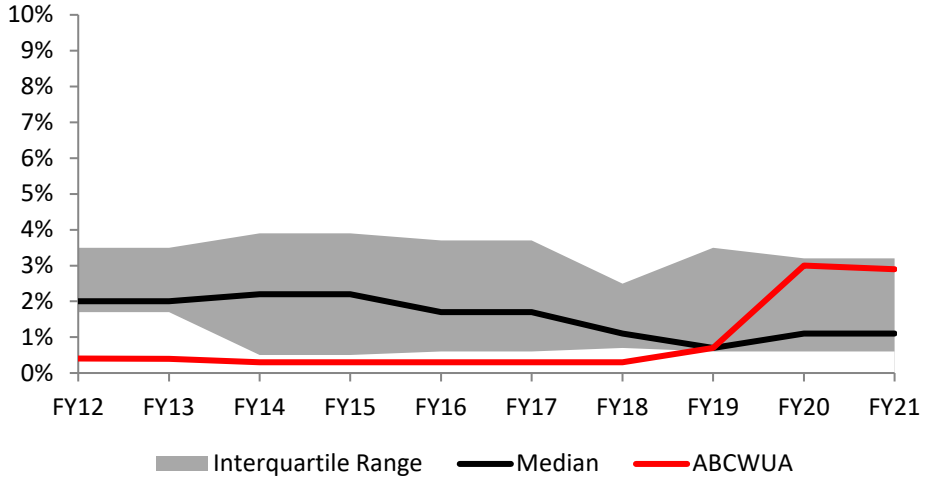
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the rate at which the Water Authority is meeting its individual need for infrastructure renewal or replacement	Total actual expenditures reserved for renewal and replacement and total present worth for renewal and replacement needs for each asset group	0.5%	0.3%	0.7%	0.6%	0.6%	0.8%	Reduce corrective maintenance by investing in infrastructure improvements to the system

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

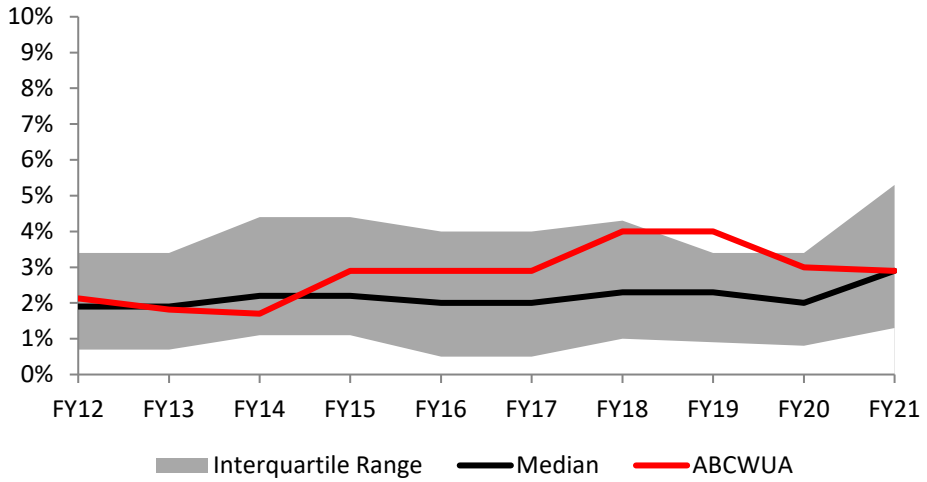
Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Performance Results (Wastewater Facility & Pumping)

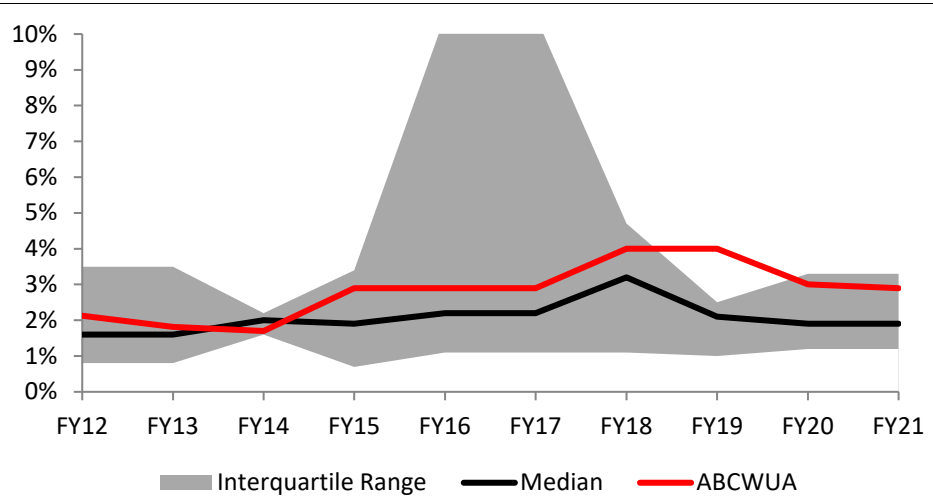
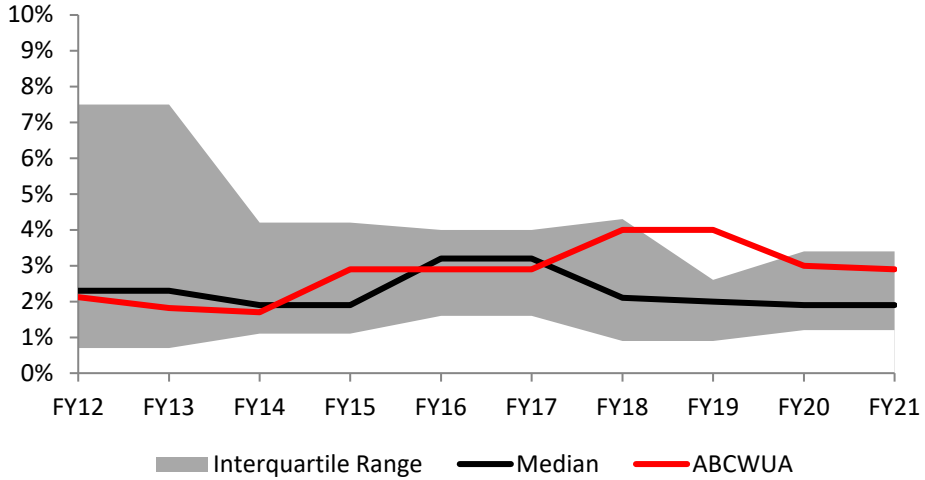
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the rate at which the Water Authority is meeting its individual need for infrastructure renewal or replacement	Total actual expenditures reserved for renewal and replacement and total present worth for renewal and replacement needs for each asset group	4.0%	4.0%	4.0%	3.0%	2.9%	4.0%	Reduce corrective maintenance by investing in infrastructure improvements to the system

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

This measure quantifies the degree to which a water or wastewater utility is replacing its infrastructure based on target lives for both water and wastewater asset groups. Data for these asset groups are provided in four categories:

1. Water pipeline/distribution
2. Water treatment facility and pumping
3. Wastewater pipelines and collection
4. Wastewater treatment facility and pumping

Measurement Status

The Water Authority's performance in this measure has been within the median range for the past three fiscal years in three of the four asset groups. The wastewater treatment performance is within or above the median range because of the significant replacement and rehabilitation program at the wastewater treatment plant. Since FY07, the Water Authority increased its capital program spending from $30 million per year to $70 million per year, including significant increases in planned rehabilitation spending from $22 million to $58 million. Since FY15, the utility has added $3 million each year cumulatively to reach an additional $30 million funding by 2023.

In FY08, the Water Authority formally established its asset management program to prolong asset life, improve decisions about asset rehabilitation, repair, and replacement, and meet customer expectations with a focus on system sustainability and reliability. The program is an extensive, well thought out 'Business Model' that helps the Water Authority make better acquisition, operations and maintenance, renewal, and replacement decisions. In FY11, the Water Authority completed an Asset Management Plan (AMP) as a part of its asset management program. The AMP provides a 30-year projection that allows the Water Authority to budget for renewals and replacements into the future. In addition, the Water Authority upgraded its work order system in FY18 in a manner that supports asset management business objectives. Moreover, the Water Authority has incorporated asset management principles and management of risk into ten-year Capital Improvement Plan. In 2019, the utility created a strategic asset management planning section to assist in providing optimal service, stewardship, and decision making and to reduce operational risk and to improve the Level of Service for Water Authority customers.

2020 Customer Opinion Survey

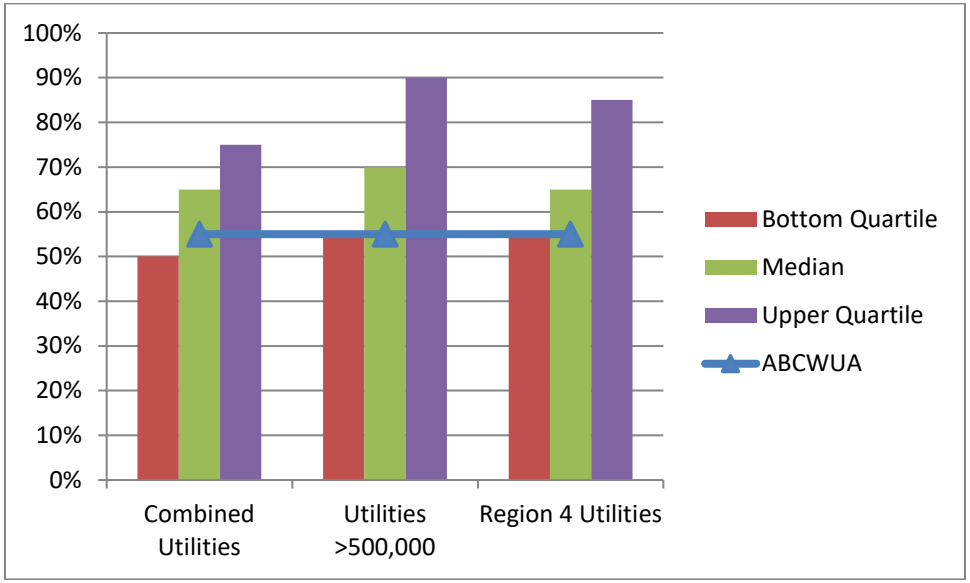
- 86% of customers feel that it is very or somewhat important to invest in the repair and replacement of old water and sewer lines

4-4 Triple Bottom Line Index

Performance Results

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current /Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Quantify the utility's sustainability efforts	Self-assessment based on Triple-Bottom-Line Checklist	60%	60%	65%	55%	55%	65%	Assess the utility's sustainability efforts

Industry Benchmarks



Generally, higher values are desirable

Results Narrative

This indicator provides a measure of a utility's sustainability efforts. It is calculated based on self-assessed points assigned in the various categories in the Triple-Bottom-Line (TBL) Checklist. The TBL framework represents a balanced view of environmental, social, and economic considerations. The value assigned to each statement is based on evidence that existed during the reporting period to support the statement, as reviewed and rated by senior utility management. Cumulative scores can range from 0 to 20 and are presented as percentages (total score / 20 × 100%).

Measurement Status

The Triple-Bottom-Line Index was recently included by AWWA in their benchmarking survey. The Water Authority has been measuring this Index for the last three fiscal years. It will continue to track these indicators and benchmark with industry peers and determine targets for its sustainability programs.

American Water Works Association

The Water Authority received the **2018 Exemplary Source Water Protection Award**. The AWWA distinguished the Water Authority from its peers for its innovative approach for protecting its source waters and the conjunctive management of its water resources to ensure long-term safety and resiliency of our water supply. Source water protection activities highlighted by the AWWA in its selection included the Water Authority's low-income credit program, the monitoring and mapping of potential and know groundwater contamination in the service area, and the comprehensive water planning efforts. The Water Authority also updated its source water protection plan.

In 2020, the Water Authority received the **National Association of Clean Water Agencies Environmental Achievement Award for Watershed Collaboration**. The Water Authority was recognized for its work in watershed stewardship, source water protection, community partnership and engagement, and its education program.

NACWA
A Clear Commitment to America's Waters

Goal 5
Organizational Development

Guiding Goal Statement

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.

Goal Performance Scorecard

Ref #	Performance Measure	Status	Trend
5-1	Employee Health and Safety Severity Rate	▲	■
5-2	Training Hours per Employee	■	▲
5-3	Customer Accounts per Employee (Water)	▲	▲
5-3	Customer Accounts per Employee (Wastewater)	▲	▲
5-4	Employee Turnover	■	■
5-5	Retirement Eligibility	▲	▲
5-6	Organizational Best Practices Index	▲	▲
	Overall Goal Status	▲	▲

Performance Key

▲ Excellent ■ Good ■ Fair ▼ Poor

Linkage of Objectives to Performance Measures

FY22 Objectives	Measure Reference
To promote a continued Culture of Safety in the Water Authority, provide a variety of job-related safety trainings, opportunities for recognition and safety communications to create awareness and promote good work practices. Track and report the hours of training offered and percent attendance by working group through the end of the 4th Quarter of FY22 and study the data to identify trends that could be mitigated by implementing tailored work practices, standard operating procedures (SOPs), and customized safety trainings. Reduce injury hours to 2,600 hours or less to improve productivity and reliability of services provided by employees by the end of the 4th Quarter of FY22.	**5-1**
Complete two employee wellness challenges per fiscal quarter focusing on nutrition, physical activity and weight loss, and disease and injury prevention to employees with a 60 percent or greater overall completion rate by the end of the 4th Quarter of FY22. Increase time spent stretching to 4,125 hours to improve productivity and wellness of employees by the end of the 4th Quarter of FY22. Incorporate more remote wellness options for employees to participate in while keeping social distance, including video classes, and instructional videos by the end of the 4th Quarter of FY22.	**5-1**
Provide employees with job-related training and monitor hours of training completed. Maintain an average of at least 25 hours of training per employee through the end of the 4th Quarter of FY22.	**5-2**
Maintain an average utility-wide vacancy rate of no greater than 5% through the end of FY22. Maintain an average number of days to fill positions of 40 days or less and report quarterly through the end of the 4th Quarter of FY22.	**5-4**
Recognize at least 15% of the work force through initiatives such as employee incentive awards, on-the-spot awards, and years of service awards through the 4th Quarter of FY22.	**5-6**
Consistent with the Water Research Foundation (WRF) Project 4907 Utility Innovation Project, develop a Strategic Plan for the Water Authority's Innovation Program by the end of the 4th Quarter of FY22.	**5-6**
Develop a formalized plan for remote working options within the Water Authority by end of 1st Quarter of FY22.	**5-6**

Performance Measure Division Responsibility

Ref #	Performance Measure	Operations	Financial / Business Services	Human Resources
5-1	Employee Health and Safety Severity Rate			✓
5-2	Training Hours per Employee			✓
5-3	Customer Accounts per Employee (Water)	✓	✓	
5-3	Customer Accounts per Employee (Wastewater)	✓	✓	
5-4	Employee Turnover	✓		✓
5-5	Retirement Eligibility	✓		✓
5-6	Organizational Best Practices Index	✓	✓	✓

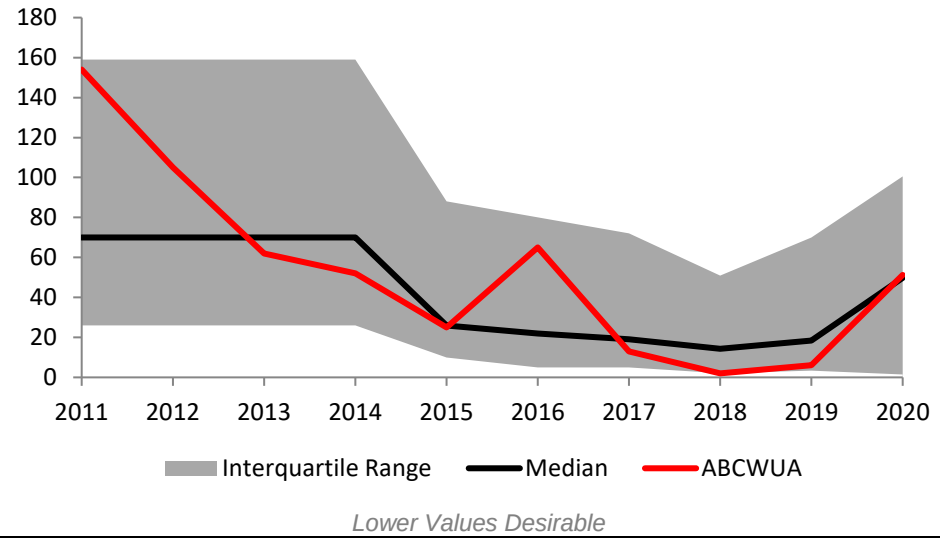
5-1 Employee Health and Safety Severity Rate

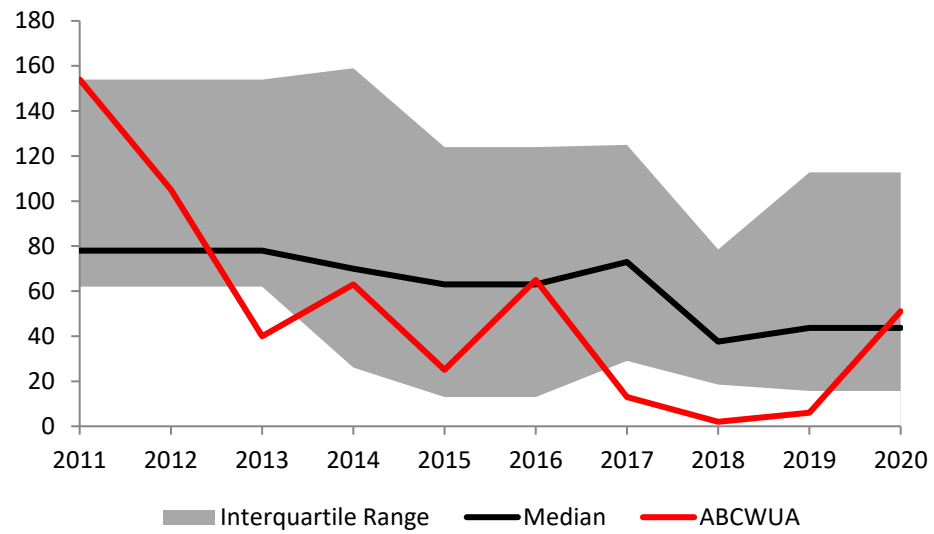
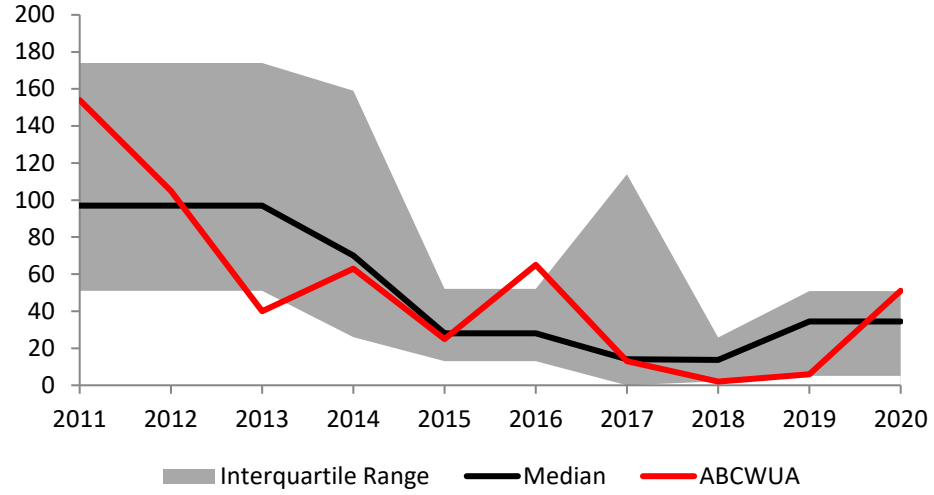
Performance Results

Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				2017	2018	2019	2020	2021	
Effectiveness	Quantify the rate of employee days lost from work due to illness or injury	Total workdays away from work and total hours worked by all employees	27	13	2	6	6	51	Improve employee health and safety to reduce total workdays from work

Industry Benchmarks

Combined Water/ Wastewater Utilities



Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

The Occupational Safety and Health Administration (OSHA) has established accident and illness recording and reporting requirements that affect most organizations. The OSHA standard is recommended because it has broad applicability and most utilities are already recording the needed data. The OSHA lost-days measure quantifies the rate of days lost due to illness or injury per 100 employee-years of work. It was selected as a good measure for water and wastewater utilities because it summarizes a very useful set of data that is readily available at most utilities.

Excessive lost workdays affect productivity and can cost utilities in a number of ways. Health care, insurance premiums, and overtime can all be adversely impacted by lost work due to injury or health reasons.

Measurement Status

The Water Authority's performance in this measure was below the median range since the Water Authority began measuring its performance in 2005. Since 2006, the Water Authority's performance in this measure has improved every year with a 100% decrease in injury hours over the last ten years. From past policy objectives, the Water Authority has developed safe work incentives and routine employee safety training. In addition, the Water Authority improved its Light Duty Program in order to get workers back to the job safely. This new process has provided a clearer understanding on what needs to take place when an injury occurs including the documentation, payroll coding and expectation and assignment of the employee. Starting in 2009, the Water Authority awarded its employees with a $300 incentive payment, taxes paid for meeting injury reduction goals. Overall, employees met the target goal 10 out of the 13 years.

A policy objective for FY22 is to reduce injury hours to 2,600 hours or less to improve productivity and reliability of services provided by employees; the goal is connected with a $300 per employee safety incentive program. Another FY22 Objective is to provide a variety of job-related safety trainings, opportunities for recognition, and safety communications to create awareness and promote good work practices.

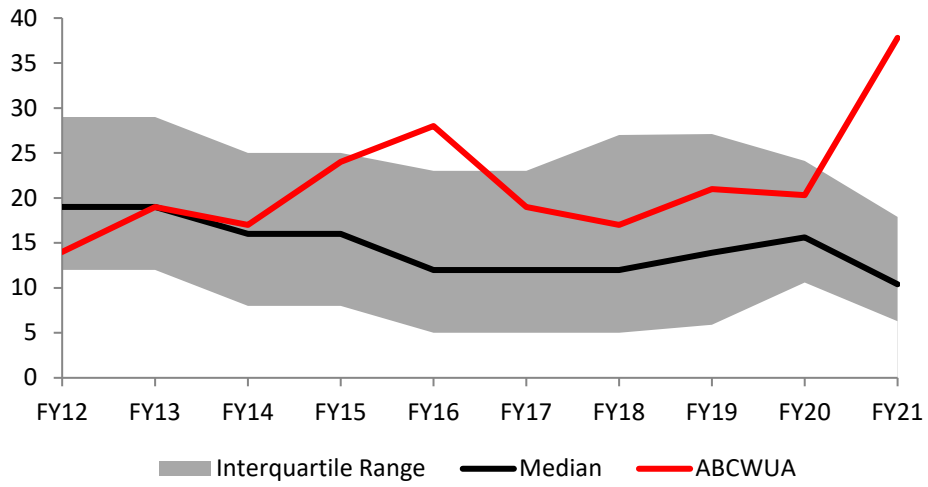
5-2 Training Hours per Employee

Performance Results

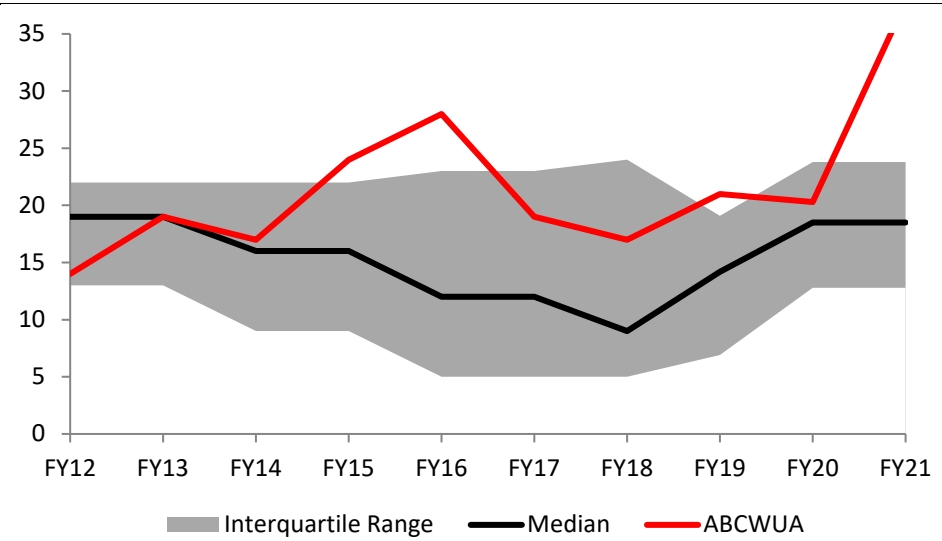
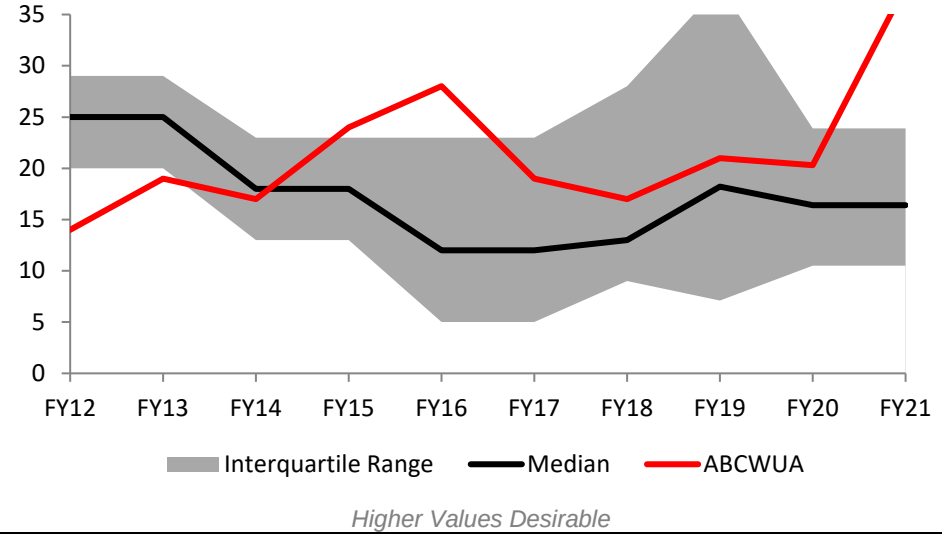
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Effectiveness	Measure the quantity of formal training completed by Water Authority employees	Number of formal training hours per employee per year	19	17	21	20	38	30	Improve employee knowledge and skills to maintain a motivated and effective works force

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

This measure is intended to reflect the organization's commitment to formal training as a means of improving employee knowledge and skills. It also does not address the effectiveness or efficiency of the training programs used by the utility.

Measurement Status

The Water Authority's performance in this measure has been within or above the median range for the past three fiscal years. The Water Authority adopted a policy objective in FY09 to increase certification training hours and by creating an organizational succession plan by implementing hiring, training and certification programs for mechanics, electricians and electronics technicians. The Water Authority has improved it performance in this measure in FY10 and FY11 from implementation of several training programs. In the past two fiscal years, the utility has developed and implemented a training program for meter replacement program as well as the technicians maintaining the AMI program. The Water Authority continued to improve its performance in FY21 by implementing a new two-year mid-management certification training program that allows growth in the knowledge, skills and abilities for these employees and provide for better leadership and supervisor capabilities.

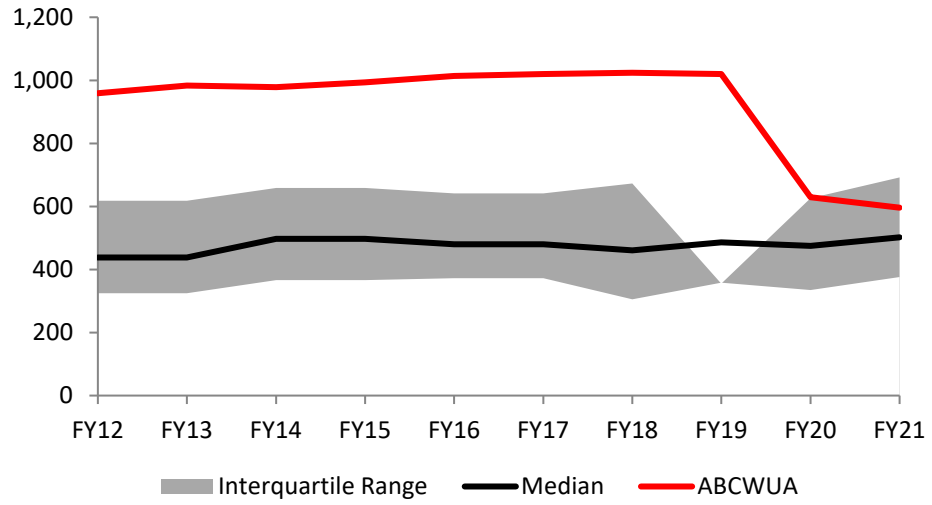
5-3 Customer Accounts per Employee

Performance Results (Customer Water Accounts per Employee)

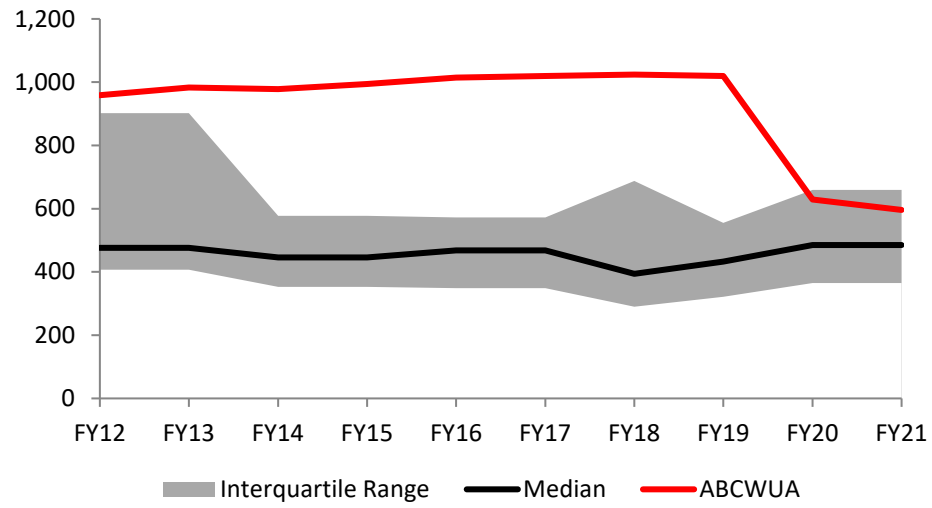
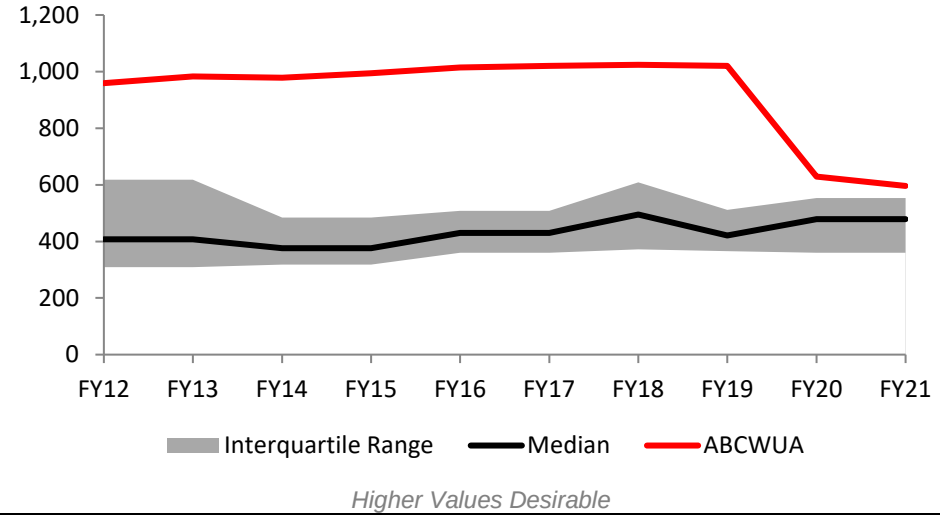
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Measure employee efficiency	Number of active accounts per employee and average million gallons of water delivered and processed per day per employee	1,021	1,024	1,020	629	596	700	Provide efficient service to our customers to meet their expectations

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

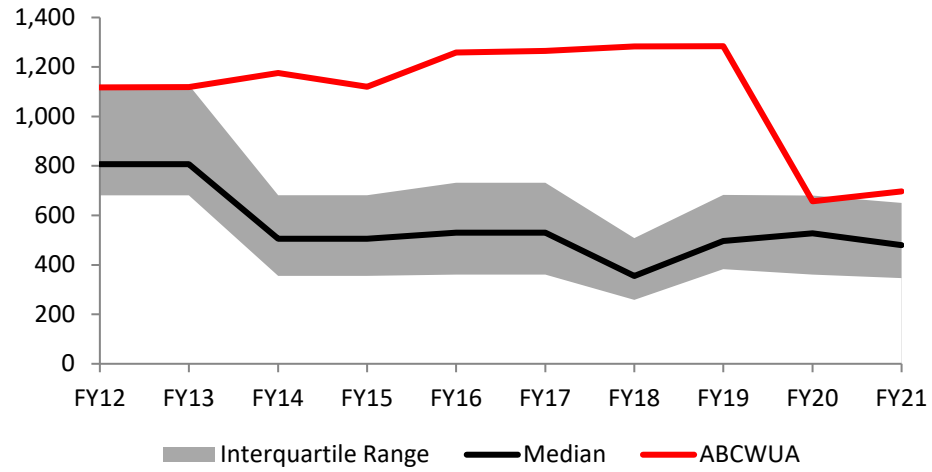
Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Performance Results (Customer Wastewater Accounts per Employee)

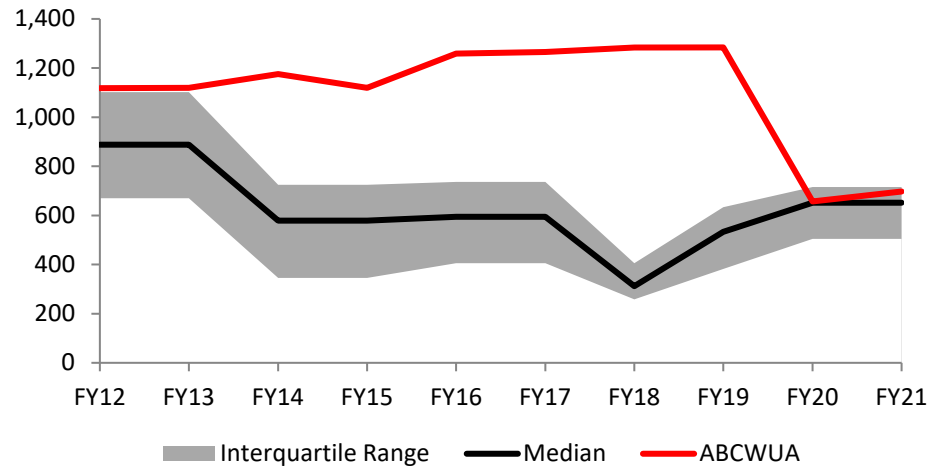
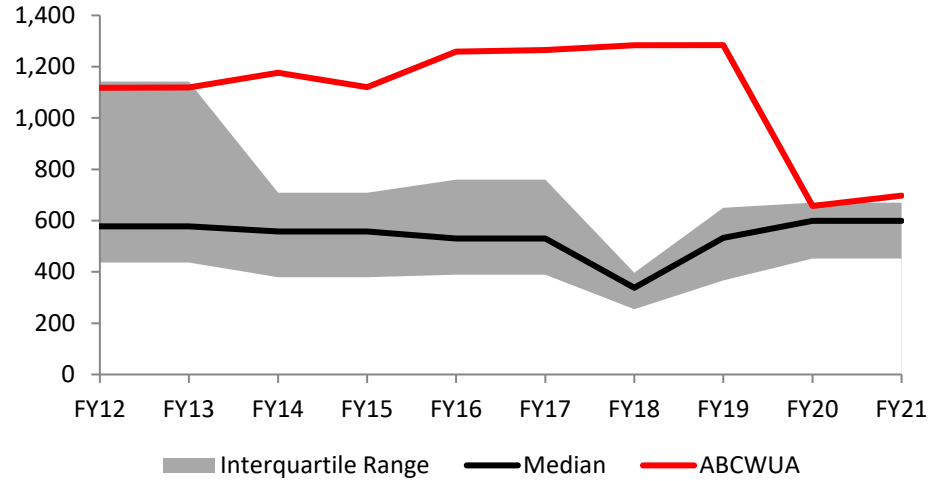
Measure Type	Purpose	Inputs	Outputs					Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Measure employee efficiency	Number of active accounts per employee and average million gallons of water delivered and processed per day per employee	1,272	1,273	1,283	657	697	800	Provide efficient service to our customers to meet their expectations

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative
These measures measure employee efficiency expressed by water and wastewater accounts per employee.

Measurement Status
The Water Authority's performance in this measure has been within the top quartile for the past three fiscal years for water and wastewater accounts per employee. The utility anticipates no change in the metric for FY22.

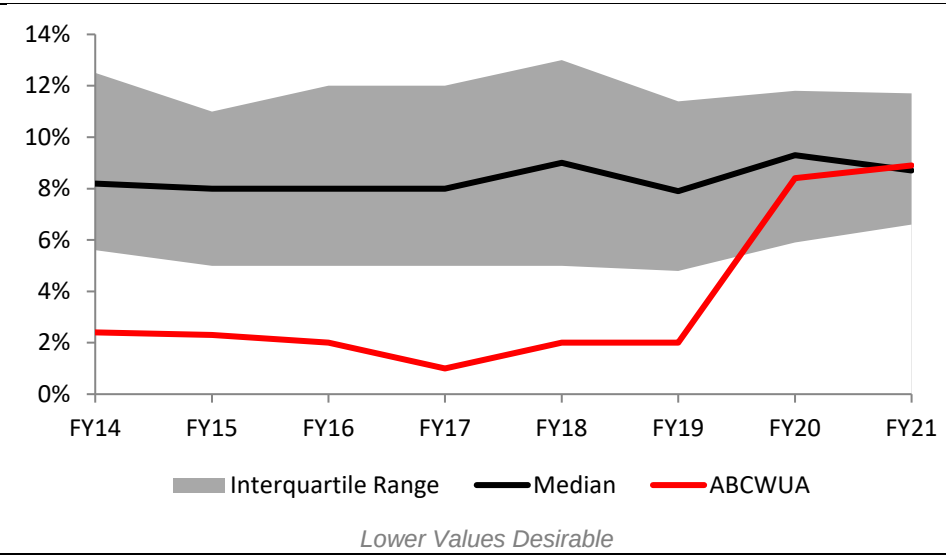
5-4 Employee Turnover

Performance Results

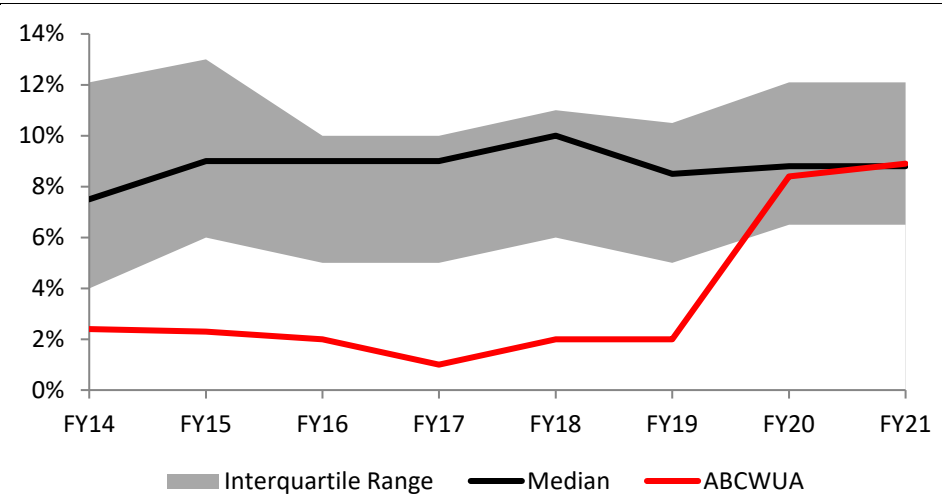
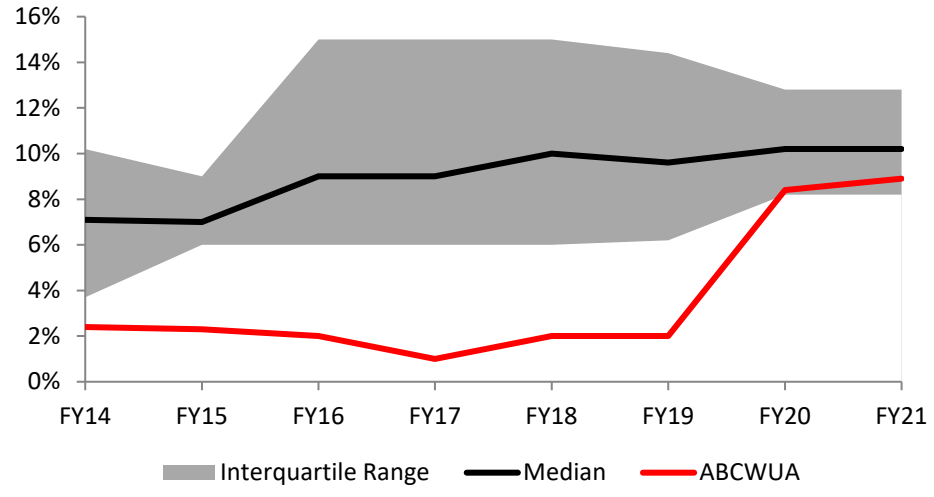
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Quantify the annual employee departures	Number of regular employee departures during the reporting period / Total number of FTEs	2%	1%	2%	2%	2%	2%	Determine staffing levels for operation needs and meeting service levels

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

This indicator quantifies annual employee departures normalized by the utility's workforce (as FTEs) per year. Regular employee departures include employees who leave voluntarily, retire, or are let go during the reporting period. Regular employees are those who worked more than 1,000 hours during the reporting period.

Measurement Status

The utility's performance is above the median range. The utility will continue to track this metric to determine staffing levels for operation needs and meeting service levels.

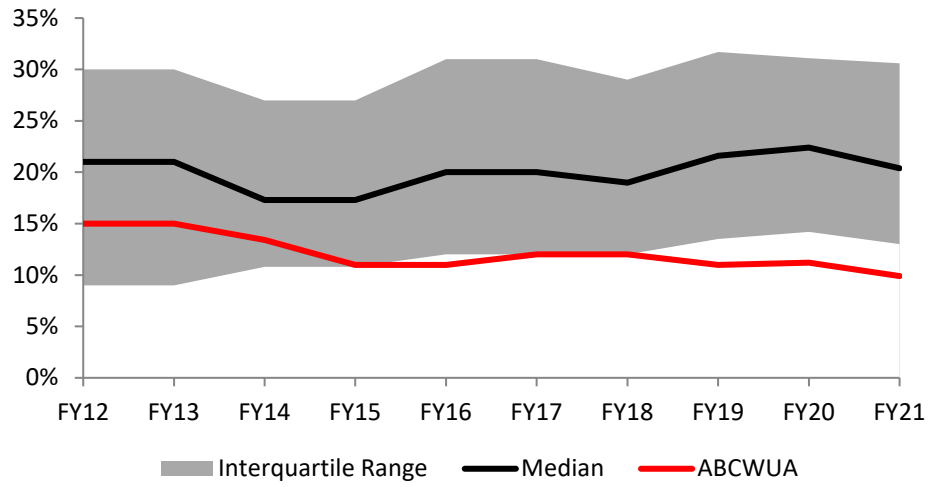
5-5 Retirement Eligibility

Performance Results

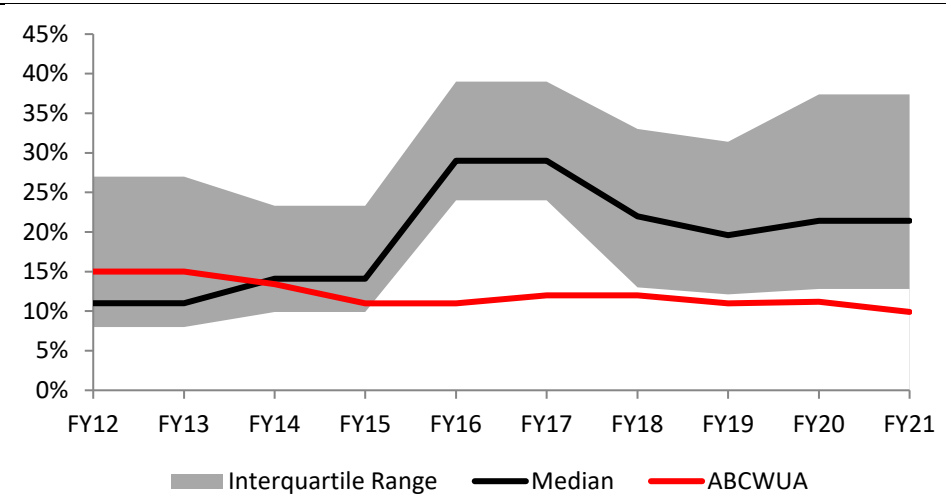
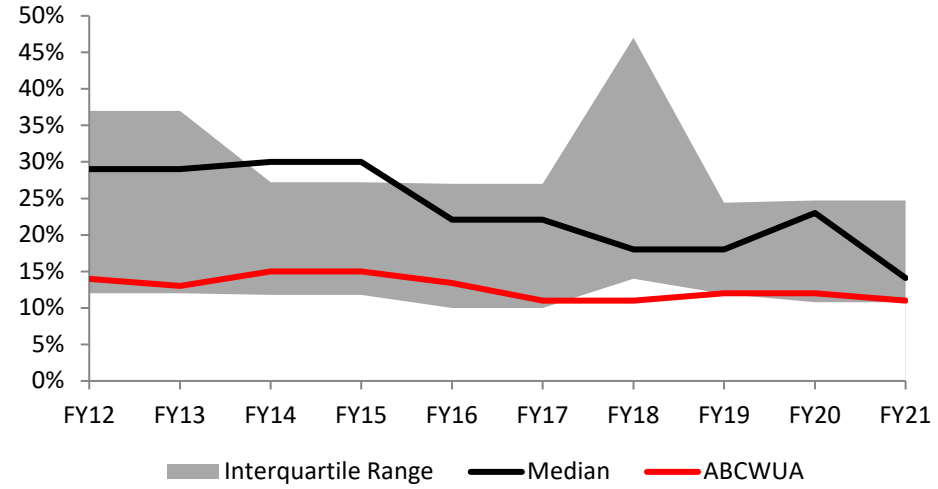
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Efficiency	Quantify the number employees who can retire	Number of regular employees eligible for retirement in the next 5 years / Total number of FTEs	11%	12%	11%	11%	10%	10%	Determine staffing levels for operation needs and meeting service levels

Industry Benchmarks

Combined Water/ Wastewater Utilities



Lower Values Desirable

Utilities with populations greater than 500,000	 *Lower Values Desirable*
Utilities located in Region 4	 *Lower Values Desirable*

Results Narrative

This indicator provides a measure of the number of regular employees eligible for retirement normalized by the utility's workforce (as FTEs). Regular employees are those who worked more than 1,000 hours during the reporting period.

Measurement Status

The utility's performance is within or above the median range. The utility will continue to track this metric to determine staffing levels for operation needs and meeting service levels.

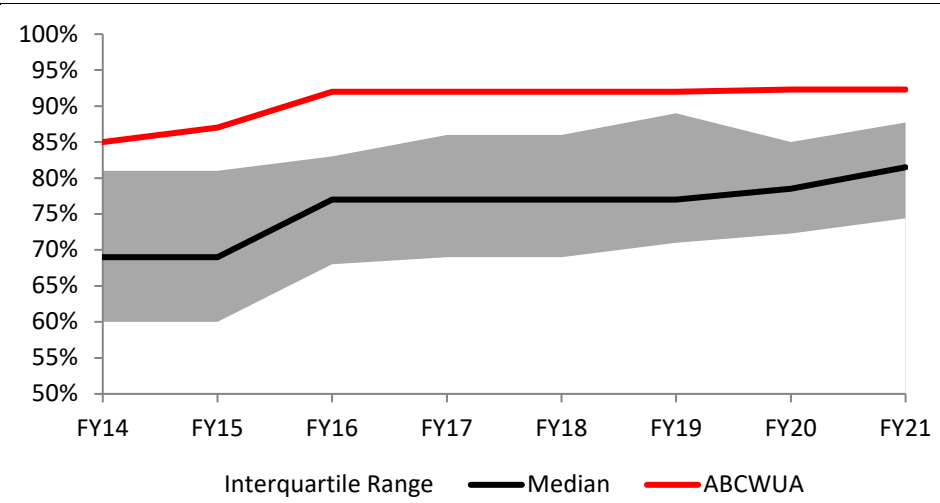
5-6 Organizational Best Practices Index

Performance Results

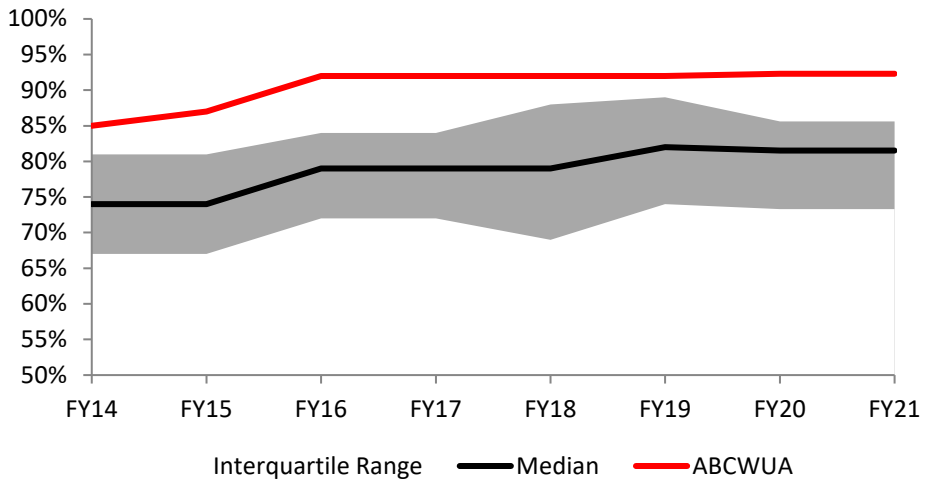
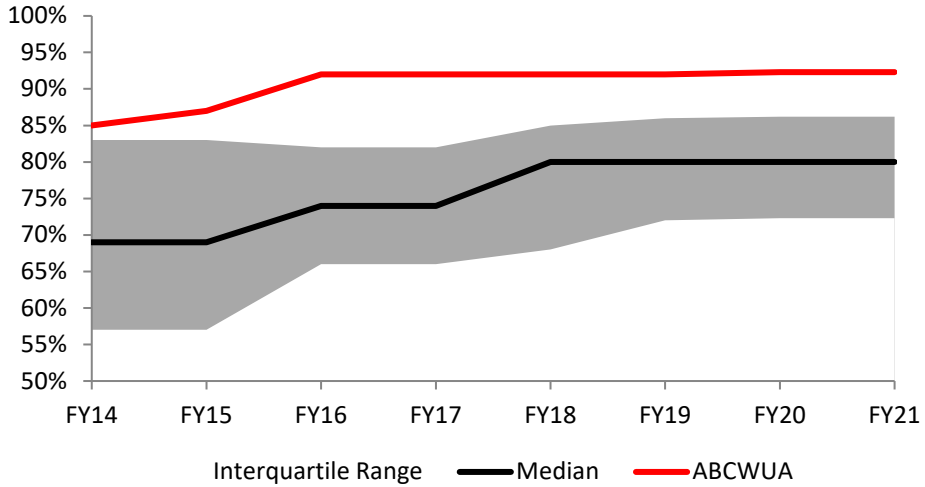
Measure Type	Purpose	Inputs	Outputs						Outcome
			Baseline	Prior Year Actuals			Current/Est	Projected	
				FY18	FY19	FY20	FY21	FY22	
Quality	To summarize the Water Authority's implementation of management programs important to water and wastewater utilities	Self-scoring system to identify the degree to which the Water Authority is implementing the seven organizational best practices	92%	92%	92%	92%	92%	92%	Implement best management practices to sustain a competitive work force

Industry Benchmarks

Combined Water/ Wastewater Utilities



Higher Values Desirable

Utilities with populations greater than 500,000	 *Higher Values Desirable*
Utilities located in Region 4	 *Higher Values Desirable*

Results Narrative

This measure summarizes the status of implementation of good management practices at a utility. It is particularly useful for identifying potential benchmarking partners, especially organizations that may have advanced knowledge and experience with applying these tools. Correlations with other measures might show that performance in other areas is related to investments in improved management practices. The Water Authority used a self-scoring system to identify the degree to which organizational best practices are being implemented. The scoring system is based on assessments performed by the utility through the Effective Utility Management (EUM) framework. Scores for the fourteen areas are aggregated as a percentage.

The practices included in the index are as follows:

- Strategic Planning & Implementation
- Long-term Financial Planning
- Risk Management Planning
- Performance Measurement System
- Optimized Asset Management Program
- Customer Involvement Program
- Governing Body Transparency
- Drought Response/Water Shortage Contingency Plan
- Source Water Protection Plan
- Succession Planning
- Continuous Improvement Program
- Leadership Effectiveness

Measurement Status

The Water Authority's performance in this measure is above the median range for the past three fiscal years. After implementing the areas of improvement from the EUM assessments, the Water Authority anticipates continued progress on this measure. This measure is particularly useful for identifying potential benchmarking partners, especially organizations that may have advanced knowledge and experience with applying these tools. The Water Authority is working on its EUM program which incorporates the benchmarking performance indicators from the AWWA Utility Benchmarking program. The utility will utilize the EUM program to make performance improvements in its operations and service delivery by examining its performance on a quarterly basis.

NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES
EXCELLENCE IN Management AWARD

The Water Authority received the **Gold** Excellence in Management Award in 2015 and 2019 recognizing the utility's significant achievement in utility management and adopting successful management practices.

In 2016 and 2019, the Water Authority was been recognized as a Utility of the Future Today. The Utility of the Future (UOTF) Today Recognition Program is a partnership of the Environmental Protection Agency and water sector organizations—the National Association of Clean Water Agencies, the Water Environment Federation, the Water Research Foundation and the WateReuse Association. The program celebrates the progress and exceptional performance of utilities while supporting the widespread adoption of the innovative UOTF business model. Utilities were selected for recognition based upon the adoption of UOTF principles (water reuse, watershed stewardship, beneficial biosolids reuse, community partnering & engagement, energy efficiency, energy generation & recovery, and nutrient & materials recovery) as the "Organizational Culture of the Future." The Water Authority was recognized for its efforts in transitioning from a traditional wastewater treatment system to a community-based resource recovery center and leader in the overall sustainability and resilience of the community the utility serves. UOTF acknowledged the Water Authority's progress in utility management, community partnerships and engagement, beneficial biosolids reuse, and water reuse.

In 2018, the Water Authority was recognized for its excellence in utility management through the highest accolade given by the Association of Metropolitan Water Agencies – the Platinum Award. The utility was recognized for high-quality, affordable water, responsive customer service, attention to resource management, infrastructure renewal and environmental protection.