Central Arkansas Water
Essential & Exceptional

2019 FINANCIAL PLAN

SAFE, LOW-COST, ABUNDANT,
DEPENDABLE, HIGH-QUALITY WATER

FROM FOREST TO FAUCET

CENTRAL ARKANSAS WATER

OUR MISSION

To enhance the quality of life for Central Arkansas by delivering high-quality water and dependable service that exceed customer expectations; protecting and ensuring a long-term water supply for future generations; and serving as responsible stewards of public health, utility resources, and the environment.

THE VALUES PICTURE

PROFESSIONALISM: I will be courteous and responsible in my dealings with others and will adhere to the technical and professional standards of my job.

INTEGRITY: I will display honesty in my work and interactions with others and will adhere to high moral and ethical standards. I will be fiscally responsible and conservative in the use of funds and resources entrusted to our utility.

CONTINUAL IMPROVEMENT: I will search for a new and better way of doing things, embracing new technologies and sustainable business practices. I will seek ways to enhance my own professional development, as well as that of my co-workers.

TEAMWORK: I will support my co-workers with enthusiasm, work collaboratively and do my part to ensure Central Arkansas Water achieves its goals.

UNITY: I will work in harmony with others to ensure a positive, safe and healthy work environment. I will consider the needs and viewpoints of customers and community stakeholders and work collaboratively with each. I will appreciate diversity and value the differences that each individual brings to any situation.

RESPECT: I will treat others with high regard, fairness and consideration.

EXCELLENCE: I will work to ensure that Central Arkansas Water meets and exceeds "world class" standards and the expectations of those I work with and the customers we serve.

Central Arkansas Water
Essential & Exceptional

GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Central Arkansas Water

Arkansas

For the Fiscal Year Beginning

January 1, 2018

Christopher P. Morrill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Central Arkansas Water for the Utility's 2018 annual budget.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operation guide, as a financial plan, and as a communication device.

The award is valid for a period of one year only. We believe the current budget continues to conform to program requirements, and we are submitting it to GFOA for an award.

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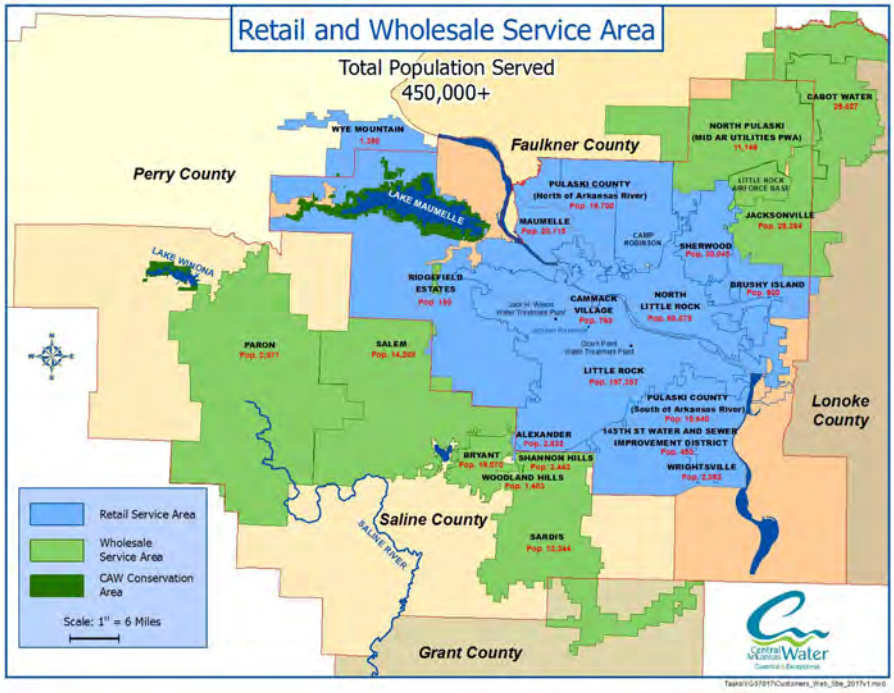
INTRODUCTION

About Central Arkansas Water

Central Arkansas Water (CAW or the Utility) is the largest water supplier in the State of Arkansas. The Utility plays an integral role in the quality of life for residents and the economic health of the communities it serves. As a regional water supplier serving a population of over 450,000, CAW contributes to the public health and well-being of one in every seven Arkansans. In addition, CAW supplies the water needed by industries that compete in regional, national, and international markets. The Utility serves approximately 204,000 metered connections through retail and wholesale service to customers in Pulaski, Saline, Grant, Perry, Lonoke, White, and Faulkner counties.



CAW's retail service boundaries encompass the cities and communities of:

- Little Rock
- North Little Rock
- Sherwood
- Maumelle
- Alexander
- Brushy Island Public Water Authority
- Cammack Village
- College Station
- Wrightsville
- Wye Mountain
- 145th Street Water and Sewer Improvement District
- Frazier Pike Public Facilities Board
- Unincorporated Pulaski County

In addition, CAW provides all of the treated water supply for the cities of Bryant and Shannon Hills in Saline County, as well as Ridgefield Estates Public Facilities Board in Pulaski County. The Utility provides a supplemental water supply to Jacksonville Water Works in Pulaski County, whose service area includes the Little Rock Air Force Base; the Salem Water Users Association in Saline County; Sardis Water Association, which serves parts of Saline and Grant counties; Cabot Waterworks in Lonoke County; Mid-Arkansas Utilities, which serves parts of Pulaski and Faulkner Counties; and Saline County Water & Sewer Public Facilities Board (Woodland Hills) in Saline County.

CAW's Past

The history of CAW and community water service in the Little Rock–North Little Rock metropolitan area dates back to the early 1800s when springs, shallow wells, and rainfall collected in cisterns provided water for the area.

Beginning in the mid 1870s, water was pumped directly from the Arkansas River into the distribution system. This water supply was good for firefighting, but the untreated water was not ideal for drinking. A yellow fever epidemic in Memphis in 1879 prompted the Little Rock City Council to seek a solution to the area's water quality problems. In 1886, two basins were constructed on Ozark Point, which today is the site of the Ozark Point Water Treatment Plant (Ozark Point Plant). Water was pumped into the basins from the river and allowed to "settle" before flowing into the distribution system. The process significantly increased the water quality at the time.

From the late 1880s to the mid 1930s, a succession of investor-owned utilities served Little Rock and North Little Rock. On the north side of the Arkansas River, the private interests included Home Water Company, Little Rock Water Works Company, American Water Works & Electric Company, Arkansaw Water Works Company, and North Little Rock Water Company. The private interests on the south of the river included the same private companies operating in North Little Rock with the exception of the North Little Rock Water Company.

The Arkansaw Water Works Company owned the Little Rock system from 1910 to 1936. In 1936, the City of Little Rock, after securing a Federal grant and loan through the U.S. Federal Emergency Administration of Public Works, purchased all facilities serving the south side of the river. The North Little Rock Water Company owned the water system on the north side of the Arkansas River from 1936 to 1959, when the City of North Little Rock purchased the facilities serving its corporate boundaries and its rural customers.

At this time, the City of Little Rock and the water utility started construction of a dam on the Alum Fork of the Saline River. Plans for a comprehensive supply project included the dam and lake (later named Lake Winona); a 39-inch, 35-mile raw water line; a new purification plant at Ozark Point; and an auxiliary reservoir three miles west of the plant. The buildings at the Lake Winona pump station were built by the Civilian Conservation Corp and Works Progress Administration as part of the New Deal.

Lake Maumelle Construction in 1957

By 1947, Lake Winona had been serving the CAW area for a decade. Studies showed fast growth and demand for water service in the region. As a result, Lake Maumelle was built. By 1958, Lake Maumelle's water flowed into the water system for the first time. Lake Maumelle was built to be much bigger than Lake Winona and encompasses 13.9 square miles. The Jack H. Wilson Water Treatment Plant (Wilson Plant) began treating water in 1966. Expansions, over the years in 1977, 1984, and 1999, have taken its treatment capacity from its original 25 million gallons per day (MGD) to 133 MGD, as well as its storage capacity of five million gallons (MG) to 15 MG. Water flows from the Lake Maumelle Pumping Station by way of a 48-inch pipeline for over nine miles to the Wilson Plant. A 72-inch pipeline carries water more than 15 miles from Lake Maumelle to the Ozark Point Plant.

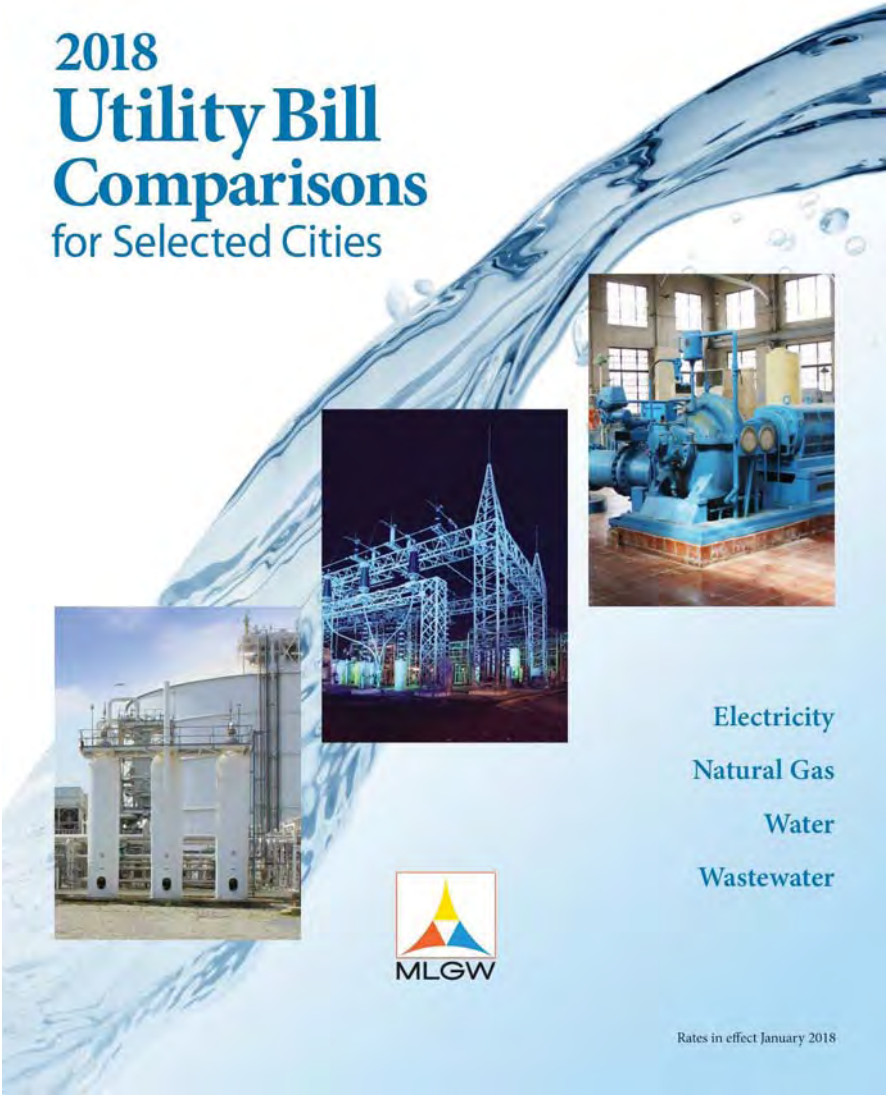
In 2000, a study by the University of Arkansas at Little Rock inspired the cities of Little Rock and North Little Rock to make a major change in their relationship by moving past geographical differences and corporate interests to benefit the entire customer base and surrounding area. The result was a unanimous decision by the cities' governing bodies and water commissions to merge Little Rock Municipal Water Works and the North Little Rock Water Department into a single regional water provider ultimately named Central Arkansas Water.

The merger was the first in Arkansas to bring together municipal water systems owned by different cities. CAW exemplifies the kind of success and level of inter-local cooperation possible through a collaborative effort of city officials, utility officials, community leaders, and business leaders.

CAW's Present

CAW remains a quasi-governmental entity, serving the best interest of its ratepayers. A seven-member Board of Commissioners governs the Utility, and a Chief Executive Officer (CEO) oversees day-to-day operations and administration. The Utility's organizational structure includes eight departments: Administration, Customer Service, Distribution, Engineering, Finance, Information Services, Water Production, and Water Quality.

CAW is an industry leader in the areas of excellent water quality, exemplary regulatory compliance, outstanding system reliability, prudent financial management, affordable rates, effective source-water protection, exceptional customer service, and strong public involvement. In the 2018 Memphis Light, Gas, and Water (MLGW) rate survey, CAW continues to offer one of the lowest water rates in the country.



MLGW 2018 Rate Survey
Ten Lowest Residential Water Bills

	Location	Company	5 CCF	10 CCF	15 CCF
1	Orlando, FL	Orlando Utilities Commission	$10.48	$13.71	$20.07
2	Phoenix, AZ	City of Phoenix	$6.90	$17.26	$36.66
3	Memphis, TN	Memphis Light, Gas & Water	$9.18	$18.36	$27.54
4	**Little Rock, AR**	**Central Arkansas Water**	**$12.98**	**$21.53**	**$30.08**
5	Nashville, TN	Metro Water Services	$10.12	$21.77	$33.42
6	Salt Lake City, UT	Salt Lake City Public Utilities	$16.01	$22.51	$29.01
7	Huntsville, AL	Huntsville Utilities	$17.59	$24.28	$31.43
8	Miami, FL	Miami-Dade Wtr & Sewer Dept	$8.05	$25.29	$44.57
9	St Louis, MO	City of St. Louis Water Division	$16.80	$25.65	$34.50
10	Dallas, TX	Dallas Water Utilities	$13.01	$26.03	$45.25

The Utility's service boundaries encompass approximately 530 square miles. The combined safe yield from the two surface water sources is 120 MGD. The maximum treatment capacity of the Wilson Plant is 133 MGD, and the treatment capacity of the Ozark Point Plant is 24 MGD. The Utility has 50.4 MG in remote storage capacity serving 22 pressure systems and another 25 MG storage in clearwells at the treatment plants.

The major components of the system are:

- **Raw Water Supply**
  - Lake Winona
  - Lake Maumelle
- **Regulating Water Storage Facility**
  - Jackson Reservoir
- **Pipeline**
  - 2,506 +/- miles of pipeline
- **Remote Booster Stations**
  - 25 booster pumping stations
- **Remote Storage**
  - 30 remote storage facilities
- **Treatment Facilities**
  - Jack H. Wilson Water Treatment Plant (*Wilson Plant*)
  - Ozark Point Water Treatment Plant (*Ozark Point Plant*)

In early 2018, a 30-inch transmission main connecting the Maumelle Water Management (MWM) service area to the CAW distribution system was completed. This new transmission main enables CAW to provide a sufficient water supply to satisfy Maumelle peak water demands at full build-out, eliminating the risk of repeating the water shortages experienced in 2012 by MWM. To continue Maumelle improvements as outlined in the CAW-MWM consolidation agreement, the Distribution Department completed the meter change-out project in 2018. Towards the end of 2018, the decommissioning of the MWM water treatment plant and wells project was started and is scheduled to be completed in 2019.

In the fall of 2016, CAW commenced work on the 2020 Strategic Plan, CAW's third strategic planning document. Operations, goals, and objectives remain greatly influenced by the ten attributes of Effective Utility Management (EUM), and CAW's 2020 Strategic Plan adopts seven related initiatives to help utility efforts through 2020 and beyond. Further details on the goals of the 2020 Strategic Plan are presented starting on page 34.

CAW's Future

Major objectives of the Utility are to secure future water sources for Central Arkansas and to consolidate surrounding systems to assure a sustainable water utility for the metropolitan statistical area. CAW is a member of the Mid-Arkansas Water Alliance (MAWA), which, in collaboration with the Metroplan Council of Local Governments, is leading a regional initiative to develop water sources that will meet the region's needs through the 21st century.

CAW's Manager of Planning, Regionalism, and Future Water Source is on MAWA's Board of Directors and has been the president of that organization for the past five years. Metroplan, which serves the four-county region of Pulaski, Saline, Lonoke, and Faulkner, along with officials of other cities and rural areas, is an integral partner in the effort.

In 2013, MAWA reached an agreement with the U.S. Army Corps of Engineers (the Corps) to withdraw 15 MGD out of Greers Ferry Lake. Currently, eight MAWA member utilities are taking water from Greers Ferry Lake to serve their respective customers as part of the Lonoke-White Water Treatment Plant project. Lonoke-White withdraws and treats approximately 3.5 MGD.

Following this successful agreement and use of the water from Greers Ferry Lake for the Lonoke-White project, CAW and 27 participating cities and water user groups, through MAWA, submitted an allocation request to the Corps in early 2015 for an additional 15 MGD from Greers Ferry Lake. This second allocation request is pending before the Corps and is projected to be approved in early 2019.

The approach to identify and secure the most feasible future water sources for regional needs represents one of the best ways to meet the needs of these communities while minimizing the financial burden on individual systems, particularly smaller systems.

CAW is continuing negotiations with the Corps and the Southwest Power Administration to purchase water rights of 100 MGD in DeGray Lake. The Utility has owned the right of first refusal to 120 MGD in DeGray Lake since 1988. In 2013, CAW assigned the City of Hot Springs an option for up to 20 MGD, and, shortly thereafter, CAW informed the Corps that the Utility desired to exercise its option to acquire the storage space in DeGray Lake for the remaining 100 MGD. CAW and the City of Hot Springs are currently negotiating the terms and conditions of the Water Storage Agreement that each party will execute with the Corps. The general terms of the proposed Water Storage Agreement have been agreed upon, but negotiations continue on details regarding electrical generation charges the Corps seeks to recover from CAW and that CAW does not believe are appropriate. The agreement is projected to be executed in 2019. The additional 100 MGD allocation will help meet the water needs of the Central Arkansas area through the middle of the next century.

In late 2017, CAW embarked on a multi-year project to analyze and streamline current business processes as well as improve the ways it uses technology. One major aspect was the selection of a new customer information system (CIS). The CIS is a critical asset which impacts all customer facing activities of the Utility and assures a stable revenue stream for CAW and its billing partners. While CAW's current CIS has served the Utility well for nearly 20 years, utility growth and process evolution have revealed its shortcomings. CAW contracted with EMA, Inc. in 2017 to conduct a comprehensive review of CAW's information technology systems, including the CIS. This assessment determined that CAW should install a more robust CIS and redesign many of its older business processes to best leverage current technology. In 2018, CAW selected Cayenta as the new CIS vendor. Implementation of Cayenta Utilities has begun and will continue into 2019 and 2020.

Beginning in early 2018, CAW collaborated with Performance Services for recommendations on energy cost savings and more efficient energy avenues. Performance Services recommended adding solar arrays onto CAW land holdings and the surface of Lake Maumelle. CAW plans to move forward with this recommendation. This project will also assist in enhancing pumping equipment, HVAC (heating, ventilation, and air-conditioning) equipment, and building lighting options. This project is slated to continue into 2020.

CAW continues to explore strategic opportunities to expand its rate base where operationally and fiscally appropriate. CAW will look to leverage its core competencies in operations and billing services to generate additional, non-water related, revenue sources to provide supplemental funding for infrastructure replacements.

Board of Commissioners

Carmen Smith
Chair

Kandi Hughes
Vice Chair

Eddie Powell
Secretary/Treasurer

Roby Robertson, Ph.D.
Member

Anthony Kendall
Member

Jim McKenzie
Member

Jay Hartman
Member

Management Team

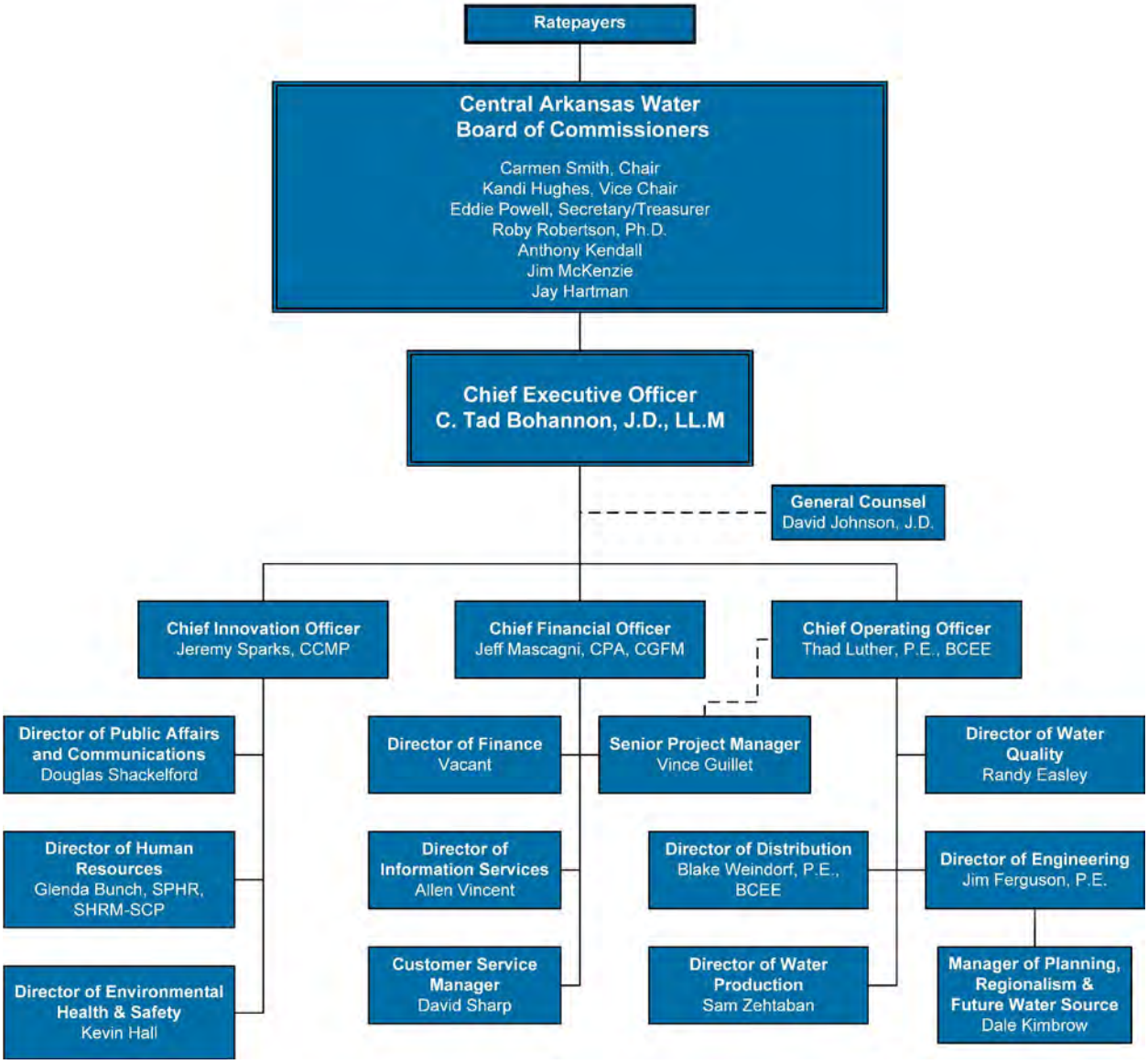
C. Tad Bohannon, J.D., LL.M	Chief Executive Officer
Thad Luther, P.E., BCEE	Chief Operating Officer
David Johnson, J.D.	General Counsel
Jeff Mascagni, CPA, CGFM	Chief Financial Officer
Jeremy Sparks, CCMP	Chief Innovation Officer
Blake Weindorf, P.E., BCCE	Director of Distribution
Jim Ferguson, P.E.	Director of Engineering
Kevin Hall	Director of Environmental Health and Safety
Glenda Bunch, SHRM-SCP, SPHR	Director of Human Resources
Allen Vincent	Director of Information Services
Douglas Shackelford	Director of Public Affairs and Communications
Sam Zehtaban	Director of Water Production
Randy Easley	Director of Water Quality

Financial Plan Development Team

Jeff Mascagni, CPA, CGFM	Chief Financial Officer
Cynthia Edwards, CPA	Controller
Todd Fisher, CPA	Finance Manager
Lacey Hristov, CPA	General Accountant
Sherry Lippiatt	General Accountant
Leo O'Bannion, CPA	General Accountant
Gloria McKenzie	Accounting Clerk II

CENTRAL ARKANSAS WATER
Organizational Chart

Effective: January 1, 2019



December 20, 2018

Board of Commissioners
Customers and Other Interested Stakeholders
Central Arkansas Water
221 East Capitol Avenue
Little Rock, AR 72202

RE: 2019 Financial Plan – Budget Message

Board of Commissioners, Customers, and Other Interested Stakeholders:

Staff respectfully present the 2019 Financial Plan for Central Arkansas Water, titled "Forest to Faucet." While "Forest to Faucet" may be a current buzzword or hash-tag for some, it is a way of life for those of us at CAW. Each employee plays an important role in ensuring that the best possible water travels from the source to each customer's tap. The forest is an important component in determining the quality of water that travels through pipes into our treatment plants and ultimately to a customer's faucet. Keeping the forest near our water sources in optimal condition is a high priority at CAW. In turn, our water retains a higher quality and requires less treatment as it passes through our treatment plants and distribution system to your homes and businesses.

Our Forest to Faucet program was developed not only to educate customers about what we do but also to participate in the communities that we serve. The Citizens Water Academy, The Power of Water professional development course for teachers, and the Forest to Faucet Festival are just a few ways we engage the community and teach stakeholders what we do to ensure that we provide them with the highest quality and best tasting water possible.

The cities of Little Rock and North Little Rock have also shown their commitment to the environment by joining 43 other cities worldwide in the Cities4Forests initiative, committing to conserve and restore their forests while making residents more aware of the far-reaching benefits of trees.

This Financial Plan is designed to present the comprehensive financial framework for all Utility activities for the budget year. The Management team and staff have developed an operating and capital improvement plan that addresses the strategic initiatives put in place as part of the 2020 Strategic Plan, which is discussed starting on page 34. Associated performance measures are discussed in more detail within the department narratives (pages 171 - 232).

Water Source and Water Quality Challenges

CAW has and will continue to encounter challenges as it works to fulfill its mission of providing high-quality water. Absent a catastrophic failure or natural disaster, CAW has sufficient water sources available to cover projected customer needs. This financial plan includes financing to purchase water rights that will provide a redundant water source available to serve the needs of CAW's customers in the event of a catastrophic failure or natural disaster, as well as provide additional capacity to meet the water demands of the Central Arkansas area well beyond the middle of the 22nd century. The ongoing challenge for CAW will be to balance the costs of acquiring the additional water source and constructing the necessary infrastructure to make it a viable redundant supply with the need to keep rates affordable.

Another challenge for CAW is the protection of its surface water sources from human induced threats including pollution and wastewater intrusion, as well as natural threats such as wildfire and sediment originating in the watershed. Preserving our water sources requires a concerted effort. An example of this effort is CAW's annual lake sweep at Lake Maumelle each fall. In 2018, CAW coordinated the 10th Annual Lake Sweep with 30 volunteers including employees participating to maintain the watershed.

The Pulaski County Quorum Court adopted a Lake Maumelle Watershed Zoning Code in April 2013 that established a number of water quality protection measures including density limitations, open space requirements, streamside buffer requirements, and prohibition of activities detrimental to water quality within the Pulaski County portion of the Lake Maumelle Watershed. Full implementation of the Zoning Code occurred in April 2014. Critical water quality protection provisions of the initially adopted Code were maintained in amendments to the Code that were adopted on August 26, 2014. As these amendments and codes are implemented due to development in the watershed, vigilance will be required to assess the impact on water quality and watershed operations.

Water Quality staff are committed to improving water quality at the source and throughout the distribution system. These improvements can be accomplished by efficient operation of the distribution system to reduce water age, installation of water quality monitoring equipment, dispersion of water treatment components throughout the system, and improved management of chlorine residuals. Better protection of our water sources, improvement of the water quality as it leaves the treatment plants and management of that quality throughout the distribution system are high priorities of the Water Production and Water Quality departments.

The best way to meet these challenges is to strive for continual improvement. Researching current best practices, enhancing processes, updating infrastructure, and attending professional development sessions are just a few ways that CAW staff stays on top of a dynamic industry. Water that tastes good, is safe for consumption, exceeds regulatory standards, and is in sufficient quantity are primary goals for all water providers. Successfully achieving those goals means CAW is contributing to the quality of life for its customers and is fulfilling its stated mission.

Infrastructure Improvement and Replacement Challenges

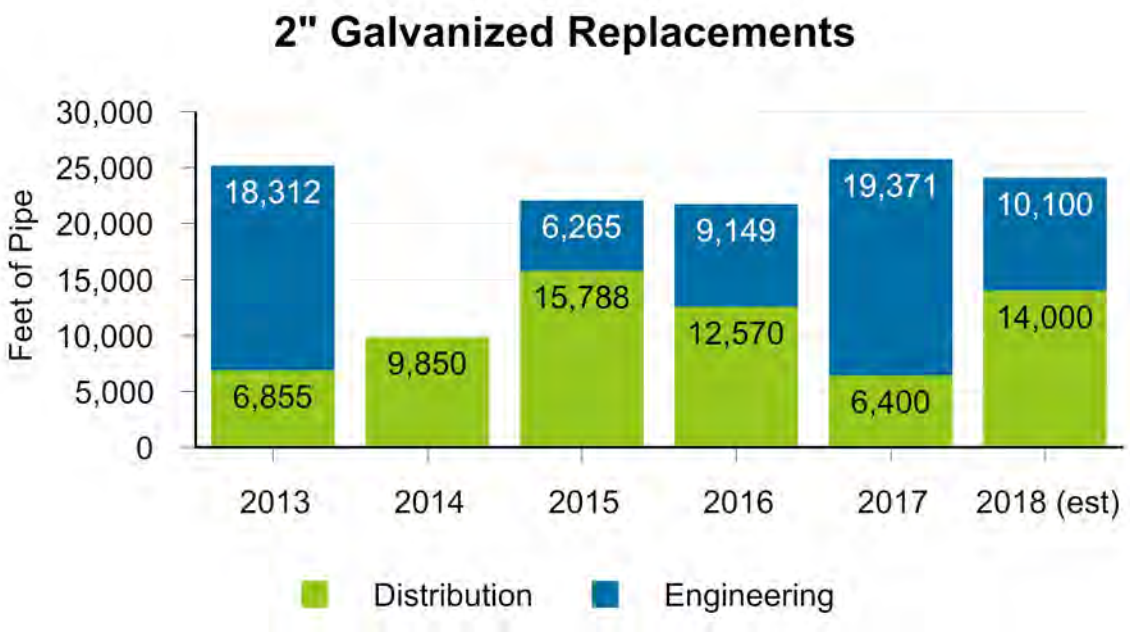
The renewal and replacement of aging infrastructure remained the number one priority identified in the American Water Works Association's (AWWA) 2017 State of the Water Industry Report. The biggest obstacle to completing this task is justifying the necessity to ratepayers.

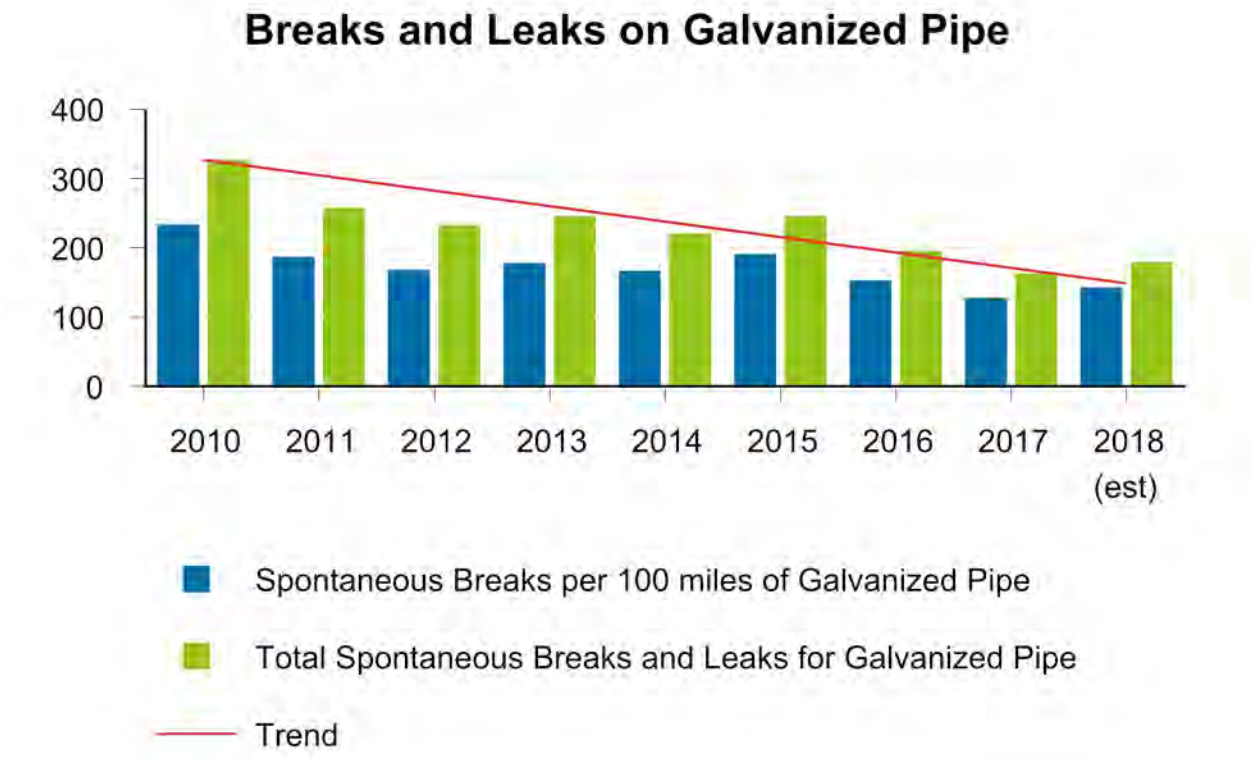
Like many larger U.S. water utilities, CAW has infrastructure that is over 100 years old but still provides service. Maintaining and enhancing aging infrastructure is a significant and ongoing challenge. The process to update infrastructure includes identifying needs and

priorities, estimating the capital costs, implementing the financial mechanisms to pay for the projects, and then repeating the procedure at regular intervals.

Major CAW infrastructure projects in 2019 include continued improvements to Pump Station No. 1A at the Wilson Plant, continued rehabilitation at the Ozark Point Plant, as well as numerous distribution pipe relocations and replacements. Projected 2019 costs for infrastructure capital projects are over $45 million.

Our 2018 accomplishments include the replacement of 24,100 feet of galvanized, asbestos-cement, and cast iron pipe with ductile iron and PVC, which are used for improved strength and performance. Replacement of 10,100 feet of this aging pipe was contracted by the Engineering department, while the remaining 14,000 feet were replaced by Distribution department personnel. From 2013 to 2018, Distribution personnel have replaced over 65,000 feet of galvanized pipe while replacement of over 63,000 feet of the pipe has been contracted by the Engineering department for a total of over 128,000 feet replaced. The table below shows the feet of pipe replaced annually over the six year period. The Engineering department did not replace any galvanized pipe in 2014 due to reallocating resources for increased pipe relocations during that period. Replacing galvanized pipe has reduced the number of breaks and leaks as shown in the graph on the next page. Replacement of these mains by both CAW personnel and contractors remains a high priority and will continue in future years.





Replacing high-maintenance galvanized pipe avoids main breaks that can cause significant street damage.

Main breaks, such as the one in the above picture, can cause damage not only to streets but also to customer property. Replacing galvanize pipes prevents these spontaneous breaks.

Distribution crews are now using portable tablets and taking advantage of an upgrade in the Utility's work management software (CityWorks). CAW uses CityWorks for its infrastructure database as well as the work order generation and recording work order completion. The tablets receive and send data in 'real time' to ensure a faster update of CAW records, provide improved customer service, and increase personnel efficiency by eliminating the time previously spent uploading and downloading information via fixed data stations in the office. Crews are also using global positioning system (GPS) equipment to log the location of each customer's meter. This data is loaded into CityWorks and the Utility's geographic information system (GIS) to aid CAW crews in their responses to main breaks.

Employment Challenges

Increased competition for staff, changing demographics, and having multiple generations in the workforce are several employment challenges. Continuing education, internal

advancement opportunities, and a diverse workforce are factors that contribute to CAW's positive work environment.

The Utility continues workforce succession planning through training and development of all employees, in coordination with the utility-wide succession planning program. Efforts in this area have resulted in annual training averaging 25 hours per employee, which is well above the 20-hour QualServe standard. Employee turnover has decreased in 2018 to 7.7%, following a significant increase in 2016 as members of the baby boomer generation reached retirement age in increasing numbers. An increase to the internal advancement rate will be a goal in 2019. The Utility will strive to focus on succession planning and workforce preparedness in 2019, with a commitment to our HIVIP^2 (**H**igh-performing, **I**nnovative, **V**alues-driven, **I**nformed, and **P**assionate **P**eople) training initiatives which are designed to cultivate a high performing, innovative, values-driven, informed, and passionate workforce through training of all levels of employees and management staff.

Diversity continues to be promoted and celebrated through a positive, inclusive, and respectful work environment that unites co-workers by recognizing and appreciating similarities and differences and effectively utilizing each individual's talents. Diversity and inclusion initiatives include employee "Spotlights" in celebration of National Diversity Month, a celebration of employee heritages through introduction of a genealogy program, and continued support for employee outreach and engagement throughout our community.

CAW will continue steps to ensure compliance with Internal Revenue Service reporting requirements that took effect under the Affordable Care Act in early 2016, the new Medical Marijuana Act of Arkansas, and revisions to other Federal or state employment regulations. The Utility continues to perform well in key employment-related areas: time to fill vacant positions is trending closely to the national average; annual turnover remains at less than half the national average; and cost of benefits has declined and is slightly below the national average.

Financial Challenges

Developing accurate demand forecasts is one of the most significant challenges in creating long-term financial forecasts. There are many factors that influence customer demand projections. Climate and weather conditions, economic drivers, and conservation are a few of the factors that must be considered.

Based on historical consumption analysis coupled with rate consultant recommendations received while establishing water rates for the rate resolution to be approved in December 2018, baseline consumption was adjusted down to 18 billion gallons for 2019. For future revenue estimates, retail consumption is expected to decline 2% annually, while wholesale consumption is projected to remain flat through 2023.

There are no proposed consumption related increases for 2019. A 15 cent increase to the Watershed Protection Fee is proposed to begin in June 2019 and expected to be approved by the Commission in December 2018. A customer billing fee is also expected

to be approved by the Commission in December 2018 and is projected to be approximately two dollars per month per customer, beginning in June 2019.

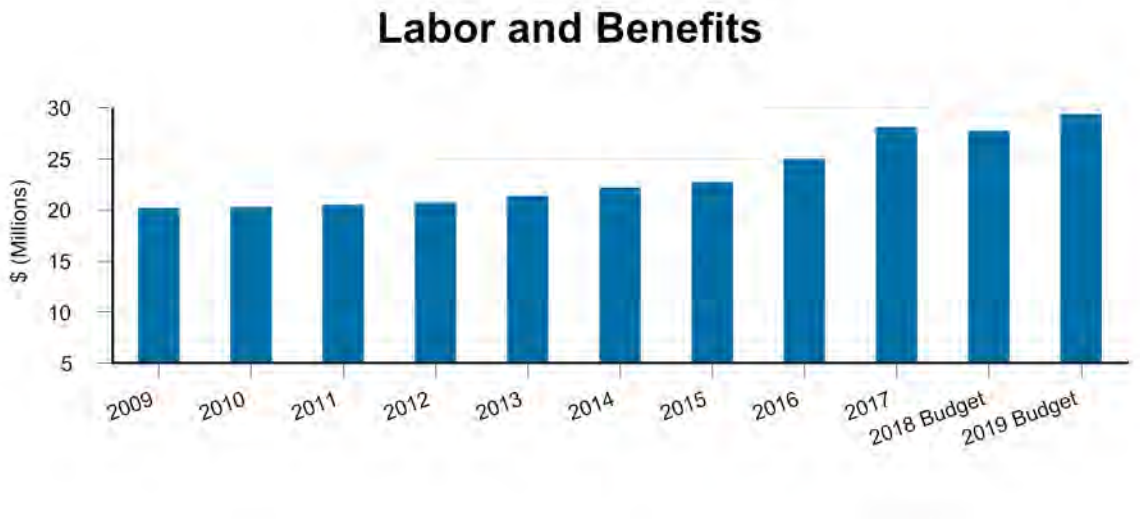
Economy and Budget Summary

Real Gross Domestic Product (GDP) is expected to grow at an annual rate of 3.3%-3.7% during the last half of 2018, with full-year real GDP growing 2.9%, up from 2.2% in 2017. Forecasters predict real GDP will increase slightly to 2.4% in 2019, based on signs of economic growth evidenced by more Federal interest rate increases than expected in 2018. The forecasters predict a relatively static labor market with unemployment remaining at the current low levels through 2020. The national unemployment rate is currently 3.9% (August 2018), down from 4.3% at this time in 2017. The unemployment rate in Pulaski County is currently at 3.4%, down slightly from 3.5% last year.

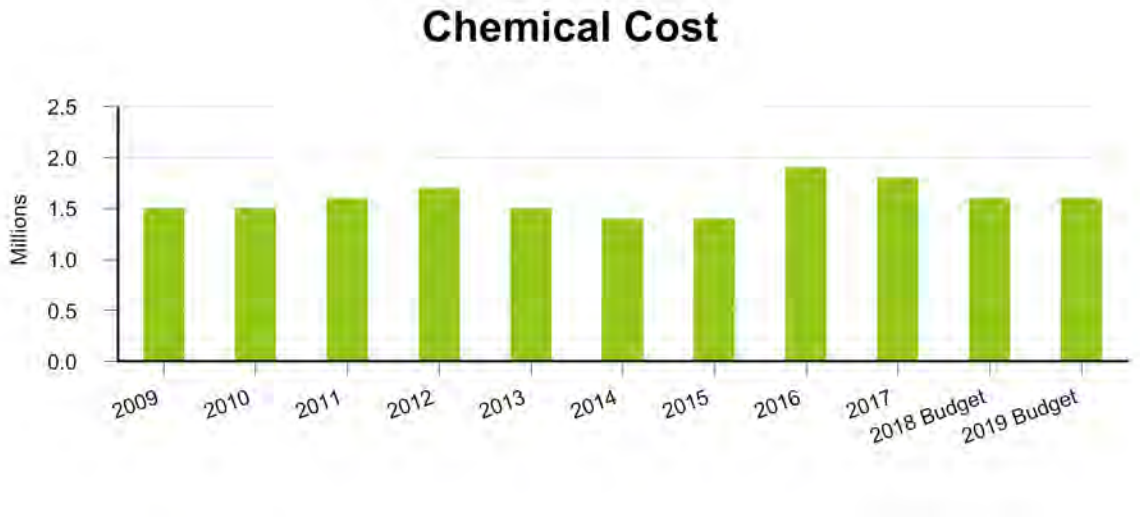
The Arkansas Realtors Association reports that home sales in Arkansas' top five markets (Benton, Pulaski, Washington, Sebastian, and Saline Counties) during the first half of 2018 are up 0.44% compared to 2017. Home sales in Pulaski County are up 2.9% for the first six months of 2018. Arkansas home prices are up 5.3% from this same time period in 2017.

2019 Budget Changes from 2018 Budget		
Operating Revenues	**$ Change**	**% Change**
Decrease in Retail Water Sales	(301,306)	(0.56)%
Increase in Penalties and Turn-on Charges	136,500	6.58 %
Increase in Ancillary Charges	2,086,927	46.02 %
Increase in Maumelle Surcharge Revenue	4,750	0.21 %
Decrease in Other Revenue	(42,400)	(5.05)%
Total 2019 Operating Revenues Budget	**69,198,694**	**2.80 %**
Operating Expenses		
Increase in Labor and Benefits	1,620,644	5.84 %
Decrease in Materials, Supplies, and Maintenance	(43,927)	(0.66)%
Increase in Electric and Other Utilities	28,558	0.65 %
Increase in Contract Services	136,039	3.99 %
Increase in Chemicals	8,493	0.53 %
Decrease in Transition Cost - MWM	(147,000)	(54.04)%
Increase in Depreciation	249,782	1.99 %
Increase in Other	8,000	2.34 %
Total 2019 Operating Expenses Budget	**58,827,825**	**3.27 %**
Capital Costs		
Increase in Capital Costs	**23,355,530**	**72.31 %**
Debt Service		
Increase in Total Bond Debt Service	**1,003,373**	**10.36 %**

The proposed budget for 2019 includes $58.8 million in operating expenses, $55.7 million in capital costs, and $9.7 million in bonded debt service. 2019 includes an increase of 17.7% in health care costs and wage adjustments of 3.5% for employees. The total wage adjustment will amount to $1,045,000 including benefits, which represents 1.8% of the total operating budget. The increase in labor and benefits in 2017 through 2019 is partially attributed to the addition of staff gained through the MWM merger and the CIS project.



The trend in chemical cost has been relatively flat prior to 2015, increasing in 2016 due to the MWM merger. Less consumption in 2017 caused costs to decrease by $164,000 and the closure of the MWM Water Treatment Plant in early 2018 caused costs to decrease by $87,000. 2019 costs are expected to increase by $8,000 or 0.5%, due to the anticipated increases in chemical prices.



Proposed Financial Plan Highlights

- 18.0 billion Gallons – Consumption (1.6% decrease from 2018 Budget)
- $69,198,694 Operating Revenues (2.8% increase from 2018 Budget)
- $58,827,825 Operating Expenses (3.3% increase from 2018 Budget)
- 343 Funded Positions (increase of eight compared to 2018 Budget)
- No Consumption-Based Retail rate increase in 2019
- 5% Wholesale On-Peak and Off-Peak rate increase in 2019
- $9,706,481 Bond Debt Service (6.6% increase from 2018 Budget)
- $55,654,830 Capital Costs (72.3% increase from 2018 Budget)
- $10,250,000 Capital Costs Funded From Rates (no change from 2018 Budget)

Acknowledgment

The 2019 Financial Plan is a collaborative effort between the Finance department, department directors, and departmental staff over the past several months. The comprehensive nature of this document requires hours of research, review, and calculations. Many thanks to each employee that assisted with this extensive process.

Respectfully submitted,

C. Tad Bohannon

Chief Executive Officer

CTB/jbm

Budget Process and Calendar

As with any business, planning is key to success. CAW has several components which are critical to the planning process and include:

Water Utility Master Plan

The water utility master plan provides guidance for future growth, rehabilitation, or replacement of existing facilities, and preparation of the capital improvement plan.

Rate Model

The rate model provides a fair and equitable basis for setting rates by customer class. This rate model is updated with a rate study every three years.

Capital Improvement Plan

The five year capital improvement plan, included as part of the annual budget, provides the Board of Commissioners and the public with a comprehensive view of the asset investments required in the near future to ensure adequate water resources, a high level of water quality, and to meet service needs of present and future customers. Although asset investments are approved through the budget process, final Board approvals are obtained as projects exceeding $100,000 are initiated.

Operating Budget

The operating budget provides a comprehensive view of revenues and expenses. A balanced budget is prepared and adopted annually. For planning purposes, CAW has developed a five year projection of sources and uses of funds. This projection will serve as a guide for future operating needs.

Budget adjustments with no-net-change impact are allowed as long as a budget reallocation form is completed. Budget reallocation forms originating in the Distribution, Engineering, Water Production, or Water Quality department must be approved by the Chief Operating Officer (COO). Forms originating in the Environmental Health and Safety, Human Resources, or Public Affairs and Communications department must be approved by the Chief Innovation Officer (CINO). The Chief Financial Officer (CFO) approves all changes or reallocations during the plan year.

2019 Budgetary Process

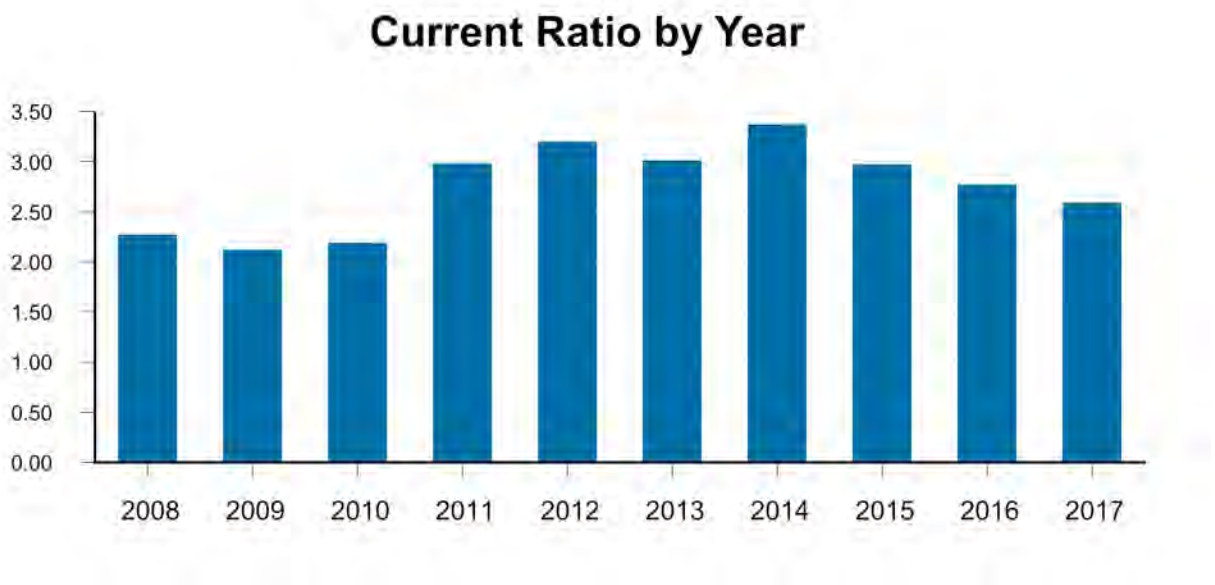
DATE	ACTIVITY
July 10, 2018	Initial budget meeting with overview of process and release of budget instructions and targets
August 6, 2018	Submission of budget requests to Finance
August 21, 2018	Departmental Review: Customer Service, Distribution, Finance, Information Services, and Water Production
August 23, 2018	Departmental Review: Administration, Engineering, and Water Quality
September 27, 2018	Review of proposed 2019 Financial Plan by Finance
October 22, 2018	Review of proposed 2019 Financial Plan by Executive Team
October 23, 2018	Annual Board of Commissioners retreat with overview of 2019 Financial Plan topics
November 15, 2018	Presentation of proposed 2019 Financial Plan to Board of Commissioners
December 20, 2018	Adoption of 2019 Financial Plan by Board of Commissioners

Financial Policies and Goals

Financial Management

The following guidelines are established to maintain a sound financial condition and to secure the most cost-effective credit rating on issues of indebtedness:

- Prudent budgeting and effective budget control
- Financial accounting and reporting in accordance with Generally Accepted Accounting Principles (GAAP) and making such reports available to bond rating agencies and the public
- Establishing and maintaining rates, fees, and charges that will provide sufficient revenues to offset projected costs
- Maintaining a five-year capital plan with annual updates (see page 112)
- Maintaining debt service coverage, determined by dividing stabilized net revenue by annual debt service for the fiscal year, at a Commission coverage target of 190% (see page 80)
- Ensuring that operating reserves are maintained at a minimum level of 45 days budgeted operating costs sufficient to meet all operating, capital, and debt service obligations (see page 81)
- Maintaining debt utilization below the 39% AWWA benchmark (see page 83)
- Maintaining the current ratio, determined by dividing current assets by current liabilities, above 1.50 (see below)



Basis of Accounting and Budgeting

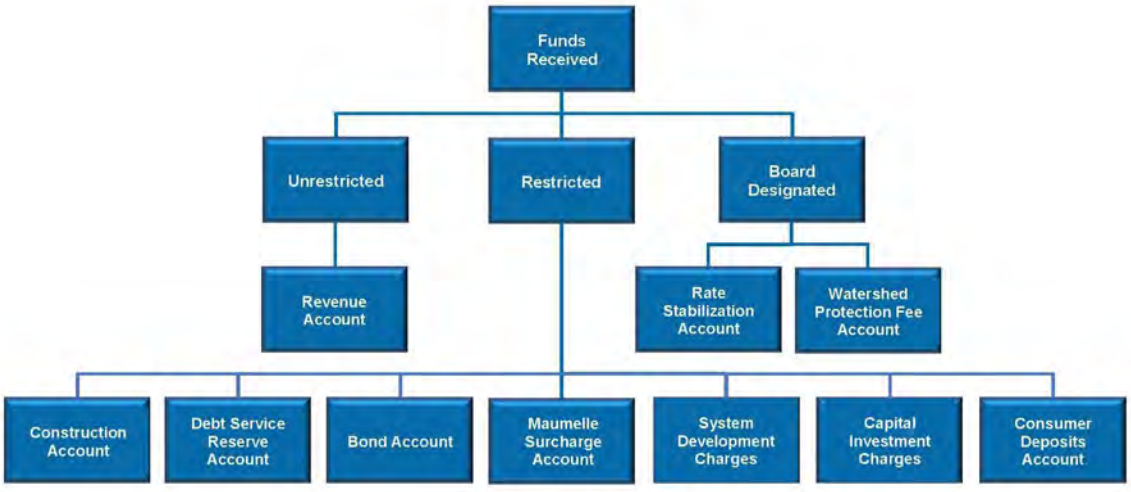
The CAW Financial Plan, proposed by the CEO and adopted by the Board of Commissioners, is a reflection of the Utility's policies, goals, and priorities. It is a tool used to communicate to the public and staff regarding funds available and allocation decisions related to capital improvements, technology, staffing, equipment, and other aspects of operations.

The basis of budgeting corresponds with the basis of accounting used for financial reporting; both are accomplished using full accrual accounting. Revenues are recognized when earned, and expenses are recognized when a liability is incurred, regardless of the timing of the related cash flows.

Fund Structure

The Utility is accounted for as a stand-alone governmental enterprise fund, which is considered a proprietary fund type. Enterprise funds account for activities that are financed and operated in a manner similar to private business enterprises or for which periodic determination of revenues, expenses, and operating income is desirable. Such funds render services to the general public on a user-charge basis and report using the economic resources measurement focus. However, to comply with bond resolutions, the Utility has accounts that segregate monies received for specific purposes described in the bond documents.

The table below outlines the unrestricted, restricted, and board designated accounts the Utility uses.



Unrestricted Accounts:

- **Revenue Account.** All revenues from user charges and fees are deposited into the revenue account. The disbursement priority order is operation and maintenance costs, senior debt – bond account, senior debt – debt service reserve account, and rate stabilization account.

Board Designated Accounts:

- **Rate Stabilization Account.** Resolution 2010-03 established a rate stabilization account for the purpose of minimizing or leveling rate increases and providing additional cash for operations during revenue shortfall years. Resolution 2015-01 clarified the debt coverage ratios that would trigger transfers into and out of the rate stabilization account.

- **Watershed Protection Fee (WPF) Account.** WPFs assessed on each monthly bill in the CAW service area are deposited into this account. The funds collected from the service area customers finance the Watershed Management Program designed to protect CAW water supply lakes and surrounding watersheds.

Restricted Accounts:

- **Construction Account**. On construction related bond issues, a construction account is held by the trustee for each bond obligation throughout the construction period. Bond proceeds for the purpose of financing construction costs are deposited into this account. Upon completion of construction activities, CAW files a written request with the trustee, who then pays construction invoices out of this account.

- **Debt Service Reserve Account.** A debt service reserve account is held by the trustee for certain outstanding bond obligations. The debt service reserve requirement is 50% of maximum annual debt service. If on the final business day of any month, after the deposit required by the bond account, the amount in the bond account is less than the amount required, the trustee shall transfer amounts from the reserve account to the bond account to cure the deficiency. Whenever deposits in the reserve account exceed the requirement, excess funds shall be transferred by the trustee into the bond account. Whenever the amount in this account, together with the amount in the bond account, is sufficient to pay in full all outstanding bonds in accordance with the terms, the funds shall be transferred to the bond account, and no deposits shall be required to be made into this account.

- **Bond Account.** A bond account is held by the trustee for each bond obligation outstanding. The Utility's standard operating procedure is to transfer monthly (on or before the final business day of the month), to the trustee, 1/12th of funds needed for the biannual debt service payments. Arkansas Natural Resources Commission (ANRC) bonds are the exception in that a bond fund is not required. Biannual debt service payments are made directly to ANRC.

- **Maumelle Surcharge Account.** All revenues from Maumelle Surcharges applied to customers of the MWM service area are deposited into the respective Maumelle Surcharge Accounts. These revenues are restricted to pay for expenses specifically identified in the CAW-MWM consolidation agreement, including needed infrastructure and required debt servicing.

- **System Development Charges (SDC) Account.** SDCs assessed as part of a new development are held in this account and used to fund or recover the cost of capital improvements or facility expansions necessitated by a new development.

- **Capital Investment Charges (CIC) Account.** CICs assessed on new meter connections are held in this account. These funds are used to recover the cost of capital improvements for facility expansions of treated water transmission, distribution facilities, and pumping and storage facilities related to site-specific facilities.

- **Consumer Deposit Account.** This account holds customer deposits paid upon beginning water service with CAW. Funds are used to ensure payment of remaining balances on customer accounts. Deposits are refunded out of this account upon establishment of satisfactory payment history.

Balanced Budget

Budgeted expenses are balanced with current revenues, carryover balances, and rate stabilization account transfers. Budgeted expenses shall not exceed estimated financial resources in a given year. Funding is available for operating, capital, and debt service in this budget.

Net Position

The Utility classifies and defines net position as:

- **Net investment in capital assets.** The net investment in capital assets component of net position consists of capital assets, net of accumulated depreciation, reduced by outstanding balances of any bonds, mortgages, notes, or other borrowings attributable to the acquisition, construction, or improvement of these assets. This component also includes deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt.

- **Restricted.** The restricted component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Restricted assets contain constraints placed on the use either by external groups, such as creditors, grantors, and contributors, or laws or regulations of other governments.

- **Unrestricted**. The unrestricted component of net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that do not meet the definition of “net investment in capital assets” or “restricted.”

Revenue Forecasting

The Board of Commissioners completes an independent review of rates every three years to ensure that sufficient funding is available to meet the Utility’s operating, capital, and debt service needs. Assumptions used to develop water sales are driven by consumption estimates prepared by rate consultants. If necessary, adjustments are made annually to factor in circumstances that were unforeseen during the preparation of the rate model.

Debt Administration

CAW has no legal debt limits; however, the Board of Commissioners adheres to strict guiding principles. Long-term debt is issued only to finance capital improvements. The Utility strives to attain the highest credit rating to ensure borrowing costs are minimized and access to future credit is available. Debt is scheduled to be paid back within a period that does not exceed the expected life of the asset financed by the debt. The Utility uses a competitive process in the sale of bonds unless it is specifically determined that a negotiated sale will produce more favorable results. The Utility adheres to full financial disclosure as it relates to its outstanding securities. The Utility has a bond rating from Moody’s Investors Service of Aa2 on the 2010C, 2012A, 2014, 2015, 2016, 2018A, and 2018B Bond Issues. A rating of A1 was placed on the 2016 Maumelle Acquisition and Construction issue, which is supported by a pledge of long-term debt surcharges collected from customers in the MWM service area.

Investment Policy

Investments are reported at fair value based on quoted market prices. Purchases and sales of investments are recorded on a trade date basis. Interest income is accrued when earned. Investment income includes all interest earned on investments, as well as realized and unrealized gains and losses.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Utility manages its exposure to declines in fair values by limiting investments to securities with a maturity of not more than five years from the date of purchase.

Credit risk is the risk that the issuer or counterparty will not fulfill its obligations. To minimize exposure to credit risk, the investment policy specifies the types of securities in which the Utility may invest. In general, the following investments are considered permissible investments:

- Direct obligations of the United States government

- Open end, government obligation money market mutual funds
- Obligations that are fully guaranteed, secured, or insured by United States government agencies, instrumentalities, and government-sponsored entities
- Repurchase agreements that are fully collateralized by direct obligations of the United States government and general obligations of any State of the United States or political subdivision thereof
- General obligations of the States of the United States and of the political subdivisions, municipalities, commonwealths, territories, or insular possessions thereof
- Pre-funded municipal bonds, the principal and interest of which are fully secured by the principal and interest of a direct obligation of the United States government
- Revenue bond issues of any State of the United States or any municipality or any political subdivision thereof

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Utility will not be able to recover the value of deposits, investments, or collateral securities that are in the possession of an outside party. State of Arkansas statutes require the Utility to maintain cash balances on deposit with financial institutions located within the State. State law also requires that account balances in excess of amounts insured by the Federal Deposit Insurance Corporation be collateralized by the financial institution.

With the exception of securities that are direct obligations of the United States government, deposit accounts that are fully insured by the Federal Deposit Insurance Corporation or fully collateralized, and money market funds with an underlying portfolio that is limited principally to United States government obligations, the investment policy states that no more than 20% of the total balance may be invested in any single investment or in securities of a single obligor.

The Utility's first priority is the security of funds, followed by providing sufficient liquidity to meet cash requirements and maximizing yields.

Capital Policy

Initial acquisition costs of an asset are capitalized if the asset has a service life of more than one year and a cost of $5,000 or more. Costs not meeting these criteria are expensed. Depreciation is computed using the straight-line method over the estimated useful lives of the respective asset classes.

Rate Design and Water Service Pricing Policies

On November 13, 2014, the CAW Board adopted resolution 2014-09. The resolution established the following policies:

1. The water rates and ancillary fee structure for providing surplus water to wholesale customers shall be established utilizing a “cost of service” methodology, following industry accepted cost of service rate setting standards for water utilities, with a utility-basis approach, rather than a cash-needs approach, providing the customers within the Cities a reasonable rate of return, recognizing that CAW is a tax-exempt governmental entity, for the capital contributed by the Cities to CAW’s water system and the investment risks assumed by the customers within the Cities to provide sufficient infrastructure to assure the wholesale customers of a reasonably reliable water supply.

2. The water rates and ancillary fee structure for providing water to retail customers who are not residents of the Cities shall be established in accordance with applicable Arkansas law, including specifically Ark. Code Ann. § 25-20-308(b) which states, “sales of water and extensions of services . . . may be made at such rates and on such other terms as the board of commissioners may deem just and reasonable, and the rates need not be the same as the rates charged customers within the jurisdictions of the public body’s participating public agencies.”

3. The water rates and ancillary fee structure for providing water to retail customers who are residents of the Cities shall be established utilizing a “cost of service” methodology, following industry accepted cost of service rate setting standards for water utilities, with a cash-needs approach.

4. In accordance with Ark. Code. Ann. § 14-234-214, the water rates for inside city and outside city customers must be adequate to:

   (a) pay the principal of and interest on all revenue bonds and revenue promissory notes as they severally mature,

   (b) make such payments into a revenue bond sinking fund as may be required by resolution or trust indenture,

   (c) provide an adequate depreciation fund to cover the cost of anticipated capital replacement needs,

   (d) pay the estimated cost of operating and maintaining the system, and

   (e) provide sufficient debt service coverage to meet all outstanding bond and trust indenture requirements.

5. When determining any water rates, whether inside city, outside city, or wholesale, the Board and CAW staff may consider whether it is appropriate to utilize a “base-extra capacity method” within the methodologies set forth above to accurately assign the cost associated with peak demand usage to those customers causing the utility to significantly exceed average load conditions.

6. When establishing customer classes within any water rate, whether inside city, outside city or wholesale, the Board and CAW staff shall assign costs to classes of

customers in a cost-responsive and industry accepted manner so that the applicable rates closely meet the cost of providing service to such customer classes using the methodologies set forth above, based on the relevant factors for providing water service to each customer class, including but not limited to the following:

(a) characteristics

(b) location

(c) demand patterns

(d) utility staffing requirements

(e) anticipated repair and replacement costs

(g) impact on water quality and supply preservation, and

(h) development, operation, maintenance, and replacement of any specific facilities necessary to serve any particular class or classes of customers.

7. Notwithstanding the parameters set forth in paragraph 6 above, the Board and CAW staff shall also consider methods to reduce rates and provide assistance to aid low-income residential inside city customers, recognizing that the lost income realized by any reduction in rates for low-income residential inside city customers must be paid by other customers.

8. The capital improvement costs to expand the water facilities to serve future customers should be borne by those future customers, to the extent practical.

9. The design of rates to recover the cost of service should support the sustainability of water resources.

Strategic Plan

CAW's 2020 Strategic Plan is the foundation of CAW's efforts to make sure it continues to build a better future for Central Arkansas. Consistent with prior years, CAW's strategic plan is based on the EUM framework developed by the Environmental Protection Agency, and six national water and wastewater associations, to address the challenges faced by water sector utilities across the country. Identified challenges are:

- rising material costs,
- aging infrastructure,
- regulatory changes,
- adequacy of water supply,
- security and environmental hazards,
- Federal funding cuts,
- rate structure stress, and
- workforce complexities.

With the following strategic initiatives and related goals, CAW strives to address these critical issues as well as focus on transparency, infrastructure replacement, affordability, watershed protection, and employee development through 2020 and beyond to build a better future for the utility, community, and customers.

Strategic Initiative 1: Enhance Customer Confidence, Experience, and Understanding
(EUM: Customer Satisfaction; Stakeholder Understanding and Support)

GOAL
A. Increase CAW's understanding of customer expectations and perceptions
B. Improve the customer service experience
C. **Effectively communicate CAW's mission, challenges, and opportunities to customers**

Maumelle Area Chamber of Commerce members touring Wilson Plant

Blue font indicates goal to which picture / graphic applies.

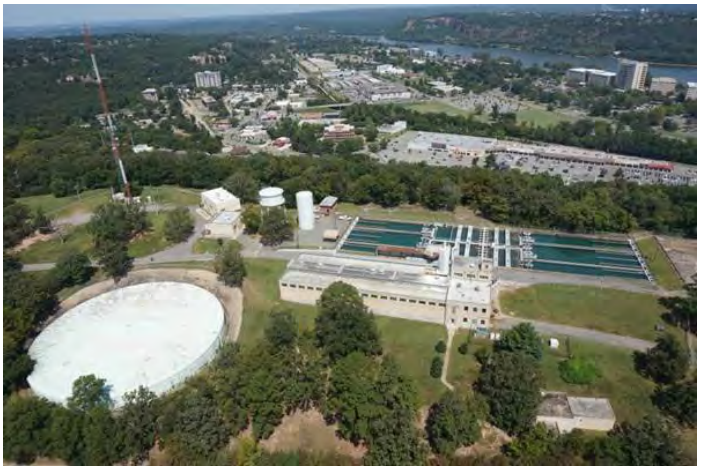
Strategic Initiative 2: Enhance Stakeholder Engagement
(EUM: Stakeholder Understanding and Support)

GOAL
A. Capitalize on the high level of CAW Board engagement
B. Increase community/ stakeholder understanding and engagement
C. **Be recognized as a responsible, innovative leader in the industry by the general public, our city partners, the state legislature, and local and national organizations**

CAW Chief Innovation Officer, Jeremy Sparks attending the 2018 Winthrop Rockefeller Institute Under 40 Summit

Strategic Initiative 3: Optimize Infrastructure Performance and Increase Infrastructure Reliability
(EUM: Operational Optimization; Infrastructure Stability)

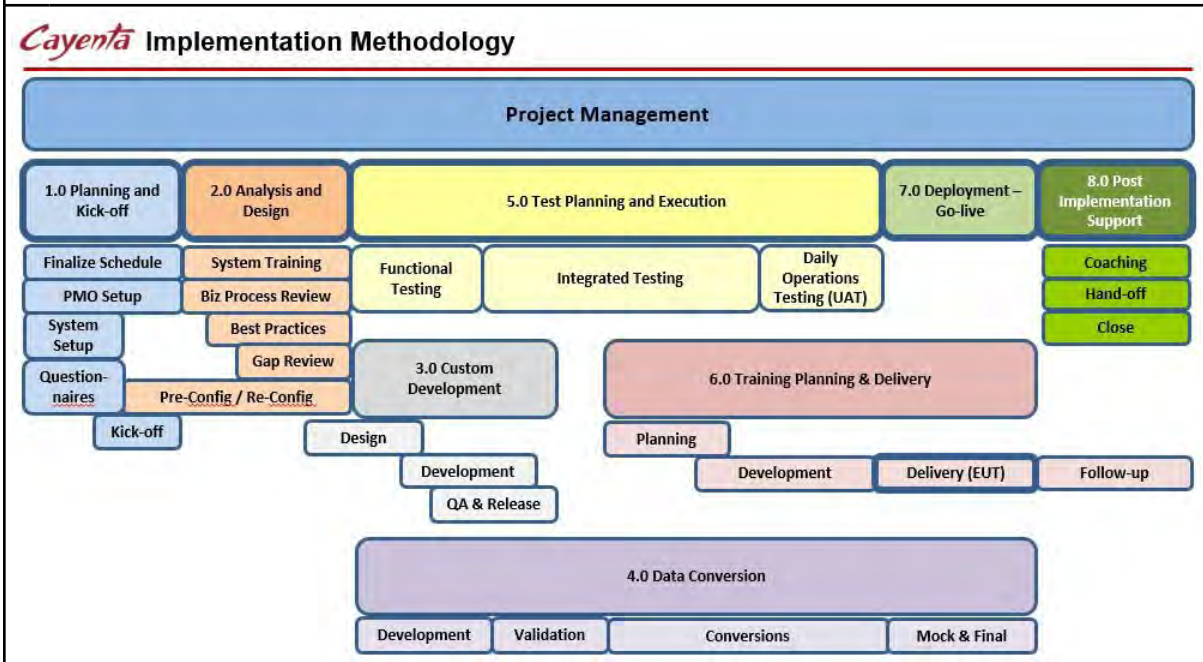
GOAL
A. **Maximize performance of existing infrastructure**
B. **Improve long-term reliability of infrastructure**



Rehabilitation of Ozark Point Plant

Strategic Initiative 4: Enhance Operating Excellence through Innovation, Leveraging of Technology, and Business Process Improvements
(EUM: Operational Optimization; Operational Resiliency)

GOAL
A. Evaluate industry best practices to identify cost effective innovations and solutions to provide operating excellence
B. **Enhance Information Technology capabilities**



Cayenta Implementation

Strategic Initiative 5: Develop, Maintain, and Recruit a Diverse, Sustainable, High-Performing Workforce
(EUM: Employee and Leadership Development)

GOAL
A. Recruit, develop, appropriately reward, and retain a high-performing, innovative, value-driven, informed, passionate, and diverse work force committed to achieving CAW's mission and strategic goals
B. Measure and improve employee satisfaction levels
C. **Expand employee skills and technical training to develop and prepare employees for future positions and increase span of employee certification and licensing**
D. Assure safety and security of employees

Cityworks Training Session

Strategic Initiative 6: Assure Long-Term Financial Stability and Integrity of Utility
(EUM: Financial Viability)

GOAL
A. **Be fiscally strong and financially stable**
B. Achieve efficiencies and increase revenues through increased collaboration with strategic partners, and develop additional sources of revenue (or reductions in costs) as a means to maintain affordable rates
C. Enhance high stakeholder confidence in financial procedures, rates, and budgets

For every dollar that CAW receives, half of it is spent on capital projects, while $0.42 of it is used for everyday business operations, such as labor and benefits, and the remaining $0.08 is used for debt service.

Strategic Initiative 7: Ensure Delivery of High-Quality Water for Future Generations
(EUM: Water Resource Adequacy; Product Quality)

GOAL
A. Identify and secure additional sources of water supply
B. Provide the highest water quality that exceeds all regulatory standards and preserves consumer confidence
C. **Effectively and efficiently manage source water quality**

Working with the U.S. Geological Survey collecting water-quality samples

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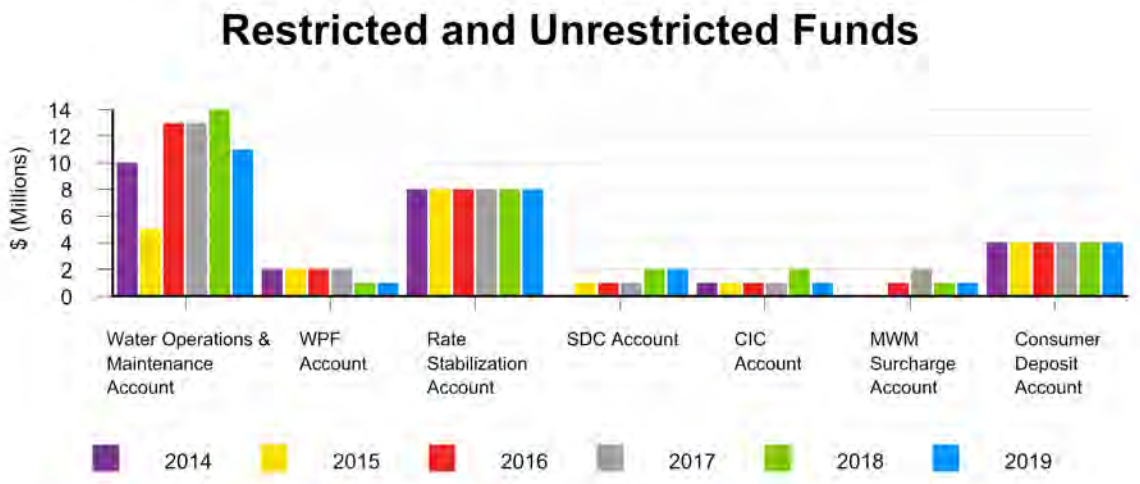
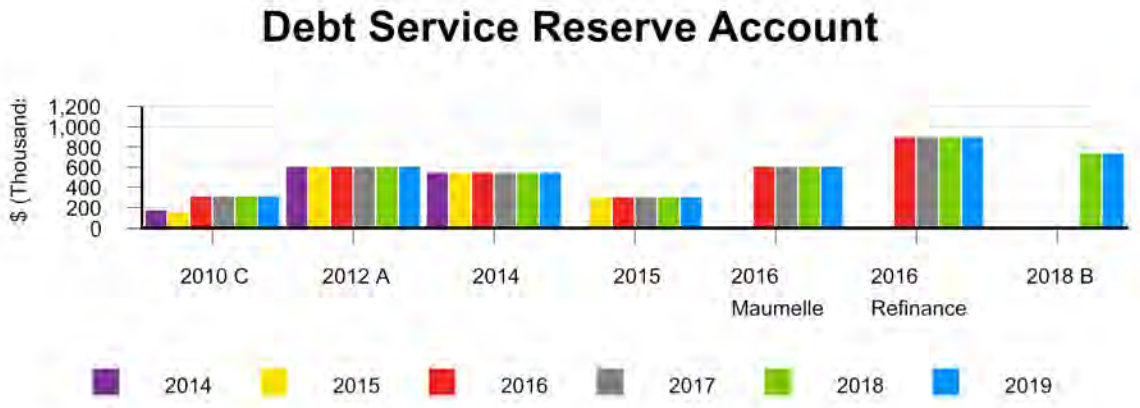
SOURCES & USES OF FUNDS

SOURCES AND USES OF FUNDS – OVERVIEW

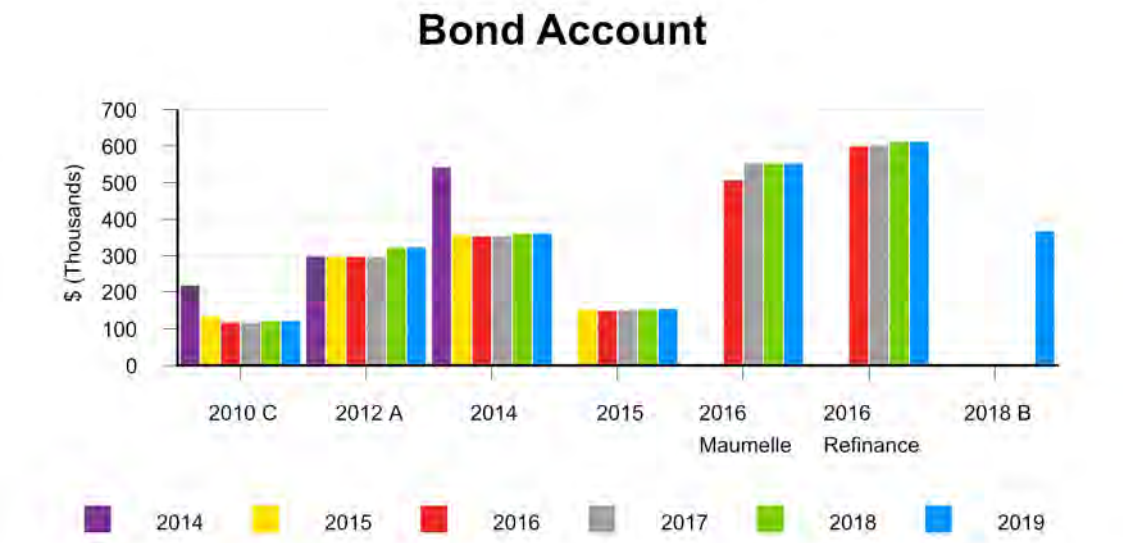
We anticipate a total of $60,245,272 in both restricted and unrestricted funds to carry forward at December 31, 2018. Unrestricted water operations and maintenance funds amount to $16,268,086 in addition to $1,095,476 WPF funds, and $8,261,106 rate stabilization funds. The restricted SDC account totals $1,680,872; the CIC account totals $1,560,039; the MWM surcharge account amounts to $1,320,437; and the restricted consumer deposits account equals $4,356,149.



The bond trust indentures require CAW to maintain certain reserves during the life of the bond issues. The debt service reserve account covers the principal and interest for the final year of each bond issue. The debt service reserve account totals $309,291 for the 2010C Bond Issue; $602,159 for the 2012A Bond Issue; $542,500 for the 2014 Bond Issue; $301,275 for the 2015 Bond Issue; $600,712 for the 2016 Maumelle Bond Issue; $893,000 for the 2016 Refinance Bond Issue, and $732,100 for the 2018B Bond Issue.

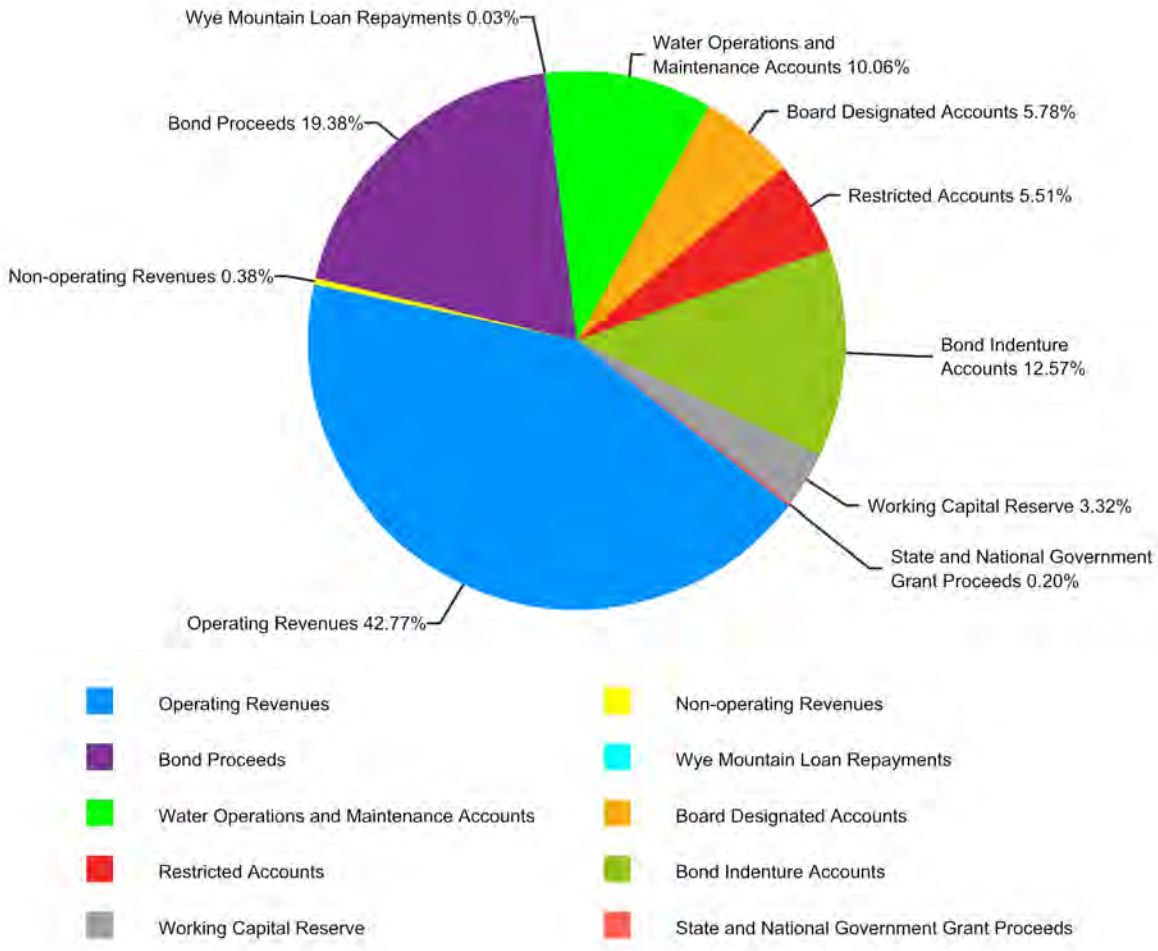


The bond account accumulates sufficient funds annually to pay the principal and interest on each bond issue. As of December 31, 2018, the account amounts to $120,351 for the 2010C Bond Issue; $320,330 for the 2012A Bond Issue; $359,371 for the 2014 Bond Issue; $154,148 for the 2015 Bond Issue; $550,723 for the 2016 Maumelle Bond Issue; and $611,585 for the 2016 Refinance Bond Issue. The working capital reserve represents 45 days of operating expenses, and for 2018, that amount is $5,374,874.



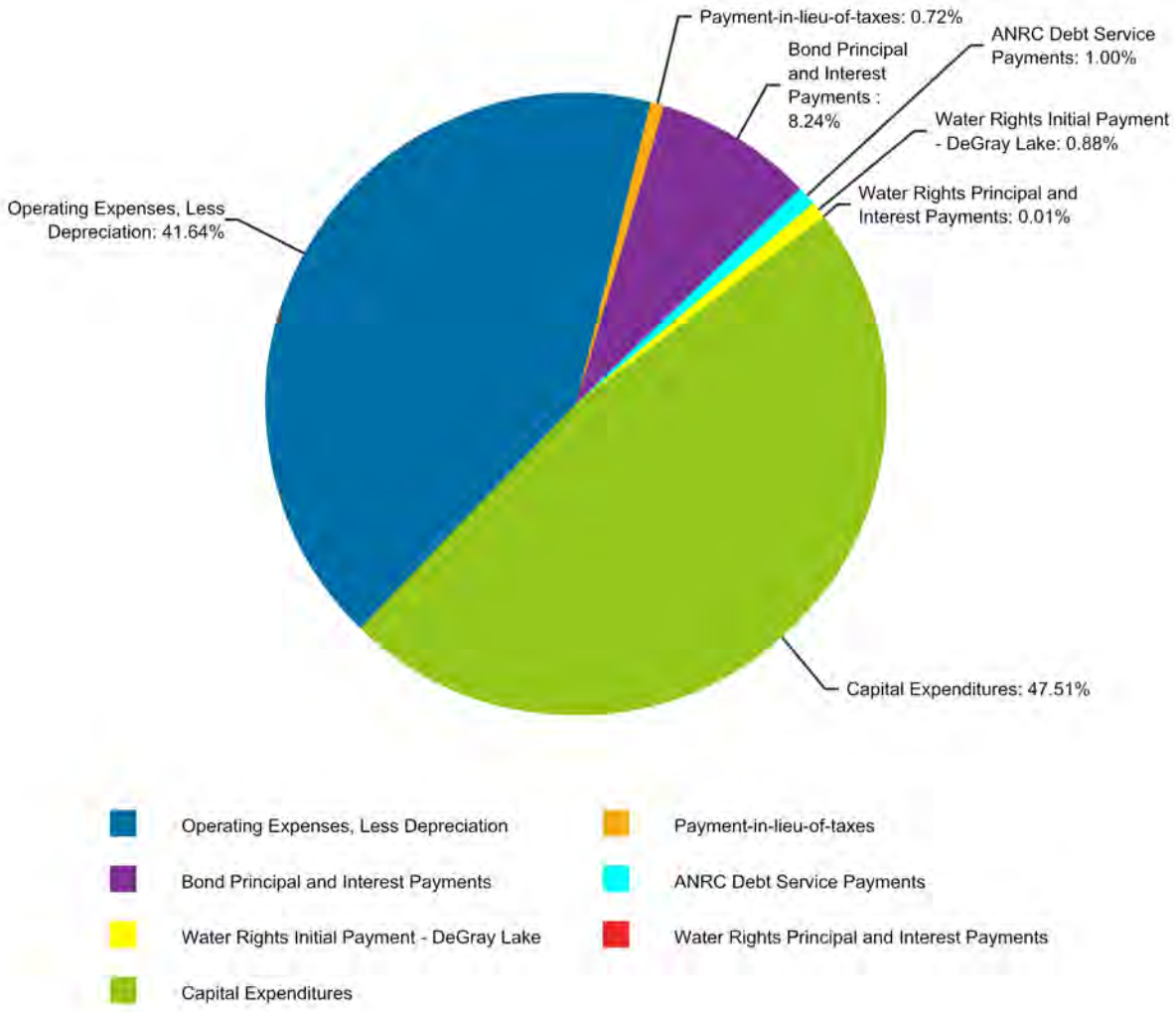
The carry-forward balances, along with anticipated operating revenues of $69,198,694, non-operating revenues of $609,750, ANRC bond proceeds of $31,347,960, Wye Mountain loan repayments of $51,000, and grant proceeds of $327,500 will fund normal operations and the capital improvement plan.

SOURCES OF FUNDS



Utility staff anticipates 42.8% of total sources of funds from operating revenues. The remaining sources of funds are made up of various sources. The sources of funds are depicted above.

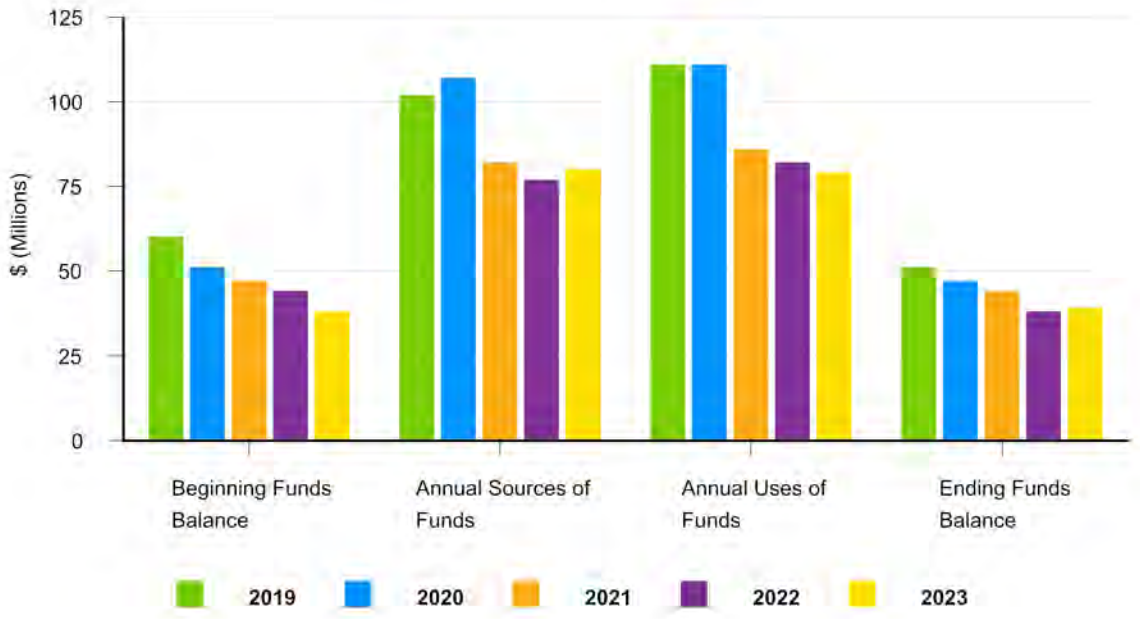
USES OF FUNDS



Operating expenses account for 41.6% of total uses of funds, while capital costs account for 47.5% and bond principal and interest payments add up to 8.3%. The uses of funds are depicted above.

Assuming all normal operations occur as anticipated and all projects are completed in the capital improvement plan according to schedule, $51,164,378 will remain in both restricted and unrestricted funds at December 31, 2019.

SOURCES AND USES OF FUNDS
(FIVE-YEAR FORECAST)



CAW forecasts sources and uses of funds for five years as a tool to aid in developing a plan for the operational and capital resources of the Utility. Accurate forecasts of revenues, expenses, debt service, and capital outlay are needed in order to set future rates. Proper planning and prioritization of spending are necessary to efficiently and effectively allocate limited financial resources. A rate study was performed during 2015 to develop a more current rate model. Rates for 2017-2019 were approved by the CAW Board of Commissioners in the 4th quarter of 2015. There are no consumption-based retail rate increases for 2019, while there is a 5% wholesale rate increase beginning on January 1, 2019. Pending Commission approval, a 15 cent increase in the WPF and a monthly customer billing fee of $1.92 per bill will be effective on June 1, 2019. A rate study due to be complete in late 2018 will assist in setting rates for 2020 - 2022.

STATEMENT OF SOURCES AND USES OF FUNDS

Sources of Funds:

Carry Forward, as of December 31, 2018		
Unrestricted Accounts		
Water Operations and Maintenance Accounts	$ 16,268,086	
Board Designated Accounts		
Watershed Protection Fees Account	1,095,476	
Rate Stabilization Account	8,261,106	
Restricted Accounts		
System Development Charges Account	1,680,872	
Capital Investment Charges Account	1,560,039	
MWM Surcharges	1,320,437	
Consumer Deposits Account	4,356,149	
Bond Indenture Accounts		
Debt Service Reserve Account – 2010C	309,291	
Debt Service Reserve Account – 2012A	602,159	
Debt Service Reserve Account – 2014	542,500	
Debt Service Reserve Account – 2015	301,275	
Debt Service Reserve Account – 2016 Maumelle	600,712	
Debt Service Reserve Account – 2016 Refinance	893,000	
Debt Service Reserve Account – 2018B	732,100	
Construction Fund – 2016 Maumelle	3,847,508	
Construction Fund – 2018B	10,383,180	
Bond Account – Principal and Interest Reserve – 2010C	120,351	
Bond Account – Principal and Interest Reserve – 2012A	320,330	
Bond Account – Principal and Interest Reserve – 2014	359,371	
Bond Account – Principal and Interest Reserve – 2015	154,148	
Bond Account – Principal and Interest Reserve – 2016 Maumelle	550,723	
Bond Account – Principal and Interest Reserve – 2016 Refinance	611,585	
Working Capital Reserve	5,374,874	
Total Carry Forward, as of December 31, 2018		**60,245,272**
2019 Sources of Funds		
Operating Revenues	69,198,694	
Non-operating Revenues	609,750	
Bond Proceeds	31,347,960	
Wye Mountain Loan Repayments	51,000	
State and National Government Grant Proceeds	327,500	
Total 2019 Sources of Funds		**101,534,904**
Total Sources of Funds		**161,780,176**

2019 Uses of Funds:

Operating and Non-operating Expenses		
Operating Expenses, Less Depreciation	46,057,207	
Payment-in-lieu-of-taxes	791,064	
Bond Principal and Interest Payments	9,115,340	
ANRC Debt Service Payments	1,110,770	
Water Rights Initial Payment - DeGray Lake	970,147	
Water Rights Principal and Interest Payments	15,067	
Capital Costs	52,554,830	
Total Uses of Funds		**$ 110,614,425**
Funds Available at December 31, 2019		
Unrestricted Accounts		
Water Operations and Maintenance Accounts	$ 15,139,837	
Board Designated Accounts		
Watershed Protection Fees Account	448,422	
Rate Stabilization Account	8,377,697	
Restricted Accounts		
System Development Charges Account	2,024,094	
Capital Investment Charges Account	1,327,056	
MWM Surcharge Accounts	1,256,535	
Consumer Deposits Account	4,417,628	
Bond Indenture Accounts		
Debt Service Reserve Account – 2010C	309,291	
Debt Service Reserve Account – 2012A	602,159	
Debt Service Reserve Account – 2014	542,500	
Debt Service Reserve Account – 2015	301,275	
Debt Service Reserve Account – 2016 Maumelle	600,712	
Debt Service Reserve Account – 2016 Refinance	893,000	
Debt Service Reserve Account – 2018B	732,100	
Construction Fund - 2016 Maumelle	2,446,537	
Construction Fund - 2018B	3,424,310	
Bond Account – Principal and Interest Reserve – 2010C	120,351	
Bond Account – Principal and Interest Reserve – 2012A	334,830	
Bond Account – Principal and Interest Reserve – 2014	374,621	
Bond Account – Principal and Interest Reserve – 2015	161,648	
Bond Account – Principal and Interest Reserve – 2016 Maumelle	565,695	
Bond Account – Principal and Interest Reserve – 2016 Refinance	631,585	
Bond Account – Principal and Interest Reserve – 2018B	358,054	
Working Capital Reserve	5,775,814	
Carry Forward, as of December 31, 2019		**$ 51,165,751**

STATEMENT OF SOURCES AND USES OF FUNDS (FIVE-YEAR FORECAST)

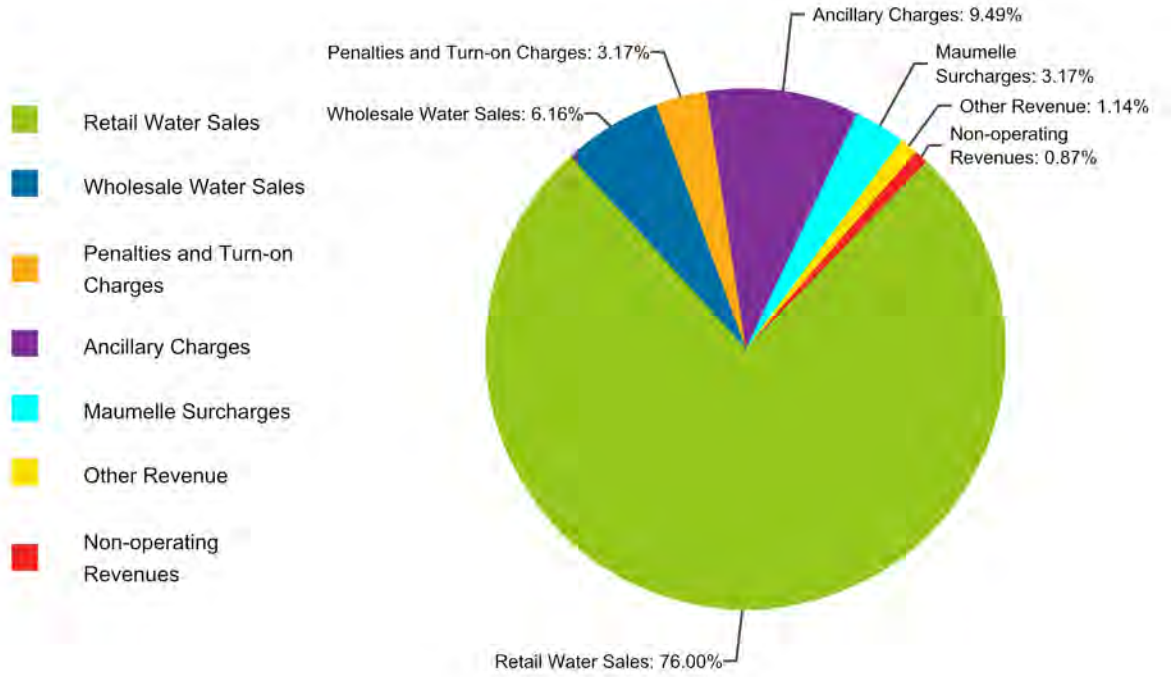
	2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget
Beginning Funds Balance	60,245,272	51,164,378	47,454,984	43,661,862	38,176,854
Operating Revenues	69,198,694	70,141,859	72,675,100	75,008,762	78,848,282
Non-operating Revenues	609,750	615,848	622,006	628,226	634,508
Bond / Loan Proceeds	31,347,960	36,410,000	8,390,000	1,300,000	—
Wye Mountain Loan Repayments	51,000	51,000	51,000	51,000	51,000
Grant Proceeds	327,500	—	—	—	—
Annual Sources of Funds	101,534,904	107,218,707	81,738,106	76,987,988	79,533,790
Operating Expenses	46,057,207	48,446,798	49,541,794	49,989,291	51,775,041
Payment-in-lieu-of-taxes	791,064	806,885	823,023	839,483	856,273
Bond Principal and Interest	8,616,713	8,643,304	9,909,320	11,198,122	11,424,345
ANRC Debt Service	1,110,770	1,110,770	1,270,377	1,429,984	1,429,984
Additional Principal Payments	500,000	500,000	500,000	500,000	500,000
Water Rights - Degray Lake Initial Payment	970,147	—	—	—	—
Water Rights Principal and Interest	15,067	985,214	985,214	982,616	992,128
Conservation Easement Loan Payment	—	170,000	245,000	320,000	395,000
Capital Costs	52,554,830	50,265,130	22,256,500	17,213,500	11,514,500
Annual Uses of Funds	110,615,798	110,928,101	85,531,228	82,472,996	78,887,271
Increase (Decrease) in Funds Balance	(9,080,894)	(3,709,394)	(3,793,122)	(5,485,008)	646,519
Ending Funds Balance	51,164,378	47,454,984	43,661,862	38,176,854	38,823,373
Breakdown of Funds Balance					
Unrestricted	15,138,464	13,485,705	11,356,270	9,745,621	8,279,608
Board Designated					
Watershed Protection	448,422	490,380	763,917	951,200	1,429,410
Rate Stabilization	8,377,697	7,695,453	6,589,387	5,484,510	5,605,835
Restricted					
System Development Charges	2,024,094	2,367,554	2,711,253	3,055,194	3,399,380
Capital Investment Charges	1,327,056	1,494,294	1,661,753	1,829,438	1,997,349
MWM Surcharges	1,256,535	1,843,494	2,131,767	416,880	1,004,359
Customer Deposits	4,417,628	4,479,722	4,542,437	4,605,779	4,669,755
Bond Reserves	12,398,668	9,526,010	7,695,717	5,821,671	5,948,885
Working Capital	5,775,814	6,072,372	6,209,361	6,266,561	6,488,792
Ending Funds Balance	51,164,378	47,454,984	43,661,862	38,176,854	38,823,373

REVENUES, EXPENSES & NET POSITION

REVENUES, EXPENSES, AND NET POSITION – OVERVIEW

REVENUES – OVERVIEW

CAW is planning to receive 82.2% of its fiscal year revenue from metered sales (retail and wholesale water sales). The remaining revenues of 17.8% are penalties and turn-on charges, ancillary charges, Maumelle surcharges, other revenue, and non-operating revenues as depicted below:



Retail Water Sales

Retail water sales include five types of metered service: residential, commercial, large volume, sprinkler, and raw water. Residential includes all customers receiving water service at a single building or building unit that is owned, leased, or rented by one party, separately metered, and occupied as a residence. Commercial includes all customers receiving water service at (i) a building containing two or more apartments or family units that are rented or leased to tenants as residences and are not separately metered; (ii) a building occupied by a retail or service business; (iii) a building owned or occupied by a public utility, a department of a municipality, or a state or Federal governmental agency; or (iv) a non-residential customer that does not fit the definition of a large volume customer. Large volume includes any non-residential and non-sprinkler customer (i) who uses at least 1,500,000 cubic feet (CF) of water per meter during the 12-month period from September 1st to August 31st or (ii) who agrees to take or pay for a minimum of 125,000 CF of water per meter per month on an annual basis. Customers who qualify for large volume water

service described in (i) above shall be assigned to the large volume class for the calendar year beginning the following January. Sprinkler includes all customers receiving separately metered water service used exclusively for irrigation sprinkler systems or other outdoor purposes. Raw water includes customers receiving untreated water. Untreated water is used for irrigation.

Retail water sales also include private fire services made up of private fire hydrants, indoor sprinkler systems, and standpipes.

Due to differing rates, retail water sales are also separated into inside-city and outside-city. Inside-city includes all customers that reside within the city limits of Little Rock or North Little Rock. Outside-city includes all customers that reside outside the city limits of Little Rock or North Little Rock. With the completion of a 30-inch transmission main which connected the former MWM system to the CAW system, the former MWM customers transitioned to CAW's outside-city rates.

Penalties and Turn-on Charges

Water bills, with the exception of private fire services, are due and payable on or before the 20th day following the billing date stated on the water bill. Payments for private fire services are due in semi-annual installments in advance on the 1st day of January and July each year. Water bills not paid on or before the due date are considered delinquent, and a penalty of 10% of the total current bill is assessed against the account. Based on a review of costs associated with customer service activities, increases were implemented in April 2017 to various penalties and turn-on charges to more accurately reflect the costs associated with performing these services. A turn-on charge of $20 is assessed on the first monthly bill to obtain service where facilities are already in place. A turn-on charge of $40 is assessed to any account that is turned off for non-payment and then reconnected.

Wholesale Water Sales

CAW provides wholesale water service to water districts outside the city limits of Little Rock and North Little Rock. The districts own and operate their own water systems, perform their own meter reading and customer billing, and purchase water on a wholesale basis for distribution to their respective retail customers. CAW bills each water district based on metered consumption at a rate that reflects the cost of providing the service. Wholesale customers account for approximately 11.6% of total metered consumption and 7.5% of total consumption based revenues in the 2019 budget.

Ancillary Charges

Ancillary charges include SDCs, CICs, WPFs, connection fees, billing fees, and other miscellaneous charges (insufficient fund checks, illegal connections, stolen meters, etc.).

SDCs are based upon meter size and apply to all new meter connections, with the exception of residential sprinkler meters. The charges are to fund or recover the cost of capital improvements or facility expansions necessitated by and attributable to new development. The charge begins at $150 for a 5/8” meter.

CICs may be geographically area-based and/or water main-based and are applicable to site-specific new meter connections. The charges are to fund or recover the cost of capital improvements or facility expansions for treated water transmission and distribution facilities, pumping, and storage facilities related to site-specific facilities.

Connection fees for a meter installation are based upon the width of the street or state highway, location of the meter installation on the site, permitting costs, and materials.

WPFs are based upon meter size and apply to all meters. The fee is restricted to finance the Watershed Management Program, which includes land purchases, water quality monitoring, and other measures to protect CAW drinking water supply lakes from potential sources of pollution. The monthly fee is $0.45 cents for households with a 5/8" meter.

Billing fees are assessed to CAW's 17 billing partners for all billing and customer service functions provided. Billing partners include water, waste water, and refuse districts in Central Arkansas.

Maumelle Surcharge Revenue

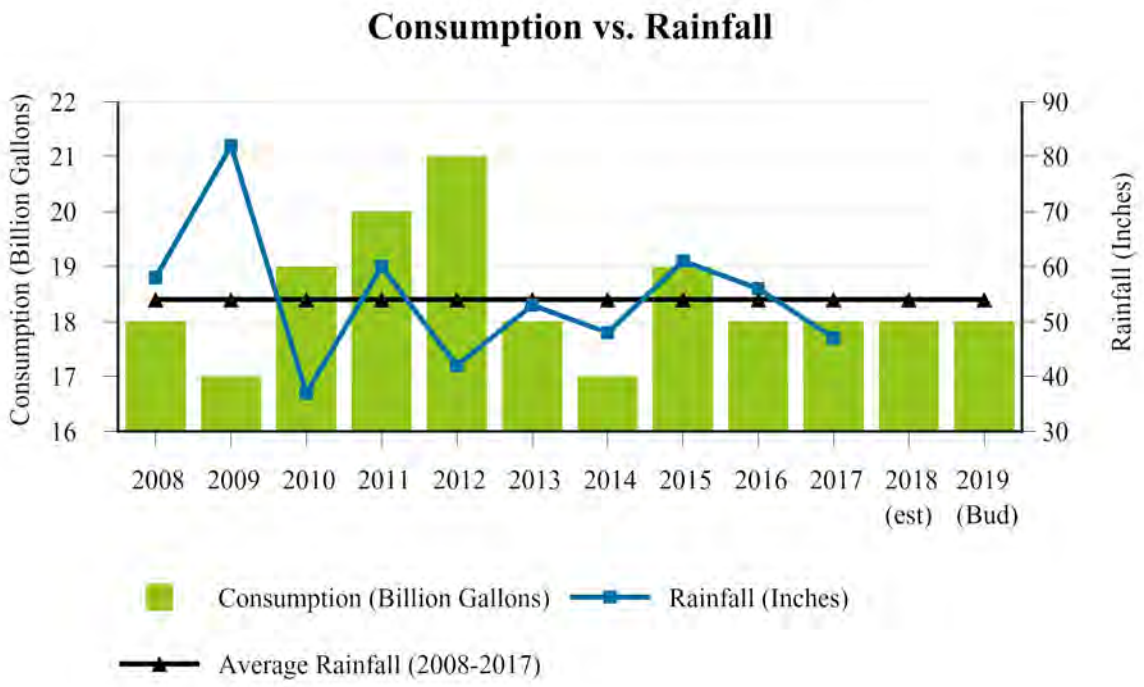
Maumelle Surcharge Revenue consists of revenue generated by the intermediate-term and long-term transition surcharges charged to customers of the former MWM service area as part of the consolidation agreement. These surcharges were established to fund needed improvements to the MWM distribution system and to fund expenses directly related to combining the two Utilities. These surcharges will begin to be eliminated as the debts associated with the surcharges are repaid.

Other Revenue

Other Revenue consists of income generated from recycling, engineering fees, Grande Maumelle Sailing Club rent, Fassler Hall rent, telecommunication tower space rent, and other miscellaneous items.

Water Demand

Weather extremes are the most significant factor impacting customer demand for water. Wet or dry precipitation extremes during the summer months and hot or cold temperature extremes during the winter months can have a significant impact on water consumption and operating revenues. These impacts can be magnified depending on the time of year or the specific portion of the Utility's service area that experiences these conditions. Record rainfall in 2009 resulted in operating revenues $6.2 million less than budget. Rainfall combined with unseasonably cool temperatures in 2014 resulted in operating revenues $4.3 million less than budget. On the other end of the spectrum, 2012 had the driest April to July periods on record. This lack of rainfall coupled with multiple days over 100 degrees resulted in operating revenues $5.6 million more than budget.

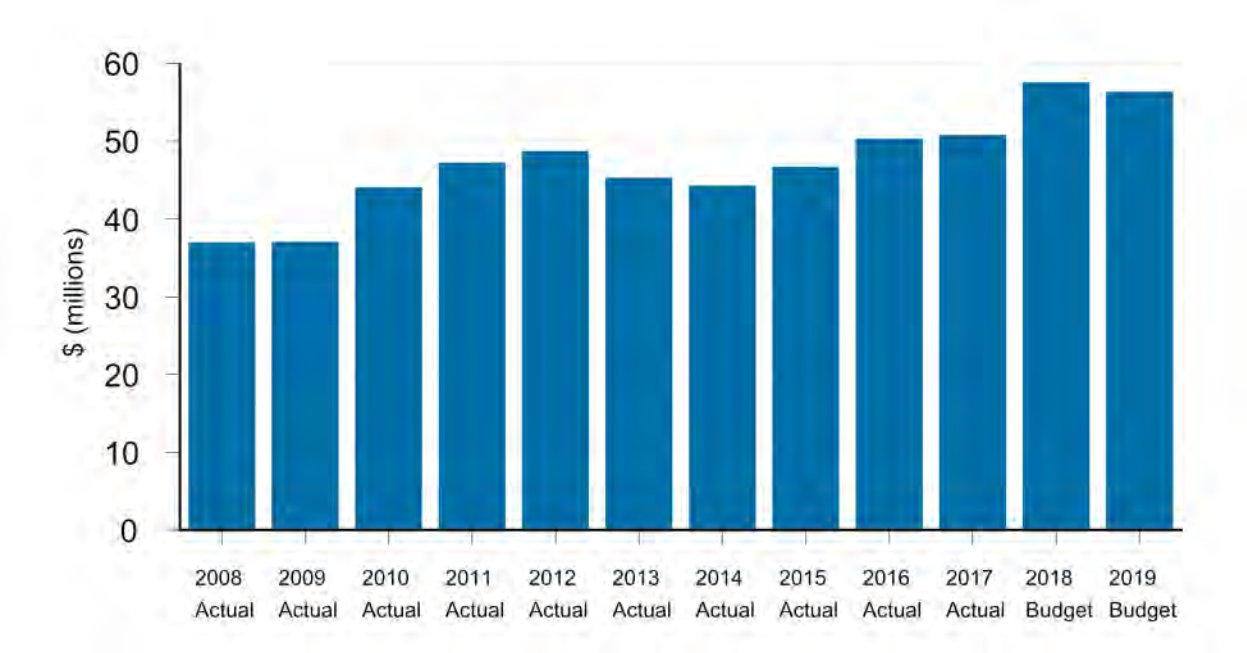


Developing accurate demand forecasts is one of the biggest challenges in creating long-term financial forecasts. There are many factors that influence customer demand projections. Climate and weather conditions, economic drivers, and conservation are a few of the factors that must be considered. Different factors affect consumption trends of each customer class, and therefore, consumption data is analyzed and forecast by class.

In order to forecast residential class usage, the total residential class usage was split into two categories: indoor and outdoor usage. Indoor usage was estimated by calculating the average of the three lowest usage months for the years analyzed. The remaining annual usage was categorized as outdoor usage. As it is impossible to predict the weather, a seven year historical average was used to forecast the outdoor usage component. The most recent calendar year actual usage was used to forecast the indoor usage component. A seven year historical average was used to forecast sprinkler class usage. A blend of the two most recent calendar years actual usage was used to forecast commercial and large volume classes.

The retail consumption baseline was reset for 2019 and is projected to decrease 2.0% annually through 2023. Wholesale consumption had no adjustment for 2019 and is projected to remain flat through 2023.

Metered Water Sales by Year



The above graph presents total actual Metered Water Sales for the years 2008 through 2017. Budgeted numbers are shown for the years 2018 and 2019. Since CAW forecasts further reduction in consumption, metered water sales have decreased from the 2018 budget.

Water Rates and Fees

The CAW Board of Commissioners approved a rate schedule for 2019-2022 on December 20, 2018 with resolution 2018-13. While the rate schedule has no consumption-based retail rate increases, it does include an increase to WPF and a customer billing fee of $1.92 per bill, both going into effect on June 1, 2019. Approved rates and fees for 2019 are presented on the following pages.

2019 rates are as follows:

Minimum Monthly Charge (includes the first 200 CF of water usage)

METER SIZE (diameter)	RATES EFFECTIVE JANUARY 1, 2018	
	INSIDE	OUTSIDE
5/8”	$ 7.85	$ 10.28
3/4”	10.14	13.28
1”	14.41	18.87
1 1/2”	24.37	31.90
2”	39.52	51.73
3”	73.07	95.64
4”	118.85	155.58
6”	235.08	307.72
8”	397.64	520.51
10”	572.49	749.38
12”	1,042.65	1,364.83

Additional Monthly Volumetric Charge ($ per 100 CF 3 - 33)

CUSTOMER CLASS	RATES EFFECTIVE JANUARY 1, 2018	
	INSIDE	OUTSIDE
RESIDENTIAL	$ 1.71	$ 2.73
COMMERCIAL	1.60	2.56
LARGE VOLUME	1.30	2.09
IRRIGATION	1.71	2.73

Additional Monthly Volumetric Charge ($ per 100 CF over 33)

CUSTOMER CLASS	RATES EFFECTIVE JANUARY 1, 2018	
	INSIDE	OUTSIDE
RESIDENTIAL	$ 2.22	$ 3.57
COMMERCIAL	1.60	2.56
LARGE VOLUME	1.30	2.09
IRRIGATION	2.22	3.57

Monthly Watershed Protection Fee

METER SIZE (diameter)	EFFECTIVE MAY 1, 2009	EFFECTIVE JUNE 1, 2019
5/8”	$0.45	$0.60
3/4”	0.45	0.60
1”	0.68	0.90
1 1/2”	1.13	1.50
2”	2.25	3.00
3”	3.60	4.80
4”	6.75	9.00
6”	11.25	15.00
8”	22.50	30.00
10”	36.00	48.00

Private Fire Service Charges

	RATES	
	EFFECTIVE JANUARY 1, 2018	
	INSIDE	OUTSIDE
FIRE HYDRANTS	$ 79.51	$ 115.02
FIRE CONNECTION MIN CHARGE	92.20	133.38
AUTOMATIC SPRINKLER SYSTEM MIN CHARGE (1,000 HEADS)	92.20	133.38
ADDL HEADS, EACH	0.09	0.15
STANDPIPE 1 1/4" (OR SMALLER) DIAMETER, EACH	18.03	26.10
1 1/2" DIAMETER, EACH	28.07	40.59
2" DIAMETER, EACH	46.12	66.69
2 1/2" DIAMETER, EACH	92.20	133.38

Wholesale Additional Monthly Volumetric Charge

Resolution 2015-20 also established a wholesale rate schedule for 2017-2019. The approved 2019 rates remain the same at $1.65 for On Peak consumption and $1.52 for Off Peak consumption. The wholesale rates are presented in the tables below.

Wholesale Minimum Monthly Charge

METER SIZE (diameter)	RATES EFFECTIVE JANUARY 1, 2018 OUTSIDE
5/8”	$10.28
3/4”	13.28
1”	18.87
1 1/2”	31.90
2”	51.73
3”	95.64
4”	155.58
6”	307.72
8”	520.51
10”	749.38
12”	1,364.83

Volumetric Charge

TIME WATER IS TAKEN	RATES EFFECTIVE JANUARY 1, 2019 $ PER 100 CF
ON PEAK Customers taking any water from: 4:01 a.m. to 8:59 a.m. and/or 5:01 p.m. to 9:59 p.m.	$1.65
OFF PEAK Customers taking all water from: 10 p.m. to 4 a.m. and/or 9 a.m. to 5 p.m.	1.52

Raw Water Additional Monthly Volumetric Charge

	RATES
	EFFECTIVE JANUARY 1, 2019
	$ PER 100 CF
Raw Water Customer	$0.66

System Development Charge

METER SIZE (diameter)	
5/8”	$150.00
3/4”	150.00
1”	225.00
1 1/2”	375.00
2”	750.00
3”	1,200.00
4”	2,250.00
6”	3,850.00
8”	7,500.00
10”	12,000.00

Capital Investment Charge

METER SIZE (diameter)	AREA $50*	AREA $100*	AREA $200*	AREA $400*	METER OFF MAIN	CONN** SIZE	CONN** OFF MAIN
5/8”	$ 50	$ 100	$ 200	$ 400	$ 2,000	2”	$ 875
3/4”	50	100	200	400	2,400	3”	1,300
1”	75	150	300	600	2,800	4”	1,600
1 1/2”	125	250	500	1,000	4,200	6”	2,400
2”	250	500	1,000	2,000	4,800	8”	3,200
3”	400	800	1,600	3,200	7,200	10”	4,000
4”	750	1,500	3,000	6,000	8,000	12”	4,800
6”	1,250	2,500	5,000	10,000	12,000	16”	6,400
8”	2,500	5,000	10,000	20,000	-	20”	8,000
10”	4,000	8,000	16,000	32,000	-	24”	9,600

*charges that are associated with specific geographical sections of system based on initial construction costs.

**CONN – connection – refers to end of main or tap for water main extension or fire service.

Connection Fee

METER SIZE (diameter)	2-LANE ROAD 20 – 28’	3-LANE ROAD 29 – 36’	4-LANE ROAD 37 – 48’	STATE HIGHWAY
5/8”	$ 450	$ 510	$ 570	$ 850
3/4”	560	680	800	1,150
1”	900	1,130	1,250	1,950
1 1/2”	1,340	1,500	1,640	2,640
2”	1,640	1,800	1,940	3,280
3”	5,000	-	-	-
4”	5,500	-	-	-
6”	7,500	-	-	-
8”	10,000	-	-	-

Maumelle Transition Surcharges

The CAW-MWM Consolidation Agreement provides for the collection of debt surcharges on each meter within the MWM service area. These surcharges are pledged to repayment of all debt and expenses required to carry out the merger of the two Utilities. Each debt surcharge will continue until the debt associated with the respective surcharges is repaid. The Transition (short-term) Surcharge was fully paid as of December 31, 2017, and the surcharge was discontinued for all bills after that date.

METER SIZE (diameter)	INTERMEDIATE	LONG TERM
5/8”	$ 4.92	$ 15.67
3/4”	4.92	15.67
1”	25.09	79.92
1 1/2"	37.39	119.09
2”	50.18	159.83
3”	62.48	199.01
4”	75.28	239.75
6”	149.05	474.71
8”	251.89	802.25

Non-operating Revenues

Investment income is earned on funds that are being held in financial institutions. These earnings are subject to the availability of funds to invest and the rates available from the

market. Investment market conditions for the past five to seven years have been poor; however, recent actions by the Federal Reserve have resulted in increasing investment yields. A renewed contract with our banking provider has also resulted in higher rates paid on operating funds held in interest bearing checking accounts. Interest rate estimates on cash and investment accounts are estimated at 1.5 - 2.0%.

EXPENSES - OVERVIEW

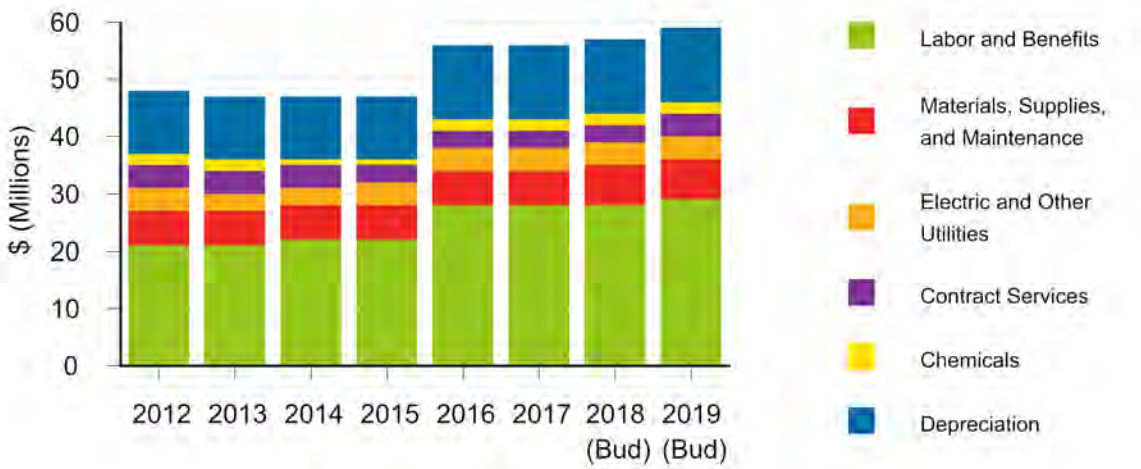
Operating Expenses

Depreciation is a major component of operating expenses and amounts to $12.8 million or 21.7% of total operating expenses for 2019. Projections indicate that total depreciation in 2018 will exceed budgeted amounts by 1.0%. During the past several years, CAW has funded and completed a significant number of construction projects with the proceeds from bond issues and rates. As projects are completed from all of the funding sources, the costs are capitalized and depreciated.

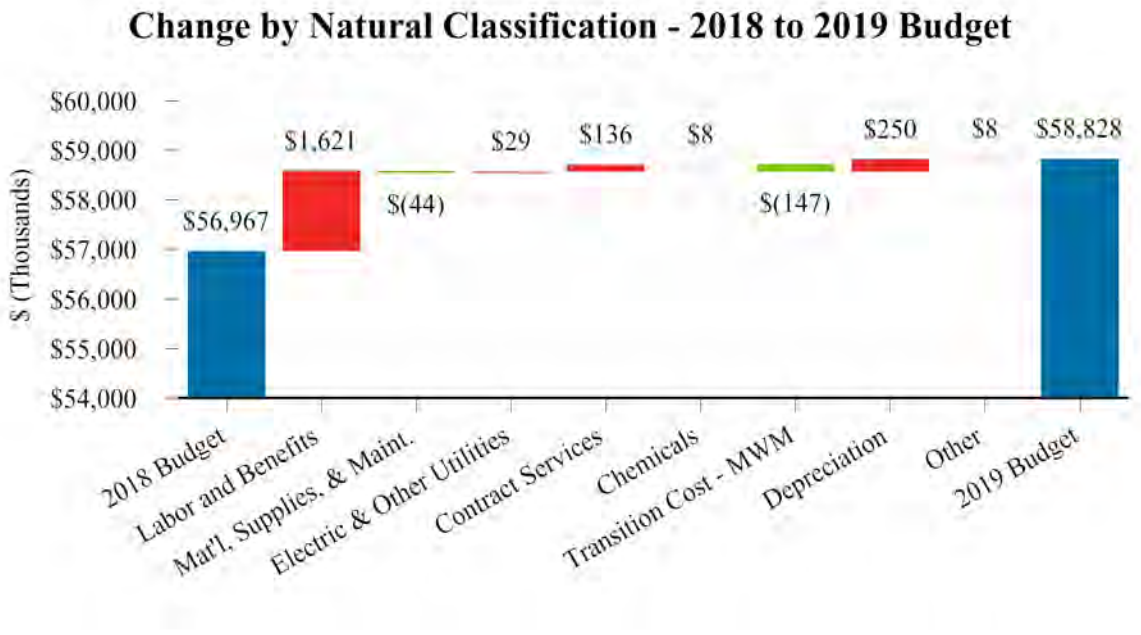
Operating expenses include 343 budgeted positions for 2019, an increase of eight positions from the number of 2018 positions. As of September 1, 2018, 315 positions were staffed, including 16 part-time positions. This reflects an increase of eight staffed positions when compared to 307 staffed positions as of September 1, 2017. This increase is driven by the CIS project, partially offset by currently vacant positions. Traditionally, the Utility's turnover rate is very low (7.7% for 2018), and staffing levels remain consistent from year to year. Where warranted, positions have been phased out or combined with other positions as employees retire. Other positions have been retained as part-time instead of full-time as circumstances indicate. Operating expenses for each department include an increase of 3.5% for exempt and non-exempt employees. Total wage and benefit costs associated with this increase amount to $1,045,000. Due to increased utilization, health insurance premiums will increase by 17.7% in the upcoming year. The estimated national average increase for health insurance is projected to be 5 - 6% as per the Society for Human Resource Management (SHRM). Department directors held operating expenses to a 0.8% overall increase (excluding depreciation, MWM transition cost, wages, and benefits) from the 2018 budget. The Arkansas Public Employees Retirement System (APERS) mandatory employer contribution rate will remain the same at 15.32% for the fiscal year beginning July 1, 2019.

The following graph presents total actual Operating Expenses by Natural Classification for the years 2012 through 2017. Budgeted numbers are shown for the years 2018 and 2019. Labor and benefits account for the majority of operating expenses with 50% for the 2019 budgeted amount. The addition of 30 employees due to the MWM merger caused labor and benefits to increase significantly in 2016. Labor and benefit increases have since returned to pre-merger percentages.

Operating Expenses by Natural Classification

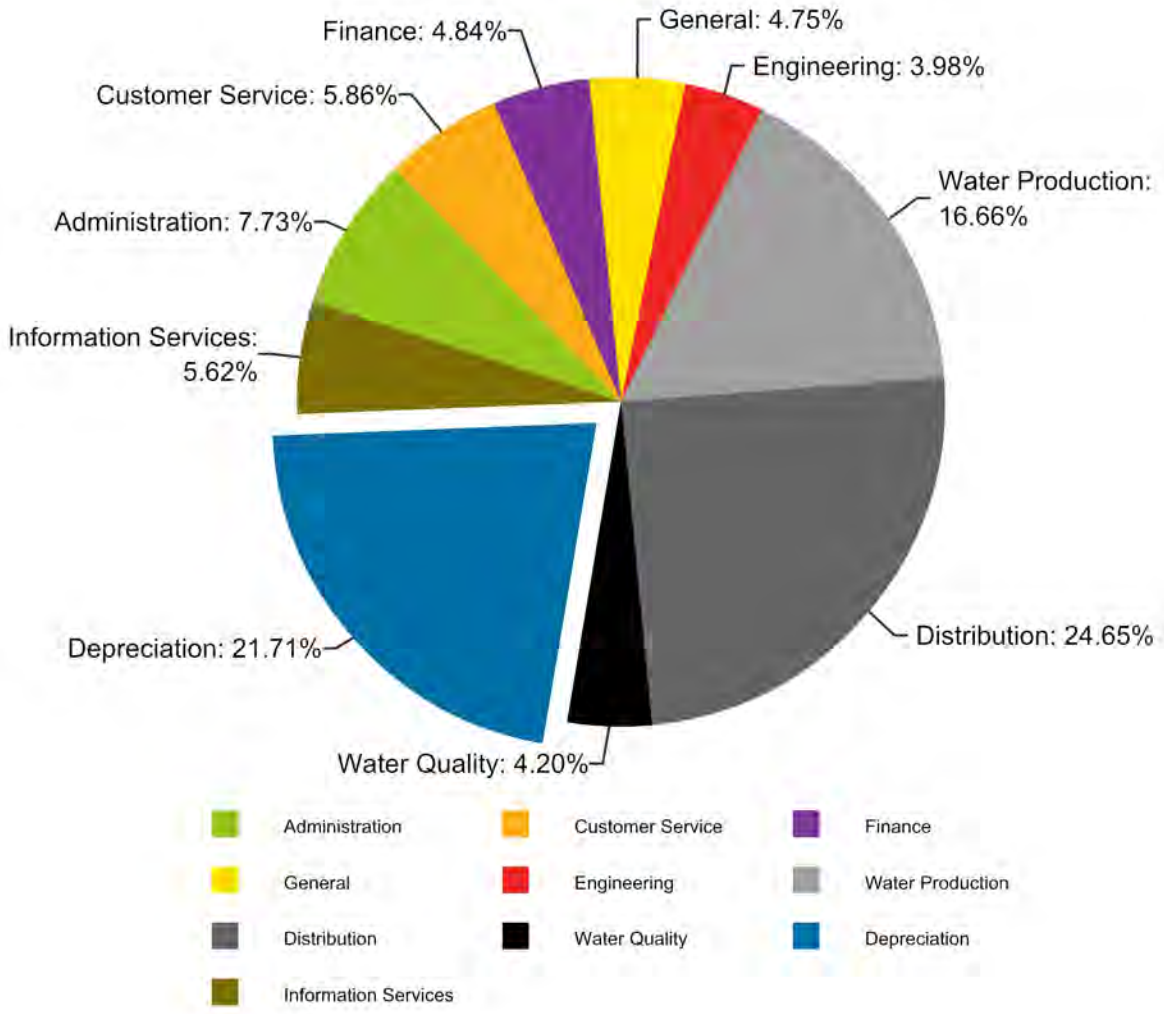


The following graph presents budgeted Operating Expenses by Natural Classification for 2018 and 2019 (blue bars) with specific Natural Classification areas driving changes in budgeted expenses between the two years. Green bars indicate decreases in expenses while red bars indicate increases in expenses.



OPERATING EXPENSES

By DEPARTMENT



The above graph shows operating expenses for all eight departments, depreciation, and general expenses.

The Administration Department is projecting a $556,800 or 14.0% budget increase from 2018. Wages and benefits make up the largest portion of the increase with the addition of eight positions from the 2018 budget. The Customer Service Assistant Supervisor Project Team Member (PTM), Billing Account Specialist PTM, Business Analyst PTM, General Accountant PTM, and New Service Representative PTM positions were transferred from other departments to the Special Project section. A new executive staff member, CINO, was added to the Administration department to facilitate company-wide initiatives to achieve continued efficiencies and adapt to the ever-changing business environment. A Training Developer and Technical Specialist were also added to the

Administration Department for the 2019 budget year. Additional capitalized labor attributable to the CIS Project Team offsets the additional payroll and benefits by $356,000. Increases in legal fees of $57,000 and office space rent for the CIS Project Team of $49,000 account for the remaining additional expenses. Administration includes Executive Staff, Environmental Health and Safety (EHS), Human Resources, Public Affairs and Communications, Special Projects, Legal, and Commissioners' expenses. Human Resources includes funds for employee assistance/wellness programs and employee training programs, such as diversity and supervisory training. Also included are amounts for recruitment and succession planning/leadership development programs. EHS includes safety training and facilities security. Public Affairs and Communications includes the annual costs for all public communications, community outreach, and education efforts, as well as the water quality report.

The Information Services (IS) Department budget for 2019 reflects an increase of $31,000 or 1.0%. The total increase is associated with increased data service and software maintenance costs . The total number of departmental employees remains the same as the 2018 budget with 18, with two vacancies as of 9/1/2018. The IS Department oversees information services, computer operations, and telecommunications.

The Customer Service Department reflects an increase in the 2019 budget of $181,700 or 5.6% compared to the 2018 budget. The primary cause for the increase is labor and benefit increases related to reorganizing Customer Service - Office positions to adapt to upcoming CIS changes. The total number of employees in the Customer Service Department remains at 53 for 2019. The Customer Service Department provides customers with information, resolves problems, and reads water meters.

The Finance Department is projecting a $156,100 decrease from the 2018 budget. This decrease is primarily due to capitalized labor and reduced postage costs in the Billing section. The total number of employees budgeted for the Finance Department decreases two positions to 22, with one vacant position at budget time. The Finance Department is responsible for accounting, finance, budgeting, purchasing, and billing.

The General category budget reflects a $127,600 or 4.8% increase from 2018. The implementation of Governmental Accounting Standards Board (GASB) 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has led to these increased costs. The General category of the budget includes other post employment benefits costs, workers compensation, and future water resources. Other costs that contribute to this category are business insurance, uncollectible accounts, utilities, and building maintenance items for the James T. Harvey (JTH) Administration building.

The Engineering Department is projecting a $24,600 or 1.0% decrease from the previous year's budget. This decrease is primarily due to the reduction in MWM transition costs for the decommissioning of the water treatment plant and wells. The decrease is offset by the increased labor and benefits for two new positions, which bring the total number of budgeted positions to 26. In 2019, the amount budgeted for capitalized labor is $412,000, which will be reflected as capital charges rather than operating expense. Engineering is

responsible for planning, design, and construction inspection of improvements within the CAW system.

Water Production's operating budget is increasing by $301,700 or 3.2% compared to 2018 budget. The number of employee positions increases by one to 38 budgeted employees. The Lake Winona Supervisor and Maintenance Repair Worker positions were transferred from the Distribution Department, while the System & Administrative Coordinator transferred to the Water Quality Department, resulting in the additional position. Variable costs such as chemical treatment, wastewater disposal, and power are driven by increases or decreases in water consumption.

Distribution, the largest department, is showing a budget increase of $406,800 or 2.9% from 2018 budgeted amounts. The number of budgeted employees decreases by two to 145 for 2019. This decrease is due to the transfer of two positions to the Water Production Department. As of the budget date, the department maintained a total of 141 employees and 6 vacancies, which are projected to be filled before the end of 2018. Increases for the 2019 budget year primarily consist of the company-wide wage adjustment and increased benefit costs. Distribution forecasts that approximately $1.61 million in payroll costs will be capitalized in 2019. This department provides field customer service activities and maintains water mains, booster pumping stations, storage tanks, the vehicle and equipment fleet, treatment plants, all warehouses, and other buildings.

Water Quality is increasing its budget for 2019 by $186,000 or 8.1%. The total number of budgeted employees increases by one to 14 for 2019. This increase resulted from the transfer of one position from the Water Production Department. Higher labor and benefits costs for this department are mainly due to this transfer of a long-term employee in addition to increased benefit costs. To ensure high-quality raw water for the Utility, the Water Quality Department is responsible for implementation of the Lake Maumelle Watershed Management Plan (WMP) and overall large-scale watershed protection programs for both Lake Maumelle and Lake Winona. The department includes water-quality monitoring and assessment; monitoring of watershed land use activities that may impact water quality in the lakes; building program support for watershed protection with local governments, private industry, and the public; and providing the CAW Board with continual recommendations for water quality protection.

Depreciation reflects an increase of $249,800 or 2.0%. Depreciation expense is directly affected as capital projects are completed and capital assets are acquired. Asset types determine the service life used for depreciation and range from five years for electronics to 75 years for distribution mains. The Utility capitalizes individual property acquisitions in excess of $5,000.

Other Expenses

Payment-in-lieu-of-taxes (PILOT) is paid to the cities of Little Rock and North Little Rock and is equal to the ad valorem taxes that would have been payable to each city based on the Utility's real property and improvements located within the city limits, had such real property and improvements been subject to ad valorem taxation.

Interest expense is budgeted net of capitalized interest. Capitalized interest is interest incurred during the process of acquiring or constructing a capital asset or interest that could have been avoided by paying down debt rather than cash-financing capital projects. Capitalized interest is included as part of the cost of the associated asset. The 2019 Financial Plan includes approximately $594,200 in capitalized interest.

NET POSITION – OVERVIEW

Net Position is the residual of all other elements presented in a statement of financial position. The increase or decrease in Net Position from one period to the next equals the net of all activity reported for that period. The total balance of Net Position at any point in time equals the cumulative total of all activity from inception.

Net Position is classified as Net Investment in Capital Assets, Restricted, or Unrestricted.

Overall, the 2019 budget will result in a Net Position increase of approximately $9,742,000, or approximately $6,914,000 before contributions.

STATEMENT OF REVENUES AND EXPENSES
(BY NATURAL CLASSIFICATION – PERCENTAGE CHANGES)

	2017 ACTUAL	2018 PROJECTED	2018 BUDGET	2019 BUDGET	CHANGE FROM 2018 PROJECTED	CHANGE FROM 2018 BUDGET
Operating Revenues						
Retail Water Sales	$ 47,560,776	$ 52,806,760	$ 53,352,775	$ 53,051,469	0.46 %	(0.56)%
Wholesale Water Sales	4,206,303	4,633,160	4,302,000	4,302,000	(7.15)%	— %
Penalties and Turn-on Charges	2,286,980	2,298,824	2,073,000	2,209,500	(3.89)%	6.58 %
Ancillary Charges	4,653,630	4,597,049	4,535,298	6,622,225	44.05 %	46.02 %
Maumelle Surcharge Revenue	2,678,515	2,228,297	2,210,750	2,215,500	(0.57)%	0.21 %
Other Revenue	899,797	936,708	840,400	798,000	(14.81)%	(5.05)%
Total Operating Revenues	***62,286,001***	***67,500,798***	***67,314,223***	***69,198,694***	***2.52 %***	***2.80 %***
Operating Expenses						
Labor and Benefits	27,728,339	27,011,896	27,743,077	29,363,721	8.71 %	5.84 %
Materials, Supplies, and Maintenance	6,269,288	6,573,622	6,642,073	6,598,146	0.37 %	(0.66)%
Electric and Other Utilities	4,219,105	4,264,395	4,426,986	4,455,544	4.48 %	0.65 %
Contract Services	3,148,187	3,199,007	3,407,712	3,543,751	10.78 %	3.99 %
Chemicals	1,699,274	1,604,054	1,612,553	1,621,046	1.06 %	0.53 %
Transition Cost - MWM	23,071	131,927	272,000	125,000	(5.25)%	(54.04)%
Depreciation	12,770,371	12,650,581	12,520,835	12,770,617	0.95 %	1.99 %
Other	353,123	343,512	342,000	350,000	1.89 %	2.34 %
Total Operating Expenses	***56,210,758***	***55,778,994***	***56,967,236***	***58,827,825***	***5.47 %***	***3.27 %***
Operating Income (Loss)	***6,075,243***	***11,721,804***	***10,346,987***	***10,370,869***	***(11.52)%***	***0.23 %***
Non-operating Revenue (Expense)						
Payment-in-lieu-of-taxes	(706,716)	(709,064)	(709,056)	(791,064)	11.56 %	11.57 %
Investment Income	413,267	650,724	338,600	609,750	(6.30)%	80.08 %
Gain/Loss on Sale of Assets	70,231	(17,965)	—	—	(100.00)%	— %
Bond Interest Expense	(1,314,068)	(1,354,166)	(2,061,499)	(2,504,335)	84.94 %	21.48 %
Bond Interest Expense - Maumelle	(761,738)	(649,422)	(677,677)	(663,566)	2.18 %	(2.08)%
Interest Expense - Other	(41,030)	(25,848)	(114,811)	(107,244)	314.90 %	(6.59)%
Total Non-operating Revenue (Expense)	***(2,340,054)***	***(2,105,741)***	***(3,224,443)***	***(3,456,459)***	***64.14 %***	***7.20 %***
Net Income (Loss) Before Contributions	***3,735,189***	***9,616,063***	***7,122,544***	***6,914,410***	***(28.10)%***	***(2.92)%***
Contributions						
Capital Contributions from Grantors	—	—	—	327,500	— %	— %
Contributions-in-aid of Construction	2,442,052	2,734,211	2,000,000	2,500,000	(8.57)%	25.00 %
Total Contributions	***2,442,052***	***2,734,211***	***2,000,000***	***2,827,500***	***3.41 %***	***41.38 %***
Change in Net Position	***$ 6,177,241***	***$ 12,350,274***	***$ 9,122,544***	***$ 9,741,910***	***(21.12)%***	***6.79 %***

STATEMENT OF REVENUES AND EXPENSES
(BY DEPARTMENT – PERCENTAGE CHANGES)

	2017 ACTUAL	2018 PROJECTED	2018 BUDGET	2019 BUDGET	CHANGE FROM 2018 PROJECTED	CHANGE FROM 2018 BUDGET
Operating Revenues						
Retail Water Sales	$ 47,560,776	$ 52,806,760	$ 53,352,775	$ 53,051,469	0.46 %	(0.56)%
Wholesale Water Sales	4,206,303	4,633,160	4,302,000	4,302,000	(7.15)%	— %
Penalties and Turn-on Charges	2,286,980	2,298,824	2,073,000	2,209,500	(3.89)%	6.58 %
Ancillary Charges	4,653,630	4,597,049	4,535,298	6,622,225	44.05 %	46.02 %
Maumelle Surcharge Revenue	2,678,515	2,228,297	2,210,750	2,215,500	(0.57)%	0.21 %
Other Revenue	899,797	936,708	840,400	798,000	(14.81)%	(5.05)%
Total Operating Revenues	***62,286,001***	***67,500,798***	***67,314,223***	***69,198,694***	***2.52 %***	***2.80 %***
Operating Expenses						
Administration	3,447,848	3,772,465	3,990,482	4,547,286	20.54 %	13.95 %
Information Services	3,328,784	3,198,523	3,274,796	3,305,873	3.36 %	0.95 %
Customer Service	3,151,817	3,158,081	3,264,765	3,446,485	9.13 %	5.57 %
Finance	3,078,674	2,832,922	3,005,711	2,849,566	0.59 %	(5.19)%
General	2,650,581	2,669,369	2,665,391	2,792,967	4.63 %	4.79 %
Engineering	2,049,541	2,049,769	2,364,701	2,340,072	14.16 %	(1.04)%
Water Production	9,341,319	9,022,968	9,500,999	9,802,651	8.64 %	3.17 %
Distribution	14,256,896	14,236,327	14,095,526	14,502,328	1.87 %	2.89 %
Water Quality	2,134,927	2,187,989	2,284,030	2,469,980	12.89 %	8.14 %
Depreciation	12,770,371	12,650,581	12,520,835	12,770,617	0.95 %	1.99 %
Total Operating Expenses	***56,210,758***	***55,778,994***	***56,967,236***	***58,827,825***	***5.91 %***	***3.27 %***
Operating Income (Loss)	***6,075,243***	***11,721,804***	***10,346,987***	***10,370,869***	***(11.52)%***	***0.23 %***
Non-operating Revenue (Expense)						
Payment-in-lieu-of-taxes	(706,716)	(709,064)	(709,056)	(791,064)	11.56 %	11.57 %
Investment Income	413,267	650,724	338,600	609,750	(6.30)%	80.08 %
Gain/Loss on Sale of Assets	70,231	(17,965)	—	—	(100.00)%	— %
Bond Interest Expense	(1,314,068)	(1,354,166)	(2,061,499)	(2,504,335)	84.94 %	21.48 %
Bond Interest Expense - Maumelle	(761,738)	(649,422)	(677,677)	(663,566)	2.18 %	(2.08)%
Interest Expense-Other	(41,030)	(25,848)	(114,811)	(107,244)	314.90 %	(6.59)%
Total Non-operating Revenue (Expense)	***(2,340,054)***	***(2,105,741)***	***(3,224,443)***	***(3,456,459)***	***64.14 %***	***7.20 %***
Net Income (Loss) Before Contributions	***3,735,189***	***9,616,063***	***7,122,544***	***6,914,410***	***(28.10)%***	***(2.92)%***
Contributions						
Capital Contributions from Grantors	—	—	—	327,500	— %	— %
Contributions-in-aid of Construction	2,442,052	2,734,211	2,000,000	2,500,000	(8.57)%	25.00 %
Total Contributions	***2,442,052***	***2,734,211***	***2,000,000***	***2,827,500***	***3.41 %***	***41.38 %***
Change in Net Position	***$ 6,177,241***	***$12,350,274***	***$ 9,122,544***	***$ 9,741,910***	***(21.12)%***	***6.79 %***

STATEMENT OF REVENUES

	INSIDE	OUTSIDE	TOTAL
Operating Revenues			
Retail Water Sales – Little Rock			
Residential	$ 11,436,030	$ 2,699,637	$ 14,135,667
Commercial	7,722,563	306,994	8,029,557
Large Volume	1,647,143	184,485	1,831,628
Sprinkler	9,734,853	236,898	9,971,751
Raw Water	23,715	60,000	83,715
Private Fire Service	497,136	53,898	551,034
Total Little Rock	**31,061,440**	**3,541,912**	**34,603,352**
Retail Water Sales – North Little Rock			
Residential	4,173,435	4,816,429	8,989,864
Commercial	2,513,826	903,447	3,417,273
Large Volume	504,247	45,113	549,360
Sprinkler	1,481,702	609,445	2,091,147
Private Fire Service	93,823	86,833	180,656
Total North Little Rock	**8,767,033**	**6,461,267**	**15,228,300**
Retail Water Sales – Maumelle			
Residential		1,879,635	1,879,635
Commercial		398,238	398,238
Large Volume		120,612	120,612
Sprinkler		821,332	821,332
Total Maumelle		**3,219,817**	**3,219,817**
Total Retail Water Sales	**39,828,473**	**13,222,996**	**53,051,469**
Wholesale Water Sales			
Bryant Water and Sewer Department		1,250,560	1,250,560
Shannon Hills		180,819	180,819
Sardis Water Association		110,970	110,970
Saline County Water and Sewer Public Facilities Board (Woodland Hills)		15,587	15,587
Salem Water Users Association		1,076,479	1,076,479
Jacksonville Water Works		1,346,726	1,346,726
Mid Arkansas Utilities		75,236	75,236
Ridgefield Estates Public Facilities Board		17,183	17,183
Cabot Water Works		228,440	228,440
Total Wholesale Water Sales		**4,302,000**	**4,302,000**
Penalties and Turn-on Charges			
Penalties		899,500	899,500
Turn-on Charges		1,310,000	1,310,000
Total Penalties and Turn-on Charges		**2,209,500**	**2,209,500**
Ancillary Charges			
Billing and Ancillary Fees		4,046,475	4,046,475
Connection Fees		875,000	875,000
Watershed Protection Fees		1,236,250	1,236,250
Capital Investment Charges		145,000	145,000
System Development Charges		319,500	319,500
Total Ancillary Charges		**6,622,225**	**6,622,225**
Maumelle Surcharges			
Maumelle Surcharge Revenue		2,215,500	2,215,500
Total Maumelle Transition Surcharges		**2,215,500**	**2,215,500**

	INSIDE	OUTSIDE	TOTAL
Other Revenue		**798,000**	**798,000**
Total Operating Revenues	**39,828,473**	**29,370,221**	**69,198,694**
Non-operating Revenues			
Interest Income		487,500	487,500
Bond Issue Interest Income		122,250	122,250
Total Non-operating Revenues		**609,750**	**609,750**
Total Operating and Non-operating Revenues	**$ 39,828,473**	**$ 29,979,971**	**$ 69,808,444**

STATEMENT OF OPERATING EXPENSES
(BY DEPARTMENT AND NATURAL CLASSIFICATION)

	Labor and Benefits	Materials Supplies and Maintenance	Electric and Other Utilities	Contract Services	Chemicals	Depreciation	Other	Transition Cost - MWM	Departmental Total
Administration									
Administration	$ 1,272,294	$ 107,100	$ 1,200	$ 555,000	—	—	$ 42,000	$ —	$ 1,977,594
Human Resources	526,408	59,625	—	62,700	—	—	—	—	648,733
Public Affairs and Communications	461,224	203,500	2,520	154,000	—	—	8,000	—	829,244
Environmental Health and Safety	486,778	183,700	1,940	179,774	—	—	—	—	852,192
Commissioners Expense	—	1,200	—	14,400	—	—	—	—	15,600
Special Projects	142,883	5,100	21,600	54,340					223,923
Total Administration	***2,889,587***	***560,225***	***27,260***	***1,020,214***	***—***	***—***	***50,000***	***—***	***4,547,286***
Information Services									
Administration	1,068,555	867,856	462,160	23,300	—	—	—	—	2,421,871
Geographic Information System	655,486	219,854	—	8,662	—	—	—	—	884,002
Total Information Systems	***1,724,041***	***1,087,710***	***462,160***	***31,962***	***—***	***—***	***—***	***—***	***3,305,873***
Customer Service									
Administration	127,267	34,574	960	45,318	—	—	—	—	208,119
Cashiering	433,384	—	—	—	—	—	—	—	433,384
Call Center	1,227,003	—	—	—	—	—	—	—	1,227,003
Walk-in	147,580	—	—	—	—	—	—	—	147,580
Meter Reading	853,462	1,200	—	—	—	—	—	—	854,662
Production Meter Reading	575,737	—	—	—	—	—	—	—	575,737
Total Customer Service	***3,364,433***	***35,774***	***960***	***45,318***	***—***	***—***	***—***	***—***	***3,446,485***
Finance									
Administration	1,053,190	73,085	480	396,060	—	—	—	—	1,522,815
Billing	451,206	601,600	—	5,780	—	—	—	—	1,058,586
Purchasing	260,270	970	480	6,445	—	—	—	—	268,165
Total Finance	***1,764,666***	***675,655***	***960***	***408,285***	***—***	***—***	***—***	***—***	***2,849,566***
General and Depreciation	***1,576,000***	***211,000***	***108,000***	***597,967***	***—***	***12,770,617***	***300,000***	***—***	***15,563,584***
Engineering									
Administration	1,510,081	58,500	4,080	32,046	—	—	—	125,000	1,729,707
New Service	173,905	580	—	780	—	—	—	—	175,265
Cross-Connection Control	336,847	13,680	1,440	3,480	—	—	—	—	355,447
Regionalism	78,163	750	320	420	—	—	—	—	79,653
Total Engineering	***2,098,996***	***73,510***	***5,840***	***36,726***	***—***	***—***	***—***	***125,000***	***2,340,072***
Water Production									
Administration	325,313	1,725	1,920	6,200	—	—	—	—	335,158
Lake Maumelle	569,783	73,675	1,100,000	12,649	17,240	—	—	—	1,773,347
Lake Winona	198,117	19,250	14,000	331	10,000	—	—	—	241,698
Ozark Point Plant	580,645	30,700	263,000	1,000	386,289	—	—	—	1,261,634
Wilson Plant	2,350,901	210,252	1,345,344	15,300	1,207,517	—	—	—	5,129,314
Booster Stations/ Jackson Reservoir	—	—	1,061,500	—	—	—	—	—	1,061,500
Total Water Production	***4,024,759***	***335,602***	***3,785,764***	***35,480***	***1,621,046***	***—***	***—***	***—***	***9,802,651***
Distribution									
Administration	560,278	213,800	59,800	666,218	—	—	—	—	1,500,096
Meters, Warehouse, and Dispatch	1,162,177	3,300	—	400	—	—	—	—	1,165,877
Pump Station Maintenance	758,327	120,000	—	—	—	—	—	—	878,327
Plant Maintenance – Ozark/Wilson	959,989	412,700	—	—	—	—	—	—	1,372,689
Distribution System Maintenance	5,597,210	2,522,400	—	600	—	—	—	—	8,120,210
Distribution Field Service	1,449,129	16,000	—	—	—	—	—	—	1,465,129

	Labor and Benefits	Materials Supplies and Maintenance	Electric and Other Utilities	Contract Services	Chemicals	Depreciation	Other	Transition Cost - MWM	Departmental Total
Total Distribution	***10,487,110***	***3,288,200***	***59,800***	***667,218***	***—***	***—***	***—***	***—***	***14,502,328***
Water Quality									
Administration	439,244	93,750	3,000	403,581	—	—	—	—	939,575
Watershed Management	377,441	58,500	1,800	235,500	—	—	—	—	673,241
Laboratory	617,444	178,220	—	61,500	—	—	—	—	857,164
Total Water Quality	***1,434,129***	***330,470***	***4,800***	***700,581***	***—***	***—***	***—***	***—***	***2,469,980***
Total	***$29,363,721***	***$ 6,598,146***	***$ 4,455,544***	***$3,543,751***	***$ 1,621,046***	***$ 12,770,617***	***$350,000***	***$ 125,000***	***$ 58,827,825***

STATEMENT OF NET POSITION

Beginning Net Position, 1/1/2018	$ 364,849,399
Operating Revenues, 2018	67,500,798
Operating Expenses, 2018	(55,778,994)
Other Expense, 2018	(2,105,741)
Contributions, 2018	2,734,211
Change in Net Position, 2018	12,350,274
Ending Net Position, 12/31/2018	377,199,673
Beginning Net Position, 1/1/2019	377,199,673
Operating Revenues, 2019	69,198,694
Operating Expenses, 2019	(58,827,825)
Other Expense, 2019	(3,456,459)
Contributions, 2019	2,827,500
Change in Net Position, 2019	9,741,910
Ending Net Position, 12/31/2019	**$ 386,941,583**

Ending Net Position is based on 2018 projected numbers and 2019 budgeted numbers.

BUDGETED POSITIONS

Central Arkansas Water budgets employee positions on an annual basis. Total budgeted positions increase by eight in the 2019 budget. The eight added positions are the CINO, a Training Developer, a Technical Specialist, a Leak Detection Specialist, an Engineer, a Water Regulations Specialist, a New Service Representative, and a Records Manager. A total of 343 budgeted positions are identified in detail in the accompanying Summary of Budgeted Positions which lists the department, position title, and number of budgeted and actual positions. A numerical index 1 – 15 reflects modifications made to position titles or department locations.

Administration

The Administration Department includes EHS, Human Resources, Public Affairs and Communications, and Special Projects as well as the CEO and his staff. Administration is budgeted to increase to a total of 27 positions in 2019. The transfer of five positions from various departments to the CIS project team and three new positions have facilitated this increase. The CINO and Training Developer are key positions to ensuring that employees adapt to ever changing technology and environments. A Technical Specialist is added to the Administration team to assist with maintaining policies and procedures to continue providing the best water to customers.

Customer Service

The 2019 budgeted positions for Customer Service remained the same as the 2018 budget with 53 budgeted positions. The department had one new position that was transferred from the Distribution Department and one position which was moved to the CIS Project Team, resulting in no net change. The department consists of 32 Customer Service employees, seven full-time Meter Reading Staff/Supervisor, and 14 part-time Production Meter Readers.

Distribution

Total staffing in Distribution decreases by two to 145 employees for the 2019 budget period. This decrease is due to the transfer of three positions to other departments, offset by the addition of the Leak Detection Specialist. The Distribution Department includes a Director, an Assistant Director, Administrative Staff, as well as staff in the following sections: (1) Meters, Warehouse, Dispatch; (2) Pump Station Maintenance; (3) Plant Maintenance; (4) Distribution System Maintenance; and (5) Customer Service Field Representatives.

Engineering

The Engineering Department 2019 budget increases by two to a total of 26 positions. This includes 17 Engineering staff, four New Service staff, four Cross Connection staff, and one employee in Regionalism. The department is currently fully staffed as of September 1, 2018. The New Service Coordinator position and one New Service Representative are filled by CAW retirees who work on a part-time basis.

Finance

Finance decreases by two from the 2018 budget to a total of 22 employees. This decrease stems from the transfer of two employees to the CIS project team. The 2019 Finance budgeted positions include 13 Accounting staff, three Purchasing staff, and six Billing staff. Finance employs two part-time CAW retirees.

Information Services

The budgeted IS staff remains constant from 2018 to 2019 with a total of 18 employees. One position is transferring from the department to the CIS project team. This loss is offset by the addition of the Records Manager position. The IS budgeted positions include a Director, 11 IS support staff, a GIS Manager, and six GIS staff. Actual department employment is 16, with two vacant positions as of September 1, 2018.

Water Production

The budgeted positions for Water Production increase by one to a total of 38 employees for the 2019 budget year. This increase is due to the transfer of two positions from the Distribution Department and of the Systems and Administrative Coordinator to the Water Quality Department. Water Production staff includes the Director of Water Production, Administrative personnel, Treatment Plant, and Water Source employees.

Water Quality

Water Quality staffing for 2019 increases by one from the 2018 budget to a total of 14 employees. The department positions include eight Laboratory staff which include a Water Quality Specialist, Laboratory Manager, a Chemist, two Laboratory Technicians, and three Field Laboratory Technicians. The department also includes the Director of Water Quality, the System and Administrative Coordinator, the Watershed Protection Manager, a Natural Resource Specialist, and two Watershed Technicians.

Change in Budgeted Positions by Year					
	2015	**2016**	**2017**	**2018**	**2019**
Administration	+2	+1	0	+4	+8
Customer Service	+1	0	+3	+4	0
Distribution	+4	+2	+20	-5	-2
Engineering	-1	0	+2	0	+2
Finance	0	0	+4	0	-2
Information Services	0	0	0	+1	0
Water Production	-1	-2	+8	+1	+1
Water Quality	+1	-1	0	0	+1

SUMMARY OF BUDGETED POSITIONS

		2015 Budget	2016 Budget	2017 Actual	2018 Budget	9/1/2018 Actual	2019 Budget
	Administration						
	Chief Executive Officer	1	1	1	1	1	1
9	Chief Legal Counsel	1	1	—	—	—	—
	Chief Operating Officer	1	1	1	1	1	1
3	Chief Financial Officer	—	—	—	1	1	1
	Technical Services Officer	1	1	1	—	—	—
9	General Counsel	—	—	1	1	1	1
5	Chief Innovation Officer	—	—	—	—	1	1
	Management Secretary	1	1	1	1	1	1
3	Administrative Assistant	1	1	1	1	1	1
	Chief Administrative Officer	1	1	1	1	1	—
5	Director of Human Resources	—	—	—	—	—	1
	Human Resources Specialist	2	2	2	2	2	2
	Human Resources Assistant	1	1	1	1	1	1
3,10	Director of Public Affairs and Communications	—	1	1	1	1	1
13	Education/Outreach Specialist	—	—	1	1	1	1
3,14	Communications Specialist/Brand Manager	1	1	1	1	1	1
	Director of Environmental Health and Safety	1	1	1	1	1	1
	Safety Specialist	1	1	1	2	2	2
3	Facility Maintenance Specialist	1	1	—	1	1	1
5	Special Projects Manager	—	—	—	1	—	1
3	Customer Service Assistant Supervisor PTM	—	—	—	—	—	1
3	Billing Account Specialist PTM	—	—	—	—	—	1
3	Business Analyst PTM	—	—	—	—	—	1
3	General Accountant PTM	—	—	—	—	—	1
3	New Service Representative PTM	—	—	—	—	—	1
2, 5	Technical Specialist	—	—	—	—	—	1
5	Social Media Specialist	—	—	—	1	1	1
5	Training Developer	—	—	—	—	—	1
	Total	14	15	15	19	19	27
	Customer Service						
3,10	Director of Customer Relations and Public Affairs	1	—	—	—	—	—
	Customer Service Manager	1	1	1	1	1	1
	Customer Service Supervisor – Office	1	1	1	1	1	1
	Customer Service Assistant Supervisor	1	1	1	1	1	—
7a	Cashier/PT Cashier	3	3	3	4	4	4

SUMMARY OF BUDGETED POSITIONS

		2015 Budget	2016 Budget	2017 Actual	2018 Budget	9/1/2018 Actual	2019 Budget
	Receptionist	1	1	1	1	1	1
	Customer Service Office Representative Walk-in	4	4	4	4	2	4
7b	Customer Service Office Representative Call Center/Lead	15	13	13	18	18	18
7b	Customer Service Office Representative Call Center - Part Time (P/T)	—	3	—	—	—	—
12	Meter Reading Supervisor	—	—	1	1	1	1
12	Customer Service Assistant Supervisor – Field	1	1	—	—	—	—
	Customer Relations Specialist	1	1	1	1	1	2
	Customer Relations Specialist – P/T	1	1	1	1	1	1
	Meter Reader	5	5	6	6	6	6
	Production Meter Reader – P/T	11	11	10	14	9	14
	Total	46	46	43	53	46	53
	Distribution						
	Director of Distribution	1	1	1	1	1	1
	Distribution Administrative Assistant	1	1	1	1	1	1
	Assistant Director of Distribution	1	1	1	1	1	1
	Distribution Manager	1	1	1	1	1	1
	Dispatcher / Lead Dispatcher	5	5	5	5	5	5
	Warehouse Foreman	1	1	—	1	1	1
	Warehouse Specialist	4	4	4	4	4	4
	Field Meter Repairer	3	3	3	3	3	3
	Meter Shop Foreman	1	1	1	1	1	1
	Instrument Technician I, II	3	3	4	4	4	4
	Maintenance Technician	6	6	9	9	9	9
3	Lake Winona Supervisor	1	1	1	1	1	—
3	Maintenance Repair Worker	1	1	1	1	1	—
3	Plant Maintenance Specialist	—	2	1	—	—	—
3	Facility Maintenance Specialist	—	—	1	—	—	—
	Lead Groundskeeper	1	1	1	1	1	1
	Maintenance Supervisor	1	1	1	1	1	1
	Industrial Electrician	2	2	3	3	3	3
	Distribution Supervisor	6	6	6	6	6	6
	Water Distribution Specialist I, II, III	48	49	52	56	50	56
	Troubleshooter	7	7	6	7	7	7
5	Leak Detection Specialist	—	—	—	—	—	1
	Foreman	20	19	20	21	21	21
	Distribution Coordinator	1	1	—	1	1	1
3	Customer Service-Supervisor-Field/Lead	1	1	1	2	2	2
3	Customer Service-Field Representative	14	14	17	16	16	15
3	Customer Service-Field Representative/Maumelle	—	—	—	—	—	—
	Total	130	132	141	147	141	145
	Engineering						
	Director of Engineering	1	1	1	1	1	1
	Engineering Administrative Assistant	1	1	1	1	1	1
	New Service Coordinator - P/T	1	1	1	1	1	1
	Engineering Technician	8	8	9	9	9	9
	Engineering Aide	1	1	1	1	1	1
3	Engineer / Senior Engineer	3	3	4	4	4	5
	New Service Representative	2	2	2	2	2	2

SUMMARY OF BUDGETED POSITIONS

		2015 Budget	2016 Budget	2017 Actual	2018 Budget	9/1/2018 Actual	2019 Budget
	New Service Representative - P/T	1	1	1	1	1	1
	Water Regulations Specialist	3	3	3	3	3	4
	MGR. of Planning, Regionalism and Future Water Source	1	1	1	1	1	1
	Total	22	22	24	24	24	26
	Finance						
3	Chief Financial Officer	1	1	1	—	—	—
5	Director of Finance	—	—	—	1	—	1
	Administrative Assistant	—	—	1	1	1	1
	Controller	1	1	1	1	1	1
	Finance Manager	1	1	1	1	1	1
	General Accountant	2	2	2	3	3	2
	Accounting Clerk I, II	5	5	6	6	6	6
	Clerical - P/T	1	1	1	1	1	1
	Purchasing/Records Clerk	1	1	1	1	—	—
	Warehouse Buyer	1	1	—	1	2	2
	Purchasing Manager	1	1	1	1	1	1
	Billing Supervisor	1	1	1	1	1	1
	Billing Account Specialist	4	4	4	5	5	4
	Billing Account Specialist – P/T	1	1	1	1	1	1
	Total	20	20	21	24	23	22
	Information Services						
	Director of Information Services	1	1	1	1	1	1
	Network Administrator	2	2	1	2	1	1
	Information Services Technician I, II	2	2	2	2	2	2
	Help Desk Technician	1	1	1	1	1	1
	Database Coordinator	2	2	2	3	2	1
	Computer Operator	2	2	2	2	2	2
4	Business Analyst	—	—	—	—	—	1
15	Intelligence & Applications Manager	—	—	—	—	—	1
3	Records Manager	—	—	—	—	—	1
	Database Administrator	1	1	1	1	1	1
	GIS Manager	1	1	1	1	1	1
	GIS Technician	4	4	4	4	4	4
	Field Data Collector	1	1	1	1	1	1
	Total	17	17	16	18	16	18
	Water Production						
	Director of Production	—	—	1	1	1	1
	System and Administrative Coordinator	1	1	1	1	—	—
6	Optimization Manager	1	1	1	1	1	1
	Production Manager	—	—	4	4	4	4
3	Senior Engineer	1	1	—	—	—	—
1	Treatment Plant Supervisor	2	2	—	—	—	—
3	Plant Maintenance Specialist	2	—	—	2	1	2
8	Treatment Plant Operator	17	17	—	—	—	—
	Facilities Operator I, II, III	—	—	28	28	27	28
3	Lake Winona Supervisor	—	—	—	—	—	1
3	Maintenance Repair Worker	—	—	—	—	—	1
1	Supervisor of Water Resources	1	1	—	—	—	—

SUMMARY OF BUDGETED POSITIONS

		2015 Budget	2016 Budget	2017 Actual	2018 Budget	9/1/2018 Actual	2019 Budget
8	Pumping Facility Operator	5	5	—	—	—	—
	Total	30	28	35	37	34	38
	Water Quality						
	Director of Water Quality	1	1	1	1	1	1
1	Assistant Director of Water Quality	1	1	—	—	—	—
3	System and Administrative Coordinator	—	—	—	—	1	1
	Watershed Protection Manager	1	1	1	1	1	1
13	Watershed Administrator	—	—	—	—	—	—
1	Conservation Coordinator	1	1	—	—	—	—
3	Water Quality Specialist	1	1	1	1	1	1
13	Natural Resource Specialist	—	—	—	1	—	1
14	Watershed Technician	2	2	2	2	2	2
3	Laboratory Manager	1	1	1	1	1	1
3,11	Chemist	1	1	1	1	—	1
3,11	Laboratory Technician	3	2	2	2	2	2
3	Field Laboratory Technician	2	2	3	3	3	3
	Field Laboratory Technician/Maumelle	—	—	—	—	—	—
	Total	14	13	12	13	12	14
	Total All Departments	293	293	307	335	315	343

1 Position removed from authorized staffing
2 Temporary position
3 Position moved to/from another department
4 One Database Coordinator Revised and Retitled Business Analyst
5 New position
6 Assistant Director of Production Retitled Optimization Manager
7a Customer Service Records Clerk position reclassified as a Cashier position
7b Two Part time Customer Service Office Representatives reclassified as F/T
8 Treatment Plant Operator and Pumping Facility Operator Combined - Facilities Operator I,II,III
9 Chief Legal Counsel reclassified as General Counsel
10 Director of Customer Relations and Public Affairs reclassified to Director of Public Affairs and Communications
11 One Laboratory Technician reclassified as Chemist
12 Title change to Meter Reading Supervisor
13 Public Education Specialist Retitled Education/Outreach Specialist
14 Communications Assistant Retitled Communications Specialist/Brand Manager
15 One Network Administrator revised and retitled Intelligence and Applications Manager

DEBT SERVICE

DEBT SERVICE – OVERVIEW

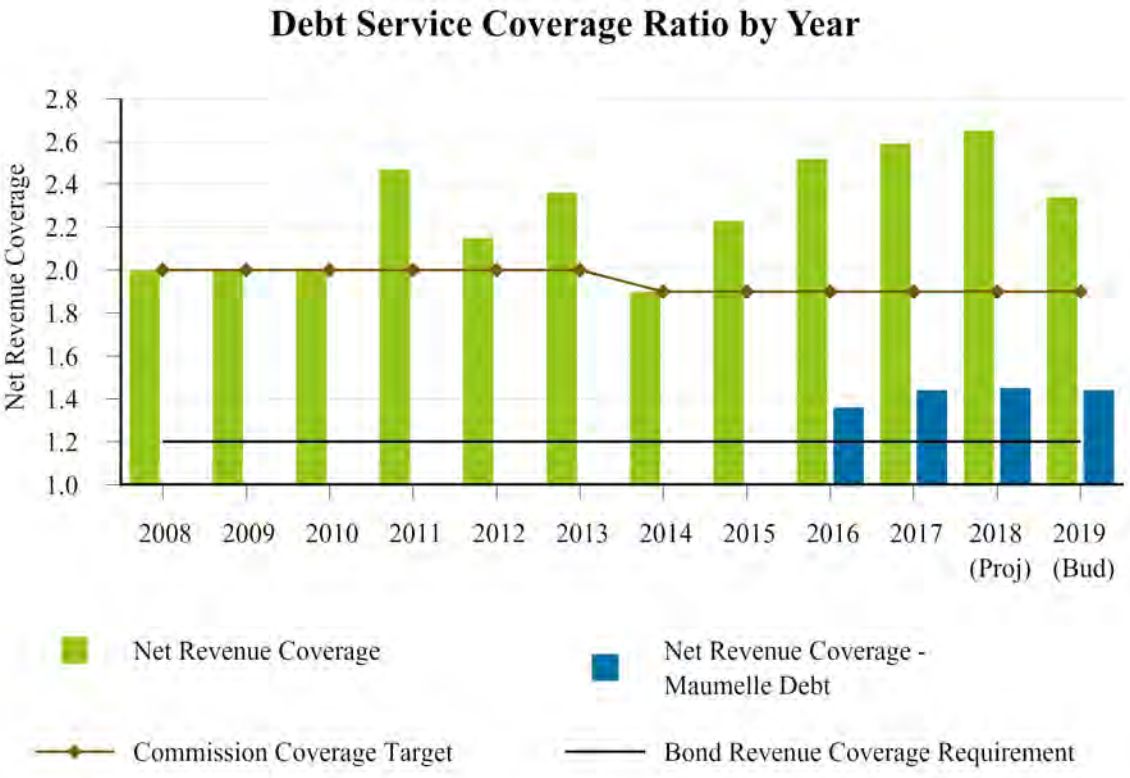
All of CAW's outstanding Revenue Bonds, other than the 2016 Maumelle Acquisition and Construction Bonds and Frazier Pike Public Facilities Board ANRC loan, are secured by and payable solely from the net revenues of the water system. CAW debt covenants specify that rates will be sufficient to meet a list of outflows (i.e., operations and maintenance expenses, principal and interest, capital needs, and allowances for contingencies and any temporary unanticipated reduction in revenues); that CAW will operate the system continually in an efficient and economical manner; that at all times CAW will maintain and preserve the system in good repair, working order, and condition so that the operating efficiency thereof will be of high integrity; that the financial books will be open for the trustee or its agent to inspect; that the system or any part of it will not be pledged except as provided for in the bond resolutions; that CAW will keep insurance in such amounts and against such risks as are usually carried by municipalities operating water systems in the State of Arkansas; and that CAW shall provide the trustee an annual audit within 120 days after the close of the year.

The 2016 Maumelle bond issue is payable from long-term debt surcharges applied to all customers in the former MWM service area. These charges will remain in place until sufficient funds have been collected to repay the $20.84 million outstanding principal on this bond issuance.

The Frazier Pike Public Facilities Board is a rural water district operated by CAW. An ANRC loan for this district is secured by debt surcharges applied to all customers in that district.

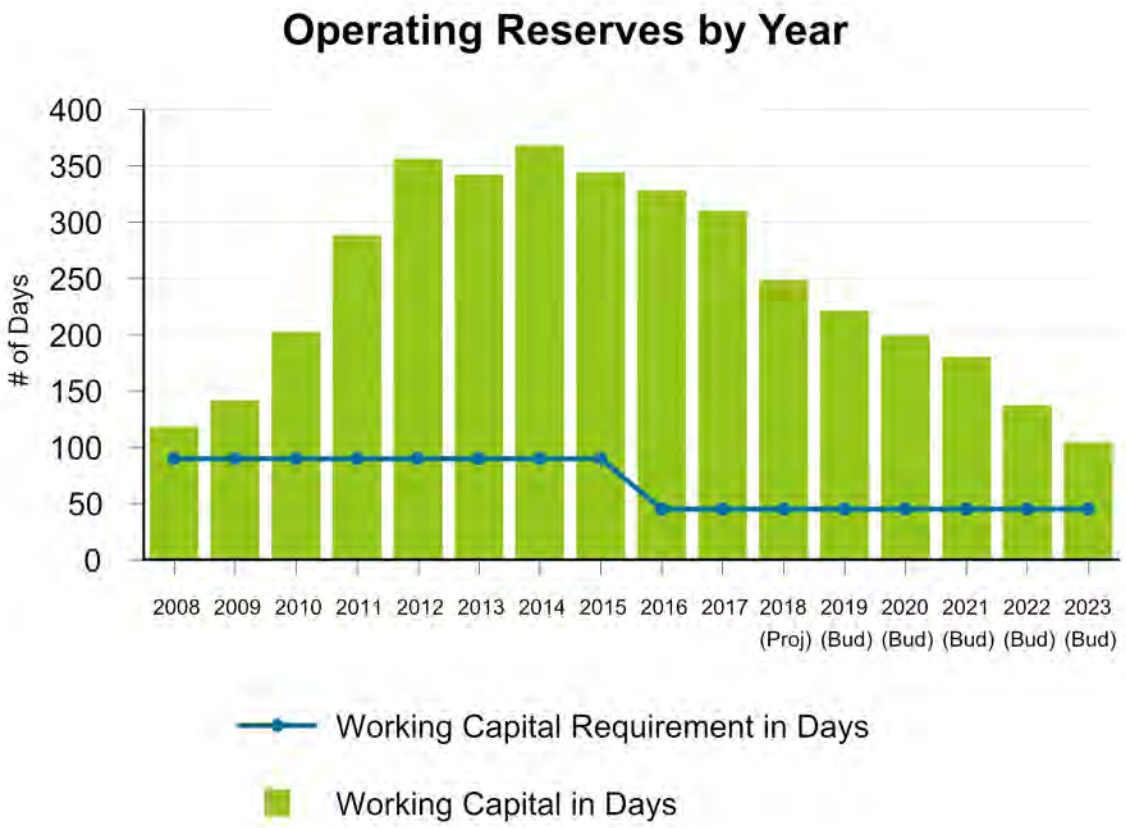
OUTSTANDING BOND ISSUES

Issue	Maturity Date	Original Amount	Outstanding Balance (Sept 30, 2018)
2010a	October 2032	$13,400,000	$10,229,000
2010c	October 2030	$8,830,000	$2,270,000
2011a	April 2034	$4,000,000	$3,392,000
2012a	October 2032	$17,515,000	$13,930,000
2014	October 2034	$10,850,000	$8,180,000
2015	October 2030	$7,445,000	$6,580,000
2016	October 2027	$17,860,000	$16,155,000
2016 Maumelle	April 2046	$22,750,000	$20,835,000
2017 Wilson	April 2041	$5,000,000	$1,471,000
2017 Ozark	April 2042	$37,000,000	$1,139,000
TOTAL		$144,650,000	$84,181,000



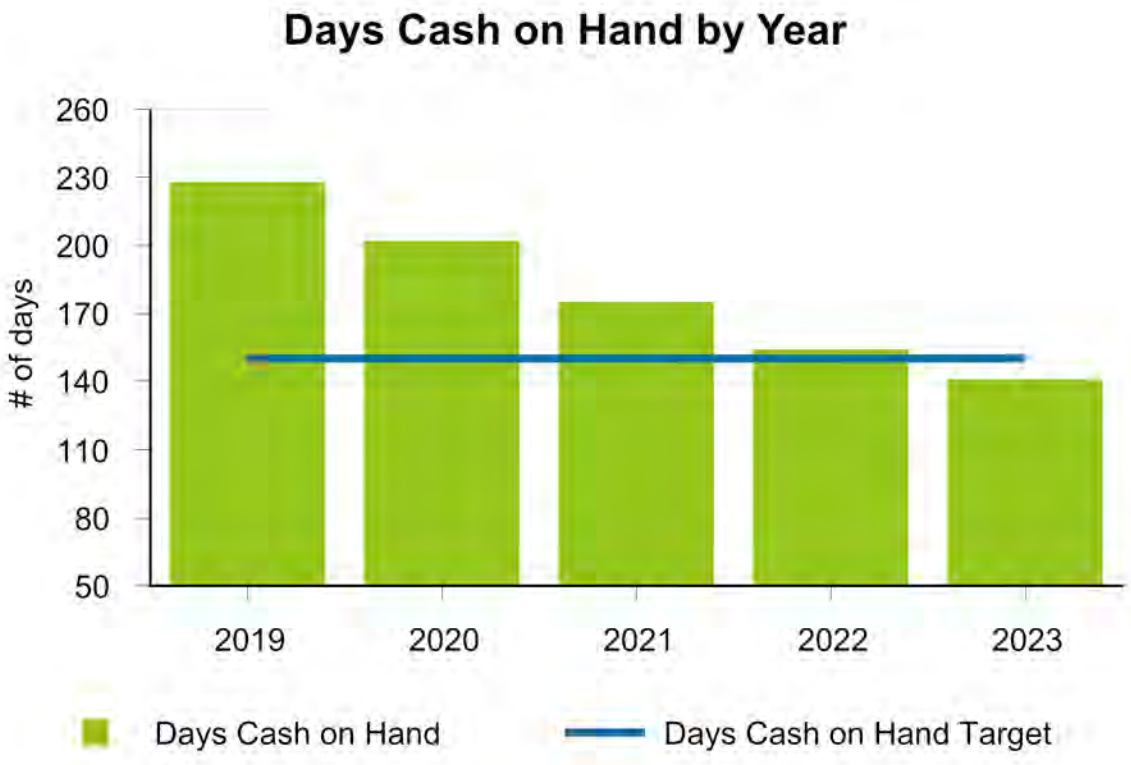
Bond covenants state that debt service coverage must not be less than 120% of the aggregate debt service due during the forthcoming fiscal year. Prior to 2014, the Commission had maintained a more conservative target of 200%, including Rate Stabilization Account transfers for Senior Debt. Resolution 2015-01 was enacted in March 2015 to clearly define triggers for Rate Stabilization Account transfers. The resolution establishes a debt service coverage target of 190% for Senior Debt. Coverage at or below 175% shall trigger a transfer from the Rate Stabilization Account, and coverage in excess of 200% shall trigger the transfer of general revenue funds to the Rate Stabilization Account. The chart above shows actual coverage for 2008 through 2017, projected coverage for 2018, and budgeted coverage for 2019. The Utility maintained coverage consistently above the previous 200% Commission target with the exception of 2014. The Rate Stabilization Account was established the following year. The Utility met the revised 190% Commission target in 2014. Utility projections reflect coverage at 234% for 2019.

The 2016 Maumelle Bond Issue is structured as special revenue debt secured by Long-Term Debt Surcharges on customers of the MWM service area. The Long-Term Surcharge was designed to yield net revenue coverage of 130%. The bond covenant requires coverage of not less than 120%. Net revenue coverage on the 2016 Maumelle Bond is projected at 144% for 2019.

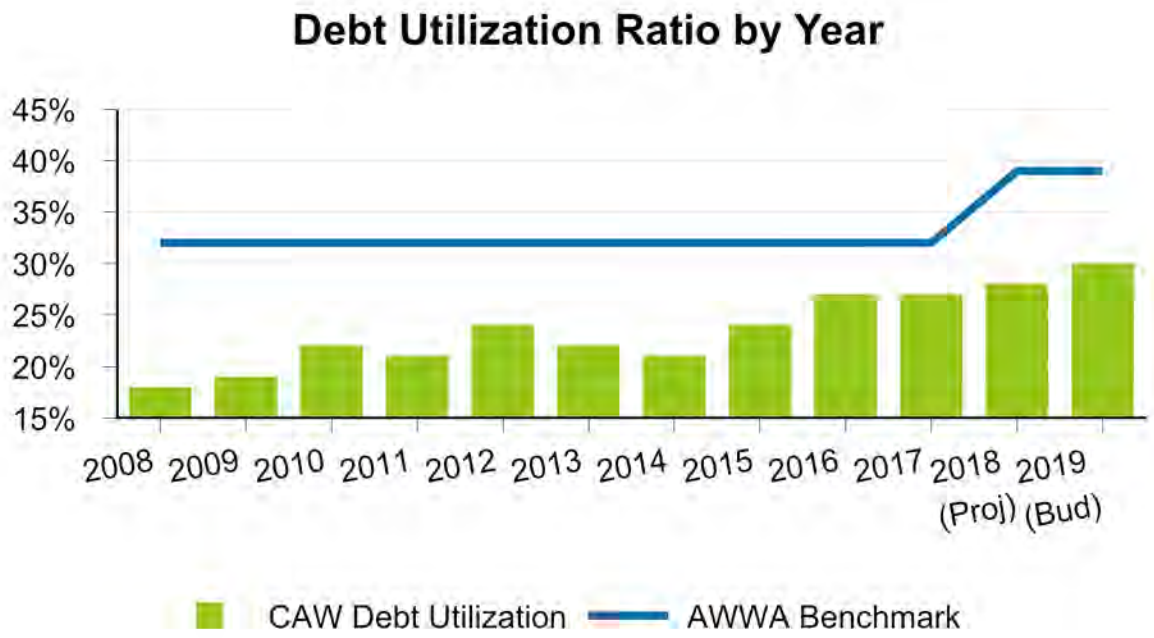


Bond covenants also require maintenance of minimum operating reserves. The chart above shows actual reserves on hand compared to the bond requirement for 2008 through 2017 and planned reserves on hand compared to the bond requirement for 2018 and 2019 based on forecasted numbers. Prior to 2016, the bond covenant requirement for working capital was 90 days. With the 2016 Refinance bond issue, the working capital requirement was revised to 45 days beginning in 2016. The elevated reserves from 2010 to 2012 are due to three years of higher than normal consumption levels and revenues resulting from dry, warm weather conditions and the corresponding increase in irrigation. The 2019 budgeted decrease in reserves is a result of capital expenses and required additional debt service related to the 2018B bond issue to fund the replacement of the Utility's CIS as well as a number of infrastructure improvements.

A continued decline in working capital through 2023 is expected due to increased debt service from the ANRC funded improvements at the Wilson and Ozark Plants along with successive years of inflationary pressure on operating costs with no rate increase to support Utility operating needs.



Beginning in 2016, CAW began utilizing days cash on hand as a tool to measure performance. The Utility has a goal of maintaining 150 days cash on hand as an operating reserve requirement. CAW takes a more conservative approach and builds its financial models based on 175 days cash on hand. The Utility projects to have 228 days cash on hand at the end of 2019. Days cash on hand begins to decline in 2020 and falls below the Utility goal of 150 days cash on hand in 2022. The Utility has no approved consumption-based retail rate increases for 2019 but does have a 5% wholesale rate increase beginning January 1, 2019. Increasing capital, operating, and debt service needs will require a rate increase by 2022 in order to maintain the Utility's goal for operating reserves.



* The benchmark is derived from a 2017 survey by AWWA where the median debt obligation for water utilities was 39%. Prior to the 2017 survey, the benchmark was derived from the 2013 survey where the median debt obligation was 32%.

Two separate 20 year ANRC Bond issues are planned for rehabilitations and upgrades to the Ozark Point Plant and to rehabilitate Pump Station No. 1A at the Wilson Plant. The first bond in the amount of $5 million was issued in late 2017 to fund the Wilson Plant improvements. The second bond of $37 million will be issued in the fourth quarter of 2019 to fund the Ozark Point Plant improvements. Proceeds from both bond issues will be drawn over a four year period. Repayment of the first bond will begin in 2021. In 2019, CAW plans to assume a loan in the amount of $3,562,000 from the Department of the U.S. Army to purchase water rights on 100 MGD from DeGray Lake.

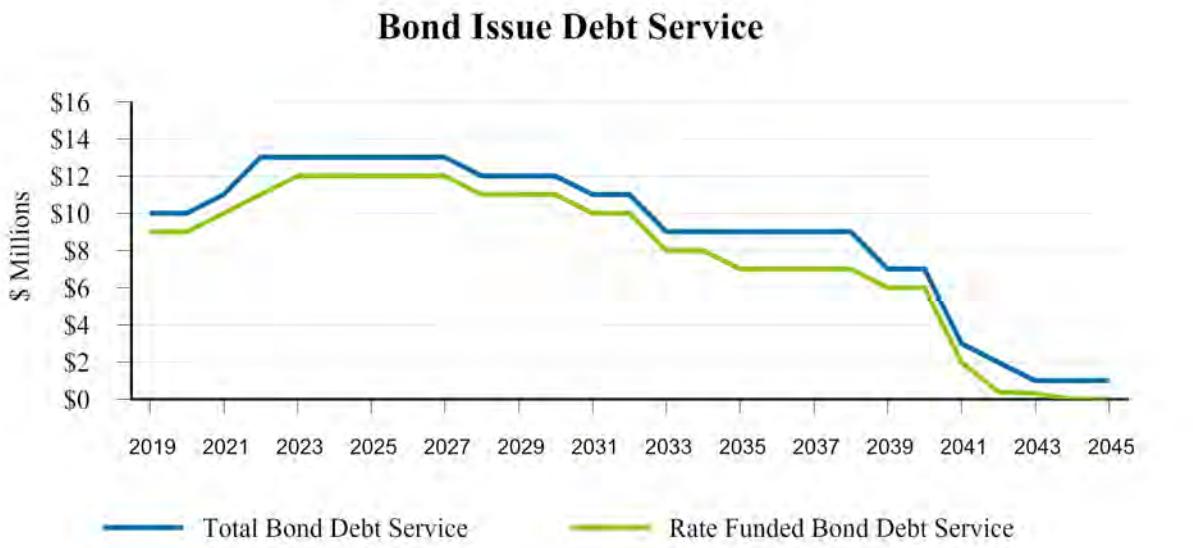
Another ANRC Bond issue for approximately $42 million is planned in 2019 for the installation of solar arrays onto CAW land holdings and the surface of Lake Maumelle to assist with energy cost savings. Repayment of these bonds will begin in 2021.

The chart above depicts CAW's actual debt utilization ratio for 2008 through 2017 and estimated ratios for 2018 and 2019, factoring in planned debt additions and repayments, as well as additional capital assets net of anticipated accumulated depreciation. Based on these estimates, the Utility's debt position will remain positive and below the AWWA benchmark.

The table and chart on the following pages depict debt service requirements for the full term of current and existing debt issues. Based on current and anticipated financing needs, the Utility's current rate model provides for sufficient revenue to meet all operating and rate funded debt service requirements.

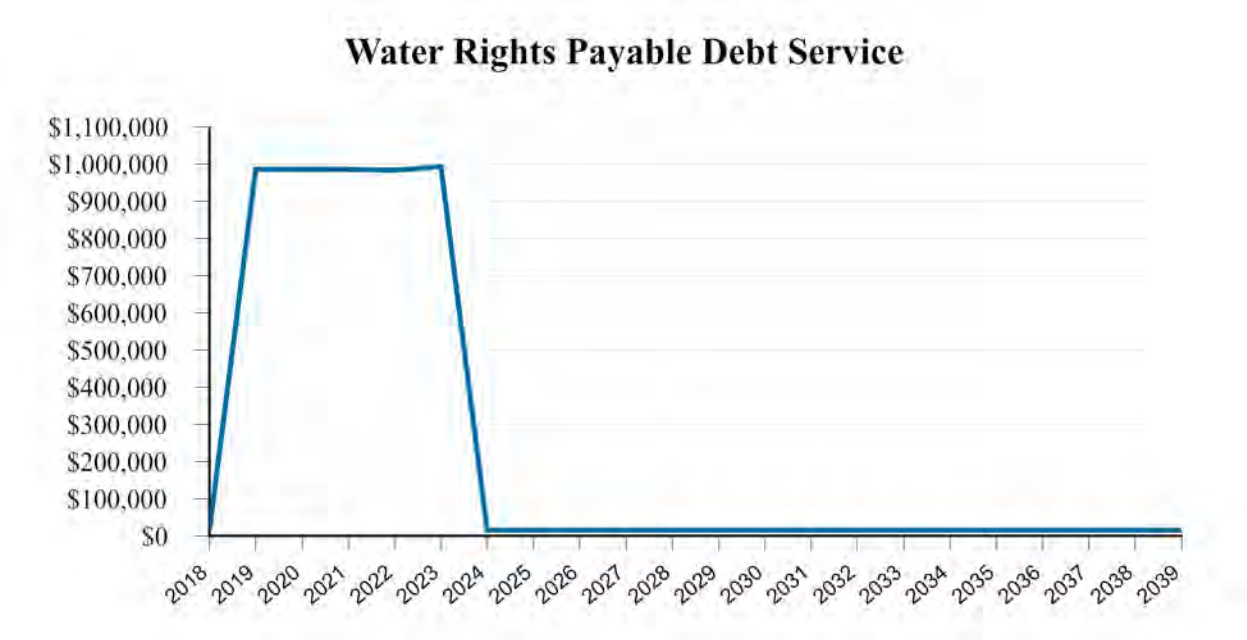
DEBT SERVICE SCHEDULE

	OUTSTANDING DEBT			FUTURE DEBT			
YEAR	PRINCIPAL	INTEREST	TOTAL	PRINCIPAL	INTEREST	TOTAL	TOTAL
2019	5,838,145	2,412,942	8,251,087	775,000	680,394	1,455,394	9,706,481
2020	6,036,106	2,223,068	8,259,174	675,000	798,898	1,473,898	9,733,072
2021	6,346,603	2,046,353	8,392,956	1,566,717	1,199,022	2,765,739	11,158,695
2022	6,691,201	1,860,025	8,551,226	2,484,222	1,571,656	4,055,878	12,607,104
2023	5,675,464	1,610,531	7,285,995	3,130,477	2,416,855	5,547,332	12,833,327
2024	5,695,315	1,407,748	7,103,063	3,098,361	2,630,659	5,729,020	12,832,083
2025	4,470,772	1,241,916	5,712,688	4,590,279	2,527,741	7,118,020	12,830,708
2026	4,571,848	1,141,665	5,713,513	4,734,462	2,385,559	7,120,021	12,833,534
2027	4,678,560	1,036,385	5,714,945	4,872,184	2,246,636	7,118,820	12,833,765
2028	3,395,924	925,933	4,321,857	5,508,631	2,111,989	7,620,620	11,942,477
2029	3,488,955	835,583	4,324,538	5,656,505	1,960,015	7,616,520	11,941,058
2030	3,607,669	739,957	4,347,626	5,823,837	1,792,884	7,616,721	11,964,347
2031	3,112,091	638,235	3,750,326	6,000,859	1,619,462	7,620,321	11,370,647
2032	3,207,224	550,094	3,757,318	6,177,826	1,439,294	7,617,120	11,374,438
2033	1,277,821	461,229	1,739,050	6,360,018	1,260,703	7,620,721	9,359,771
2034	1,176,185	422,172	1,598,357	6,014,769	1,092,926	7,107,695	8,706,052
2035	1,073,307	388,170	1,461,477	6,169,482	941,388	7,110,870	8,572,347
2036	1,105,184	354,886	1,460,070	6,326,723	784,197	7,110,920	8,570,990
2037	1,142,232	320,004	1,462,236	6,486,547	621,185	7,107,732	8,569,968
2038	1,179,457	283,416	1,462,873	6,654,017	453,840	7,107,857	8,570,730
2039	1,216,865	245,633	1,462,498	5,394,194	281,913	5,676,107	7,138,605
2040	1,254,459	206,652	1,461,111	5,517,140	158,967	5,676,107	7,137,218
2041	1,132,638	165,858	1,298,496	1,460,451	35,685	1,496,136	2,794,632
2042	1,010,000	129,150	1,139,150	372,840	14,323	387,163	1,526,313
2043	1,045,000	93,188	1,138,188	276,605	4,954	281,559	1,419,747
2044	1,080,000	56,000	1,136,000	—	—	—	1,136,000
2045	1,060,000	18,550	1,078,550	—	—	—	1,078,550
TOTAL	$ 81,569,025	$ 21,815,343	$ 103,384,368	$106,127,146	$ 31,031,145	$ 137,158,291	$ 240,542,659



WATER RIGHTS PAYABLE DEBT SERVICE

	GREERS FERRY OUTSTANDING WATER RIGHTS PAYABLE			DEGRAY LAKE FUTURE WATER RIGHTS PAYABLE			
YEAR	PRINCIPAL	INTEREST	TOTAL	PRINCIPAL	INTEREST	TOTAL	TOTAL
2019	7,316	7,751	15,067	970,147	—	970,147	985,214
2020	7,572	7,495	15,067	870,654	99,493	970,147	985,214
2021	7,837	7,230	15,067	894,527	75,620	970,147	985,214
2022	8,111	6,956	15,067	919,055	48,494	967,549	982,616
2023	8,395	6,672	15,067	944,256	32,805	977,061	992,128
2024	8,689	6,378	15,067	—	—	—	15,067
2025	8,993	6,074	15,067	—	—	—	15,067
2026	9,308	5,759	15,067	—	—	—	15,067
2027	9,634	5,433	15,067	—	—	—	15,067
2028	9,971	5,096	15,067	—	—	—	15,067
2029	10,320	4,747	15,067	—	—	—	15,067
2030	10,681	4,386	15,067	—	—	—	15,067
2031	11,055	4,012	15,067	—	—	—	15,067
2032	11,442	3,625	15,067	—	—	—	15,067
2033	11,842	3,225	15,067	—	—	—	15,067
2034	12,257	2,810	15,067	—	—	—	15,067
2035	12,686	2,381	15,067	—	—	—	15,067
2036	13,130	1,937	15,067	—	—	—	15,067
2037	13,590	1,477	15,067	—	—	—	15,067
2038	14,065	1,002	15,067	—	—	—	15,067
2039	14,557	510	15,067	—	—	—	15,067
TOTAL	**$ 221,451**	**$ 94,956**	**$ 316,407**	**$ 4,598,639**	**$ 256,412**	**$ 4,855,051**	**$ 5,171,458**



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CAPITAL IMPROVEMENT PLAN

CAPITAL IMPROVEMENT PLAN – OVERVIEW

CAW seeks to proactively address infrastructure needs as part of the Utility's commitment to ensure that customers receive the best possible service. In order to guide needed infrastructure investments, the Utility updates a five-year capital improvement plan (CIP) each year that projects the Utility's spending for anticipated capital needs, addressing repair, replacement, and relocation of existing infrastructure as well as the development or acquisition of new facilities, property, and equipment. The CIP serves as a tool to identify capital cost needs, coordinate financing, and specify the timing of these improvements.

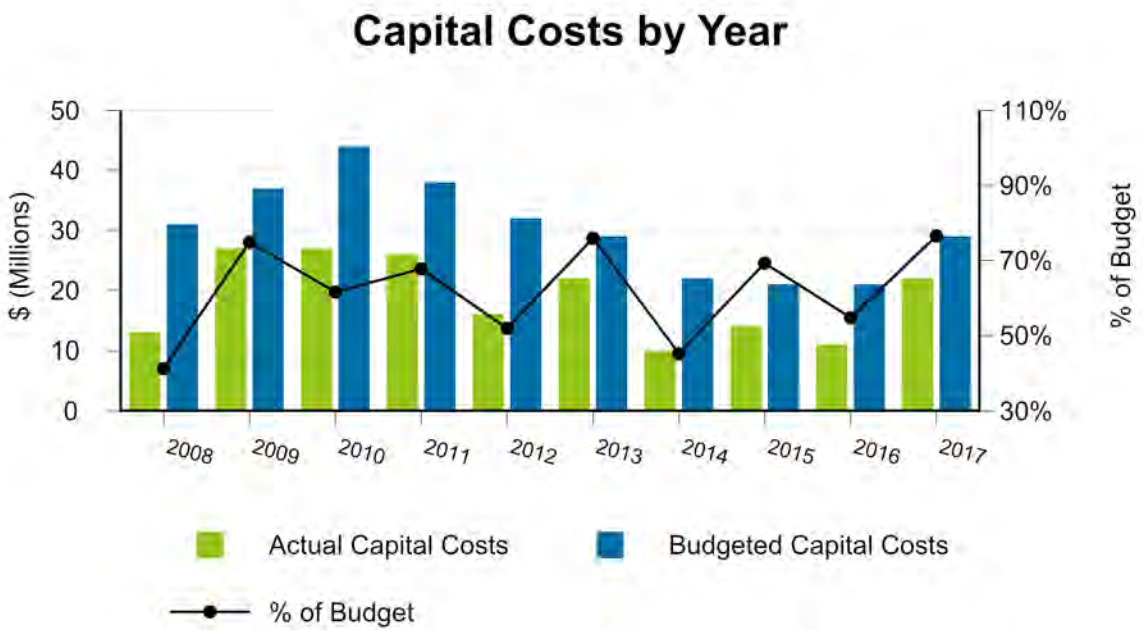
The prioritization process for the CIP involves evaluating capital needs and ranking potential projects or purchases based on a number of criterion including: age and condition of asset to be replaced, operational improvements, compliance and system expansion requirements, and impact on future operating budgets.

CAW goes a step further and utilizes a combination of methodologies for prioritizing underground pipelines for replacement. The most immediate are pipelines that are in the right-of-way of local streets or highways that are undergoing rehabilitation or widening and require that the existing utilities, including water mains, be relocated out of the way of those improvements. These pipeline assets, more commonly, have not reached the end of their useful lives but must be replaced regardless of age.

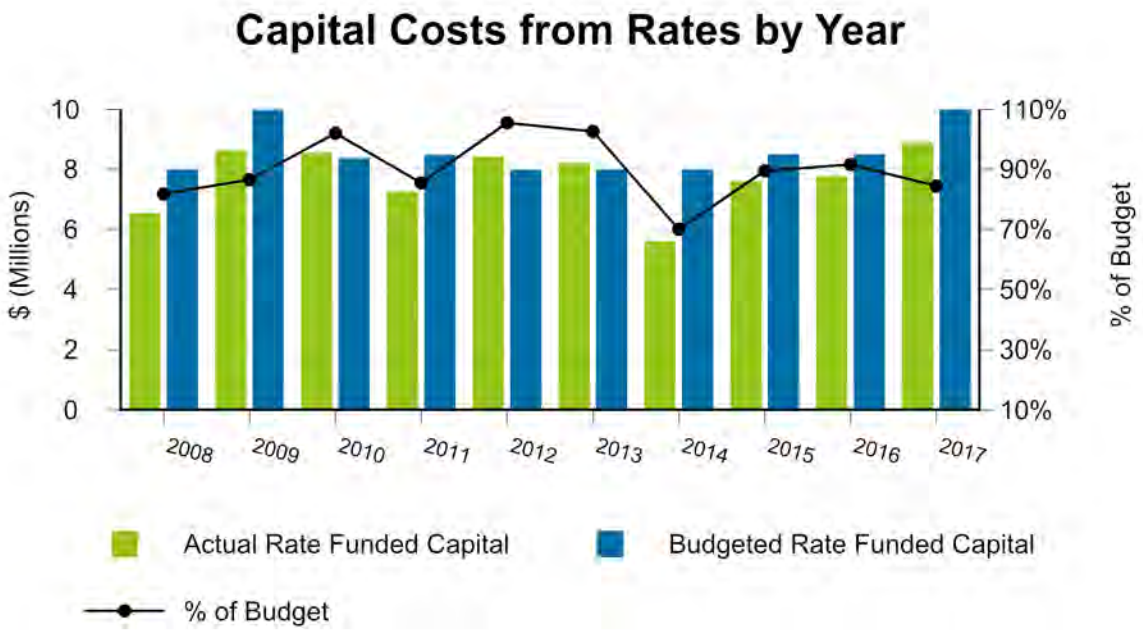
CAW staff have developed a matrix which assesses every length of pipe in the distribution system through the utilization of historical pipeline data combined with existing GIS information. Staff assigns a numerical value for each of a number of variables which gauge the condition and criticality of that segment of pipe. The matrix then generates a numerical value with the highest number being the highest priority for pipeline replacement. This method identifies geographically disparate segments of pipe across the distribution system. In order to economize the replacement of these mains, minimize the disruption of service to customers, and not have multiple disturbances of local streets and landscapes, CAW staff also evaluate pipelines adjacent to the high-priority segments for replacement. Industry research and CAW's own experience has shown pipe age and break history are very good predictors of future failure. Based on this information, older 2-inch galvanized pipe, along with some older transmission mains made of asbestos-cement and cast iron will be the focus of CAW's replacement efforts.

CAW historically does not complete 100% of planned capital projects each budget year. The Utility must allocate funding for the projects from the proper funding source. The funding sources for 2019 include: US Army Loan Funds, 2018B Bond, ANRC Ozark, ANRC Solar, ANRC Wilson, Grant Proceeds, MWM Rates, MWM Bond, MWM Surcharge Revenue, Watershed Protection Fees, Developer Funds, Capital Investment Charges, and Rates.

Total actual Capital Costs compared to budget for 2008 through 2017 are as follows:

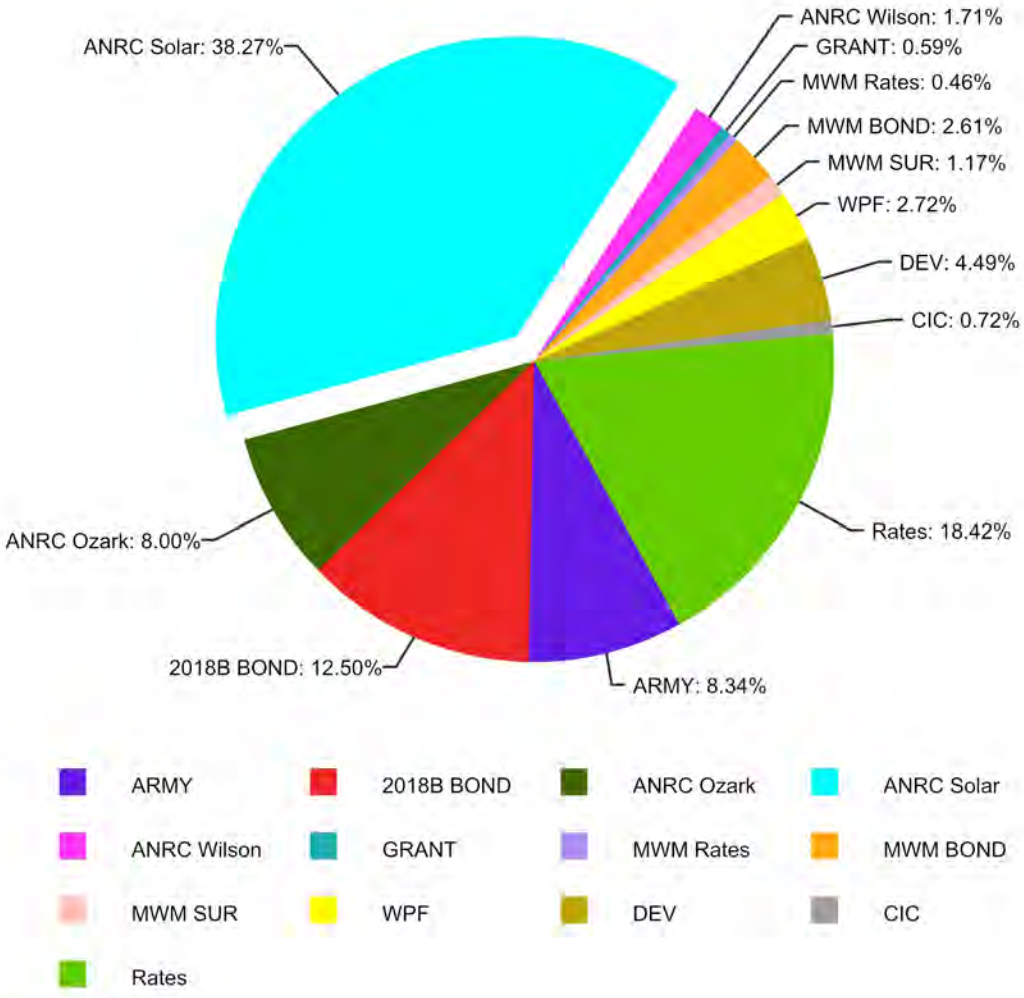


While overall actual capital spending sometimes varies greatly from budget due to delays in major relocation projects and unawarded grant projects, the Utility has historically executed over 90% of projects funded by rates over the last ten years:

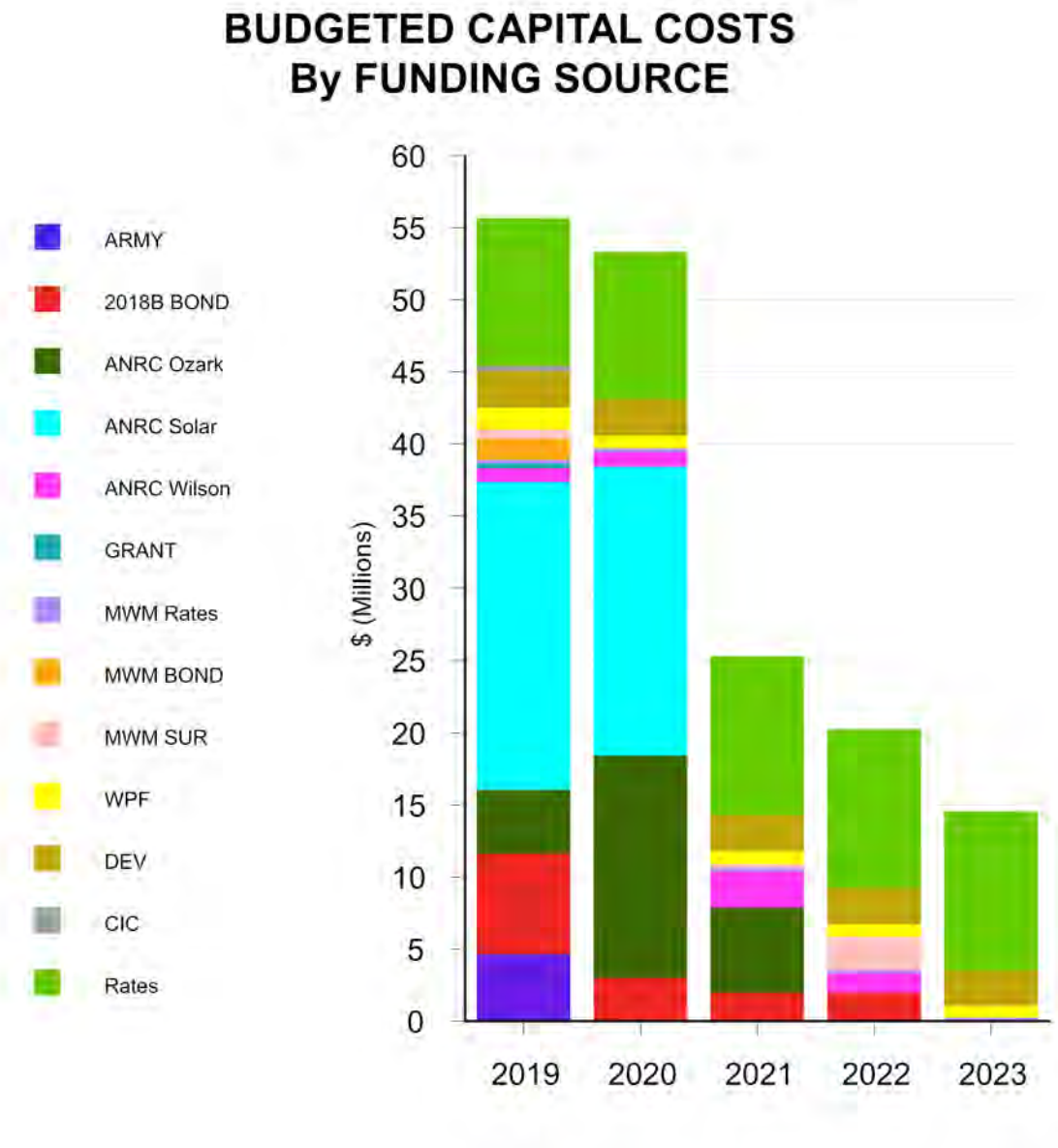


2019 CAPITAL COSTS

By FUNDING SOURCE



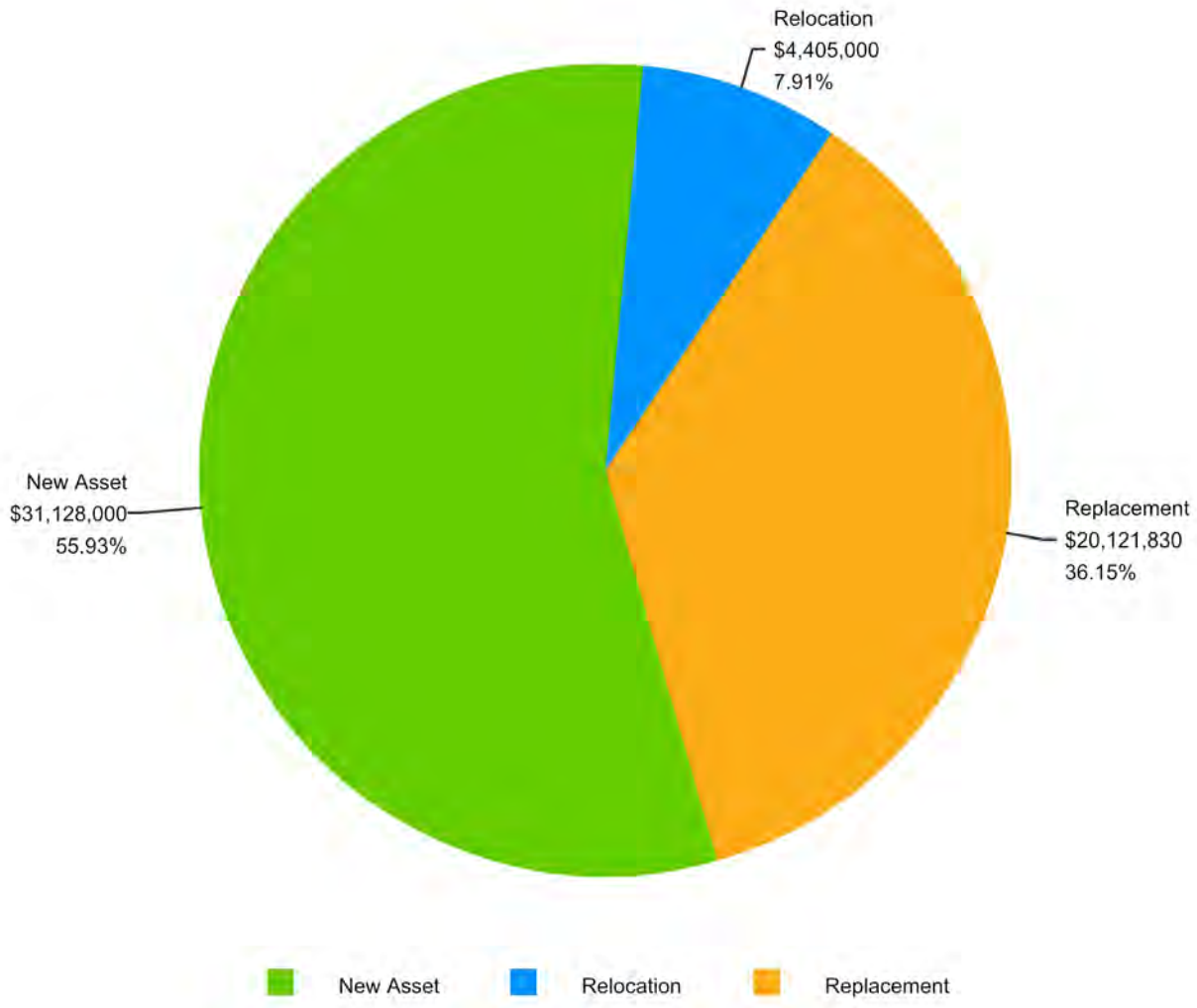
ANRC Solar accounts for approximately 38.3% of planned 2019 Capital Costs. Generally, WPFs and grant proceeds are used to fund watershed management efforts, while rates are used to fund replacements, relocations, and rehabilitation projects.



Based on an energy audit conducted by Performance Services, CAW received several recommendations for energy cost savings and more efficient energy avenues, one of which is to install solar arrays on selected properties. ANRC funding for this solar project represents the majority of capital funding in 2019 and 2020. From 2019 through 2023, funding from rates continues to be an important source of funding, as they become the main source of capital funding from 2021 forward.

2019 CAPITAL COSTS

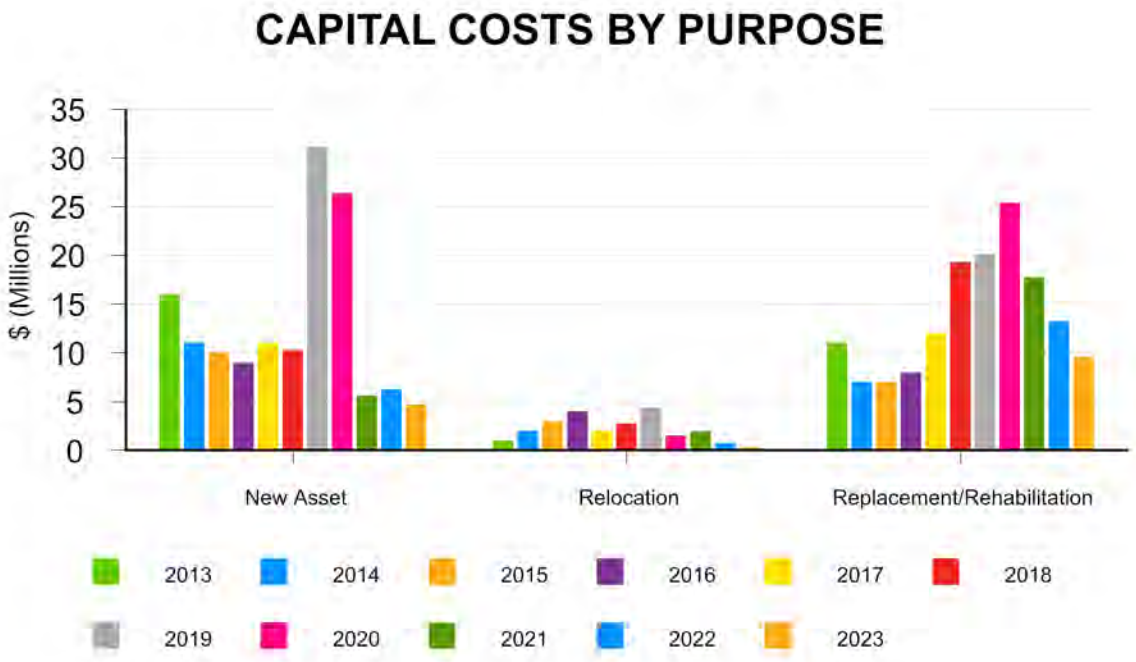
By PURPOSE



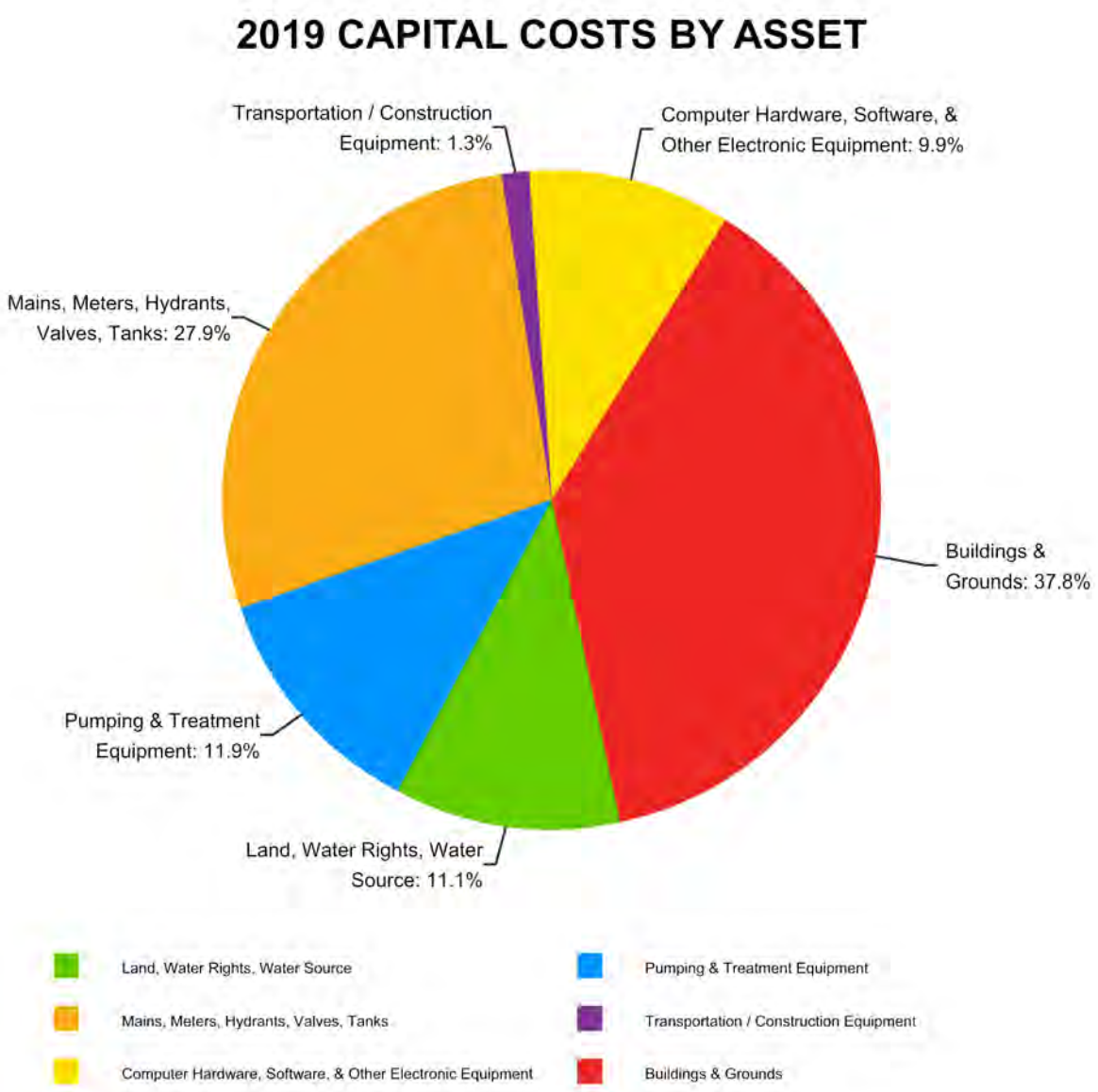
There are three main categories of 2019 Capital Costs as noted in the above graph. 65.9% of the New Asset category is for buildings and grounds with the largest portion going towards solar arrays and other energy conservation measures. Two major groupings highlight the Replacement/Rehabilitation category for 2019. 26.2% of this category is allocated for pumping and treatment projects related to the bond funded rehabilitation work at the Ozark Point Plant as well as rate funded replacement of aging galvanized, asbestos-cement, and cast iron water mains throughout the distribution system. Another 23.7% is for computer projects, specifically the bond and rate funded replacement of the CIS. Lastly, the remaining component of capital costs, Relocations, is comprised of relocations required by city, county, and state roadway projects throughout the Utility service area.

Annual Cost Trend

CAW anticipates completing approximately $169 million in capital improvement projects from 2019-2023. During this five-year period, the largest year of capital costs is projected to be in 2019.

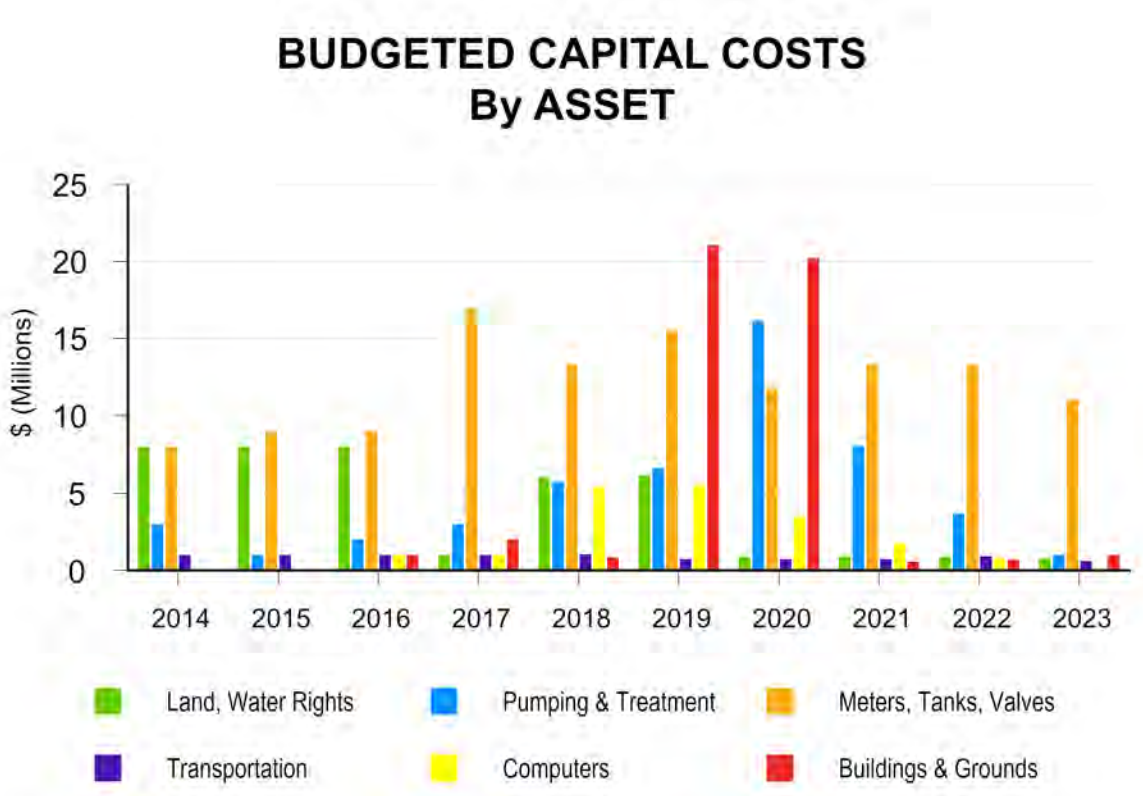


Large increases in 2019-2020 are due to New Asset costs driven by the Utility's initiatives in solar arrays and other energy conservation measures as well as Replacement/ Rehabilitation costs for continued improvements at the Ozark Point Plant.



Approximately 37.8% of 2019 capital costs are buildings and grounds-related and primarily consist of solar arrays, other energy conservation measures, and building improvements (buildings and grounds). Distribution system assets (mains, meters, fire hydrants, valves, and tanks) account for 27.9% of the total. Another 11.9% of 2019 capital costs include water treatment facility improvements (pumping and treatment).

A departmental justification is provided for each project in the 2019 CIP, including impact on operations and maintenance expense, if any. All projects with a total cost exceeding $500,000 over the next five years are detailed on pages 121-168.



The Five-Year Plan includes details to expand and improve the water system on both sides of the Arkansas River from 2019 through 2023. Solar arrays and other energy conservation measures, improvements at Ozark Point Plant, and main replacements are a significant portion of total capital costs from 2019 to 2023. Main replacements are of primary importance to the Utility and will absorb more of the funding sources available in the future.

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
ADMINISTRATION														
Improve Wilson Classroom Space - Job No. 08370	200,000		200,000											
Install Security System Improvements	20,000													20,000
Install Solar Arrays and Other Energy Conservation Measures	20,000,000				20,000,000									
TOTAL	$20,220,000	$ —	$ 200,000	$ —	$20,000,000	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 20,000
CUSTOMER SERVICE														
Replace Meter Reader Truck	21,000													21,000
TOTAL	$ 21,000	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 21,000
DISTRIBUTION														
Arc Flash Hazard Analysis - Job No. 08275	60,000													60,000
Expand Concrete Pavement Area at Clearwater Yard - Job No. 08268 (Carryover)	30,000													30,000
Install and Replace Hydrants	148,000													148,000
Install Hydrants - Maumelle	6,000							6,000						
Install Mains - Maumelle	10,000							10,000						
Install Meters - Maumelle	7,500							7,500						
Install Meters for New Services	180,000													180,000
Install Valves	75,000													75,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
Install Valves - Maumelle	8,500							8,500						
Install, Replace, and Relocate Mains	110,000													110,000
Install, Replace, and Transfer Services - Maumelle	225,000							225,000						
Pump Station No. 25 By-Pass of Tank 25 including Variable Frequency Drives in Pump Station No. 29	125,000		125,000											
Purchase Generator for Pump Station No. 16C	90,000													90,000
Purchase/Install Meters - Change Out Program	580,000													580,000
Purchase/Install Services (New, Replace, Transfer)	1,341,000													1,341,000
Refurbish Wilson Filter Flow Transmitter	34,000													34,000
Replace 1/2 Ton Truck(s) (2019 - 6 trucks - 440, 459, 464, 473, 485, 490)	133,500													133,500
Replace 2 Ton Dump Truck(s) (2019 - truck - 295)	90,000													90,000
Replace 3 Ton Dump Truck(s) (2019 - truck -210)	105,000													105,000
Replace 3/4 Ton Service Truck(s) (2019 - 3 trucks - 420, 446, 550)	107,000													107,000
Replace Generator Tank No. 5	8,000													8,000
Replace Leak Detection Equipment	32,000													32,000
Replace One Ton Van(s) (2019 - truck - 411)	38,500													38,500
Replace Two Ton Crew Truck(s) (2019 - 2 trucks - 255, 468)	220,000													220,000
Replace Work Stations in Dispatch Area at Clearwater	12,000													12,000
Restore - Tank No. 2 - (Roof 2019 / Exterior 2021)	90,000													90,000
Restore - Tank No. 8 - Interior	55,000													55,000
TOTAL	$ 3,921,000	$ —	$ 125,000	$ —	$ —	$ —	$ —	$257,000	$ —	$ —	$ —	$ —	$ —	$ 3,539,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
ENGINEERING														
Construct Structural Repair of Tank No. 30A - Job No. 07612 - Maumelle Bond	451,000								451,000					
Construct Tank No. 5 Landscaping Improvements - Job No. 08340	75,000													75,000
Developer Funded Capital	2,500,000											2,500,000		
Developer Participation - New Mains	150,000													150,000
Improve Ozark Point Plant - Install Flow Meters, Valves, & Line Relocations	400,000			400,000										
Improve Ozark Point Plant - Phase 2 Construction - Project No. 4687 - Job No. 07516B	3,500,000			3,500,000										
Improve Ozark Point Plant - Phase 2 Construction Phase Engineering Services - Project No. 4687 - Job No. 07516	212,500			212,500										
Improve Ozark Point Plant - Phase 2 Engineering Design & Bidding - Job No. 07516C	341,870			341,870										
Improve Pump Station No. 1A - Phase 1 Construction - Wilson Plant - Job No. 07515B	900,000					900,000								
Improve Pump Station No. 1A - Phase 1 Construction Phase Engineering Services - Wilson Plant - Job No. 07515	53,590					53,590								
Inundation Study - Jackson Reservoir & Lake Maumelle	40,000													40,000
Paint/Improve Ground Storage Tank No. 30A - Job No. 07601 - Maumelle	650,000									650,000				
Professional Services - Engineering	5,000													5,000
Professional Services - Land Surveying	5,000													5,000
Professional Services - Property Appraisals	5,000													5,000
Purchase DeGray Lake Water Rights - Job No. 08118	4,640,000	4,640,000												
Purchase GPS Units	9,000													9,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
Relocate 12/8-inch Water Mains - Counts Massie/Crystal Hill Rd - Project No. 4037 - Job No. 07360	400,000												400,000	
Relocate 12/8/3-inch Water Mains along Camp Robinson Rd (AR Highway 176) at 54th St - Project No. 4743	300,000		300,000											
Relocate 12/8/6-inch Water Mains - Phase 3 - Kanis Rd / Bowman to Gamble	250,000		250,000											
Relocate 16-inch Transmission Main - Capitol Drain/N. Cantrell Rd/Gill St Bridge - Job No. 07310	375,000		375,000											
Relocate 24-inch Transmission Main Along Interstate 30 (I-30) Ark River Bridge - Job No. 08335	1,880,000		1,880,000											
Relocate 24/20/12/8-inch Water Mains - I-30 Widening - Various Locations	150,000		150,000											
Relocate 42/16/12/8-inch Water Mains - Along Cantrell Rd/AR Highway 10/Rodney Parham Rd	750,000		750,000											
Relocate Water Mains - Various Known/ Unknown Locations - State/County/City Improvements	300,000													300,000
Replace Distribution Mains & Valves - Phase 3 - Maumelle Job No. 07610	1,000,000								1,000,000					
Replace Galvanized Water Mains - Pulaski Heights - Little Rock - Job No. 08295H	350,000													350,000
Replace Master Meters	50,000													50,000
Replace Vehicle - Engineering Dept.	26,000													26,000
Replace Water Mains - Galvanized, Asbestos-Cement, Cast Iron - System-wide	2,500,000													2,500,000
TOTAL	$22,268,960	$4,640,000	$3,705,000	$4,454,370	$ —	$953,590	$ —	$ —	$ 1,451,000	$650,000	$ —	$2,500,000	$400,000	$ 3,515,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
FINANCE														
Upgrade BI360 to Version 5 Portal	15,000													15,000
TOTAL	$ 15,000	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 15,000
INFORMATION SERVICES														
Assess Cloud Readiness Plan	25,000													25,000
Conduct MS Access Migration review	10,000													10,000
Create Intranet Dashboards	31,000													31,000
Install Cityworks Enhancements	30,000													30,000
Purchase Billing Printer	48,000													48,000
Purchase Chemical Tracking Software	30,000													30,000
Purchase Document Management System	450,000													450,000
Purchase Microsoft Office 2016	45,000													45,000
Purchase Microsoft Operating System Licenses - Windows 10	30,000													30,000
Purchase Microsoft Server OS upgrade	85,000													85,000
Purchase Network Monitor Tool - Netscout/ Aircheck	10,000													10,000
Purchase Next Gen Itron Handheld Meter Readers	10,000													10,000
Purchase Time & Attendance System / Human Resource Initiative	100,000													100,000
Replace Customer Information System - Job No. 08288	4,087,870		2,928,870											1,159,000
Replace GPS Equipment	30,000													30,000
Replace Server UPS units	100,000													100,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
Replace Servers (Clearwater, Maryland, Wilson Plant)	45,000													45,000
Ugrade Real Time Posting with FiServ (Payment Vendor)	70,000													70,000
Update Itron - Field Mobile Data Collector 3	30,000													30,000
Upgrade Enquesta Billing Server/Storage Area Networks	40,000													40,000
Upgrade Supervisory Control and Data Acquisition System (SCADA) Connectivity	30,000													30,000
Upgrade SCADA Data Secure Access	20,000													20,000
Upgrade VMware monitoring - vRealize Operations	16,000													16,000
TOTAL	$ 5,372,870	$ —	$2,928,870	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 2,444,000
WATER PRODUCTION														
Implement Tank Management System	50,000													50,000
Purchase 2.5 Megawatt Generator	1,300,000				1,300,000									
Remodel Lake Winona House No. 1 - Job No. 08276 (Carryover)	75,000													75,000
Replace Granular Activated Carbon Media	260,000													260,000
Remodel Lake Winona House No. 2	35,000													35,000
SCADA System Radios	75,000													75,000
TOTAL	$ 1,795,000	$ —	$ —	$ —	$ 1,300,000	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 495,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates
WATER QUALITY														
Aerial Photography and Land Use Data Creation of Lake Maumelle Watershed - Job No. 08277	60,000													60,000
Forest Restoration and Enhancement - Job No. 07554	25,000										25,000			
Improve Buildings Winrock Grass Farm (WGF) - Job No. 07303	10,000										10,000			
Improve Forest Roads - Job No. 07390	50,000										50,000			
Install Bridge Access to former WGF - Job No. 07305	400,000										400,000			
Install Dedicated Water Quality Sampling Stations	12,000													12,000
Purchase ATV	8,000													8,000
Purchase Conservation Easements	300,000										300,000			
Purchase Property	500,000										500,000			
Renovate Lake Maumelle Residence	75,000													75,000
Replace Winona Thermistor Chain with Water Quality Profiling System	46,000													46,000
Restore Hydrologic Flow - USACE Sec. 206 Project - Job No. 08280	555,000						327,500				227,500			
TOTAL	$ 2,041,000	$ —	$ —	$ —	$ —	$ —	$327,500	$ —	$ —	$ —	$1,512,500	$ —	$ —	$ 201,000
GRAND TOTAL	$55,654,830	$4,640,000	$6,958,870	$4,454,370	$21,300,000	$953,590	$327,500	$257,000	$ 1,451,000	$650,000	$1,512,500	$2,500,000	$400,000	$10,250,000

CAPITAL IMPROVEMENT PLAN – 2019 FUNDING SOURCES

DESCRIPTION	TOTAL	ARMY	2018B BOND	ANRC Ozark	ANRC Solar	ANRC Wilson	GRANT	MWM Rates	MWM BOND	MWM SUR	WPF	DEV	CIC	Rates

ARMY	Department of U.S. Army Corps of Engineers
2018B BOND	Bonds 2018 Multiple Capital Improvements
ANRC Ozark	Arkansas Natural Resources Commission - Ozark Point Project
ANRC Solar	Arkansas Natural Resources Commission - Solar Projects
ANRC Wilson	Arkansas Natural Resources Commission - Wilson Pump Station No. 1A Project
GRANT	Grant Funding
MWM Rates	MWM Rate Revenue
MWM BOND	MWM 2016 Bond
MWM SUR	MWM Surcharge Revenue
WPF	Watershed Protection Fee
DEV	Developer Funding Capital
CIC	Capital Investment Charges
Rates	Rates

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
ADMINISTRATION		
Improve Wilson Classroom Space - Job No. 08370	200,000	0
Install classroom space for Citizens Water Academy.		
Install Security System Improvements	20,000	0
Upgrade outdated security system to current technologies.		
Install Solar Arrays and Other Energy Conservation Measures	20,000,000	0
Install solar arrays and other energy conservation measures to reduce energy consumption and operating expenses.		
CUSTOMER SERVICE		
Replace Meter Reader Truck	21,000	0
Replace meter reader truck due to excessive mileage and maintenance costs.		
DISTRIBUTION		
Arc Flash Hazard Analysis - Job No. 08275	60,000	0
Study and remove arc flash hazards.		
Expand Concrete Pavement Area at Clearwater Yard - Job No. 08268 (Carryover)	30,000	0
Install concrete in yard area around fire hydrants.		
Install and Replace Hydrants	148,000	0
Install and replace hydrants to maintain fire protection levels and water quality by means of flushing.		
Install Hydrants - Maumelle	6,000	0
Install hydrants for Maumelle to maintain fire protection levels and water quality by means of flushing.		
Install Mains - Maumelle	10,000	0
Install capital mains within the distribution system in Maumelle.		
Install Meters - Maumelle	7,500	0
Install meters for new services requested for new construction and infrastructure additions in Maumelle.		
Install Meters for New Services	180,000	0
Install meters for new services requested for new construction and infrastructure additions.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Install Valves	75,000	0
Install and replace valves within the distribution system.		
Install Valves - Maumelle	8,500	0
Install and replace valves within the distribution system in Maumelle.		
Install, Replace, and Relocate Mains	110,000	0
Install, replace, and relocate mains. Work is performed by CAW distribution crews.		
Install, Replace, and Transfer Services - Maumelle	225,000	0
Install, replace, and transfer Maumelle services relating to new and existing jobs.		
Pump Station No. 25 By-Pass of Tank 25 including Variable Frequency Drives in Pump Station No. 29	125,000	0
Bypass Tank 25 in order to continue operating Pump Station 25. Completing this project will allow Tank 25 to be removed from service.		
Purchase Generator for Pump Station No. 16C	90,000	0
Purchase a permanent generator at Pump Station No. 16C to maintain service to the West Markham pressure zone in case of a power outage.		
Purchase/Install Meters - Change Out Program	580,000	0
Purchase and install meters in service for 16 years or longer thereby enhancing water metering by removing slow meters that impact revenues.		
Purchase/Install Services (New, Replace, Transfer)	1,341,000	0
Install, replace, and transfer services relating to new and existing jobs.		
Refurbish Wilson Filter Flow Transmitter	34,000	0
Refurbish old and inaccurate filter flow transmitters.		
Replace 1/2 Ton Trucks	133,500	0
Replace six trucks due to excessive mileage and maintenance costs (2019 - 6 trucks - 440, 459, 464, 473, 485, 490).		
Replace 2 Ton Dump Truck	90,000	0
Replace dump truck due to excessive mileage and maintenance costs (2019 - truck 295).		
Replace 3 Ton Dump Truck	105,000	0
Replace dump truck due to excessive mileage and maintenance costs (2019 - truck 210).		
Replace 3/4 Ton Service Trucks	107,000	0
Replace three trucks due to excessive mileage and maintenance costs (2019 - 3 trucks - 420, 446, 550).		
Replace Generator Tank No. 5	8,000	0
Replace with generator capable of noise attenuation to reduce disruption to local residential area.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Replace Leak Detection Equipment	32,000	0
Replace obsolete leak detection equipment.		
Replace One Ton Van	38,500	0
Replace one ton van due to high mileage and excessive maintenance cost (2019 - van - 411).		
Replace Two Ton Crew Trucks	220,000	0
Replace two trucks due to excessive mileage and maintenance costs (2019 - 2 trucks - 255, 468).		
Replace Work Stations in Dispatch Area at Clearwater	12,000	0
Update dispatch work area, install partitions for added privacy, and noise reduction.		
Restore - Tank No. 2 - (Roof 2019 / Exterior 2021)	90,000	0
Paint the roof of Tank 2 in 2019 and the exterior in 2021. Existing paint coating is failing.		
Restore - Tank No. 8 - Interior	55,000	0
Paint the interior of Tank 8. Existing paint coating is failing.		
ENGINEERING		
Construct Structural Repair of Tank No. 30A - Job No. 07612 - Maumelle Bond	451,000	0
Replace damaged roof on Maumelle Tank No. 30A.		
Construct Tank No. 5 Landscaping Improvements - Job No. 08340	75,000	0
Improve landscaping at Tank No. 5 in Pulaski Heights.		
Developer Funded Capital	2,500,000	0
Developer contributed capital improvements to CAW water system as a result of new developments in the CAW service area.		
Developer Participation - New Mains	150,000	0
Extend and/or upsize new mains by CAW in cooperation with developer new water main installation; provides for future extensions and growth.		
Improve Ozark Point Plant - Install Flow Meters, Valves, & Line Relocations	400,000	0
Install flowmeters and valves to measure clearwell flows and relocate existing water mains.		
Improve Ozark Point Plant - Phase 2 Construction - Project No. 4687 - Job No. 07516B	3,500,000	0
Construction improvements to Ozark Point Plant to increase functional life, efficiency, & effectiveness of the plant.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Improve Ozark Point Plant - Phase 2 Construction Phase Engineering Services - Project No. 4687 - Job No. 07516	212,500	0
Rehabilitate and improve Ozark Point Plant to increase functional life, efficiency, & effectiveness of the plant.		
Improve Ozark Point Plant - Phase 2 Engineering Design & Bidding - Job No. 07516C	341,870	0
Improve Ozark Point Plant to increase functional life, efficiency, & effectiveness of the plant.		
Improve Pump Station No. 1A - Phase 1 Construction - Wilson Plant - Job No. 07515B	900,000	0
Phase 1 Construction of recommended pump, structure, & electrical improvements to the existing Wilson Plant Pump Station No. 1A.		
Improve Pump Station No. 1A - Phase 1 Construction Phase Engineering Services - Wilson Plant - Job No. 07515	53,590	0
Phase 1 Construction Phase Engineering Services of recommended pump, structure, and electrical improvements to the Wilson Plant Pump Station No. 1A.		
Inundation Study - Jackson Reservoir & Lake Maumelle	40,000	0
Prepare an Inundation Study for Jackson Reservoir (update of existing study) and Lake Maumelle (no previous study).		
Paint/Improve Ground Storage Tank No. 30A - Job No. 07601 - Maumelle	650,000	0
Paint the interior and exterior of Maumelle Tank No. 30A.		
Professional Services - Engineering	5,000	0
Professional design and consultation as required on various projects.		
Professional Services - Land Surveying	5,000	0
Professional land surveying required for the acquisition of new land, easements, & maintenance of property rights on existing land & easement holdings.		
Professional Services - Property Appraisals	5,000	0
Professional appraisal services required for the acquisition of new land and easements.		
Purchase DeGray Lake Water Rights - Job No. 08118	4,640,000	(88,000)
Purchase of 100 MGD DeGray Lake Water Rights from the US Army Core of Engineers.		
Purchase GPS Units	9,000	0
Purchase of GPS unit - Engineering Department.		
Relocate 12/8-inch Water Mains - Counts Massie/Crystal Hill Rd - Project No. 4037 - Job No. 07360	400,000	0
Relocate 4,145 feet of 8-inch and 12-inch water mains for the widening of Counts Massie & Crystal Hill Rds; City of Maumelle street improvements.		
Relocate 12/8/3-inch Water Mains along Camp Robinson Rd (AR Highway 176) at 54th St - Project No. 4743	300,000	0
Relocate 12/8/3-inch water mains along Camp Robinson Rd (AR Highway 176) in conflict with proposed Arkansas Department of Transportation (ARDOT) improvements.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Relocate 12/8/6-inch Water Mains - Phase 3 - Kanis Rd / Bowman to Gamble	250,000	0
Relocate existing 12/8/6-inch water mains in conflict with proposed City of Little Rock street improvements along Kanis Road.		
Relocate 16-inch Transmission Main - Capitol Drain/N. Cantrell Rd/Gill St Bridge - Job No. 07310	375,000	0
Relocate existing 16-inch transmission main in conflict with proposed Highway 10 bridge replacement at Gill Street (Little Rock). ARDOT project.		
Relocate 24-inch Transmission Main Along Interstate 30 (I-30) Ark River Bridge - Job No. 08335	1,880,000	0
Payment No. 1 for the relocation of the existing 24-inch transmission main from the old to new I-30 Arkansas River bridge.		
Relocate 24/20/12/8-inch Water Mains - I-30 Widening - Various Locations	150,000	0
Relocate 24/20/12/8-inch water mains due to the widening of I-30 by ARDOT.		
Relocate 42/16/12/8-inch Water Mains - Along Cantrell Rd/AR Highway 10/Rodney Parham Rd	750,000	0
Relocate 42/16/12/8-inch water mains in conflict with proposed ARDOT improvements along Highway 10/Cantrell Rd/Rodney Parham Rd.		
Relocate Water Mains - Various Known/Unknown Locations - State/County/City Improvements	300,000	0
Relocate water mains for known and unknown road and drainage improvements (city/county/state improvements).		
Replace Distribution Mains & Valves - Phase 3 - Maumelle Job No. 07610	1,000,000	0
Phase 3 of water main replacements in Maumelle.		
Replace Galvanized Water Mains - Pulaski Heights - Little Rock - Job No. 08295H (Carryover)	350,000	0
Galvanized pipe replacement in the Pulaski Heights area of Little Rock.		
Replace Master Meters	50,000	0
Replace old master meters, new SCADA connection technology is needed.		
Replace Vehicle - Engineering Dept.	26,000	0
Replace vehicle(s) due to excessive mileage and maintenance costs (Engineering Department).		
Replace Water Mains - Galvanized, Asbestos-Cement, Cast Iron - System-wide	2,500,000	0
Replace old, high maintenance galvanized, asbestos-cement, & cast iron pipe experiencing numerous leaks and breaks.		
FINANCE		
Upgrade BI360 to Version 5 Portal	15,000	0
Upgrade BI360 to utilize v 5.0 portal with enhanced features. The new portal will run on any web browser and support Windows 10 deployment.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
INFORMATION SERVICES		
Assess Cloud Readiness Plan	25,000	0
Information Technology Master Plan (ITMP) - Cloud readiness assessment.		
Conduct MS Access Migration review	10,000	0
Consultant will review all Access databases to assess conversion to cloud based systems and integration with new billing system.		
Create Intranet Dashboards	31,000	0
Allows CAW to implement a more robust Intranet system with greater function.		
Install Cityworks Enhancements	30,000	0
ITMP - Redlining and GIS editing tools.		
Purchase Billing Printer	48,000	0
Replace three year old billing printer.		
Purchase Chemical Tracking Software	30,000	0
CAW should use Cityworks to track the inventory levels of the chemicals.		
Purchase Document Management System	450,000	0
Increase effectiveness, efficiency, and security of document management.		
Purchase Microsoft Office 2016	45,000	0
Upgrade current version of office with Office 2016. This is only half of the users. The other half will be on Office 365.		
Purchase Microsoft Operating System Licenses - Windows 10	30,000	0
CAW has been on the current OS for over nine years. The new CIS vendor recommends Windows 10.		
Purchase Microsoft Server OS upgrade	85,000	0
Provides capability to support all versions of the operating system as well as run newer software.		
Purchase Network Monitor Tool - Netscout/Aircheck	10,000	0
Tool to help staff more quickly identify problems with the network.		
Purchase Next Gen Itron Handheld Meter Readers	10,000	0
Replace outdated handheld mobile devices.		
Purchase Time & Attendance System / Human Resource Initiative	100,000	0
Purchase Tier 1 time and attendance system.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Replace Customer Information System - Job No. 08288	4,087,870	0
Replace current billing system with ITMP recommendation.		
Replace GPS Equipment	30,000	0
Replace outdated GPS equipment.		
Replace Server UPS units	100,000	0
Provides battery backup power for the JTH server room. The UPS will ensure the team has enough time to shut down equipment properly.		
Replace Servers (Clearwater, Maryland, Wilson Plant)	45,000	0
Replace physical servers at remote locations.		
Ugrade Real Time Posting with FiServ (Payment Vendor)	70,000	0
Enhancements will allow real time payment posting from Fiserv.		
Update Itron - Field Mobile Data Collector 3	30,000	0
Replace due to end of service life and to avoid any issues with new billing system.		
Upgrade Enquesta Billing Server/Storage Area Networks	40,000	0
Upgrade the server to help ensure uninterrupted operation.		
Upgrade SCADA Connectivity	30,000	0
Develop the requirements and preliminary design for a secure network connection between the SCADA and the corporate network.		
Upgrade SCADA Data Secure Access	20,000	0
DMZ to support secured access between laboratory information management system and SCADA. SCADA data could be pulled to support regulatory reporting requirements.		
Upgrade VMware monitoring - vRealize Operations	16,000	0
Realize operations combine multiple VMware components to deliver integrated performance, capacity, and configuration management for Vsphere.		
WATER PRODUCTION		
Implement Tank Management System	50,000	0
Ensure water quality in tanks is maintained.		
Purchase 2.5 Megawatt Generator	1,300,000	0
Install 3rd generator at Lake Maumelle Pump Station for increased reliabilty, capacity, resilience, and flexiblity.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Remodel Lake Winona House No. 1 - Job No. 08276 (Carryover)	75,000	0
Current home was built with the original construction of Lake Winona in the 1930's. This house serves as the care taker's home and is in need of delayed upgrades.		
Replace Granular Activated Carbon Media	260,000	0
This is the routine replacement of granulated activated carbon filters at the Ozark Point Plant.		
Remodel Lake Winona House No. 2	35,000	0
Home was built in 1939 and is need of renovation due to age and deferred upgrades.		
SCADA System Radios	75,000	0
Replacement of obsolete SCADA plant system programmable logic controllers. Purchase required equipment and installation by CAW staff.		
WATER QUALITY		
Aerial Photography and Land Use Data Creation of Lake Maumelle Watershed - Job No. 08277	60,000	0
New aerials of Lake Maumelle Watershed and development of updated land use and land cover GIS layer to monitor development and historical record.		
Forest Restoration and Enhancement - Job No. 07554	25,000	0
Continuation of obligations for land/forest improvements associated with the Forest Legacy purchase of the former WGF.		
Improve Buildings WGF - Job No. 07303	10,000	0
The former WGF has outbuildings that need electrical, physical, and safety upgrades. These assets were acquired with the Forest Legacy purchase.		
Improve Forest Roads - Job No. 07390	50,000	0
Unmanaged roads significantly impact watershed and water quality. Management of these are critical for water quality improvement.		
Install Bridge Access to former WGF - Job No. 07305	400,000	0
Provide access over the Maumelle River when the Highway 10 low water crossing is removed. CAW will need to access for continued use and management.		
Install Dedicated Water Quality Sampling Stations	12,000	0
Dedicated sampling stations are a continuation of a multi-year project to replace sub-standard compliance sampling locations in the distribution system.		
Purchase ATV	8,000	0
Provides capability to patrol and scout; access remote areas; transport people, tools, and supplies.		
Purchase Conservation Easements	300,000	2,500
Continuation of land acquisition through conservation easements is consistent with the 2007 WMP and will assist in full implementation of that plan.		

CAPITAL IMPROVEMENT PLAN - 2019 JUSTIFICATIONS

DESCRIPTION AND JUSTIFICATION	COST	2019 O&M IMPACT
Purchase Property	500,000	2,500
Continued land purchases are consistent with the 2007 WMP recommendations and will assist in the full implementation of the plan.		
Renovate Lake Maumelle Residence	75,000	0
Repurpose for limited office space, public outreach, and education.		
Replace Winona Thermistor Chain with Water Quality Profiling System	46,000	0
Provides ability to monitor for lake stratification or destratification to help ensure proper water treatment.		
Restore Hydrologic Flow - USACE Sec. 206 Project - Job No. 08280	555,000	0
Restore hydrologic flow of the Maumelle River at the former WGF to historic, pre-farmed conditions.		

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
ADMINISTRATION					
Improve Wilson Classroom Space - Job No. 08370	200,000				
Install Security System Improvements	20,000	20,000	36,000		
Install Solar Arrays and Other Energy Conservation Measures	20,000,000	20,000,000			
TOTAL	20,220,000	20,020,000	36,000	—	—
CUSTOMER SERVICE					
Replace Meter Reader Truck	21,000		21,000		
TOTAL	21,000	—	21,000	—	—
DISTRIBUTION					
Arc Flash Hazard Analysis - Job No. 08275	60,000	60,000			
Capital Projects for Plants, Tanks, & Pump Stations		120,000	120,000	120,000	120,000
Expand Clearwater Warehouse					290,000
Expand Concrete Pavement Area at Clearwater Yard - Job No. 08268 (Carryover)	30,000				
Install and Replace Hydrants	148,000	125,000	152,000	154,000	155,000
Install Hydrants - Maumelle	6,000	6,000	6,500	7,000	7,500
Install Mains - Maumelle	10,000	11,000	12,000	12,500	13,000
Install Meters - Maumelle	7,500	8,000	8,500	9,000	9,000
Install Meters for New Services	180,000	155,000	195,000	200,000	205,000
Install Valves	75,000	76,500	78,000	79,500	80,000
Install Valves - Maumelle	8,500	9,000	9,500	10,000	10,000
Install, Replace, and Relocate Mains	110,000	100,000	95,000	90,000	85,000
Install, Replace, and Transfer Services - Maumelle	225,000	225,000	225,000	225,000	225,000
Pump Station No. 25 By-Pass of Tank 25 including Variable Frequency Drives in Pump Station No. 29	125,000				
Purchase Generator for Pump Station No. 16C	90,000				
Purchase Hydrant Tool - Impact Drive Hydrant Saver		10,500			

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
Purchase Tractor and Bush Hog for Easement Maintenance				35,000	
Purchase Vac-Tron				65,000	
Purchase/Install Meters - Change Out Program	580,000	540,000	590,000	595,000	600,000
Purchase/Install Services (New, Replace, Transfer)	1,341,000	1,415,000	1,405,000	1,441,500	1,485,000
Refurbish Wilson Filter Flow Transmitter	34,000				
Relocate Utility Lines inside Clearwater Warehouse (overhead hazard)			30,000		
Replace 1 Ton Service Truck(s)		83,000	39,500		
Replace 1.5 Ton Service Truck (522 - crane truck)			46,000		
Replace 1/2 Ton Truck(s) (2019 - 6 trucks - 440, 459, 464, 473, 485, 490)	133,500	159,500	112,000	134,000	115,000
Replace 2 Ton Dump Truck(s) (2019 - truck - 295)	90,000	184,000	292,000	190,000	192,000
Replace 3 Ton Dump Truck (531)		110,000			
Replace 3 Ton Dump Truck(s) (2019 - truck -210)	105,000				
Replace 3/4 Ton Service Truck (521)		35,500			
Replace 3/4 Ton Service Truck(s) (2019 - 3 trucks - 420, 446, 550)	107,000	73,000	148,000	110,000	112,000
Replace Air Piercing Tool		16,000			
Replace Directional Drilling Machine				240,000	
Replace Generator Tank No. 5	8,000				
Replace Leak Detection Equipment	32,000				
Replace One Ton Van(s) (2019 - truck - 411)	38,500	39,000	39,500		40,000
Replace Two Ton Crew Truck(s) (2019 - 2 trucks - 255, 468)	220,000			115,000	115,000
Replace Work Stations in Dispatch Area at Clearwater	12,000				
Restore - Tank No. 17		210,000			
Restore - Tank No. 2 - (Roof 2019 / Exterior 2021)	90,000		600,000		
Restore - Tank No. 22				400,000	400,000
Restore - Tank No. 8 - Interior	55,000				
TOTAL	3,921,000	3,771,000	4,203,500	4,232,500	4,258,500

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
ENGINEERING					
Construct Booster Pump Station No. 17B - Highland Ridge					600,000
Construct Structural Repair of Tank No. 30A - Job No. 07612 - Maumelle Bond	451,000				
Construct Tank No. 5 Landscaping Improvements - Job No. 08340	75,000				
Developer Funded Capital	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Developer Participation - New Mains	150,000	150,000	150,000	150,000	150,000
Improve Booster Pump Station No. 11		330,000			
Improve Ozark Point Plant - Install Flow Meters, Valves, & Line Relocations	400,000				
Improve Ozark Point Plant - Phase 1 Construction - Clearwell Baffles & Paint - Job No. 07516A		500,000	2,240,000		
Improve Ozark Point Plant - Phase 2 Construction - Project No. 4687 - Job No. 07516B	3,500,000	14,400,000	3,500,000		
Improve Ozark Point Plant - Phase 2 Construction Phase Engineering Services - Project No. 4687 - Job No. 07516	212,500	510,000	150,000		
Improve Ozark Point Plant - Phase 2 Engineering Design & Bidding - Job No. 07516C	341,870				
Improve Pump Station No. 1A - Phase 1 Construction - Wilson Plant - Job No. 07515B	900,000				
Improve Pump Station No. 1A - Phase 1 Construction Phase Engineering Services - Wilson Plant - Job No. 07515	53,590				
Improve Pump Station No. 1A - Phase 2 Construction - Wilson Plant - Job No. 07515			1,500,000	1,300,000	
Inspection of Arkansas River Transmission Crossings				50,000	
Install 12-inch Water Main - Morgan/North Little Rock Intermediate Pressure Zone Looping		650,000			
Install 12-inch Water Main - Water Main to Water Main Pressure Zone Interconnection			250,000		
Install 24-inch Transmission Main - N. Locust St/Pump Station No. 23 - North Little Rock				2,000,000	
Install Master Plan Distribution Mains - Various			250,000	250,000	250,000
Inundation Study - Jackson Reservoir & Lake Maumelle	40,000				
Paint/Improve Ground Storage Tank No. 30A - Job No. 07601 - Maumelle	650,000				
Paint/Improve Ground Storage Tank No. 30B - Maumelle			300,000	300,000	
Participation - West Pulaski Water Authority - Burlingame/Kanis Rd		1,000,000	1,000,000		
Professional Services - Engineering	5,000	5,000	5,000	5,000	5,000
Professional Services - Land Surveying	5,000	5,000	5,000	5,000	5,000
Professional Services - Property Appraisals	5,000	5,000	5,000	5,000	5,000

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
Purchase DeGray Lake Water Rights - Job No. 08118	4,640,000				
Purchase GPS Units	9,000	9,000	10,000	10,000	10,000
Relocate 12-inch Water Main - So. University - 28th/Col. Glenn - Little Rock				450,000	
Relocate 12/8-inch Water Mains - Counts Massie/Crystal Hill Rd - Project No. 4037 - Job No. 07360	400,000				
Relocate 12/8/3-inch Water Mains along Camp Robinson Rd (AR Highway 176) at 54th St - Project No. 4743	300,000				
Relocate 12/8/6-inch Water Mains - Phase 3 - Kanis Rd / Bowman to Gamble	250,000				
Relocate 12/8/6-inch Water Mains - Phase 4 - Kanis Rd / Bowman to Gamble		150,000			
Relocate 16-inch Transmission Main - Capitol Drain/N. Cantrell Rd/Gill St Bridge - Job No. 07310	375,000				
Relocate 24-inch Transmission Main Along Interstate 30 (I-30) Ark River Bridge - Job No. 08335	1,880,000		805,000		
Relocate 24/20/12/8-inch Water Mains - I-30 Widening - Various Locations	150,000	300,000	150,000		
Relocate 42/16/12/8-inch Water Mains - Along Cantrell Rd/AR Highway 10/Rodney Parham Rd	750,000	750,000	750,000		
Relocate Water Mains - Various Known/Unknown Locations - State/County/City Improvements	300,000	300,000	200,000	300,000	300,000
Remove Sludge - Maumelle Water/Wastewater Lagoons - Job No. 07602 - Maumelle Surcharge				2,000,000	
Repair Lake Winona Spillway		75,000			
Repair Lake Winona Storm Drains		75,000			
Replace Building Roofs - Lake Winona		15,000			
Replace Distribution Mains & Valves - Phase 3 - Maumelle Job No. 07610	1,000,000				
Replace Galvanized Water Mains - Pulaski Heights - Little Rock - Job No. 08295H (Carryover)	350,000				
Replace Master Meters	50,000				
Replace Vehicle - Engineering Dept.	26,000	27,000	28,000	28,000	29,000
Replace Water Mains - Galvanized, Asbestos-Cement, Cast Iron - System-wide	2,500,000	3,000,000	3,500,000	4,000,000	4,500,000
TOTAL	22,268,960	24,756,000	17,298,000	13,353,000	8,354,000
FINANCE					
Upgrade BI360 to Version 5 Portal	15,000				
TOTAL	15,000				

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
INFORMATION SERVICES					
Assess Cloud Readiness Plan	25,000				
Capital Project Planning & Project Management Application				250,000	
Conduct MS Access Migration review	10,000				
Conduct Network PIN Test				15,000	
Create Intranet Dashboards	31,000	16,000	16,000	16,000	
Implement GIS Programming for Outage Notification		40,000			
Install Call Center Enhancement			100,000		
Install Cityworks Enhancements	30,000				
Install Data Storage Protection				50,000	
Perform Information Technology Risk Management Assessment				50,000	
Purchase Billing Printer	48,000				
Purchase Chemical Tracking Software	30,000				
Purchase Cityworks Cloud					50,000
Purchase Document Management System	450,000	400,000			
Purchase ESRI Tools Enhancements		25,000			
Purchase ITMP Tasks/Equipment		25,000	25,000	25,000	
Purchase Microsoft Office 2016	45,000				
Purchase Microsoft Operating System Licenses - Windows 10	30,000				
Purchase Microsoft Server OS upgrade	85,000				
Purchase Network Monitor Tool - Netscout/Aircheck	10,000				
Purchase Next Gen Itron Handheld Meter Readers	10,000	30,000			
Purchase Operational Data Management and Reporting - Compliance and Analysis		30,000			
Purchase Time & Attendance System / Human Resource Initiative	100,000	300,000	195,000		
Purchasing Enhancements				70,000	
Reimplement integration with BI360				40,000	
Replace and Upgrade Network Switches			40,000		

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
Replace Customer Information System - Job No. 08288	4,087,870	2,000,000	247,000		
Replace GIS Field Data Collector Vehicle		25,000			
Replace GPS Equipment	30,000		30,000		
Replace Large Format Scan/Print/Copy Machine		25,000			
Replace Network Firewalls				30,000	
Replace SCADA Switches			35,000	35,000	
Replace Server UPS units	100,000			20,000	
Replace Servers (Clearwater, Maryland, Wilson Plant)	45,000		20,000	20,000	20,000
Replace Wireless Access Points				35,000	
Ugrade Real Time Posting with FiServ (Payment Vendor)	70,000				
Update Itron - Field Mobile Data Collector 3	30,000				
Upgrade Enquesta Billing Server/Storage Area Networks	40,000				
Upgrade Financial Management Software		40,000			
Upgrade Microsoft Dynamics Finance and Operations System			600,000		
Upgrade Phone System		43,130	41,870		
Upgrade Phone System - Lake Maumelle					60,000
Upgrade SCADA Connectivity	30,000				
Upgrade SCADA Data Secure Access	20,000				
Upgrade SCADA System Management/Security		60,000			
Upgrade VMware monitoring - vRealize Operations	16,000				
TOTAL	5,372,870	3,059,130	1,349,870	656,000	130,000
WATER PRODUCTION					
Basin rehabilitation (1), Filters (4) Media Replacement, and Concrete Work at Wilson Plant				200,000	200,000
Coat Pipe Gallery Piping - Job No. 08255 (Carryover)			276,130		
Implement Tank Management System	50,000	50,000	50,000	50,000	50,000
Inspect Interior of Hypo Tanks - Ozark Point Plant		30,000			

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
Inspect Interior of Hypo Tanks - Wilson Plant		40,000			
Purchase 2.5 Megawatt Generator	1,300,000				
Remodel Lake Winona House No. 1 - Job No. 08276 (Carryover)	75,000				
Replace Eight CL-17's, On-Line Monitors of Chlorine Residuals		27,000			
Replace Granular Activated Carbon Media	260,000	260,000	260,000	260,000	260,000
Remodel Lake Winona House No. 2	35,000				
Replace SCADA System Programmable Logic Controllers		150,000	150,000		
Replace Switchgear Programmable Logic Contorollers Wilson Plant		120,000			
Replace Switchgear Programmable Logic Controllers Lake Maumelle Pump Station		120,000			
SCADA System Radios	75,000				
TOTAL	1,795,000	797,000	736,130	510,000	510,000
WATER QUALITY					
Aerial Photography and Land Use Data Creation of Lake Maumelle Watershed - Job No. 08277	60,000				
Forest Restoration and Enhancement - Job No. 07554	25,000	25,000	25,000	25,000	25,000
Improve Buildings WGF - Job No. 07303	10,000				
Improve Forest Roads - Job No. 07390	50,000	50,000	50,000	50,000	50,000
Install Bridge Access to former WGF - Job No. 07305	400,000				
Install Dedicated Water Quality Sampling Stations	12,000	12,000	12,000	12,000	12,000
Purchase ATV	8,000				
Purchase Conservation Easements	300,000	200,000	200,000	200,000	200,000
Purchase Property	500,000	500,000	500,000	500,000	500,000
Renovate Lake Maumelle Residence	75,000				
Replace Inductively Coupled Plasma Mass Spectroscopy			150,000		
Replace Ion Chromatograph			100,000		
Replace Laboratory Facilities			500,000	500,000	500,000
Replace Total Organic Carbon Analyzer				100,000	

CAPITAL IMPROVEMENT PLAN - FIVE-YEAR PLAN

DESCRIPTION	2019	2020	2021	2022	2023
Replace Winona Thermistor Chain with Water Quality Profiling System	46,000				
Restore Hydrologic Flow - USACE Sec. 206 Project - Job No. 08280	555,000				
Restore River, Floodplain, and Wetland - WGF		100,000	100,000	100,000	
TOTAL	2,041,000	887,000	1,637,000	1,487,000	1,287,000
GRAND TOTAL	55,654,830	53,290,130	25,281,500	20,238,500	14,539,500

Green shaded rows are featured in the Projects Section on the following pages.

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PROJECTS

Significant Project Detail

CAW seeks to proactively address infrastructure needs as part of the Utility's commitment to ensure that customers receive the best possible service. The following pages highlight and provide additional detail on projects that CAW management has deemed both operationally and financially significant to the Utility over the next five years.

Each of these projects have an anticipated capital investment of $500,000 or greater over the five year capital planning period of 2019 - 2023. The following project details contain a brief project purpose statement, descriptive pictures, anticipated project duration, estimated costs, funding source(s), and future impact on utility operations.

Project Name:	Install Solar Arrays and Other Energy Conservation Measures
Department:	Administration
Focus Area:	Cost Savings and Sustainability
Location:	Multiple Locations

Name:	Est Start Date:	Duration: (Months)
Thad Luther	June 2019	15 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC SOLAR	20,000,000	20,000,000	—	—	—

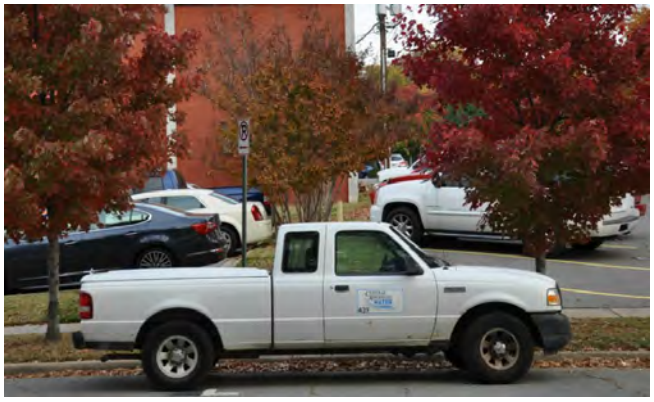
O&M Impact

G/L	2019	2020	2021	2022	2023
Utility	—	(1,351,000)	(2,838,000)	(2,757,000)	(2,826,000)
Repair and Maintenance	—	145,000	149,000	152,000	156,000

PROJECT PURPOSE

Over 85% of this project consists of the design, construction, and commissioning of multiple solar arrays to sustainably offset CAW electric power requirements and reduce CAW energy cost by approximately $2,700,000 annually. Increased upkeep costs will offset this amount beginning in 2022. The remainder of the project is made up of other Energy Conservation Measures (ECMs) planned at CAW office buildings and pump stations. ECMs primarily consist of electrical/mechanical improvements to HVAC, lighting, and pump/motor control centers. Estimated O&M costs associated with the solar arrays and other improvements are easily offset by power cost savings. Current financial analysis of the project indicates power savings will generate sufficient positive cash flow to make debt payments and have no impact on rates.

Project Name:	Replace Vehicles
Department:	All
Focus Area:	Vehicles
Location:	James T. Harvey Administration Building and Clearwater



Name:	Est Start Date:	Duration: (Months)
Various	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	741,000	736,000	726,000	577,000	603,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The Utility utilizes a fleet management plan as the primary guide to CAW's fleet management decisions. Truck replacements are determined based on chronic repair needs and projected mileage. Vehicle age also factors into replacement but is a secondary factor behind repair needs and mileage. Current fleet management guidelines dictate that a vehicle should be replaced when it reaches 100,000 miles or when chronic repair needs dictate replacement.

Detail of Vehicle Replacements

	2019	2020	2021	2022	2023
Replace 1 Ton Service Trucks (Distribution)		83,000	39,500		
Replace 1 Ton Van (Distribution)	38,500	39,000	39,500		40,000
Replace 1.5 Ton Service Truck (Distribution)			46,000		
Replace 1/2 Ton Trucks (Distribution)	133,500	159,500	112,000	134,000	115,000
Replace 2 Ton Crew Trucks (Distribution)	220,000			115,000	115,000
Replace 2 Ton Dump Trucks (Distribution)	90,000	184,000	292,000	190,000	192,000
Replace 3 Ton Dump Trucks (Distribution)	105,000	110,000			
Replace 3/4 Ton Service Trucks (Distribution)	107,000	108,500	148,000	110,000	112,000
Replace Meter Reader Truck (Customer Service)	21,000		21,000		
Replace Vehicles (Engineering Department)	26,000	27,000	28,000	28,000	29,000
Replace GIS Field Data Collector Vehicle (Information Services)		25,000			

Project Name:	Install and Replace Hydrants
Department:	Distribution
Focus Area:	Hydrants
Location:	CAW System

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	148,000	125,000	152,000	154,000	155,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The project will consist of installing new hydrants and the replacement of existing hydrants that have been hit and damaged by vehicles.

Project Name:	Install Meters for New Services
Department:	Distribution
Focus Area:	Meters
Location:	Systemwide

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	180,000	155,000	195,000	200,000	205,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

These meters are dedicated to the installation of new residential, commercial, and industrial service accounts. They are for new services requested for new construction and infrastructure additions. These meters range from 5/8-inch to 6-inch in diameter and are essential for customer service, revenue generation, and system growth within the system.

Project Name:	Install, Replace, and Transfer Services - Maumelle
Department:	Distribution
Focus Area:	Services
Location:	Maumelle Service Area

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
MWM RATES	225,000	225,000	225,000	225,000	225,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The project will consist of replacing existing services for residential and commercial customers due to failure and/or preventative maintenance.

Project Name:	Purchase/Install Meters - Change Out Program
Department:	Distribution
Focus Area:	Meters
Location:	Systemwide

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	580,000	540,000	590,000	595,000	600,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The meter change out program consists of a routine cycle to change out meters which have reached the end of their useful lives as determined through industry knowledge and experience: 16 years for 5/8-inch meters, 12 years for 3/4-inch meters, 10 years for 1-inch meters, 8 years for 1-1/2-inch meters, and 6 years for 2-inch meters.

Project Name:	Purchase/Install Services (New, Replace, Transfer)
Department:	Distribution
Focus Area:	Services
Location:	Systemwide

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	1,341,000	1,415,000	1,405,000	1,441,500	1,485,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The project will consist of installing service lines at new service locations and replacing existing services for residential and commercial customers due to failure and/or preventative maintenance.

Project Name:	Restore Tank No. 2, No. 8, No. 17, and No. 22
Department:	Distribution
Focus Area:	Tanks
Location:	Systemwide

Name:	Est Start Date:	Duration: (Months)
Blake Weindorf	February 2019	49 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	145,000	210,000	600,000	400,000	400,000

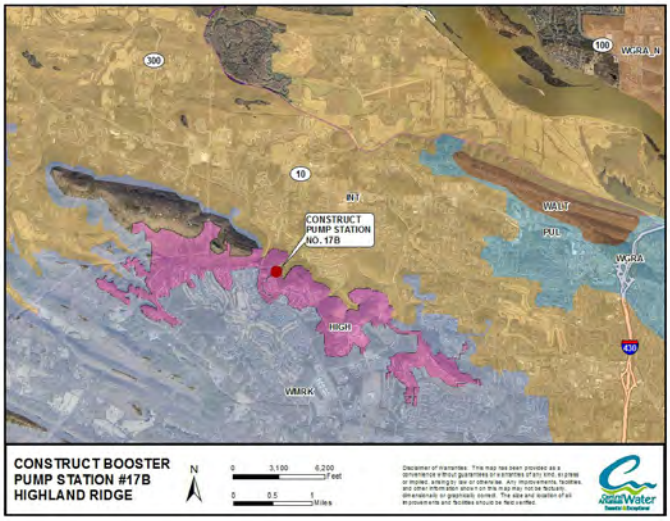
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The project consists of required improvements to several elevated water storage tanks. Specifically, the roof and exterior of Tank No. 2 located near the Interstate 430 and Interstate 630 interchange in West Little Rock will be sandblasted and repainted for the first time since construction of the tank in 1986. The roof portion will be performed in 2019, while the tank exterior will be completed in 2021. The interior of Tank No. 8 located in Walton Heights is scheduled to be repainted in 2019. The interior and exterior of Tank No. 17 located just west of Rahling Road is projected to be repainted in 2020. The interior and exterior of Tank No. 22 located in Indian Hills is planned to be repainted at the end of 2022 and into the first quarter of 2023.

Project Name:	Construct Booster Pump Station No. 17B - Highland Ridge
Department:	Engineering
Focus Area:	Pumps
Location:	Little Rock



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2023	10 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	—	—	—	—	600,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The Highland Ridge pressure system is currently served by two booster pumping stations, No. 17 and No. 16B, with a combined capacity to deliver 1.25 MGD into the pressure system. Pump Station No. 16B was temporarily modified to pump into Highland Ridge in 2005 due to a pumping capacity deficiency existing at that time. Demand continues to grow in the Highland Ridge system. As identified in the 2010 Master Plan, a new booster pump station needs to be constructed to serve the zone and meet growing consumption demand.

Project Name:	Developer Funded Capital
Department:	Engineering
Focus Area:	Mains
Location:	CAW System

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
DEV	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000

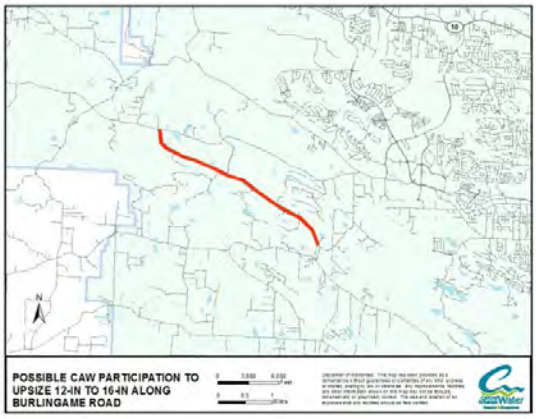
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of improvements made to the CAW distribution system by developers constructing new projects within the CAW service area. These improvements consist of distribution mains, valves, fire hydrants in new subdivisions, and distribution infrastructure to service large new commercial developments. All improvements are reviewed and approved by the CAW engineering staff, both in the planning phase and upon completion of construction, to ensure compliance with CAW design standards.

Project Name:	Developer Participation - New Mains
Department:	Engineering
Focus Area:	Mains
Location:	Systemwide



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	150,000	150,000	150,000	150,000	150,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

Consistent with CAW's water main extension policies, developers/builders are required to design and install new water mains to CAW specifications and requirements. If CAW determines, upon engineering review of plans submitted by developers/builders, that a longer length, different route, or increased capacity is needed due to current or future CAW system needs, CAW may financially participate with the developer/builder to make these modifications. This project will fund participation in these types of water main improvements.

Project Name:	Improve Ozark Point Plant - Phase 1 Construction - Clearwell Baffles & Paint - Job No. 07516A
Department:	Engineering
Focus Area:	Rehabilitation of Ozark Point Plant
Location:	Ozark Point Plant

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	October 2020	8 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC OZARK	—	500,000	2,240,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of necessary construction activities to paint the interior and exterior of Clearwell No. 4, which is a 200 foot diameter, welded steel, ground reservoir. The project will also include the removal and replacement of the malfunctioning internal baffles of Clearwell No. 3 and No. 4. The project will serve to increase the functional life, efficiency, and effectiveness of both clearwells. The need for this project was identified in the Ozark Point Plant Rehabilitation Preliminary Engineering Report. Detailed engineering design of this work was completed in 2018.

Project Name:	Improve Ozark Point Plant - Phase 2 Construction - Project No. 4687 - Job No. 07516B
Department:	Engineering
Focus Area:	Rehabilitation of Ozark Point Plant
Location:	Ozark Point Plant

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	July 2019	24 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC OZARK	3,500,000	14,400,000	3,500,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of the construction activities for the Phase 2 rehabilitation and improvements at the Ozark Point Plant that will increase functional life, efficiency, and effectiveness of the 80 year old plant. The detailed engineering and design for this project began in 2018 and will conclude in mid-2019. The work will consist of structural rehabilitation and improvements to the flocculation and sedimentation basins, filter/control/chemical building, filter pipe gallery, and the backwash/sludge/wastewater system. Building structural repairs and improvements, including installation of solar panels, will also be made. The Phase 2 construction work will be bid in 2019 with construction anticipated to begin in the second half of 2019.

Project Name:	Improve Ozark Point Plant - Phase 2 Construction Phase Engineering Services - Project No. 4687 - Job No. 07516
Department:	Engineering
Focus Area:	Rehabilitation of Ozark Point Plant
Location:	Ozark Point Plant

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	July 2019	24 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC OZARK	212,500	510,000	150,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of the Phase 2 engineering services (engineering and construction inspection) necessary to rehabilitate and improve the Ozark Point Plant and to increase functional life, efficiency, and effectiveness of the 80 year old plant. The engineering design for this project will be completed in early 2019. The construction work will consist of structural rehabilitation of and improvements to the flocculation and sedimentation basins, filter/control/chemical building, filter pipe gallery, and the backwash/sludge/wastewater system. Building structural repairs and improvements are also being designed. The Phase 2 construction work will be bid in 2019 with construction to begin in the second half of 2019.

Project Name:	Improve Pump Station No. 1A - Phase 1 Construction - Wilson Plant - Job No. 07515B
Department:	Engineering
Focus Area:	Pumping System
Location:	Wilson Plant

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	8 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC WILSON	900,000	—	—	—	—

O&M Impact

G/L	2018	2019	2020	2021	2022
	—	—	—	—	—

PROJECT PURPOSE

This project consists of the construction element of Phase 1 of the recommended pump, structure, and electrical improvements to the existing Wilson Plant Pump Station No. 1A. The improvement project was designed in 2016/2017. This improvement project has been split into two phases for sequencing and funding purposes. One half of the pumping units will be replaced in Phase 1, while the remaining units will be replaced in Phase 2. A Preliminary Engineering Report (PER) was completed in 2015 that detailed needed improvements for Pump Station No. 1A, the original pump station located at the Wilson Plant. This pump station is the primary station pumping into the Little Rock Intermediate and the Pulaski Heights pressure systems. Originally constructed in 1964, the station is

capable of delivering 57 MGD into the Intermediate system through five pumps and 17 MGD into the Pulaski Heights system through five pumps. Items to be replaced and/or improved include the pumping units, motors, motor starters, other electrical components, control equipment, and building integrity. The station also has a suction cavitation problem that will be addressed. Phase 1 was bid and awarded in late 2017. Construction began in 2018 and will continue into 2019. The new pumps and motors can only be installed during the low demand months of late 2018 and early 2019. Up to eight months in 2019 may be needed to complete the construction work. The total construction contract for Phase 1 is $3,585,100 with approximately $900,000 anticipated to be spent in 2019 to finish this phase.

Project Name:	Improve Pump Station No. 1A - Phase 2 Construction - Wilson Plant - Job No. 07515
Department:	Engineering
Focus Area:	Pumping System
Location:	Wilson Plant

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2021	24 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC WILSON	—	—	1,500,000	1,300,000	—

O&M Impact

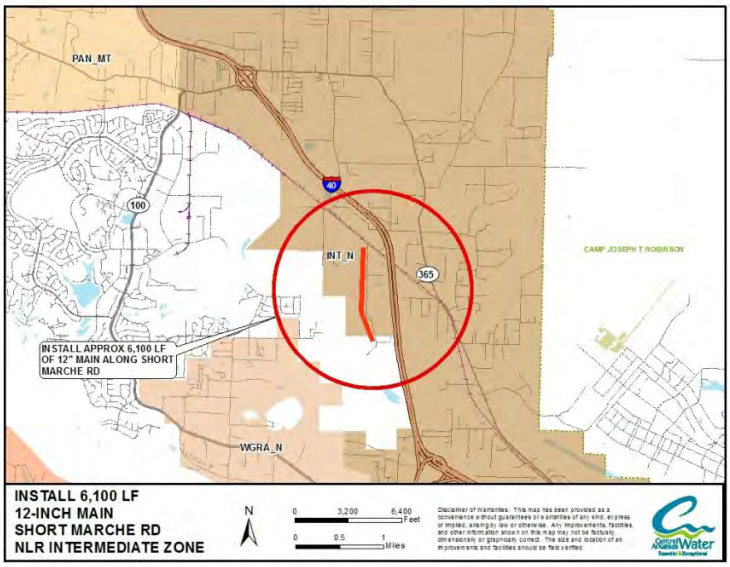
G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of the construction element of Phase 2 of the recommended pump, structure, and electrical improvements to the existing Wilson Plant Pump Station No. 1A. The improvement project was designed in 2016/2017. The improvement project has been split into two phases for sequencing and funding purposes. One half of the pumping units will be replaced in Phase 1, and the remaining pumping units will be replaced in Phase 2. A PER was completed in 2015 that detailed needed improvements for Pump Station No. 1A, the original pump station located at the Wilson Plant. This pump station is the primary station pumping into the Little Rock Intermediate and the Pulaski Heights pressure systems. Originally constructed in 1964, the station is capable of delivering 57 MGD into the Intermediate system through five pumps and 17 MGD into the Pulaski Heights system through five pumps. Items to be replaced and/or improved include the pumping units,

motors, motor starters, other electrical components, control equipment, and building integrity. The station also has a suction cavitation problem that will be addressed. Phase 1 was bid and awarded in late 2017. Construction began in 2018 and will be completed in 2019. The new pumps and motors can only be installed during the low demand winter months of any year, and only one half of the pumping units can be taken out of service at any time. Therefore, this project must be performed in two phases.

Project Name:	Install 12-inch Water Main - Morgan/North Little Rock Intermediate Pressure Zone Looping
Department:	Engineering
Focus Area:	Mains
Location:	North Little Rock/Pulaski County



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2020	9 Months

Capital Costs

Source	2019	2020	2021	2022	2023
2018B BOND	—	650,000	—	—	—

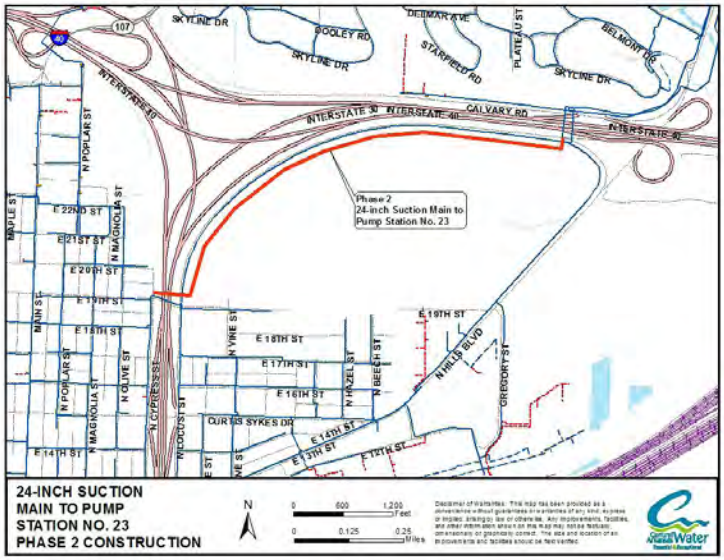
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will construct approximately 6,100 feet of 12-inch water main from the Maumelle Transmission Main to the Morgan area to improve flows and pressures. In conjunction with a transmission main already completed along White Oak Crossing, this project will alleviate problem areas in the Morgan area of the CAW service system.

Project Name:	Install 24-inch Transmission Main - N. Locust St/Pump Station No. 23 - North Little Rock
Department:	Engineering
Focus Area:	Mains
Location:	North Little Rock



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2022	12 Months

Capital Costs

Source	2019	2020	2021	2022	2023
2018B BOND	—	—	—	2,000,000	—

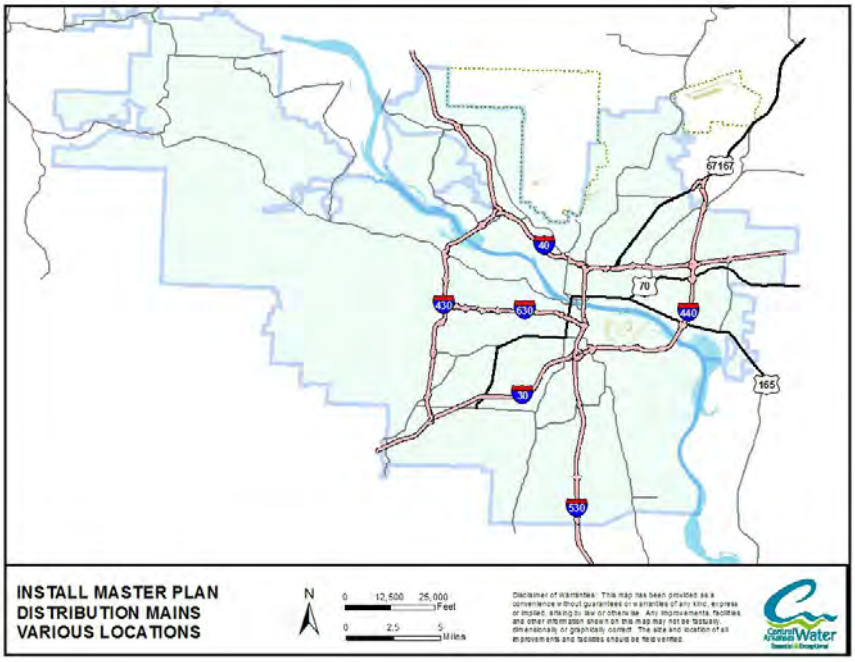
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will construct approximately 7,000 linear feet of 24-inch water transmission main to provide additional flow and redundant capacity to the No. 23 tank and booster pump station located at Montgomery Point in North Little Rock. This project would be the second and last phase of construction of the redundant transmission main that extends from downtown North Little Rock to Montgomery Point. The existing 20-inch transmission main to the tank and pump station is 53 years old and is the subject of frequent leaks and shutdowns.

Project Name:	Install Master Plan Distribution Mains - Various
Department:	Engineering
Focus Area:	Mains
Location:	Systemwide



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2021	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	—	—	250,000	250,000	250,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

Installation of various sized distribution water mains as per recommendations from the CAW Utility Master Plan.

Project Name:	Paint/Improve/Construct Structural Repair - Ground Storage Tank No. 30A
Department:	Engineering
Focus Area:	Tanks
Location:	Maumelle

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	6 Months

Capital Costs

Source	2019	2020	2021	2022	2023
MWM BOND	451,000	—	—	—	—
MWM Surcharge	650,000				

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of improvements to Tank No. 30A located in Maumelle. As part of the CAW/MWM merger agreement, the damaged roof of Tank No. 30A is to be replaced, and the interior and exterior of the tank are to be painted. The tank roof was damaged years before the CAW/MWM merger due to over pressurization of the tank.

Project Name:	Paint/Improve Ground Storage Tank No. 30B - Maumelle
Department:	Engineering
Focus Area:	Tanks
Location:	Maumelle

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	October 2021	6 Months

Capital Costs

Source	2019	2020	2021	2022	2023
MWM Surcharge	—	—	300,000	300,000	—

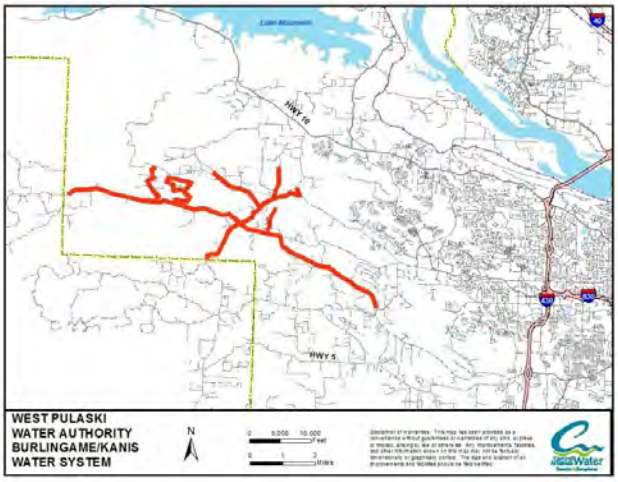
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project consists of improvements to Tank No. 30B located in Maumelle. As part of the CAW/MWM merger agreement, the interior and exterior of the tank are to be painted. Funding for the tank painting is being derived from the Maumelle surcharge fund.

Project Name:	Participation - West Pulaski Water Authority - Burlingame/Kanis Rd
Department:	Engineering
Focus Area:	System Expansion - Mains
Location:	Systemwide



Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	July 2020	18 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC WILSON	—	1,000,000	1,000,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will consist of CAW participation of up to $2,000,000 for a system expansion in the Burlingame Rd/Kanis Rd/Ferndale Cutoff Rd area of West Pulaski County. The project is primarily being funded by the West Pulaski Water Authority in its work to provide CAW potable water to the area. CAW is participating in the project to ensure minimum standards are met in the development of the water infrastructure in the area. CAW participation in the project is also needed to help West Pulaski Water Authority obtain favorable loans and grants to fund the approximate $9 million project.

Project Name:	Purchase DeGray Lake Water Rights
Department:	Engineering
Focus Area:	Water Source
Location:	DeGray Lake

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	October 2019	2 Month

Capital Costs

Source	2019	2020	2021	2022	2023
ARMY	4,640,000	—	—	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
Maintenance	(88,000)	(88,000)	(88,000)	(88,000)	(88,000)

PROJECT PURPOSE

This project is the purchase of 100 MGD of the 120 MGD water rights currently under the right of first refusal contract with the Corps. With this purchase, CAW will own or have rights to three water supply sources, ensuring a sustainable long-term water supply which will meet the Utility's needs well into the next century. This purchase will increase debt service costs approximately $968,000 per year through 2022 but will decrease operation and maintenance costs approximately $88,000 per year. Funding for the purchase is through the assumption of a loan of $3.6 million from the Corps combined with $1.1 million received from the City of Hot Springs for 20 MGD of the 120 MGD total purchased from CAW in 2013.

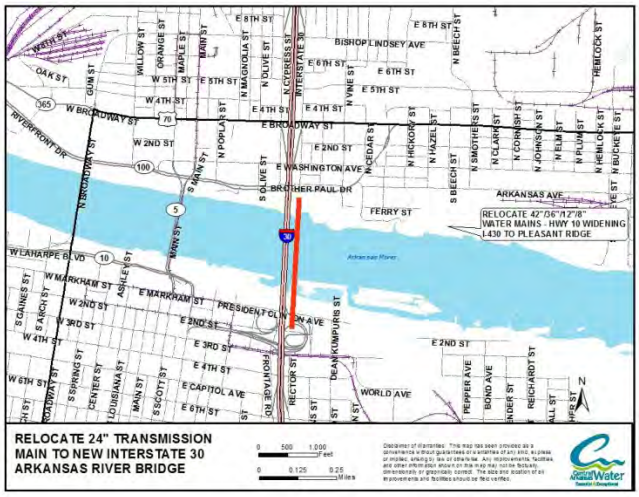
Project Name:	Relocation of Transmission and Distribution Mains
Department:	Engineering
Focus Area:	Mandatory Relocation Projects
Location:	Systemwide

PROJECT PURPOSE

As a condition of CAW water mains and other infrastructure components occupying roadway right of way areas, the Utility has a legal obligation to relocate these assets if they are in conflict with street or drainage improvement projects. Relocation of mains are budgeted as required within the CAW service area due to the street, road, drainage, or other public work improvements.

While relocations do result in newer infrastructure, these projects are not dictated by CAW system needs or assets that are past their useful life. Therefore, these mandatory projects compete for limited infrastructure funds that could otherwise be used for replacing aging infrastructure that is past its useful life or that has a chronic history of spontaneous breakage. The Utility was able to accommodate these relocations in 2015 - 2018 without a significant reduction in the replacement of galvanized pipe by using excess working capital and rates. CAW will continue this funding practice with the addition of Bond funds in 2019 as relocation projects continue. Funding of relocations in 2019 - 2023 will result in the decrease of galvanized pipe and asbestos-cement pipe replacement projects in these years.

Project Name: Relocate 24-inch Transmission Main Along Interstate 30 (I-30) Ark River Bridge - Job No. 08335



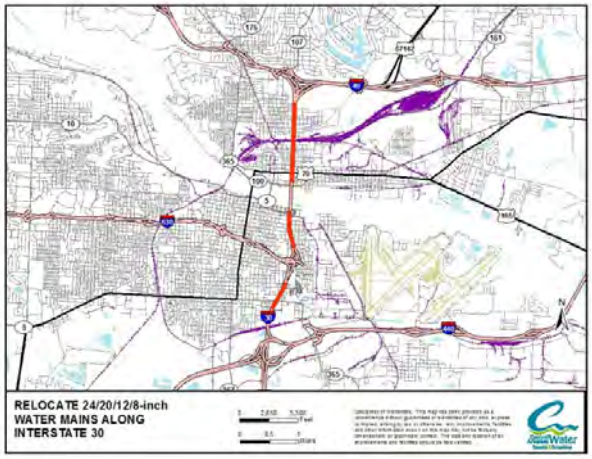
Est Start Date:
March 2019

Duration: (Months)
30 Months

Total Cost:
$2,685,000

Source	2019	2020	2021	2022	2023
2018B BOND	1,880,000	—	—	805,000	—

Project Name: Relocate 24/20/12/8-inch Water Mains - I-30 Widening - Various Locations



Est Start Date:
August 2019

Duration: (Months)
24 Months

Total Cost:
$600,000

Source	2019	2020	2021	2022	2023
2018B BOND	150,000	300,000	150,000	—	—

Project Name: Relocate 42/16/12/8-inch Water Mains - Along Cantrell Rd/AR Highway 10/ Rodney Parham Rd

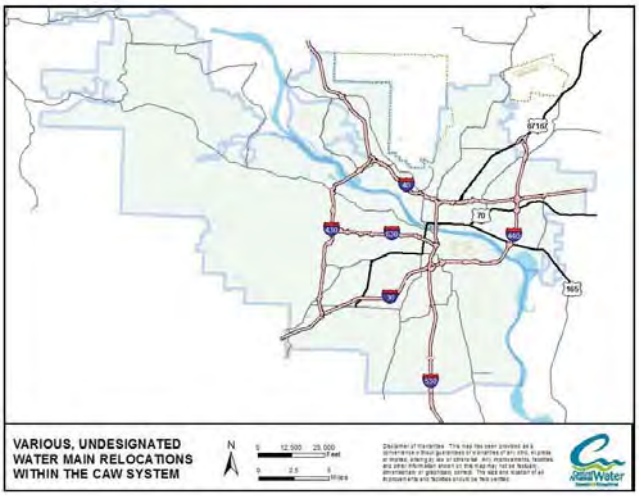
Est Start Date:
January 2019

Duration: (Months)
24 Months

Total Cost:
$2,250,000

Source	2019	2020	2021	2022	2023
2018B BOND	750,000	750,000	750,000	—	—

Project Name: Relocate Water Mains - Various Known/Unknown Locations - State/County/ City Improvements



Est Start Date:
January 2019

Duration: (Months)
Ongoing

Total Cost:
$1,400,000

Source	2019	2020	2021	2022	2023
RATES	300,000	300,000	200,000	300,000	300,000

Project Name:	Remove Sludge - Maumelle Water/Wastewater Lagoons - Job No. 07602 - Maumelle Surcharge
Department:	Engineering
Focus Area:	MWM Merger
Location:	Maumelle

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	June 2020	3 Months

Capital Costs

Source	2019	2020	2021	2022	2023
MWM Surcharge	—	—	—	2,000,000	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will consist of the removal of biosolids and sludge from the MWM wastewater sludge lagoon located at the MWM wastewater treatment plant (now North Little Rock Wastewater Utility). Removal of the sludge will allow for the permit closure of these lagoons. The water treatment plant has been closed after completion of the Maumelle Transmission Main in early 2018. The wastewater treatment plant may be closed by North Little Rock Wastewater Utility in the near future. Removal of the sludge from the two lagoons is a component of the CAW/MWM merger plan and will be funded through Maumelle surcharge funds.

Project Name:	Replace Distribution Mains & Valves - Phase 3 - Maumelle Job No. 07610
Department:	Engineering
Focus Area:	Asset Replacement - Water Mains
Location:	Maumelle

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	12 Months

Capital Costs

Source	2019	2020	2021	2022	2023
MWM BOND	1,000,000	—	—	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will consist of the replacement of problematic asbestos-cement and PVC water mains with new ductile iron water mains in various locations within the City of Maumelle. Also in this project, new main-line valves will be installed around the Maumelle system where there is currently insufficient valve spacing. The replacement project was identified in the CAW/MWM merger agreement and is funded with the Maumelle acquisition and construction bonds.

Project Name:	Replace Water Mains - Galvanized, Asbestos-Cement, Cast Iron - Systemwide
Department:	Engineering
Focus Area:	Asset Replacement
Location:	Systemwide

Name:	Est Start Date:	Duration: (Months)
Jim Ferguson	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	2,500,000	3,000,000	3,500,000	4,000,000	4,500,000

O&M Impact

While this project will reduce maintenance costs of repairing leaks and breaks, this amount is not easily quantifiable due to the unique circumstances and environments surrounding each leak and break situation.

PROJECT PURPOSE

The replacements are prioritized as needed based on water main service life expectancy as well as mains that experience numerous leaks and breaks, resulting in uncontrolled loss of water service. Replacement of the aging water mains provides an improved level of service to customers in the affected areas and reduces maintenance costs associated with leaks and breaks.

Project Name:	Purchase Document Management System (DMS)
Department:	Information Services
Focus Area:	CAW
Location:	CAW System

Name:	Est Start Date:	Duration: (Months)
Allen Vincent	January 2019	24 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	450,000	400,000	—	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
Software Maintenance	—	75,000	75,000	75,000	75,000

PROJECT PURPOSE

In late 2017, CAW contracted with RIMtech Consulting to conduct an assessment of the Utility's recordkeeping environment. Deliverables from this assessment will include a draft records retention schedule as well as a recommendation on the type of DMS that would best fit the needs of the Utility.

There are many benefits that justify costs associated with document and content management practices, policies, and procedures, as well as the implementation and operation of a DMS, including:

- Reduced paper storage - Removal of paper by converting paper documents that are stored or in an archive into an electronic form.
- Improved retrieval time - Obtaining paper from storage or an archive is slower than electronic retrieval of documentation. Along with the improved retrieval time

comes the ability to perform searches for similar information. This is especially useful when trying to perform major changes or perhaps searching for information subject to litigation.

- Less paper, printer, and toner costs - Reduced need to print paper documents as electronic versions are available for use or reuse.
- Improved staff productivity - Less time spent searching for documents or trying to find the current version. Document review and approval cycles, particularly where multiple reviewers and approvers are involved in the business process, are faster than the current manual processes.
- Improved disaster recovery - The DMS can store critical documents in the event of significant disruption or disaster for the business.
- Improved security - A single secure location for documents to ensure that the right people can access the right documents.
- Improved compliance to support State and Federal reporting requirements.

Project Name:	Purchase Time & Attendance System / Human Resource Initiative
Department:	Information Services
Focus Area:	CAW
Location:	CAW

Name:	Est Start Date:	Duration: (Months)
Allen Vincent	October 2019	36 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	100,000	300,000	195,000	—	—

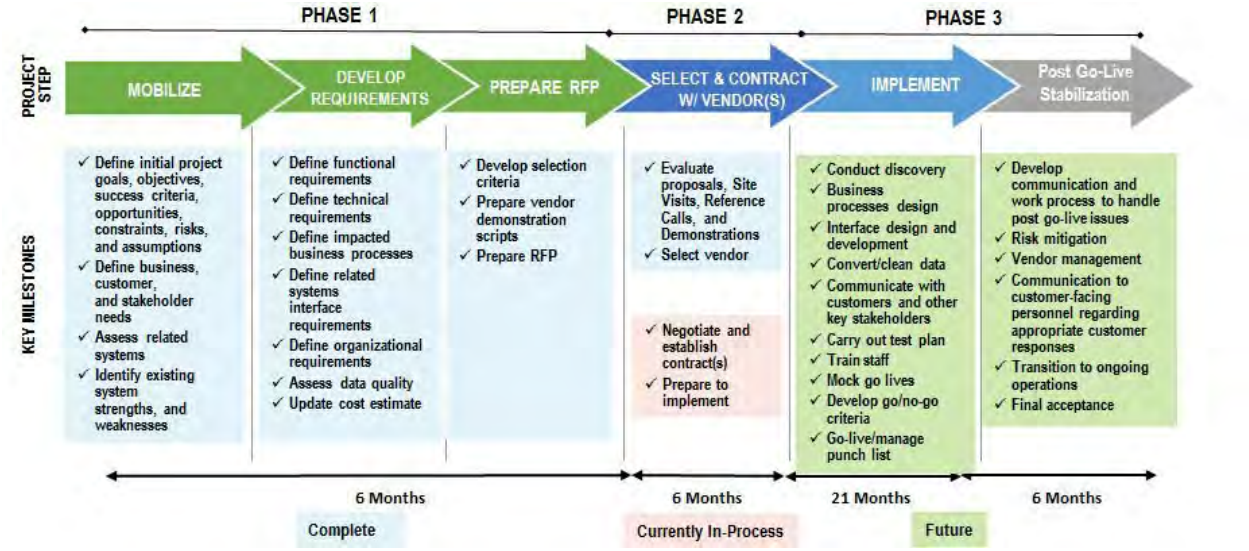
O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This recommendation is centered on implementation of a Tier 1 time and attendance system. These implementations are much larger than just timeclocks in that there are many business rules regarding shift pay, overtime, and accruals that will need to be documented, configured, and approved by senior management. Most staff at CAW will be able to use timeclocks that sit on the network, eliminating a large portion of the timesheet management process. Some of the benefits of implementing a time and attendance system include the ability to control and manage labor costs, enforce labor rules, and reduce timekeeping overhead. Timeclocks will be setup in strategic locations similar to where the manual clocks currently are and will feed data automatically into the payroll system.

Project Name:	Replace Customer Information System - Job No. 08288
Department:	Information Services
Focus Area:	Customer Billing
Location:	CAW System



Name:	Est Start Date:	Duration: (Months)
Allen Vincent	January 2019	36 Months

Capital Costs

Source	2019	2020	2021	2022	2023
2018B BOND	2,928,870	816,130	—	—	—
RATES	1,159,000	1,183,870	247,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
Software Maintenance	—	324,588	(14,363)	(14,794)	(15,238)

PROJECT PURPOSE

CAW's current CIS has been in place for 20 years and has not kept up with trends in technology, the needs of the utility, or the expectations of the customers. As part of the 2017 ITMP, a comprehensive assessment of the Utility's current CIS situation was conducted along with a comparison to currently available systems on the market. The current CIS does not deliver the service, information, or experience customers expect. Furthermore, the current system is not flexible, which results in vendor support to address

most issues. Many of these issues require vendor professional service hours not included in the software support contract resulting in unplanned costs.

Months of preparation have occurred to define system and stakeholder needs, develop requirements, and produce a request for proposal (RFP). After the release of the RFP, subsequent vendor submissions, and review of the RFP submissions, Cayenta was selected as CAW's new CIS vendor. The CIS project team, along with EMA, Inc. will be working with Cayenta staff on the implementation phase of the system, which is set to begin in the fourth quarter of 2018. The implementation and post go-live stages of the project will continue into 2019 and early 2020.

Project Name:	Upgrade Microsoft Dynamics Finance and Operations System
Department:	Information Services
Focus Area:	Finance
Location:	James T. Harvey Administration Building

Name:	Est Start Date:	Duration: (Months)
Allen Vincent	April 2021	6 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	—	—	600,000	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

Upgrading from the current version of Microsoft Dynamics GP to Dynamics 365 Finance and Operation Enterprise and implementing the Risk Management and Purchasing modules will be a major system functionality improvement for the Finance Department. Dynamics 365 is written on the latest Microsoft platform, and many of the new features for Accounts Payable, Accounts Receivable, Fixed Assets, General Ledger, and Budgeting are included in this upgrade. Currently, Budgeting is a separate component. Implementing Dynamics 365 will address many of the limitations and gaps of GP and eliminate the need for third-party add-ons.

Project Name:	Purchase 2.5 Megawatt Generator
Department:	Water Production
Focus Area:	Water Supply
Location:	Lake Maumelle Pump Station

Name:	Est Start Date:	Duration: (Months)
Doug Graham	February 2019	4 Months

Capital Costs

Source	2019	2020	2021	2022	2023
ANRC SOLAR	1,300,000	—	—	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

The two current generators are rated for 2.2 megawatts each, are water cooled, and are 31 years old. This currently allows two large pumps to be run simultaneously providing a flow of 62 MGD. There have been times that a pump would trip the generator on startup when only one generator was running. With the addition of a 2.5 megawatt generator, CAW will have the ability to run three large pumps at this location, improving reliability and flexibility. The new unit will be air cooled which omits the need to keep the water cooling lines flushed. Having this generator will also lengthen the time period between generator change outs, resulting in less capital costs.

Project Name:	Replace Granular Activated Carbon (GAC) Media
Department:	Water Production
Focus Area:	Treatment
Location:	Ozark Point Plant

Name:	Est Start Date:	Duration: (Months)
Sam Zehtaban	March 2019	60 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	260,000	260,000	260,000	260,000	260,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

Activated carbon is commonly used to adsorb natural organic compounds, taste and odor compounds, and synthetic organic chemicals in drinking water treatment. CAW utilizes the activated carbon in granular form in its filtration-adsorption process in which all of the filter media is GAC.

The need to periodically 'reactivate (regenerate)' or replace the GAC to maintain the adsorption capability is a significant consideration when using GAC. How often the GAC should be changed needs to be based on contaminant levels and water use.

Specifications for filter media follow the AWWA Standard for Granular Filter Material B604-18, ANSI/AWWA B100-01, American Water Works Association.

Project Name:	Purchase Conservation Easements
Department:	Water Quality
Focus Area:	Watershed Protection
Location:	Lake Maumelle Watershed

Name:	Est Start Date:	Duration: (Months)
Randy Easley	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
WPF	300,000	200,000	200,000	200,000	200,000

O&M Impact

G/L	2019	2020	2021	2022	2023
Land Management	2,500	5,000	7,500	10,000	12,500

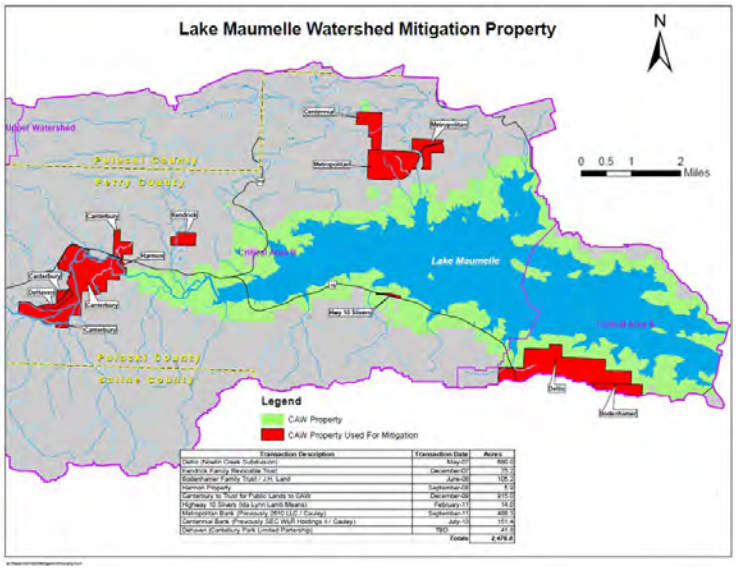
PROJECT PURPOSE

Conservation easements are voluntary, legally binding agreements that limit certain types of land uses and developments in perpetuity. Conservation easements benefit the public and the environment while keeping land in private hands.

A conservation easement's purpose will vary depending on the character of the particular property, the goals of CAW, and the needs of the landowners. These purposes might include maintaining and improving water quality, perpetuating and fostering the growth of healthy forests, or ensuring lands are managed so that they are always available to benefit the sustainable use of the water supply.

The ability to utilize conservation easements is less expensive than fee simple title ownership and allows landowners to continue use of their property while achieving the management objectives of the Utility.

Project Name:	Purchase Property
Department:	Water Quality
Focus Area:	Watershed Protection
Location:	Lake Maumelle Watershed



Name:	Est Start Date:	Duration: (Months)
Randy Easley	January 2019	Ongoing

Capital Costs

Source	2019	2020	2021	2022	2023
WPF	500,000	500,000	500,000	500,000	500,000

O&M Impact

G/L	2019	2020	2021	2022	2023
Land Management	2,500	5,000	7,500	10,000	12,500

PROJECT PURPOSE

Land purchases are essential to the protection and management of the CAW watersheds. CAW can best manage the source water from the watersheds of Lake Maumelle and Lake Winona by purchasing land and applying scientifically sound practices and strategies for land and water management and conservation.

Since 2007, CAW has purchased over 2,600 acres for watershed protection and improvement of water quality. The continuation of land purchases is consistent with recommendations of the 2007 WMP and will assist in the full implementation of the plan.

Project Name:	Replace Laboratory Facilities
Department:	Water Quality
Focus Area:	Laboratory Analyses
Location:	CAW Laboratory

Name:	Est Start Date:	Duration: (Months)
Randy Easley	January 2021	36 Months

Capital Costs

Source	2019	2020	2021	2022	2023
RATES	—	—	500,000	500,000	500,000

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

This project will improve the capability, efficiency, and safety of the laboratory facility as well as bring the lab into compliance with Good Laboratory Practices (GLP) and the Americans with Disabilities Act. GLP is a set of principles that provides a framework within which laboratory analyses are planned, performed, monitored, recorded, reported, and archived. GLP helps assure regulatory authorities that the data submitted are a true reflection of the results obtained during analyses and can therefore be relied upon when making risk/safety assessments.

Water quality targets, objectives, and standards are set to evaluate the quality of the water resources, both surface and subsurface water bodies, to characterize ecological status (for surface waters) and to establish satisfactory conditions for intended uses of the

aquifer(s). The laboratory data define whether that condition is being met, and whether the water is at an acceptable quality.

It is important to note that good, high quality laboratory work requires appropriate planning, design, and construction of the laboratory facility. Depending on the planned use of the laboratory, i.e., for research and/or monitoring, chemical, radiochemical, biological or microbiological analyses, appropriate space and basic laboratory facilities should be available.

This project will enhance CAW's laboratory ability to maintain its current Arkansas Department of Health (ADH) Certification, as well as the ability to obtain additional certifications from the Arkansas Department of Environmental Quality (ADEQ) and Environmental Protection Agency.

Additionally, the laboratory data management system will be upgraded to support a Laboratory Information Management System for the electronic integration of data from all laboratory instrumentation and computers as well as the reporting and storage of data.

Project Name:	Restore Hydrologic Flow - USACE Sec. 206 Project - Job No. 08280
Department:	Water Quality
Focus Area:	Watershed Protection
Location:	Lake Maumelle Watershed - Winrock Grass Farm

Name:	Est Start Date:	Duration: (Months)
Randy Easley	October 2019	18 Months

Capital Costs

Source	2019	2020	2021	2022	2023
GRANT	327,500	—	—	—	—
WPF	227,500	—	—	—	—

O&M Impact

G/L	2019	2020	2021	2022	2023
	—	—	—	—	—

PROJECT PURPOSE

CAW acquired approximately 900 acres in the watershed of Lake Maumelle, which is the drinking water supply for 450,000 people in several Central Arkansas communities. A portion of the property was acquired through the U.S. Department of Agriculture's Forest Legacy program with the intent of restoring the former Winrock Zoysia grass farm to native habitats, primarily forest, for the purpose of protecting the watershed. Several restoration and conservation projects are aimed to restore function to river, floodplain, and wetland resources.

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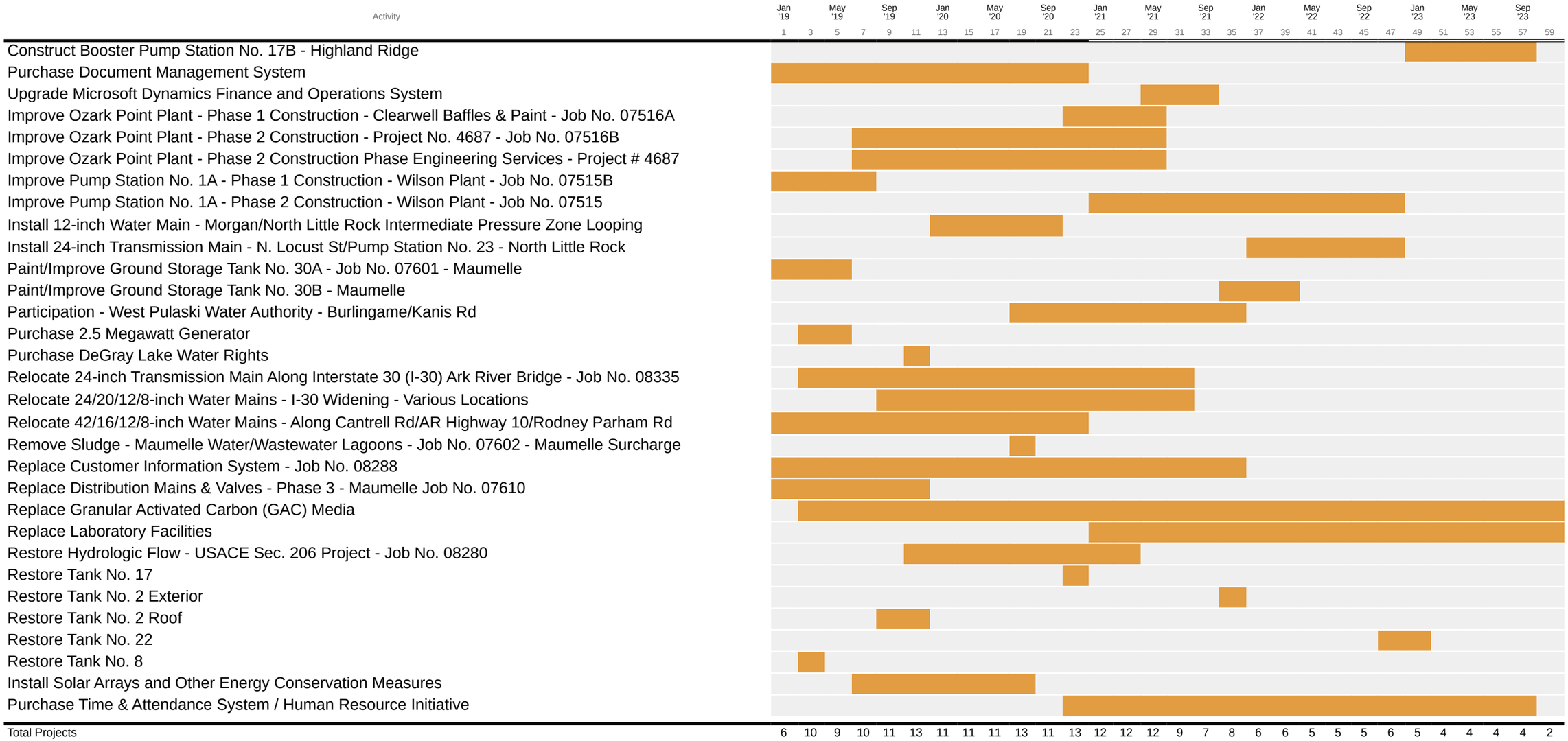
Project Planner



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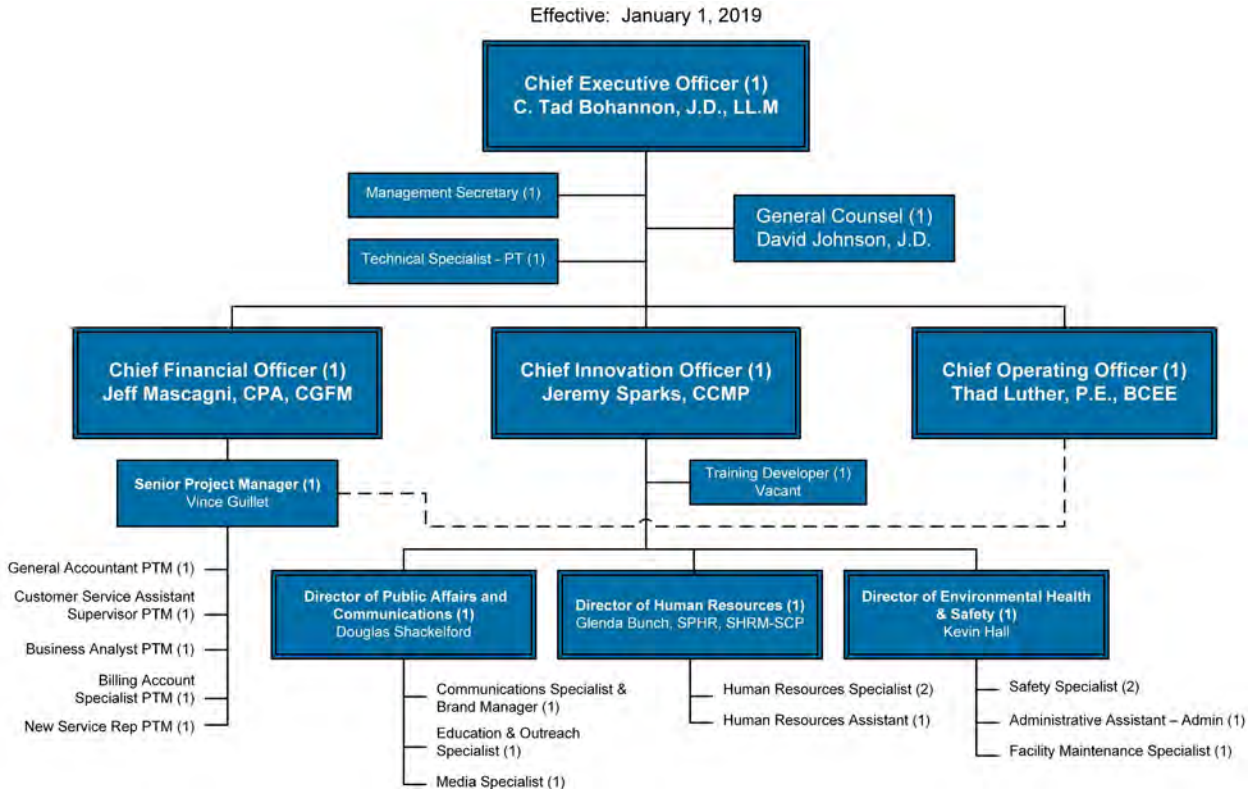
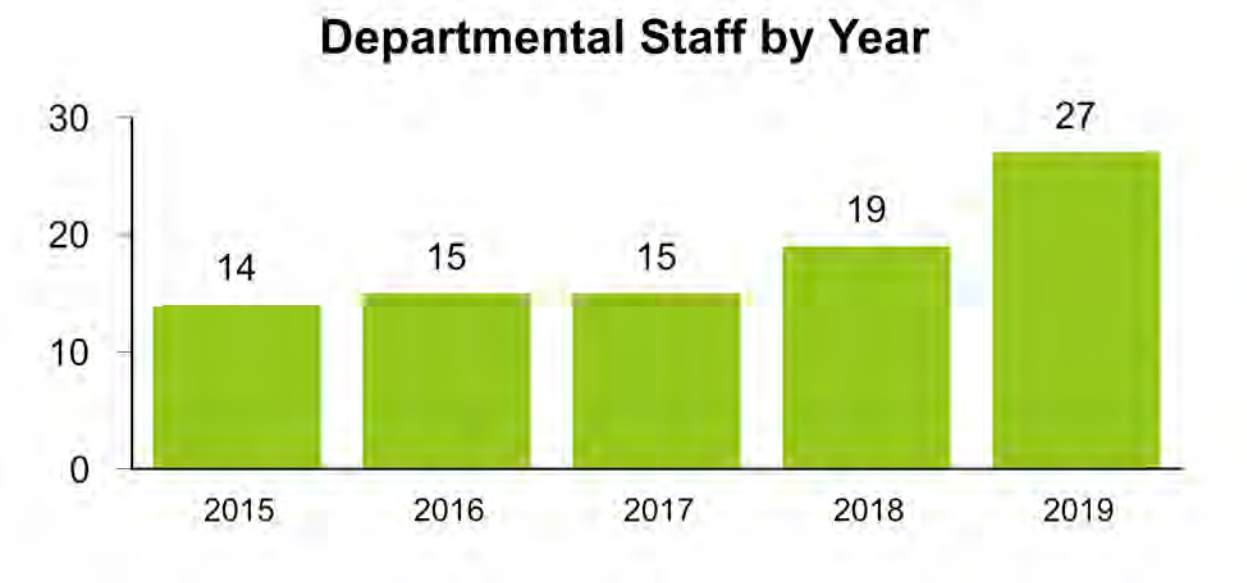
DEPARTMENTS

ADMINISTRATION DEPARTMENT





EXECUTIVE STAFF

Chief Executive Officer

The highest-ranking officer in the organization, the CEO, reports directly to the Board of Commissioners. The CEO collaborates with the Board to establish a strategic plan for the Utility and is responsible for implementing plan initiatives throughout the organization. The CEO also is responsible for the overall management of the Utility and the organization's profile and image. As the Utility's leader, the CEO frequently fills the roles of motivator, mentor, and advocate. The CEO has direct supervision over the COO, CFO, and CINO, as well as day-to-day supervision of the General Counsel (GC).

Chief Operating Officer

The COO is responsible for managing the day-to-day operational activities of the Utility and ensuring the required resources and assets are in place to deliver high-quality water and dependable service. The COO is responsible for the development, design, and implementation of business processes and systems that effectively and efficiently deliver water and service to customers. The COO directly supervises the Engineering, Distribution, Water Production, and Water Quality Departments.

Chief Financial Officer

The CFO is responsible for managing all financial, customer service, and technology driven aspects of the Utility as well as the day to day supervision of the Senior Project Manager. The CFO ensures that strategic objectives are financially supported through financial planning, implementing the annual budget, and developing sufficient rates. The CFO is responsible for accurate and timely financial reporting, maintaining banking relationships, investment and debt management, billing activities, and customer payment processing. The CFO also has oversight in the processing and contracting of procurement requests for materials, supplies, and services in addition to risk management practices.

Chief Innovation Officer

The CINO is responsible for managing administrative aspects of the Utility and for ensuring a high performing, innovative, values-driven, informed, and passionate workforce is in place to carry out CAW's mission. The CINO directly supervises EHS, Human Resources, and Public Affairs and Communications of the Administration Department. The CINO is responsible for overseeing organizational change initiatives, benchmarking, and business system process modeling. The CINO also leads the strategic planning process and the professional development of CAW employees.

General Counsel

The GC reports directly to the CEO and the Board of Commissioners. The GC enhances CAW by providing prompt resolution of legal issues, proactive advice, and counsel to the Utility's administration. The GC is responsible for working with the Board, the Utility's officers, and department directors to ensure operations of the Utility maintain compliance with relevant laws, regulations, and policies. The GC serves as legal adviser and counsel to the Board and staff; provides assistance in interpreting the legal ramifications of proposals, policy directives, and other actions; advises, promotes, and manages efforts related to Federal, state, or local legislation; and handles special projects as requested by the Board, or CEO.

EUM Attribute:	Employee and Leadership Development
Goal:	Implement increased leadership and employee development training for CAW managers and employees.

EUM Attribute:	Stakeholder Understanding/Support
Goal:	Maintain open dialogue with city and county officials, major customers, regional partners, and community organizations.

2018 Accomplishments

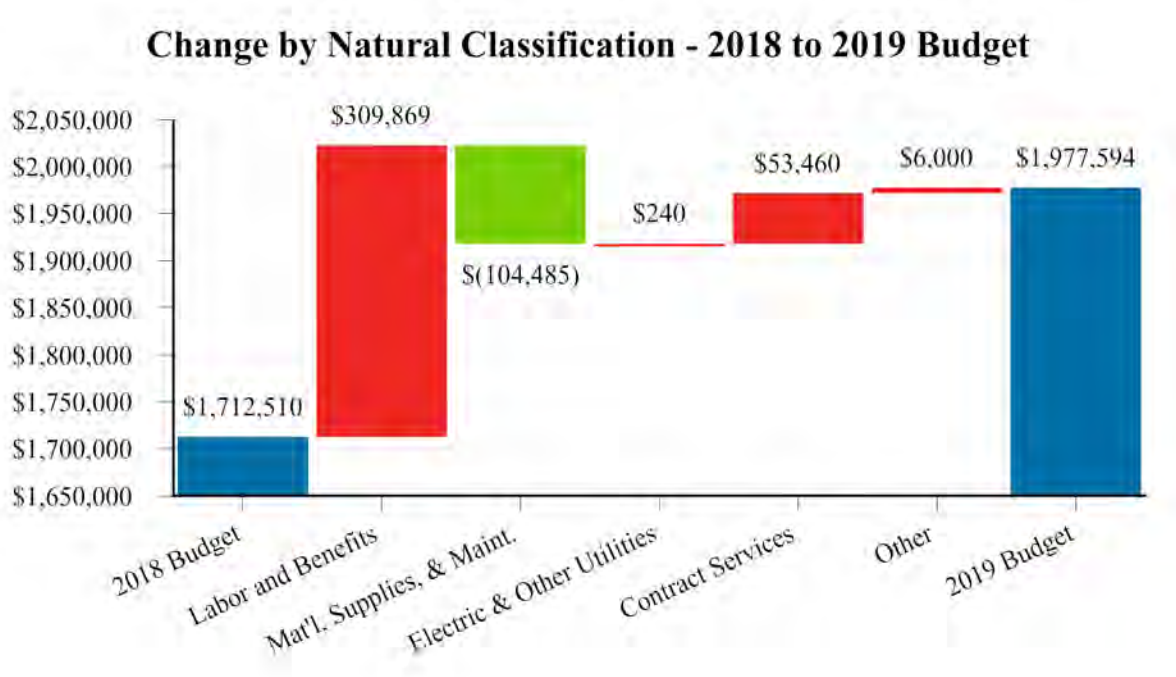
CAW leadership continued its pursuit of the mission of delivering high quality water and dependable service, protecting and ensuring a long-term water supply, and serving as responsible stewards of public health, utility resources, and the environment. To that end, CAW leadership was proactive in procuring additional land in the CAW watershed. CAW acquired 850 acres of land in the watershed in 2018. Since cost savings are an integral part of being responsible stewards, CAW collaborated with Performance Services to determine possible energy cost savings. Solar array installations on CAW land holdings and the surface of Lake Maumelle have been recommended as potential ECMs. Work on these solar initiatives will continue in 2019. CAW Executive Staff has been instrumental in the CIS replacement project. The project has progressed well, with Cayenta being selected as the CIS vendor and system implementation beginning in late 2018. The MWM consolidation project is in its closing phases as the Maumelle Transmission Main was completed in early 2018. Maumelle customers began receiving CAW water, which ended the need for the MWM treatment plant and wells. Decommissioning these assets was in process at the end of 2018 and projected to continue into 2019. Upon retirement of the Chief Administrative Officer, the CINO took over those responsibilities as well as assumed oversight of organizational changes.

2019 Goals

- Long-term Succession Planning
- Improve long-term financial and source water sustainability
- Continue increasing cross departmental functionality
- Continue formalizing Standard Operating Procedures and processes
- Increase employee developmental opportunities
- Increase community knowledge and satisfaction

Administration Department - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 1,022,932	$ 1,056,948	$ 962,425	$ 1,272,294
Materials, Supplies, and Maintenance	108,361	115,688	211,585	107,100
Electric and Other Utilities	840	1,250	960	1,200
Contract Services	387,687	452,353	501,540	555,000
MWM Transition Cost	127	—	—	—
Other	58,922	23,462	36,000	42,000
Total Expenses	***1,578,869***	***1,649,701***	***1,712,510***	***1,977,594***
Total Capital Costs	***21,220***	***—***	***130,000***	***20,220,000***
Total Administration	***$ 1,600,089***	***$ 1,649,701***	***$ 1,842,510***	***$ 22,197,594***



Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

ENVIRONMENTAL HEALTH & SAFETY

EHS works to create and maintain a safe workplace environment, both in the field and in the office, by preventing accidents and occupational illnesses. EHS staff conducts intense employee training, performs routine health and safety inspections throughout the Utility, and eliminates unsafe acts and conditions.

Each Director, Manager, and Supervisor has the responsibility of enforcing the Utility's safety policies and procedures and setting a good health and safety example for employees. While EHS has the responsibility of providing the necessary training and support to facilitate effective enforcement and workplace safety, supervisors reinforce sound practices by leading by example and wearing the proper personal protective equipment, following all safety rules and regulations, actively participating in safety inspections and safety meetings, and being good role models for employees.

Mission

EHS ensures that each CAW employee benefits from a safe and healthy place of employment.

EUM Attribute:	Operational Resiliency
Goal:	Eliminate or reduce employee injuries and motor vehicle crashes.

Objective 1: Provide Occupational Safety & Health Administration (OSHA) required safety training for all affected CAW employees, leading to reduced workers compensation claims, costs, and lost time compared to previous year.

2018 Accomplishments

By the end of 2018, EHS will have provided over 100 health and safety training sessions for CAW employees. The majority of the training EHS provides is OSHA required. Examples of training include CPR, defensive driving, competent person, confined spaces, respiratory protection, hearing conservation, forklift certification, and emergency response, among others.

Objective 2: Inspect all facilities on a quarterly basis and all vehicles annually

2018 Accomplishments

EHS will complete a thorough safety inspection by the end of 2018 at all CAW facilities (JTH, Maryland Avenue Complex, Clearwater, Wilson Plant, Ozark Point Plant, Lake Maumelle, Lake Winona, and all MWM facilities) and will work with staff to ensure that all hazards identified during those inspections are corrected.

Every CAW vehicle will be inspected at least once; however, most vehicles will be inspected by EHS or department supervisors several times throughout the year.

Objective 3: Inspect all construction sites to ensure adherence to all Federal and State regulations and all CAW rules and regulations

2018 Accomplishments

EHS anticipates visiting over 150 job sites by the end of 2018. During these safety inspections, EHS personnel observe the operations, evaluate possible safety concerns, OSHA compliance, and public safety awareness, and note any corrections of safety issues found during job site visits.

2019 Goals

EHS will continue to implement recommendations of the Vulnerability Assessment in 2019, providing additional safety and security enhancements as needed at various Utility facilities and updating or creating Emergency Action Response Plans for a number of scenarios identified by the Vulnerability Assessment.

EHS will create new safety policies as well as updating current safety policies included in the utility safety manual.

EHS will work closely with the Distribution Department to conduct a utility-wide electrical safety survey. This will include creating standard operating procedures while working near high voltage services and equipment.

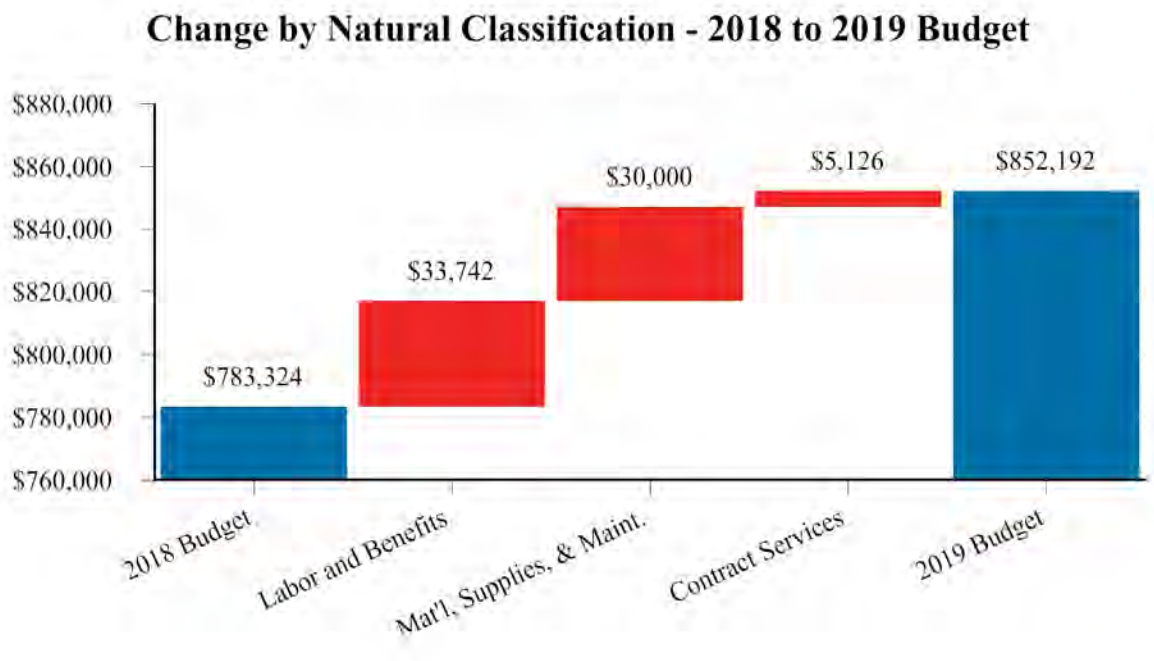
EHS will begin the process of creating a Job Safety Analysis program in 2019. This will help integrate accepted safety and health principles and practices into a particular task or job operation.

EHS will begin creating “self-paced” on-line safety training in 2019. This proficiency-based model will allow employees to have a schedule that meets their individual training requirements.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Safety Training Classes	98	100	100
Safety Training Hours (cumulative)	3,271	2,400	2,500
Workers' Comp Claims	17	11	11
Workers' Comp Claim Costs	$313,170	$99,928	$125,000
Workers' Comp Lost Time (days)	172	100	0
"At Fault" Vehicular Accidents	10	6	6
"Not At Fault" Vehicular Accidents	10	4	6
Perform all Facility and Vehicular Inspections	Y	Y	Y

Environmental Health & Safety - Expense Summary

	2017 ACTUAL	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 343,934	$ 442,349	$ 453,036	$ 486,778
Materials, Supplies, and Maintenance	54,167	73,042	153,700	183,700
Electric and Other Utilities	800	1,450	1,940	1,940
Contract Services	164,131	161,988	174,648	179,774
Total Expenses	***563,032***	***678,829***	***783,324***	***852,192***
Total Capital Costs	—	—	—	—
Total Environmental Health & Safety	***$ 563,032***	***$ 678,829***	***$ 783,324***	***$ 852,192***



Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

HUMAN RESOURCES

The Human Resources Section provides services and support for all aspects of employment, employee relations, and succession planning for each of CAW's dedicated employees. The section's four staff members, who collectively have over 80 years of experience in the field of Human Resources, have a wide range of diverse responsibilities that include recruitment; developing and maintaining the employee handbook and Utility-wide policies and procedures; evaluating and recommending employee benefits; overseeing the compensation program; providing training and professional development; reviewing/assisting with performance evaluations; overseeing Utility-wide succession planning; implementing the alcohol/drug-free workplace program; providing employee relations and assistance; leading diversity and inclusion initiatives; and contributing to CAW's Strategic Plan.

Human Resources is responsible for addressing many of the challenges currently faced by employers across the nation, including continually changing and expansive employment legislation, increased turnover, and knowledge/experience drain caused by retirement of the baby boomer generation, qualified labor pool shortages, and a budget restrictive economy.

Additionally, Human Resources works to ensure that CAW's employees enjoy a uniquely positive work environment with opportunities for individual professional growth and the opportunity to make important contributions to the growth of the Utility. All of the programs and initiatives of the Human Resources Section focus on a single objective - ensuring that CAW has the well-educated, well-trained, and dedicated work force that the Utility requires to provide the exceptional water and outstanding service that customers expect and on which they know they can depend.

Mission

The Human Resources staff strives to provide the Utility with a well-qualified, diverse, and dedicated work force through recruitment efforts and Utility programs. Human Resources is dedicated to providing all of CAW's employees with outstanding service, support, information, and assistance in regard to Utility policies, benefits, programs, and other areas of concern.

Human Resources is committed to ensuring that the Utility's recruitment programs, policies, procedures, compensation, and employee benefits programs continue to attract and retain high performing, innovative, values-driven, informed, and passionate (HIVIP) employees throughout the organization. This role is in ongoing support of the Utility's commitment to exceptional water quality and customer service, fiscal responsibility, resource stewardship and sustainability, and legal and ethical accountability.

In addition, Human Resources is committed to ensuring CAW's fair and equitable treatment of all employees, in accordance with legal and professional standards.

EUM Attribute:	Employee and Leadership Development
Goal:	To recruit, develop, reward, and retain a workforce that is high performing, innovative, values-driven, informed, passionate, and diverse in a collaborative environment dedicated to continual learning and improvement and the professional and leadership development of all employees, while maintaining competitive pay and employee benefits within the budgetary requirements of the Utility.

Objective 1: Maintain "time to fill" vacant positions at or below SHRM standard of seven weeks

2018 Accomplishments

2018 continued to be a high volume year for recruitment, with 37 positions filled in the first seven months of the year. Even with the very thorough, multi-faceted recruitment and qualification processes, positions were filled, on average, within 7.35 weeks, just slightly above the SHRM benchmark.

Objective 2: Maintain annual turnover rate at or below 10%

2018 Accomplishments

CAW's turnover rate for the last five years has averaged just under 8.5%, far below the national five year average of 18% for state and local government employers. Projected retirements of the baby boomer generation continue to be reflected in CAW's turnover rate, estimated at 8.2% for 2018, still roughly half of the estimated national average for state and local governments.

Objective 3: Maintain cost of benefits below the adjusted Bureau of Labor Statistics/ Society for Human Resource Management (BLS/SHRM) national average of 29.5% (2017)

2018 Accomplishments

CAW's estimated 2018 Cost of Benefits as a percent of total compensation (wages + benefits) once again decreased slightly to 30.6%, roughly 1% above the BLS/SHRM national average. Increases in group health insurance premiums were offset by decreases in self-funded workers' compensation expenses.

Objective 4: Implement Diversity and Inclusion training and programs

2018 Accomplishments

A strong commitment to Diversity and Inclusion initiatives continues throughout the organization. In 2017-2018, CAW focused on diversity and inclusion through various community outreach activities. The Diversity Inclusion Team (DIT), along with CAW co-workers, represented the utility at the following community events:

- Cinco de Mayo - participating employer, water distribution and community information and outreach
- Juneteenth Celebration - participating employer, water distribution and community information and outreach
- Black Hall of Fame - co-sponsor, community networking and outreach
- Just Communities Day of Reflection - co-sponsor, community networking and outreach
- MLK Reads - tutoring and support for 3rd grade students below their target reading level. Employee participation grew from 11 tutors in the spring semester to 21 tutors in the fall semester 2018.

Internally, employees celebrated National Diversity Month with DIT "Spotlights" - a program that focuses on one participating employee via intranet/email each day, which has grown in popularity and doubled in size since its inception in 2015. The DIT also kicked off an anonymous suggestion program to encourage employees to submit their ideas, suggestions, and concerns to the DIT. Employee and DIT training was a focus area in 2018, with all new hires receiving a full day of diversity inclusion training and the DIT receiving VIP^2 training - insights into diversity as a team and as individuals and Human Resource Management Association (HRMA) training - a full day of diversity training by the HRMA, Little Rock.

In celebration of Diversity Month (October 2018), the DIT launched an initiative to help employees discover their heritage, and possible unknown similarities, through a genealogy program.

Objective 5: Ensure employee competency through job-related certification and tracking percentage of those meeting job certification requirement(s)

2018 Accomplishments

CAW employees are committed to meeting and exceeding the professional standards of their jobs. The number of employees holding designated certifications exceeded the level of job certifications required by the Utility by an impressive 30% in 2018.

Objective 6: Ensure employee competency through training, meeting QualServe standard of 20.0 hours of training per employee annually.

2018 Accomplishments

Employees received an average of 25 hours of training for 2018, resulting from an increased focus on employee development and supervisory training. VIP^2 training, designed to cultivate a HIVIP workforce, was conducted in phases for all supervisory and lead staff (three day training), new employees (half day training) and all employees (three hour training) at the Utility. Formalized succession planning, supervisory training, and employee development programs will continue to be focus areas in 2019.

Objective 7: Support workforce succession preparedness through internal advancement of employees and tracking number of non-entry level positions filled internally.

2018 Accomplishments

CAW continued to focus on internal advancement in 2018, with 55% of non-entry level positions filled internally. The Utility will continue to focus on workforce succession preparedness in 2019, facilitated in part by the new VIP^2 initiatives.

Other 2018 Accomplishments

In addition to the goals and accomplishments identified above, Human Resources played a significant role in completion of the following important projects in 2018:

- Implementation of a new skills based pay system for the Buyer position in the Purchasing section, providing greater opportunities for advancement and increasing employee job satisfaction and engagement.
- Reorganization of Field Customer Service section, providing a more cohesive system to ensure the resolution of customer concerns and the most effective delivery of exceptional service to customers.
- Enhancements to the holiday policy to recognize those who give up time with family and friends to insure safe and reliable water service for the community.
- Creation and hiring of three new positions to enhance innovation (CINO), social media and customer communications (Media Specialist), and the safety of CAW employees (Safety Specialist).

2019 Goals

Human Resources will continue to focus on implementing succession plans and workforce preparedness programs in 2019, including VIP^2 initiatives, leadership development, supervisory training for new and existing supervisory staff, and employee career counseling, training, and development.

Planned initiatives also include steamlining and automating Human Resources processes, including employment applications, performance evaluations, and communication of the value of total compensation to employees.

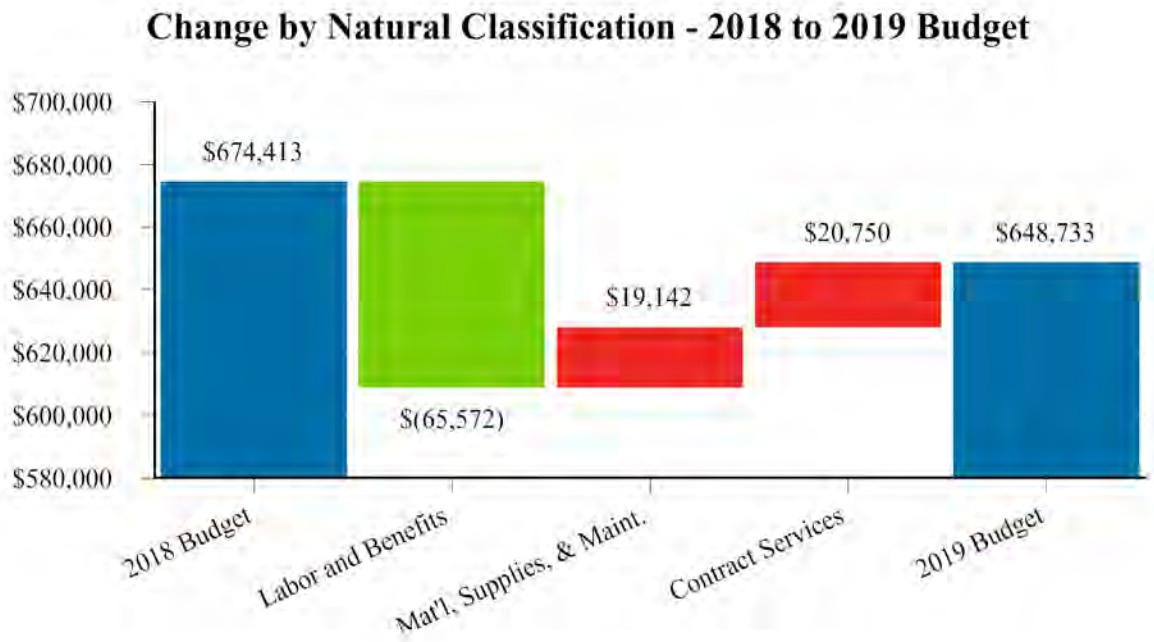
The Utility will strive to maintain an employee Cost of Benefits as a percent of total compensation at or below the BLS/SHRM national average of 29.5%.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Time to Fill (Weeks)	7.8 wks	7.4 wks	7.0 wks
Turnover	8.1%	7.7%	7.7%
Cost of Benefits*	29.8%	29.0%	29.5%
Diversity and Inclusion Training	Yes	Yes	Yes
Job-related Certification	116%	130%	130%
Employee Training (Hours)	23.6 hrs	25.2 hrs	24 hrs
Internal Advancement	78%	55%	65%

* Calculation methodology revised to provide benchmarking with BLS/SHRM Cost of Benefits Calculation as percentage of total compensation (wages and benefits), rather than percentage of wages only.

Human Resources - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 616,503	$ 607,519	$ 591,980	$ 526,408
Materials, Supplies, and Maintenance	28,452	34,285	40,483	59,625
Electric and Other Utilities	—	180	—	—
Contract Services	41,553	52,079	41,950	62,700
Total Expenses	***686,508***	***694,063***	***674,413***	***648,733***
Total Capital Costs	***—***	***—***	***—***	***—***
Total Human Resources	***$ 686,508***	***$ 694,063***	***$ 674,413***	***$ 648,733***



Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

PUBLIC AFFAIRS AND COMMUNICATIONS

The Public Affairs and Communications Section manages a comprehensive and multi-faceted corporate public relations and communications program for CAW. Programming encompasses consumer, community, public, and news media relations, as well as other external communications with customers and the public. The section ensures that the Utility provides accurate, timely, and responsive information relating to service, rates, outreach, public-policy decisions, and initiatives that are integral to the Utility's role as a water service provider. Communications also is responsible for maintaining a positive public presence for the Utility. Staffing for the section includes the Director of Public Affairs and Communications, the Communications Specialist and Brand Manager, the Education and Outreach Specialist, the Media Specialist, and contractual support from external public relations agencies.

The Public Affairs and Communications section works extensively with other departments to meet the Utility's special and general communications objectives. The section develops and provides information to customers and the public through multiple venues that include billing statement inserts; billing statement messages; a series of customized pamphlets, brochures, and other publications; news releases; news conferences; facility tours; advertising; public presentations and meetings; community and special events; the distribution of water-related literature; Utility sustainability objectives; CAW website (www.carkw.com); and social media venues such as Twitter messaging, a Facebook page, Blog, and YouTube video broadcast messaging. Public Affairs and Communications also provides direction on consumer and other research, as well as manages contracts with external public relations agencies.

Mission

CAW's philosophy of external communications is: (1) to foster dialogue with customers to ensure the continual enhancement of service so as to meet the needs and reasonable expectations of customers; (2) to provide customers with information "in advance" of changes in rates, water service, policies, procedures, and operations; (3) to keep pace to the extent economically practical with advancements in communications technology; (4) to advance public participation in policy and decision-making; and (5) to maintain relations that reflects the Utility's culture as a hometown utility and contributing corporate community partner.

EUM Attribute:	Stakeholder Understanding and Support
Goal:	Actively involve stakeholders to engender understanding and support and disseminate information through multiple venues to optimize audience diversity and outreach

Objective 1: Expand Education and Outreach initiatives to disseminate the utility's mission, operations, and enrich understanding about the product and delivery.

2018 Accomplishments

Beginning in 2017, launched the Citizens Water Academy program targeting a diverse sector of community leaders, stakeholders, and residents in central Arkansas under the premise of introducing critical areas of operations, encourage continued learning, and advocacy for this valuable resource. Through late 2018, over 30 participants completed the program.

Objective 2: Expand opportunities to communicate with customers through diverse outreach venues, including social media technology such as Facebook, Twitter, and web blogs.

2018 Accomplishments

In 2018, total consumer outreach continued to increase through targeted social media marketing strategies. Additional social media outlets were acquired. Strategies for outreach and education in 2019 will continue to increase the utility's following.

Objective 3: Comply with and/or exceed Federal and state regulatory deadlines for issuance of the annual Water Quality Report by July 1st.

2018 Accomplishments

The annual Water Quality Report was issued on May 31, 2018. On June 12, 2018, postcard notices were mailed to all customers and all ground addresses within U.S. zip codes that are completely or significantly within the Utility's CIS.

Objective 4: Maintain frequent and regular contact with public officials and other key stakeholder groups regarding rates, water quality, and watershed protection.

2018 Accomplishments

CAW maintains almost constant dialogue with public officials within the service area. Utility leaders consistently attend city and county meetings, speak one-

on-one with civic leaders and elected officials, and provide support for the needs of their constituents and utility stakeholders. Communications also works closely with the Water Quality Department to maintain strong relationships with water quality and watershed partners, including the Arkansas Game and Fish Commission, The Nature Conservancy, U.S. Geological Survey (USGS), Arkansas Forestry Commission, and others.

Objective 5: Foster public engagement in policy and decision-making through public meetings and public hearings.

2018 Accomplishments

Outreach and education for Maumelle residents continues through public meeting updates concerning the merger of MWM and CAW, which went into effect in March of 2016.

Objective 6: Issue responses to Arkansas Freedom of Information Act requests within required time frames.

2018 Accomplishments

100% compliance

EUM Attribute:	Customer Satisfaction
Goal:	To provide customer service that exceeds expectation in quality, delivery, rates, and dependability

Objective 1: Regularly conduct customer satisfaction surveys, targeting overall performance rating to exceed 80%.

2018 Accomplishments

In CAW's previous comprehensive satisfaction survey, 94% of respondents were satisfied with the overall performance of the utility. The next survey will be conducted during fourth quarter 2018 with survey results being reported upon the conclusion of the year.

Other 2018 Accomplishments

Public Affairs and Communications added a Media Specialist in 2018. This position is responsible for the Utility's media content. CAW has assumed a greater social media presence with the addition of this position. Since the position was filled in June, Facebook outreach has increased 125%, while Twitter outreach has increased 150%. CAW joined

the Nextdoor app in June and acquired 55,000 subscribers in the first four months. Outreach through LinkedIn expanded 300% from the page update in August 2018 through early fourth quarter 2018.

Following the overwhelming success of the No Child Left Behind grant which allowed the Utility to impart valuable water-related curriculum to teachers throughout Pulaski County, CAW continued these education efforts through partnering with the UALR STEM program to introduce the Power of Water teacher professional development program. This program equipped 14 elementary and junior high school teachers, representing four districts in central Arkansas and surrounding areas, to teach important water industry concepts.

2019 Goals

Public Affairs and Communications will continue to identify opportunities to engage with community stakeholders and consumers in an effort to provide higher levels of education about water related issues, value, and the importance of high-quality water for economic development in the CAW service area and beyond.

Also, CAW will expand its communications programs to focus on current CAW resources, including its staff, facilities, lakes, and the final product, its water. CAW is proud of the water it produces and those who produce it, so a focus on sharing information about the quality of water and those who produce it will continue as a priority.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Expand and Diversify Communications Outreach Venues	Yes	Yes	Yes
Issue Federal Water Quality Report Before July 1st	Yes	Yes	Yes
Issue Responses to Arkansas Freedom of Information Act Requests Within Required Time Frames	Yes	Yes	Yes

Public Affairs and Communications - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 407,911	$ 395,642	$ 362,573	$ 461,224
Materials, Supplies, and Maintenance	132,568	124,408	202,500	203,500
Electric and Other Utilities	1,820	1,190	1,680	2,520
Contract Services	54,584	58,683	153,250	154,000
MWM Transition Cost	1,471	1,483	5,000	—
Other	7,000	20,050	6,000	8,000
Total Expenses	***605,354***	***601,456***	***731,003***	***829,244***
Total Capital Costs	—	—	—	—
Total Communications & Public Affairs	**$ 605,354**	**$ 601,456**	**$ 731,003**	**$ 829,244**

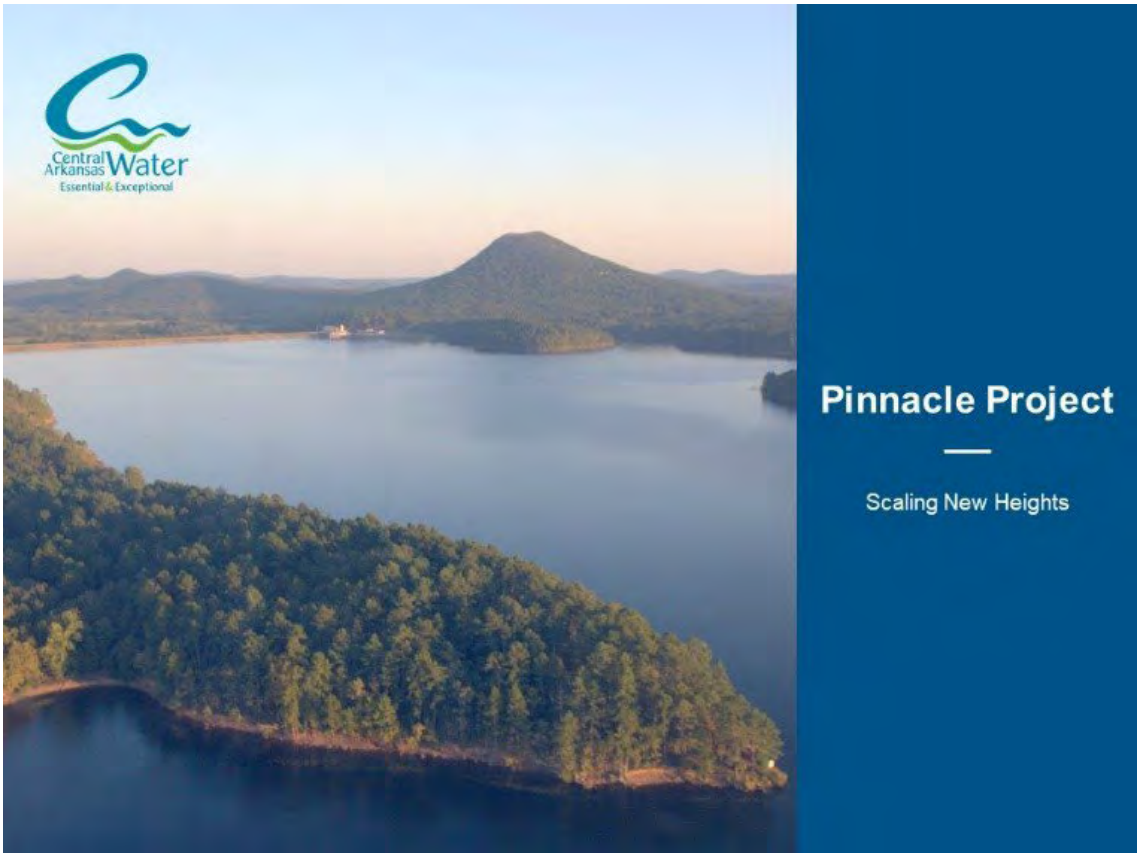
Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

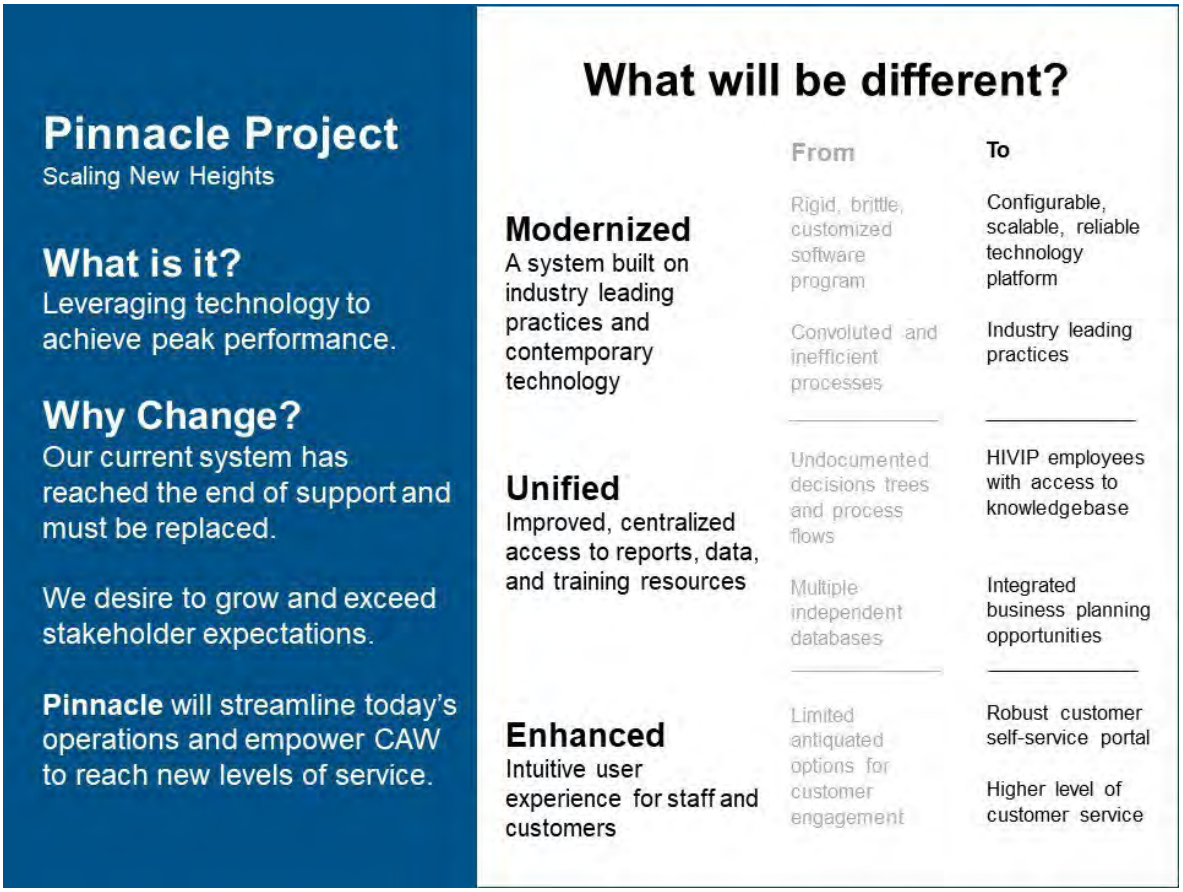
SPECIAL PROJECTS

The Special Projects Department was established in late 2018 to manage the Utility's CIS replacement project. The Department consists of six experienced members from various departments within the Utility and is led by the Senior Project Manager. This team will dedicate 2019 and most of 2020 to redesigning business processes, configuring the Cayenta Utilities CIS, converting customer data, and testing the new system prior to go-live of the new CIS.

The CIS replacement project, dubbed the Pinnacle Project, will leverage current technology to transform CAW's current billing and customer service processes to be more efficient, while improving the overall customer experience. Implementing industry leading practices improve the efficiency of the Utility by:

- eliminating redundant processes,
- reducing the number of manual exchanges to accomplish tasks,
- expanding cross-training of staff, and
- providing improved reporting to support decision making.





2018 Accomplishments

The Pinnacle Project team completed an exhaustive review of Utility processes and data in order to finalize a set of specifications for the future CIS. Using the results of this review, the team prepared a comprehensive RFP outlining CAW's expectations for a new CIS and detailing nearly 3,000 requirements that were expected of the new CIS. Upon the conclusion of the RFP solicitation period, the team performed a detailed review of each of the six vendor proposals received in order to arrive at a set of finalists for the project. Through the summer, the team participated in scripted demonstrations from the finalists, conducted reference checks, and conducted final scoring of the proposals.

2019 Goals

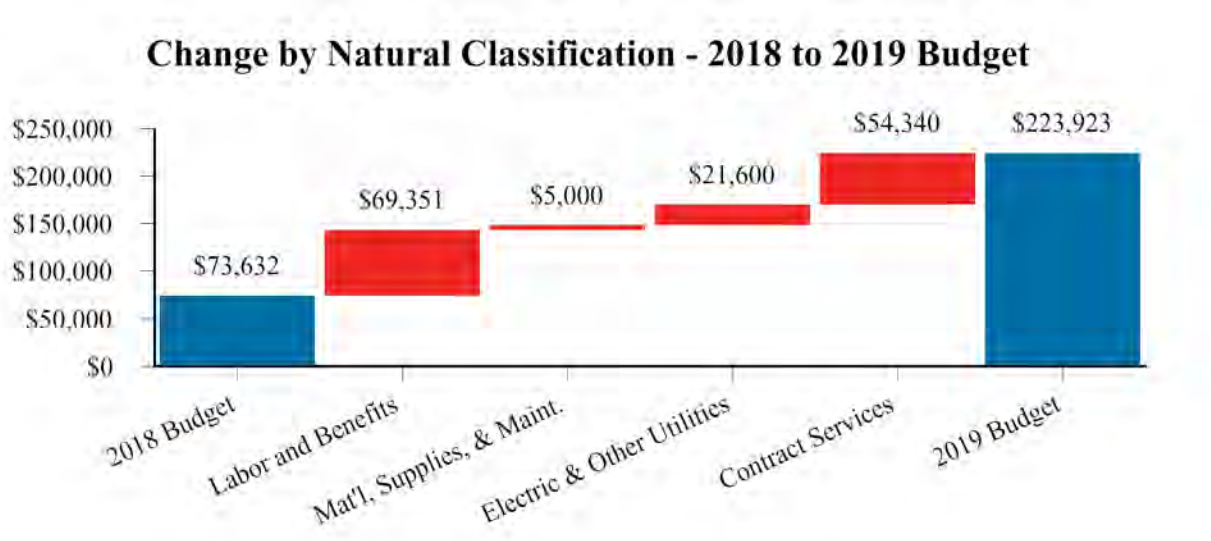
Project tasks and goals for 2019 include:

- Complete the analysis, design, and configuration phase of the project which will configure the new CIS to CAW's specific needs
- Complete any required custom modifications

- Develop necessary interfaces between the CIS and other Utility systems.
- Perform data conversion activities
- Begin functional testing
- Finalize a training plan and training materials

Special Projects - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ —	$ 80,731	$ 73,532	$ 142,883
Materials, Supplies, and Maintenance	—	32,342	100	5,100
Electric and Other Utilities	—	480	—	21,600
Contract Services	—	24,454	—	54,340
Total Expenses	**—**	***138,007***	***73,632***	***223,923***
Total Capital Costs	**—**	—	—	—
Total Special Projects	***$ —***	***$ 138,007***	***$ 73,632***	***$ 223,923***



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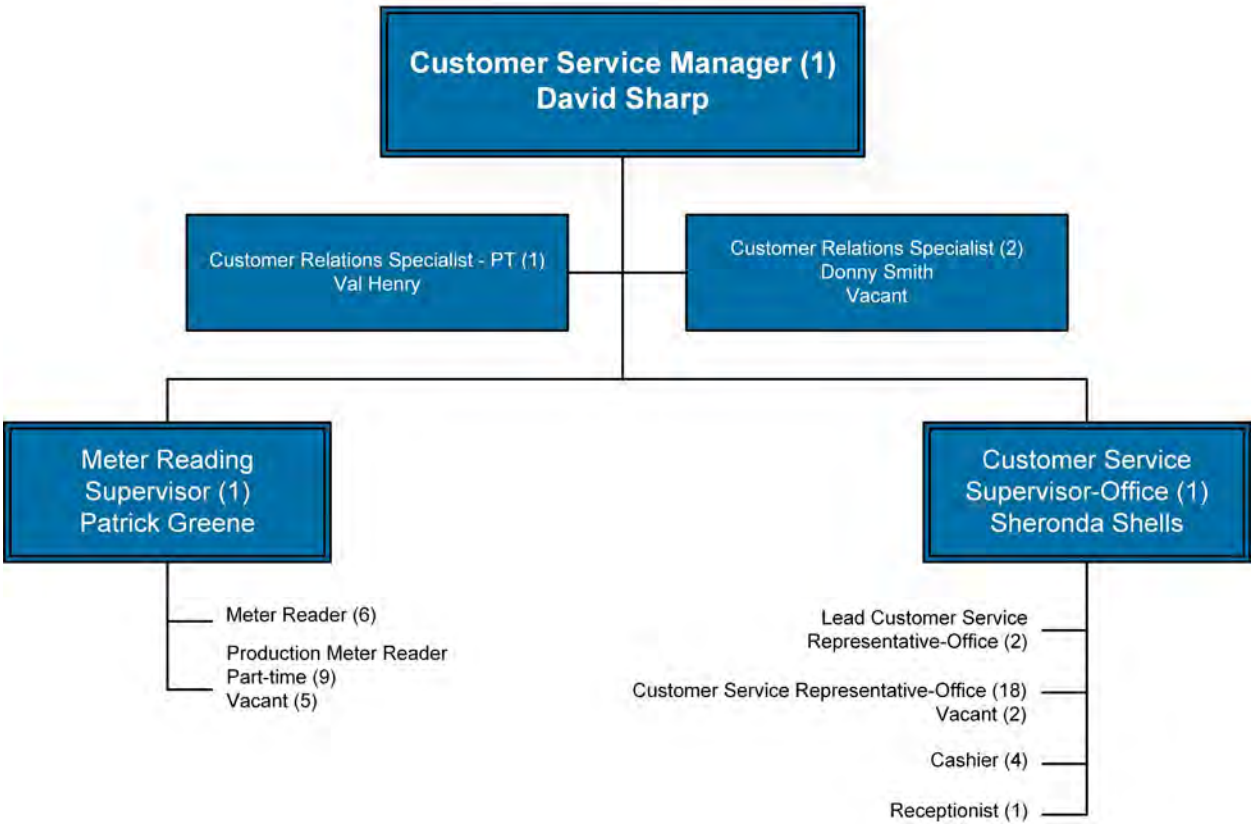
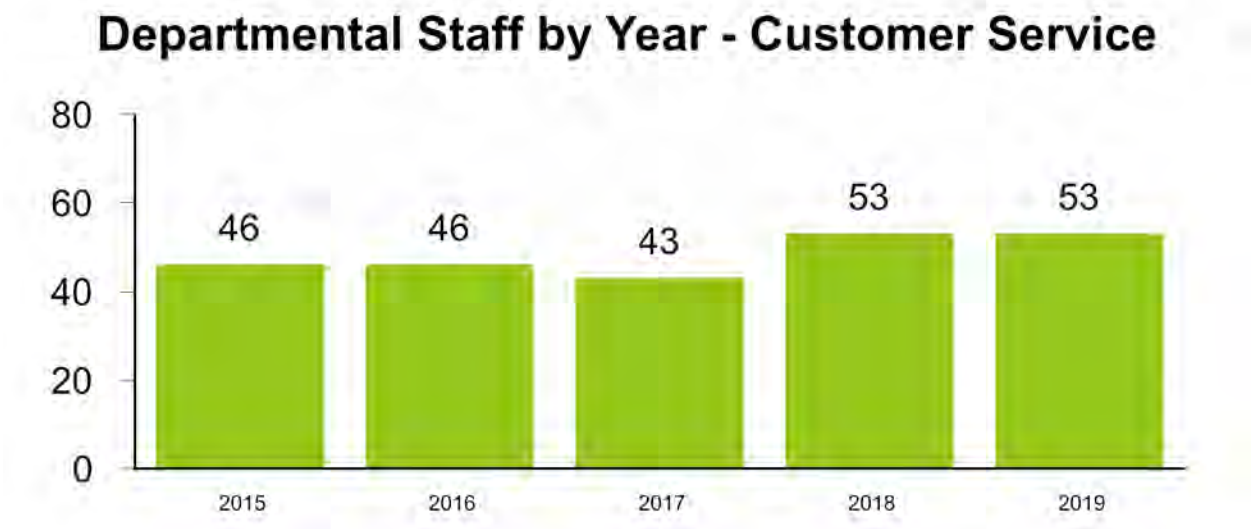
CUSTOMER SERVICE DEPARTMENT

Effective: January 1, 2019





CUSTOMER SERVICE DEPARTMENT

The Customer Service Department is the Utility's primary contact for customers. This department provides information to customers through all phases of the account management process: creation, metering, collection, troubleshooting, transferring, and closing of accounts. The department's responsibilities include meter reading, customer relations, call center operations, and cashiering.

Mission

The Customer Service Department is committed to providing quality service to customers in ways that are helpful, caring, and responsive. Customers include water customers as well as the departments within the Utility. The Department's goal is to offer services that not only meet but clearly exceed external and internal customer expectations. The department accomplishes its mission through teamwork, communication, courtesy, integrity, and innovation and takes responsibility for the efficient and effective delivery of quality service.

EUM Attribute:	Customer Satisfaction
Goal:	To provide customer service that exceeds expectations

Objective 1: Maintain abandoned calls percentage at or below 4%.

2018 Accomplishments

As of July 31, 2018, CAW's Call Center fielded over 119,000 customer calls with an average abandonment rate above utility goal (4.0%) at 5.82%. The call volume represented a decrease of 2,400 calls compared to the same period last year. Last year's call volume increase was mainly due to the incorporation of the Maumelle service area. This year the residents of Maumelle have become more accustomed to CAW processes and billing formats and as a result, have placed fewer calls into the Utility. This year's call volumes have returned to pre-merger volumes. Abandoned percentage increases are a result of staffing shortages beginning in the third quarter of 2017 through the first quarter of 2018. As of the second quarter 2018, staffing is back to normal, and the abandonment percentage has trended down. Expectation is that this will continue to trend downward for the remainder of 2018 to end the year near the goal.

Objective 2: Maintain average call answer time at or below 40 seconds.

2018 Accomplishments

The average speed of answer as of July 2018 was one minute seventeen seconds (1:17). This is measurably higher than the Utility goal of less than 0:40 seconds. As discussed above, departmental staffing levels were negatively compromised in the first two months of the year. The most notable causes of this were staff attrition and leaves of absence. Recruiting efforts saw six new employees added in the first quarter of 2018. Once these customer service representatives were deployed, the Utility saw marked improvement in response times. While average speed of answer peaked at over 2.5 minutes at the end of February, positive trending saw that improve dramatically every month March through July. The department expects to be near goal at the end of year.

Other 2018 Accomplishments

Recruiting efforts have paid substantial dividends. Six new Customer Service Representatives have joined the team since the year began. Vacancies were filled, and two additional staff were added in anticipation of the CIS change coming in 2020.

Organizational structure enhancements allowed creation of two Lead Customer Service Representative positions that were staffed from within the department. This allows additional career development opportunities inside of the department as well as management's ability to shift some of the off phone duties from the Customer Service Representatives to the Lead Customer Service Reps, which will allow more dedicated staffing of the telephones.

2019 Goals

Since departmental staffing levels have returned to near full complement, the department will be focusing this upcoming year on training initiatives which are designed to enhance the knowledge retention, call-handling skill, and image presentation of the call center staff. CAW has both a partnership with Service Skills of St. Louis who provides online video training modules as well as an interdepartmental program which is designed to build both knowledge and consistency among the customer service representatives. The departmental management team is committed to ensuring these tools are utilized in an effective manner.

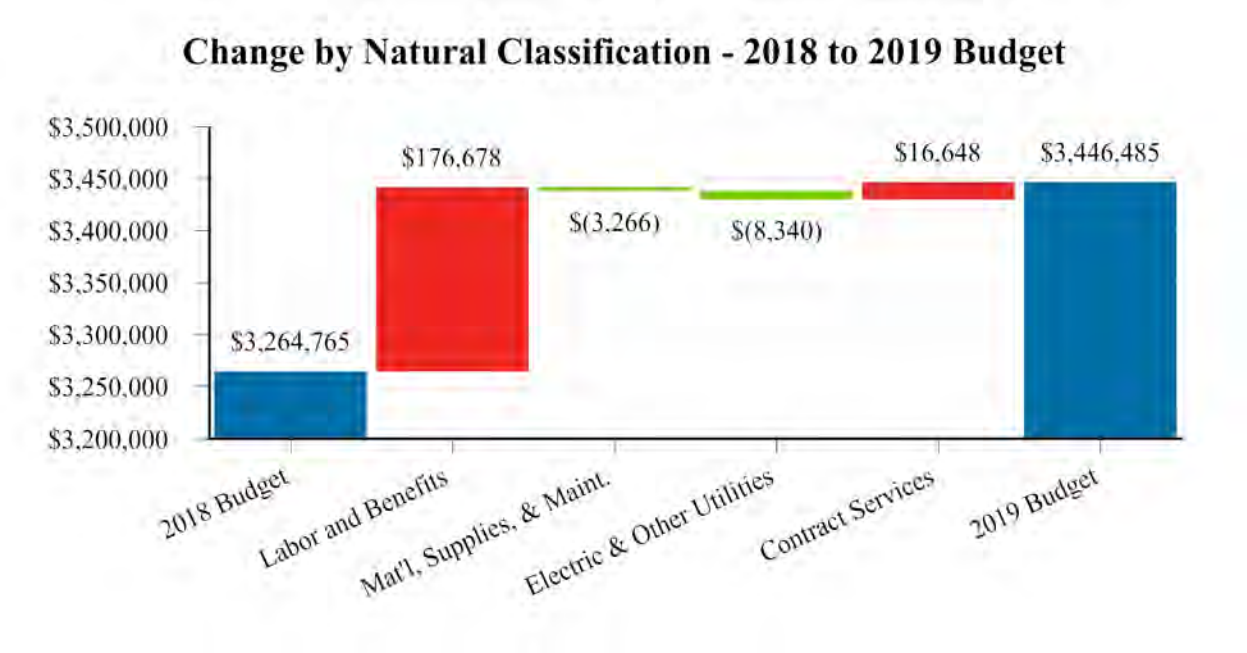
One of the planned initiatives next year is to transition the department to a more paperless documentation solution. The department will work with IS to implement a desk top scanning tool that employees will utilize to retain imaged copies of leases, photo identification, leak adjustment requests, and name change forms in order to simplify the process of filing and storing this cumbersome volume of paper. This will be a cost-saving measure as well as requiring less space for storing documents.

Staff will transition to a new handheld meter reading device in 2019 as Itron will no longer support the current tool. The new device is a smart phone design and will require additional staff training as well as utility process updates.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Abandoned Calls Percentage	6.15%	4.75%	<4.00%
Average Call Answer Time (in seconds)	73	60	<40
e-Bill Customers	12,033	12,669	13,250

Customer Service - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 2,963,310	$ 3,027,546	$ 3,187,755	$ 3,364,433
Materials, Supplies, and Maintenance	45,264	43,971	39,040	35,774
Electric and Other Utilities	10,358	13,398	9,300	960
Contract Services	132,885	73,166	28,670	45,318
Total Expenses	***3,151,817***	***3,158,081***	***3,264,765***	***3,446,485***
Total Capital Costs	***183,715***	***—***	***85,700***	***21,000***
Total Customer Service	***$ 3,335,532***	***$ 3,158,081***	***$ 3,350,465***	***$ 3,467,485***



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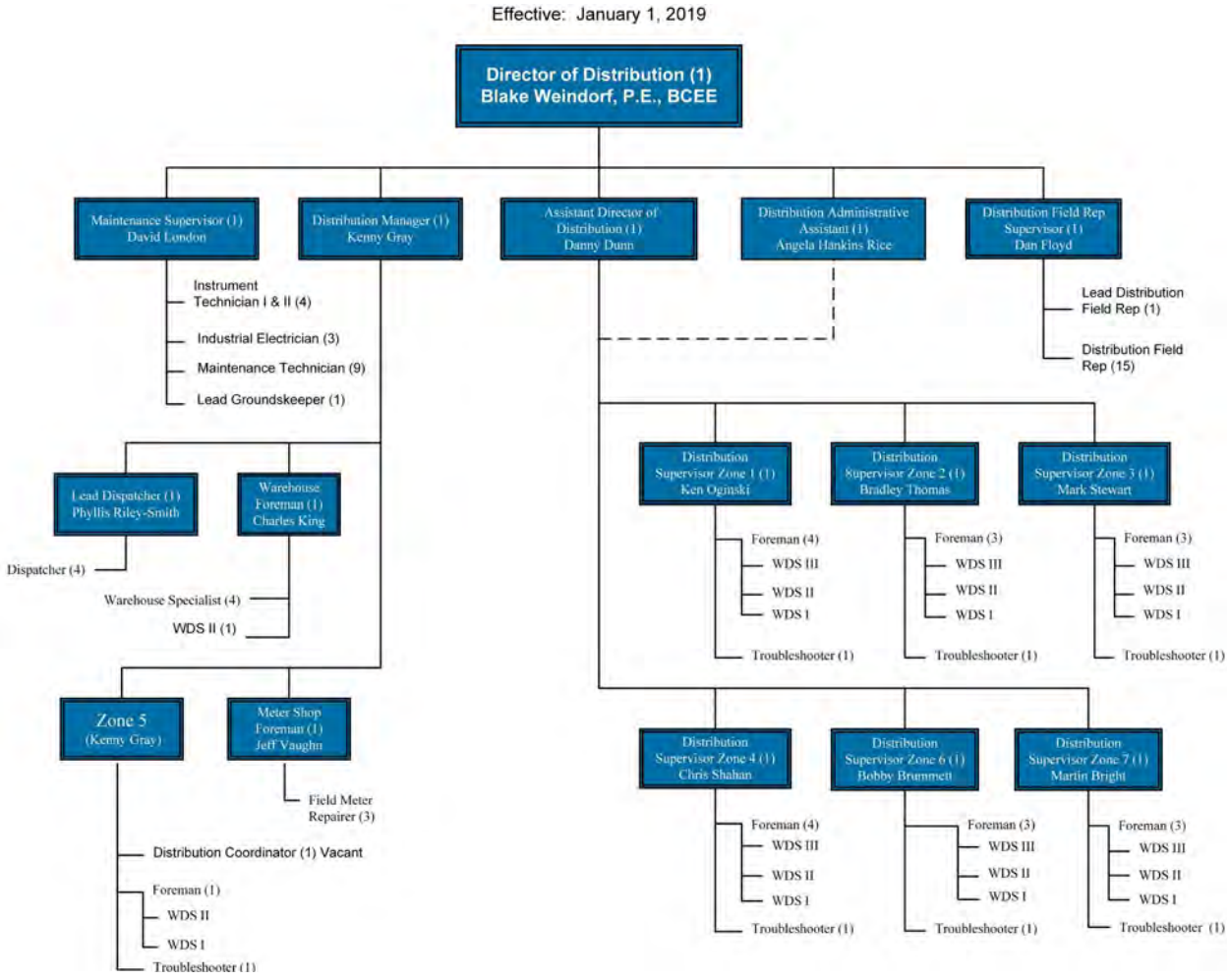
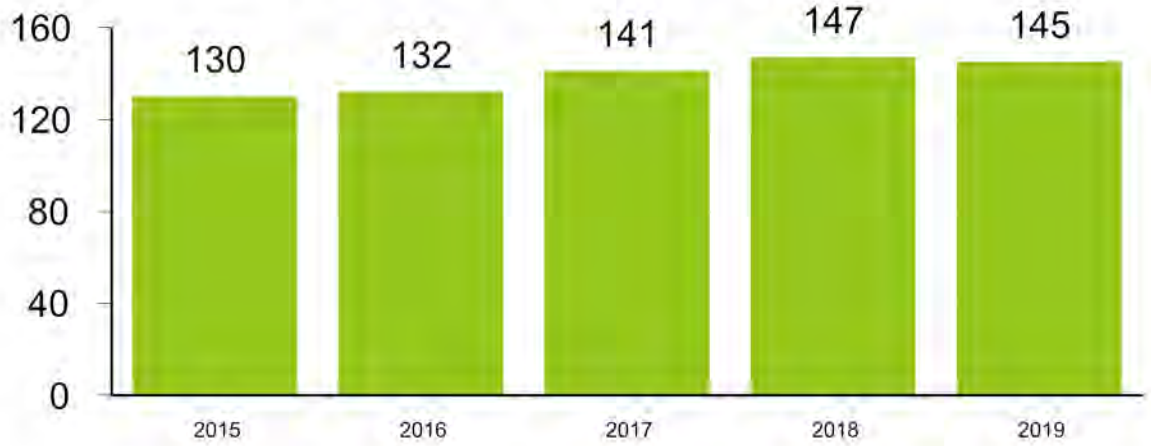
DISTRIBUTION DEPARTMENT



Departmental Staff by Year



DISTRIBUTION DEPARTMENT

The Distribution Department ensures that the infrastructure used to transport water to customers is maintained to current standards and is quickly repaired when necessary. Although CAW's distribution system is highly technical in nature, the goal of the Distribution Department is simple - to provide dependable water service and high quality water to CAW customers. In order to meet this overarching goal, the department undertakes a wide variety of initiatives to improve the distribution system's stability, reliability, resiliency, and sustainability.

As the most direct link between a water utility and its customers, the distribution system also substantially shapes the public's perception of the Utility and its level of satisfaction with the Utility's service. Through proactive maintenance, as well as emergency repair activities, professional communication and customer service are emphasized in all elements of the department's work.

Mission

The Distribution Department is committed to operating and maintaining CAW's distribution system with dependable service that exceeds customer expectations in order to deliver high quality water to customers whenever they need it.

EUM Attribute:	Infrastructure Stability
Goal:	To ensure asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences

Objective 1: Reduce the total number of main breaks per 100 miles of pipe from previous year.

2018 Accomplishments

The Distribution Department continued the 2-inch galvanized pipe replacement program implemented in 2015. This program focuses on replacing 2-inch mains with high failure rates within the distribution system. Galvanized mains account for 38% of the distribution system's annual leaks and breaks, but only 6% of the system's pipe makeup. Distribution's goal is to replace 14,000 linear feet of galvanized pipe annually. This program furthers the goals of CAW's asset management plan, which identified a need to increase the amount of this type of main replaced each year. CAW's 2014 pilot study of galvanized pipe replacement determined that in-house construction crews are the most cost-effective way to increase the replacement of these problem assets. Since the pilot study, Distribution Department staff, along with the Engineering Department's 2-inch galvanized pipe replacement program, have reduced the

number of spontaneous breaks per 100 miles of galvanized pipe from 191 breaks in 2015, down to 128 in 2017. The extreme cold weather in early 2018 caused a slight increase in galvanized main breaks in 2018 which are projected to be at 143 breaks per 100 miles of pipe on galvanized pipe by year-end.

Overall, spontaneous main breaks system-wide continue to decrease significantly from previous years. 2017 recorded a record low of 18 spontaneous main breaks per 100 miles of pipe, down from 20.5 in 2016 and 23 in 2015. Distribution estimates there to be 18.5 spontaneous main breaks per 100 miles of pipe for 2018; a slight increase due to higher than normal breaks in January and June of 2018.

Objective 2: Reduce the number of unplanned outages from previous year.

2018 Accomplishments

The Distribution Department continues efforts to minimize emergency outages, repair main breaks without resulting in an outage, and pre-schedule required outages whenever possible. Distribution saw a record low of unplanned outages in 2017 at only 26. Based on observed trends through August 2018, a slight increase in 2018 to 30 unplanned outages is anticipated.

EUM Attribute:	Operational Optimization
Goal:	Maximize resource efficiency

Objective 1: Reduce the number of customers affected by unplanned outages.

2018 Accomplishments

Along with the slight increase in main breaks for 2018, Distribution also anticipates a small rise in the number of customers affected by unplanned outages in the system from 775 in 2017 to a projected 825 affected in 2018.

The Distribution Department implemented a system-wide valve inspection program in July 2013 which was completed in 2016. The objective is to reduce the number of customers affected by outages as well as property damage, by inspecting and ensuring each of the 34,401 valves in the distribution system is locatable and operable. Through a three year inspection program, 1,059 covered and inoperable valves were deemed to be ‘un-locatable’. In 2017, Distribution personnel worked to locate and inspect these ‘un-locatable’ valves, beginning with the larger sized to smaller sized valves. Staff has located and inspected a total of 104 ‘un-locatable’ valves in 2017 and plans to locate and inspect another 100 'un-locatable' valves in 2018. As part of the 2020 Strategic Plan, Distribution will continue to work toward having all of these valves operational by 2020.

Shown below is a breakdown of the remaining 955 un-locatable valves in the system.

Un-Locatable Valves	
Valves	Number
2"	567
3"	36
4"	26
6"	143
8"	162
10"	4
12"	17
Total	**955**

Objective 2: Maintain unaccounted for water below AWWA Benchmark (median = 9.5%) and ADH action level > 15%.

2018 Accomplishments

The distribution system is closely monitored for any increase in unaccounted for water. When significant increases occur, indicating a possible unreported leak or main break, Distribution personnel survey right-of-ways and easements that are not easily visible to locate leaks. 2018 saw an increase in the 12-month rolling average of unaccounted for water through July 2018, which is currently at 9.2%. Distribution will continue its proactive work in order to keep this number below the AWWA benchmark of 9.5%.

EUM Attribute:	Financial Viability
Goal:	Manage budget effectively

Objective 1: Schedule and complete at least 85% of approved capital budget projects.

2018 Accomplishments

Based on trends through August 2018, Distribution anticipates completing 92% of the capital projects budgeted for 2018 at a cost of $4.33 million.

Objective 2: Reduce O&M Costs associated with main breaks.

2018 Accomplishments

Due to increased infrastructure stability from the asset management program, the Distribution Department has reduced the O&M budget for repairing main breaks. Staff projects spending $785,000 on main breaks in 2018 compared to $821,000 in 2017. Additionally, this amount is estimated to remain flat for 2019.

Other 2018 Accomplishments

Merger with MWM: Distribution continued efforts in Maumelle following the successful merger with MWM in 2016. Distribution took the lead during the Maumelle Water Source Transition leading to the entire Maumelle area receiving CAW water on January 29, 2018. Distribution flushed the entire Maumelle water system in order to strategically bring CAW water into Maumelle as the Maumelle Transmission Main was placed in service. The well thought-out plan also included close relations with nearly all departments' utility-wide.

In 2018, the department changed out approximately 11,000 meters in Maumelle; converting them from gallon to one hundred cubic fee (CCF) meters which are standard throughout the CAW system. The majority of these meters were changed from April through September in order to accommodate the Average Winter Consumption feature used by North Little Rock Wastewater. During this four and a half month period, Distribution was able to leverage its workforce to successfully change out over 9,000 meters. This required a large and coordinated effort including not only staff from Distribution but also Billing, IS, and Customer Service.

Additionally, Distribution continues to focus resources on service line replacements in Maumelle due to poor condition. Distribution replaced 165 services in 2016, 185 services in 2017, and projects 200 services in Maumelle in 2018; the three year total for service replacements inside Maumelle is projected at just over $700,000.

Integration of Customer Service Field Operations: Customer Service Field Operations were incorporated into the Distribution Department in 2016 in order to best serve customers with the most efficient utilization of existing personnel and resources. Since this change, the completion rate, accuracy of field orders, and number of orders worked per day have improved. In 2017, the completion rate and accuracy of field orders both increased by 0.3%. This increase continued into 2018 both by nearly another 0.1% with the completion rate climbing to 99.76% and the accuracy field order up to 99.78%. The average number of orders worked per day by field reps has increased as well, from 48.62 in 2016 to 49.54 in 2017 and climbing to a high of 50 work orders per day in 2018.

Implemented Cityworks Upgrade: Distribution successfully transitioned field crews to iPads taking advantage of an upgrade in the Utility's work management software (Cityworks) which CAW uses both for its infrastructure database and for generating work orders and recording completion. The iPads receive and send data in 'real time' to ensure

a faster update of CAW records, provide improved customer service, and increase personnel efficiency by eliminating time previously spent uploading and downloading information via fixed data stations inside the office. The department continued to leverage the Cityworks upgrade by implementing bar coding to decrease turnaround time for crews and the warehouse.

In addition to the Cityworks upgrade, IS upgraded the Map View/Work Order Search feature within the software on the iPads. The mapping system utilizes custom built tools that allow employees to get information literally at the touch of a button. A vehicle GPS tracking layer was added to the mapping system as well. This layer has been beneficial when routing personnel in the field.

Safety: In late 2016 and 2017, the Distribution Department refocused its safety efforts by increasing training, tailgate talks, and supervisor accountability. These efforts continued in 2018 to increase the safety culture within the department. With the department's renewed focus on the safety culture, lost time accidents and workers compensation claims are at an all-time low. As of August 2018, the department has not had a workers compensation claim this year. The department has seen a significant decrease in vehicle accidents in 2018 as well, with no 'at fault' vehicle accidents as of August 2018. With these notable trends, it is anticipated that year end numbers will be at or below the projected four workers compensation claims.

Hydrant Inspection: Distribution staff started inspection of all the fire hydrants (11,011) south of the river in August 2018. In January 2019, staff will move to the north side of the river, inspecting the remaining fire hydrants (5,029) in CAW's system. Completion of all fire hydrant inspections will occur in the spring of 2019, meeting the bi-annual inspection goal of 16,040 hydrants.

GPS Mapping of Meter Locations: The department began electronically locating meters in May 2017 by using GPS technology. Using three employees, staff is collecting points on an average of 450 meters per day. At the beginning of 2018, there were 41,500 of 153,000 meters that had not been mapped. Distribution staff have been diligently working on this task and plan to have all meters mapped by the end of 2018. Following this milestone, staff will work with GIS to add the service lines to the mapping system in 2019. Once these steps are completed, this information will be used to implement a customer outage reporting program within the new CIS platform.

Lead Service Line Replacement Program: With the Flint, MI crisis making national headlines in early 2016, CAW began renewed efforts to eliminate the remaining lead service lines within the system. Little Rock Municipal Waterworks had a major effort in the late 1980's and early 1990's where three crews were dedicated to replacing lead service lines for approximately three years. The North Little Rock Water Department replaced the majority of its lead services throughout the 1980's as work load allowed. In 2016 and 2017, staff investigated approximately 8,000 services that were mislabeled, listed as lead, or installed prior to 1950 with an unknown service type (utilizing a Customer Service Material Inspection App on iPads). Staff verified that out of those, only 185 were actual lead services.

Working in mid-2017, prior to the release of AWWA Standard C810-17, "Replacement and Flushing of Lead Service Lines", Distribution began replacing identified lead services and is projected to complete replacement of all known lead services by the end of 2018.

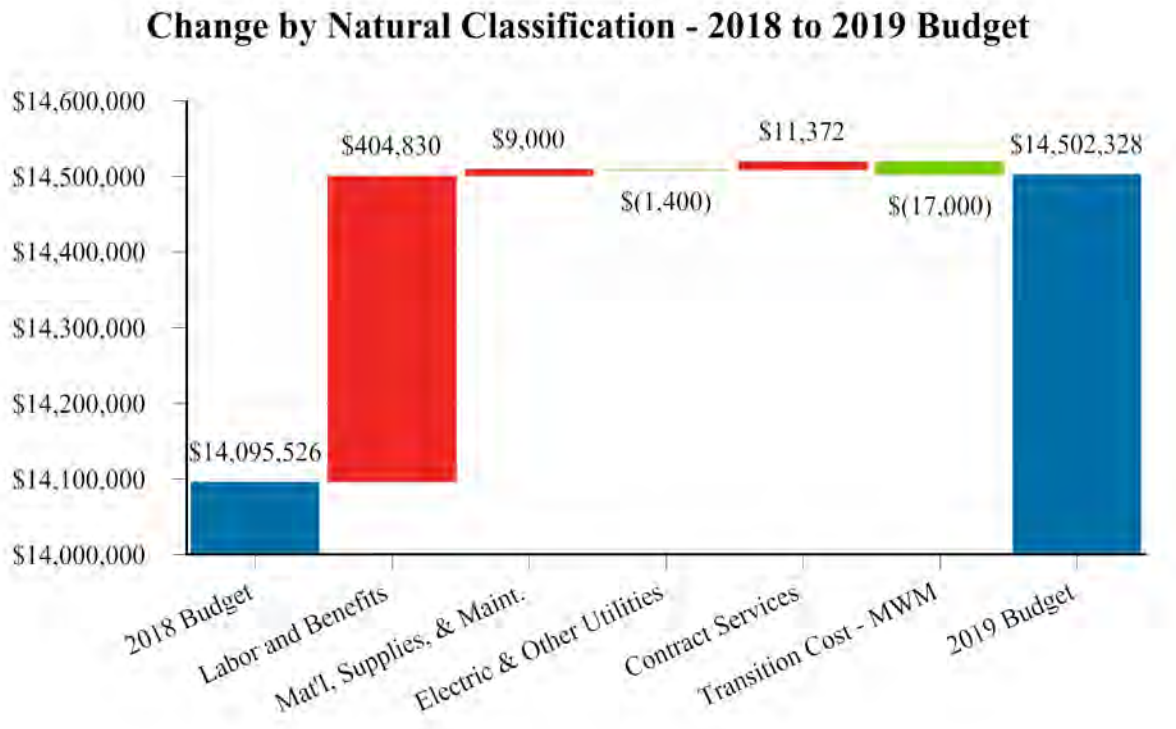
2019 Goals

In 2019 Distribution will continue to pursue efficiency gains enabled by the integration of Customer Service Field operations into the department. With the completion of GPS mapping of meter locations in 2018, the department will begin to map service lines from meters to the water mains in 2019. This will complete the link needed to provide outage notifications in the future to improve customer service response. Distribution will continue its 2-inch galvanized pipe replacement program with an additional 14,500 feet in 2019, which will contribute to reduced main breaks, fewer unplanned outages, and a smaller number of customers affected by breaks. Distribution will also work in 2019 on strategic plan initiatives including revised job standards to evaluate employee efficiencies, revised condition assessments to improve the Asset Management Program, Leak Detection/Non-Revenue Water Audit, and employee performance and training enhancement. Additionally, in 2019, the department plans to work on an easement condition assessment layer added to the GIS system. With this inspection layer added to the mapping system, staff will start inspecting all of the easements in the system. The condition assessment will allow each easement to be maintained based on its status and priority level; it will also aid the leak detection program.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Replace 2-inch Galvanized Pipe (Feet)	6,400	14,000	14,500
Spontaneous Main Breaks per 100 Miles of Pipe	18.0	18.5	18.0
Unplanned Outages	26	30	30
Customers Affected	775	825	800
Locate and Inspect 'Un-locatable' Valves	104	100	855
Unaccounted For Water ≤ 9.5%	12.5%	9.5%	9.3%
Complete Capital Budget Projects	80%	92%	92%
Main Break O&M Costs	$821K	$785K	$785K
Field Rep Order Completion Rate	99.7%	99.8%	99.8%
Field Rep Order Accuracy Rate	99.7%	99.8%	99.8%
Field Rep Work Order Rate per Day	49.5	50.0	50.4
GPS Mapping of Meter Locations	32,839	41,500	0

Distribution - Expense Summary

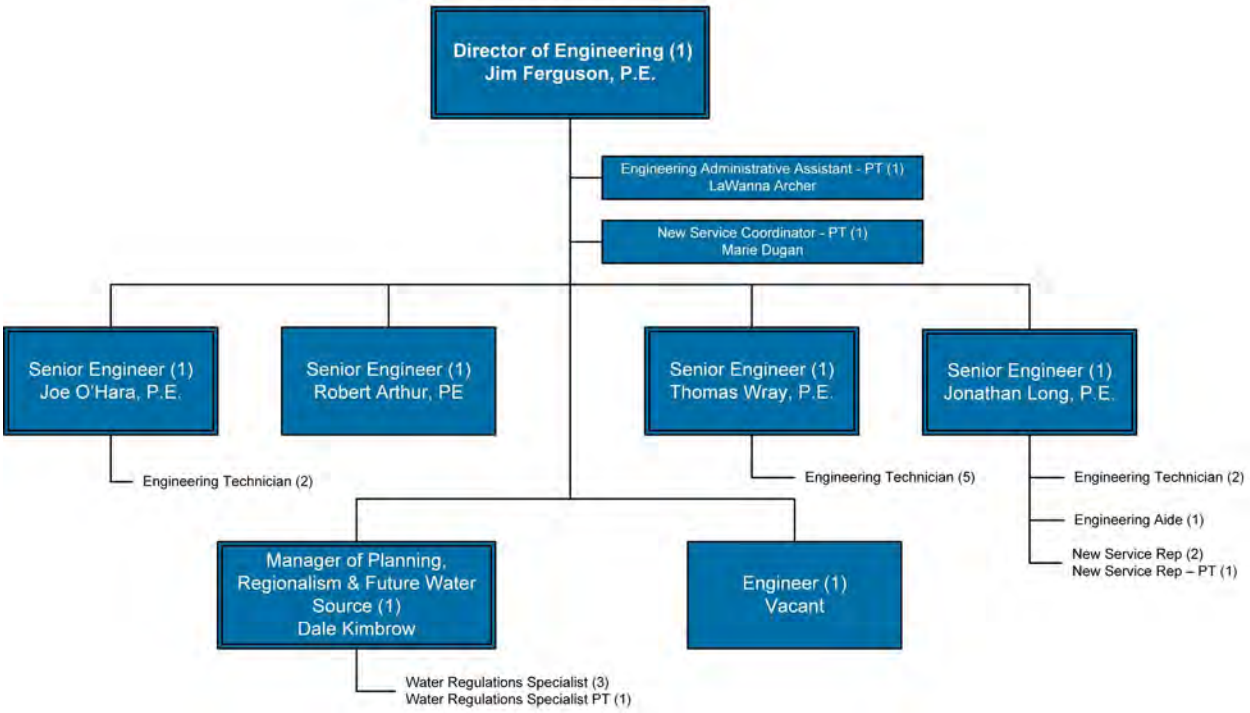
	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 10,149,302	$ 9,971,407	$ 10,082,280	$ 10,487,110
Materials, Supplies, and Maintenance	3,378,879	3,573,166	3,279,200	3,288,200
Electric and Other Utilities	109,567	55,557	61,200	59,800
Contract Services	619,148	633,063	655,846	667,218
MWM Transition Costs	—	3,134	17,000	—
Total Expenses	***14,256,896***	***14,236,327***	***14,095,526***	***14,502,328***
Total Capital Costs	***3,387,378***	***—***	***4,327,400***	***3,921,000***
Total Distribution	***$ 17,644,274***	***$ 14,236,327***	***$ 18,422,926***	***$ 18,423,328***



Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

ENGINEERING DEPARTMENT

Effective: January 1, 2019



Departmental Staff by Year

ENGINEERING DEPARTMENT

The Engineering Department oversees the engineering, development, review, and management of all treatment, pumping, storage, and distribution improvements and the approval of residential, commercial, and large volume requests for services. The department also maintains vigilance within the service area to protect the system from contamination from backflow or cross-connections.

The Engineering Department consists of four sections: Engineering and Planning, Cross-Connection Control Program (CCCP), New Service, and Regionalism and Future Water Source.

The Engineering and Planning Section works to develop and adhere to the Water Utility Master Plan for existing and future improvements and revises the Water Utility Master Plan to address and meet the growing and ever-changing dynamics of the CAW system. This section also continually reviews and modifies the CAW standard specifications, standard details, and operating guidelines to ensure that the needs of the CAW system are being met in a cost-efficient and practical manner. Planners, engineers, and engineering technicians work directly with new and existing customers, developers, consulting engineers, architects, plumbers, and contractors to plan and construct needed expansion or revision of water system facilities. The section's goal is to produce in-house design of any pipeline installation, replacement, and/or relocation project that is classified as capital costs. The use of outside consulting engineers for design support is limited to capital projects involving specific technical matters that are beyond the staff engineers' areas of competence or time restrictions.

The CCCP section monitors CAW customer compliance with ADH requirements concerning prevention of contamination of the system through real or potential cross-connections or backflow. The program maintains an extensive database of customer accounts, backflow requirements, and testing updates.

The New Service Section maintains information concerning water service availability and receives and processes requests for service from new customers to the CAW system. This section is highly interconnected with the CIS, Cityworks work-order system, GIS mapping computer systems, and various Engineering Department databases.

The Regionalism and Future Water Source Section serves as the Utility's liaison to neighboring water systems, wholesale customers, and large volume customers to ensure that CAW is meeting the needs and reasonable expectations of major water users. The Manager of Planning, Regionalism and Future Water Source also represents CAW on the MAWA Board of Directors. By establishing regular communication and managing relations with wholesale entities, large volume accounts, and water quality sensitive accounts, CAW is able to promote fairness, provide a high level of service to these classifications of customers, and be responsive to their concerns.

EUM Attribute:	Operational Resiliency
Goal:	Maintain proper and adequate planning for expansion of new system infrastructure and rehabilitation of existing infrastructure so as to meet the needs and security of existing and future customers of the CAW system.

Objective 1: Master planning and construction plan review throughout the system to determine scope of needed facility and pipeline installations or improvements.

2018 Accomplishments

The CAW-MWM merger agreement required the construction of a 30-inch transmission main connecting CAW's existing facilities to the Maumelle service area. The Engineering Department and its consulting engineer performed the design of the transmission main and opened bids on the project on December 20, 2016. Construction of the 5.5 mile long pipeline began in January 2017, and it was placed into service in January 2018. In May 2018, the project was considered 100% complete, and the final payment was made to the contractor. Engineering provided construction phase engineering services and construction inspection during the duration of the pipeline construction.

The Engineering Department has managed the development of an extensive PER by a contracted consulting engineer detailing work totaling $26.9 million in costs necessary for treatment process and structure/building improvements and rehabilitation needed for the continued productive use of the Ozark Point Plant. This PER will be used to effect detailed engineering design of these improvements. Engineering design began in 2018 and should be complete in

early 2019. Construction is expected to commence in early 2019 and take up to two years to complete.

The Engineering Department has managed the detailed engineering design for the phased replacement of all pumps, motors, and electrical equipment at CAW's largest pump station, the Wilson Plant Pump Station No. 1A. Phase one of this project was bid in late 2017, and the improvement work began in 2018. Phase one construction will complete by mid-2019. Phase two of the proposed pump station improvements is expected to bid as early as 2021.

Objective 2: Continue CAW's work with MAWA, as the alliance performs studies, investigations, and continues progress toward securing water rights for the entirety of the Mid-Arkansas region.

2018 Accomplishments

CAW has made an official request to the U.S. Army Corps of Engineers to purchase the remaining 100 MGD DeGray Lake raw water allotment. The request is under review, with the purchase expected to be completed in early 2019.

A water right study and corresponding agreement for an additional 20.25 MGD water storage from Greers Ferry by MAWA is expected to be executed in 2018.

Objective 3: Improve infrastructure to mitigate spontaneous water main failures within the system; replace problematic, high maintenance galvanized iron pipe, asbestos-cement pipe, PVC pipe, and cast iron pipe.

2018 Accomplishments

CAW replaced approximately 38,050 feet of galvanized, asbestos cement, and cast iron pipe through the combination of contracted work (23,550 feet) and work performed in-house by the Distribution Department (14,500 feet). Galvanized, asbestos-cement, and cast iron pipe contribute to the majority of spontaneous water main failures in the CAW system.

CAW completed the installation of $1.94 million in water main replacements for compliance with the MWM merger agreement. This work was split into two phases. Both phases began construction in 2017 and were completed in 2018.

Other 2018 Accomplishments

The Engineering Department reviewed approximately 15 street and drainage projects initiated by the ARDOT, Pulaski County Public Works, and the Cities of Little Rock, North Little Rock, Sherwood, and Maumelle. Several of these proposed improvement projects were found to require relocation of CAW water lines. The Engineering Department designed and contracted two capital construction projects (totaling 5,700 feet of pipe and $1.76

million construction costs) and several small projects constructed by CAW crews for water line relocations in 2018. One additional capital relocation project was completed in 2018 with the installation of 1,265 feet of 20-inch diameter transmission main on the new Broadway Bridge over the Arkansas River. While relocations result in new infrastructure installation, these projects are not initiated for system needs or to replace pipe that is past its useful life. Therefore, these mandatory projects compete for limited capital funds that could otherwise be used for replacing aging infrastructure that is past its useful life or that has a chronic history of spontaneous leaks or breaks. The Utility was able to accommodate a portion of these relocations in 2018 using excess working capital funds which were allocated to a number of relocation projects starting in 2015.

The Engineering Department, in cooperation with the Distribution and Water Production departments, completed the rewind and rehabilitation of a 2,250 HP electric motor for pumping unit No. 4 at the Lake Maumelle raw water PS.

CAW completed the installation of a new 10,000 gallons per minute pumping unit in the Wilson Plant PS No. 1B. This project was a component of the MWM merger agreement.

Engineering completed the design of a significant water main relocation project along Counts Massie Road in Maumelle and in North Little Rock for street improvements that will begin construction in 2019.

CAW completed the design and obtained bids for the $1.1 million roof replacement, including interior and exterior painting, of Tank No. 30A in compliance with the MWM merger agreement. This project began construction in 2018 and will complete in 2019.

Also, Engineering completed the design and obtained bids for the $2.7 million baffle curtains and painting improvements to the Ozark Point Plant Clearwells No. 3 and No. 4. This project began construction in 2018 and will be completed in 2019.

2019 Goals

Engineering plans to oversee the replacement of approximately 45,000 feet of old, high maintenance galvanized, asbestos-cement, PVC, and cast iron pipe in 2019. Approximately two-thirds of this footage will be replaced through contracted capital jobs, and one-third will be replaced by the Distribution Department using in-house forces.

An estimated 40 street, road, and drainage improvement projects initiated by ARDOT and the cities of Little Rock, North Little Rock, Sherwood, and Maumelle will be reviewed. Many of these projects could require the relocation of water facilities.

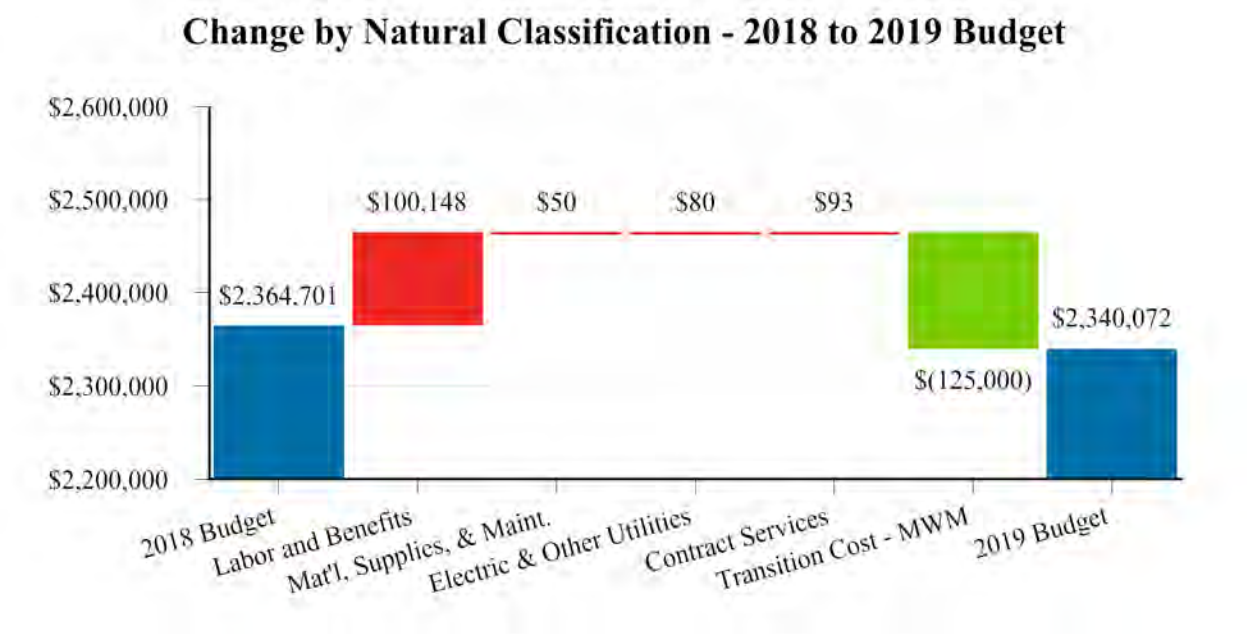
Engineering will manage the detailed engineering design of the Ozark Point Plant Rehabilitation and Improvements project. This project is being designed in 2018 by a previously selected consulting engineer. Engineering will manage the completion of the phase one construction of the Wilson Plant PS No. 1A that began in 2018 and is scheduled to complete in 2019.

Engineering will work with ARDOT to contract the relocation of an existing 24-inch water transmission main currently attached to the Interstate 30 Arkansas River bridge. The bridge will be replaced as part of the 30 Crossing interstate improvement project. A new transmission main will be attached to the new interstate river bridge. Work on the new bridge is scheduled to commence in late 2019.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Galvanized, Asbestos-Cement, and Cast Iron Pipe Replacement (linear feet)	23,600	38,050	45,000

Engineering – Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 1,948,434	$ 1,835,740	$ 1,998,848	$ 2,098,996
Materials, Supplies, and Maintenance	63,375	60,212	73,460	73,510
Electric and Other Utilities	5,245	5,349	5,760	5,840
Contract Services	32,487	23,468	36,633	36,726
MWM Transition Costs	—	125,000	250,000	125,000
Total Expenses	***2,049,541***	***2,049,769***	***2,364,701***	***2,340,072***
Total Capital Costs	***15,112,272***	***—***	***19,704,200***	***22,268,960***
Total Engineering	***$ 17,161,813***	***$ 2,049,769***	***$ 22,068,901***	***$ 24,609,032***



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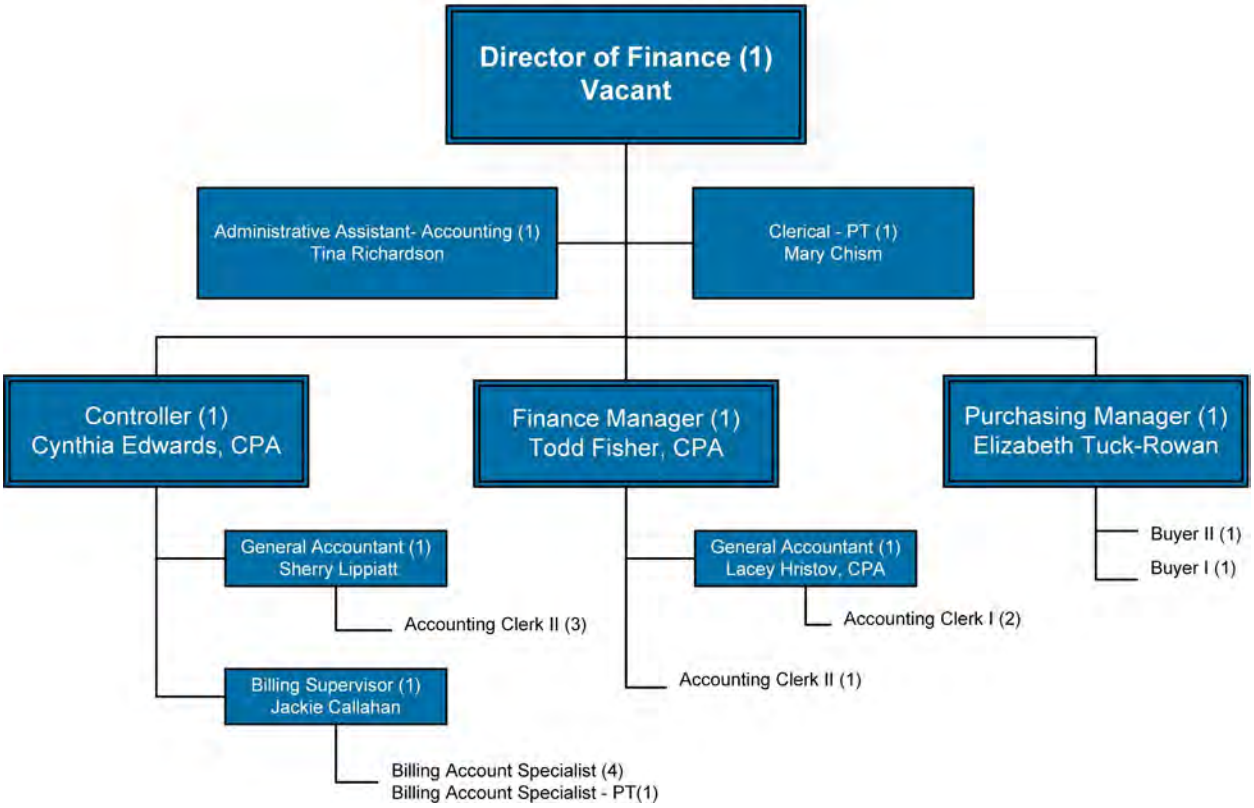
FINANCE DEPARTMENT

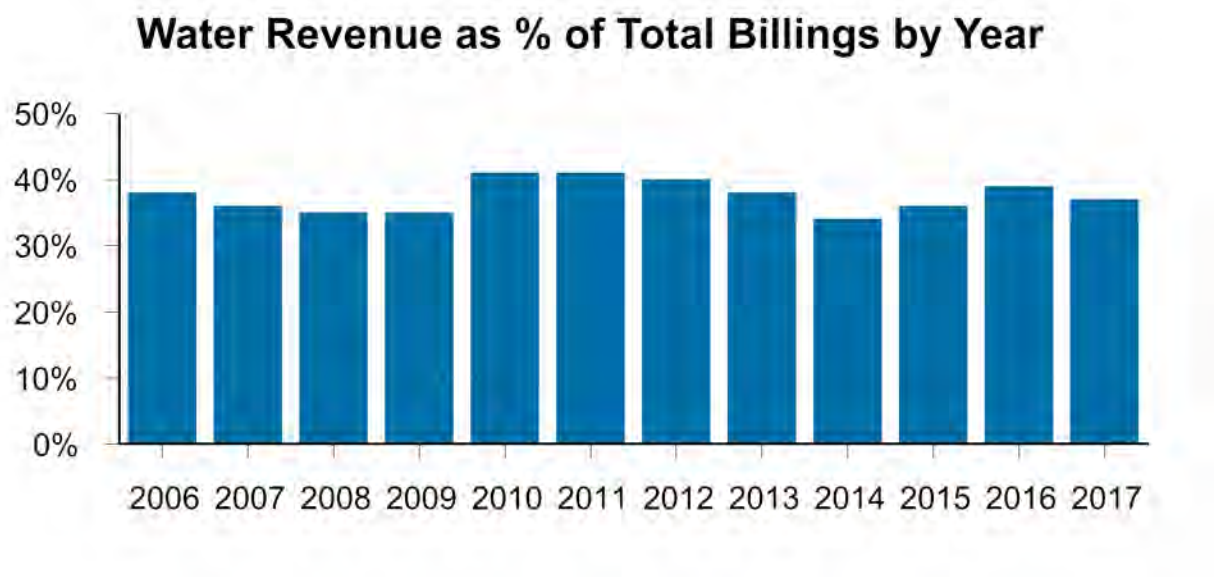
Effective: January 1, 2019



Departmental Staff by Year - Finance

FINANCE DEPARTMENT

The Finance Department is the Utility's business operations center. The department includes multi-disciplined and cross-functional teams of professionals involved in accounting, finance, billing, and purchasing. The department's combined 22 staff members stay attuned to the needs and expectations of external and internal customers while maintaining the rigors of cyclical mission-critical functions involving approximately 154,000 metered accounts, 17 billing partners, and monthly billings that collectively total over $150 million annually.



The department's responsibilities cover a broad range of functions that include financial planning and reporting, fiscal control, interdepartmental budgeting, billing, utility-wide purchasing, remittance processing, credit and collections, rate-making, investments, bond-issue preparation, banking relationships, business insurance coverage, and risk management.

Mission

The Finance Department provides leadership and support on all financial matters ensuring efficient utility operation by providing timely and accurate information. The department ensures compliance with current regulatory requirements and provides guidance to internal and external stakeholders supporting the Utility mission and values.

EUM Attribute:	Financial Viability
Goal:	Ensure the long-term financial success of the Utility through sound financial management practices.

Objective 1: Distribute financial reports by the second Thursday of each month for the previous month's activity.

2018 Accomplishments

Finance consistently met this goal during 2018, providing the financial reports by the target deadline.

Objective 2: Receive the GFOA Distinguished Budget Award

2018 Accomplishments

Finance met this goal again in 2018, receiving the GFOA Distinguished Budget Award for the ninth consecutive year.

Objective 3: Receive the GFOA Certificate of Achievement for Excellence in Financial Reporting

2018 Accomplishments

Finance met this goal again in 2018, receiving the GFOA Certificate of Achievement for Excellence in Financial Reporting Award for the ninth consecutive year.

Objective 4: Finalize and distribute CAFR by April 30.

2018 Accomplishments

Finance met this goal once again in 2018. The 2017 CAFR was approved by the Commission on April 12, 2018.

Objective 5: Maintain stabilized net revenue bond coverage at or above Commission target (currently 190%)

2018 Accomplishments

Finance has met this goal each of the last seven years. The 2019 Financial Plan maintains net revenue coverage above this target at 2.34.

Objective 6: Maintain days cash on hand at or above 150 days

2018 Accomplishments

CAW has maintained days cash on hand at or above 150 days continuously since 2010. CAW is projected to end 2018 with 234 days cash on hand and is budgeted for 228 days cash on hand to end 2019.

Objective 7: Maintain debt utilization at or below AWWA benchmark (currently < 39%)

2018 Accomplishments

CAW has continuously maintained a debt utilization ratio well below this benchmark over its history. This continued in 2018 with a projected debt utilization of 27.68%. Budgeted debt utilization for 2019 is 30.06%.

Other 2018 Accomplishments

The Utility issued almost $23.5 million in Water Revenue bonds to fund land purchases, a portion of the CIS project, and needed infrastructure. CAW also closed on a $2.5 million interim loan to finance Ozark Point Plant engineering costs. This interim loan will be part of a future bond issue for the Ozark Point Plant rehabilitation.

The Finance staff prepared its first Popular Annual Financial Report (PAFR) for the year ended December 31, 2017 and submitted it to the GFOA for award consideration. The PAFR is a condensed, easy-to-read snapshot of CAW's activities for the year.

Finance assisted the CIS project team with both staffing resources and business process knowledge. Finance staff also assisted with vendor selection and contract negotiations with the selected vendor, Cayenta.

The Utility contracted with Raftelis Financial Consultants for its triennial rate study. This study encompasses review of operating expenses, infrastructure costs, and needed debt service for future years and determines rate changes, if any, for customers. The 2018 study recommends rates for 2019 - 2022.

Upon completion of the 30-inch Maumelle Transmission Main to connect former MWM customers to the CAW distribution system, Finance staff assisted with the decommissioning of the MWM water treatment plant and wells. The project began in 2018 and is expected to be completed in 2019.

2019 Goals

The Utility plans to issue Water Revenue bonds in 2019 for needed infrastructure projects. Finance staff will assist in issuing the bonds.

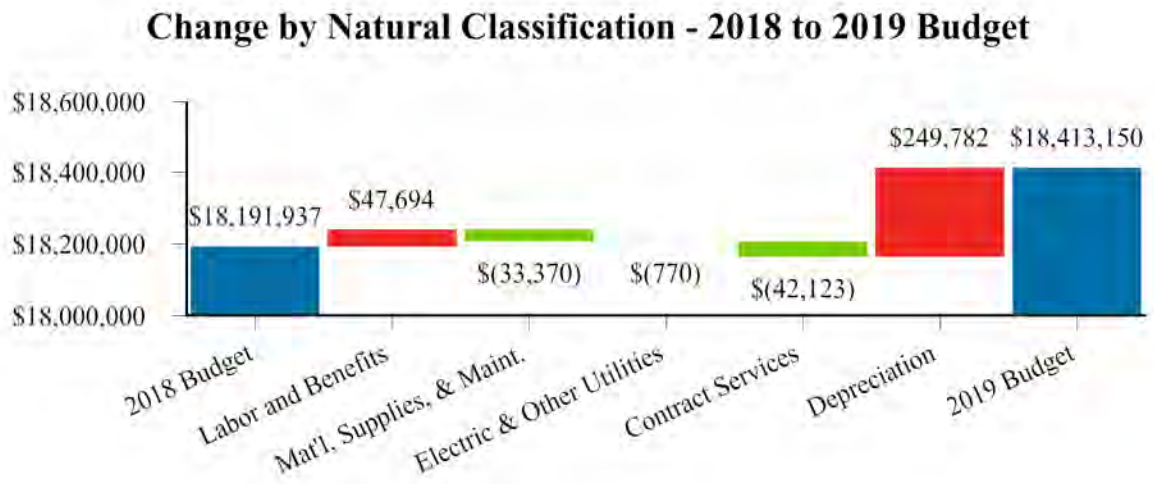
Staff will assist the IS department with the DMS project. This project will not only help Finance in moving toward a less-paper intensive environment but will show benefits in all departments across the Utility.

Staff will continue to support the CIS replacement project. This extremely critical project will rely on a cross-departmental team of CAW subject matter experts who will be tasked with determining necessary system requirements and assisting with the integration of the selected system into CAW's operations.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
Interim Financial Reports Distributed by 2nd Thursday Each Month	Yes	Yes	Yes
GFOA Distinguished Budget Award Was Received	Yes	Yes	Yes
GFOA Certificate of Achievement for Excellence in Financial Reporting Was Received	Yes	Yes	Yes
CAFR Finalized and Distributed by April 30th	Yes	Yes	Yes
Revenue Bond Coverage	2.59	2.65	2.34
Days Cash on Hand	310	248	221
Debt Utilization	26.72%	27.68%	30.06%

Finance - Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 3,462,306	$ 3,167,554	$ 3,292,972	$ 3,340,666
Materials, Supplies, and Maintenance	866,764	916,194	920,025	886,655
Electric and Other Utilities	104,557	104,730	109,730	108,960
Contract Services	986,954	1,013,813	1,048,375	1,006,252
MWM Transition Cost	21,473	—	—	—
Depreciation	12,770,371	12,650,581	12,520,835	12,770,617
Other	287,201	300,000	300,000	300,000
Total Expenses	***18,499,626***	***18,152,872***	***18,191,937***	***18,413,150***
Total Capital Costs	***—***	***—***	***—***	***15,000***
Total Finance	***$ 18,499,626***	***$ 18,152,872***	***$ 18,191,937***	***$ 18,428,150***



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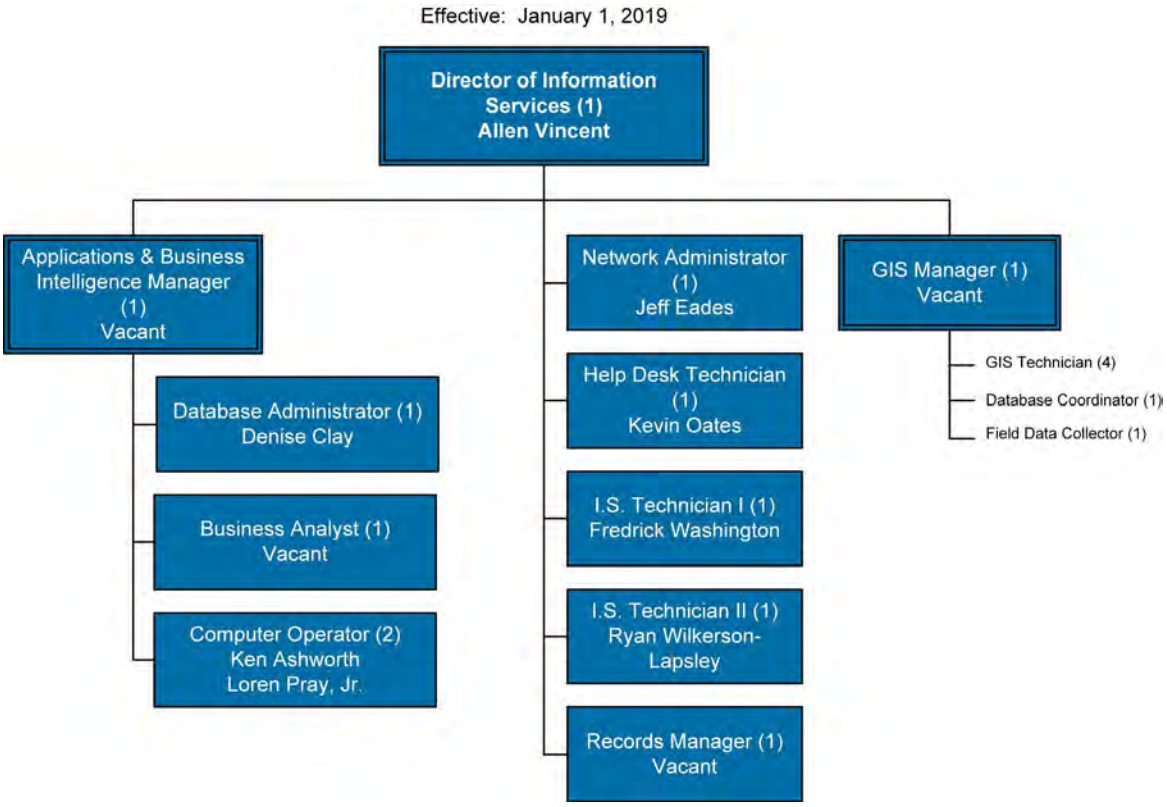
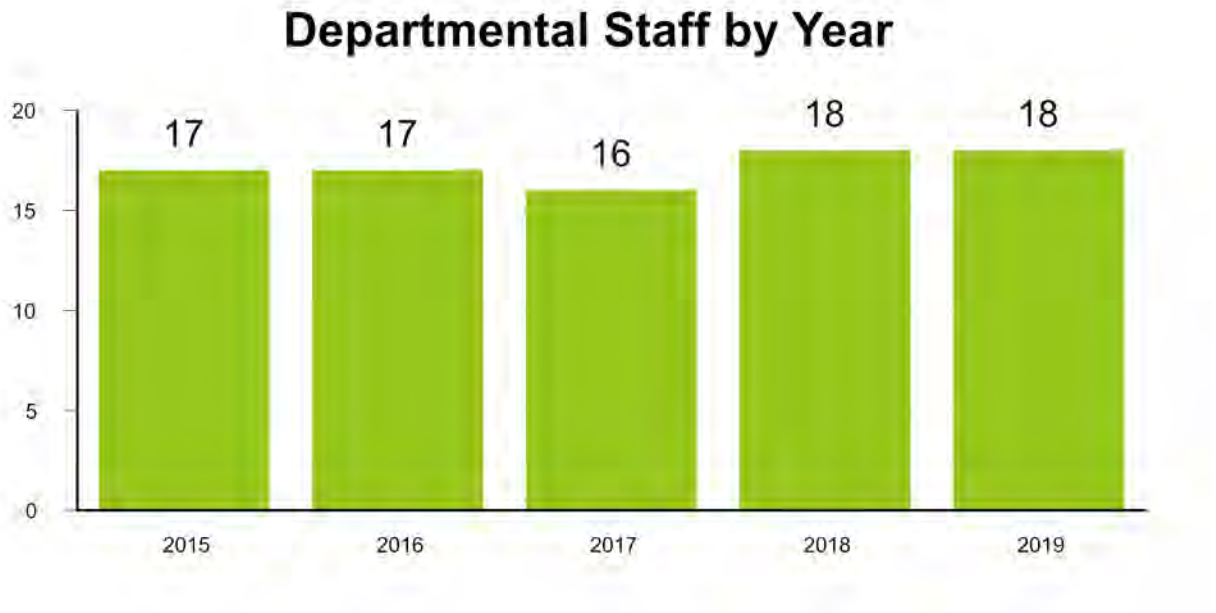
INFORMATION SERVICES DEPARTMENT

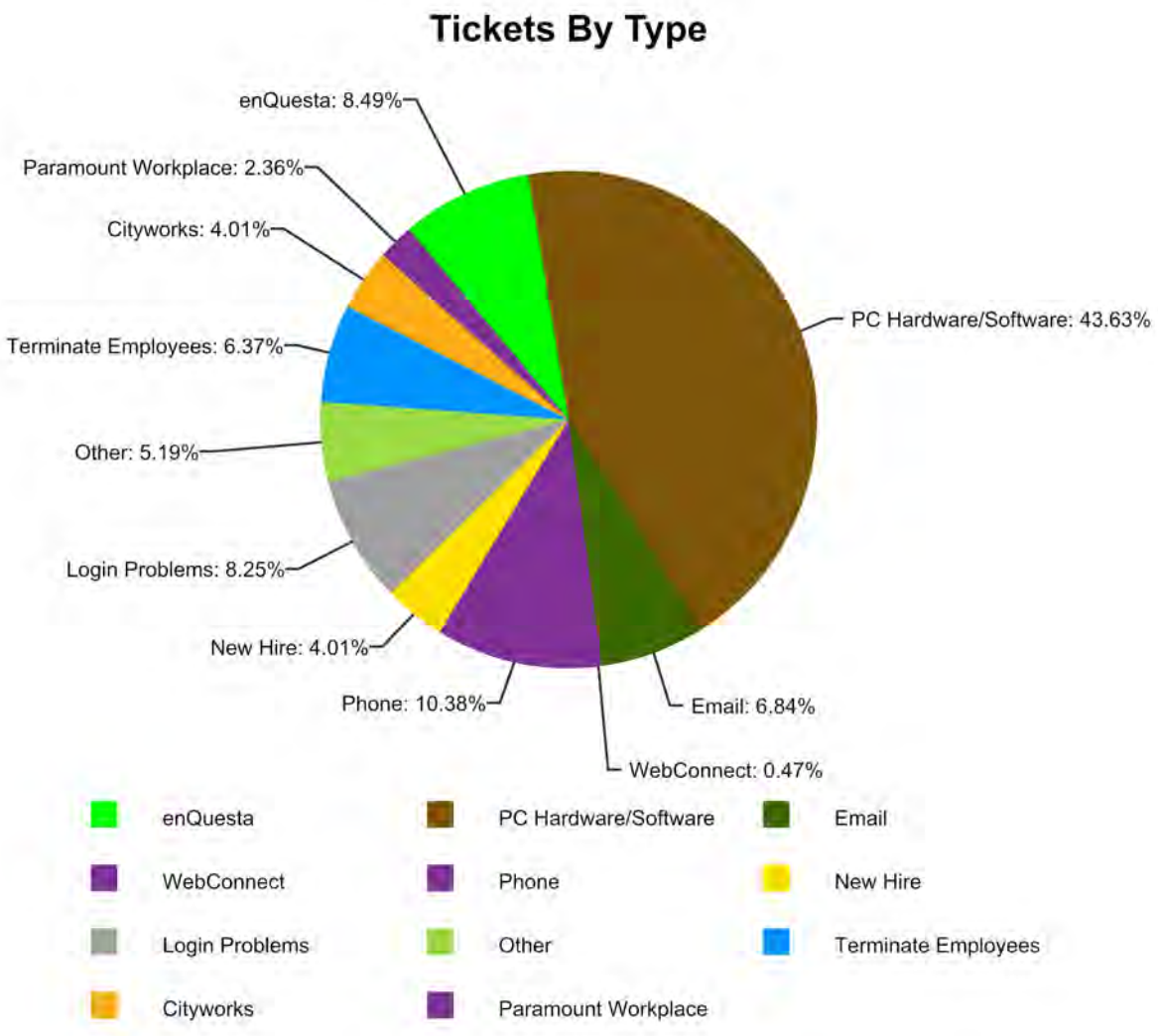


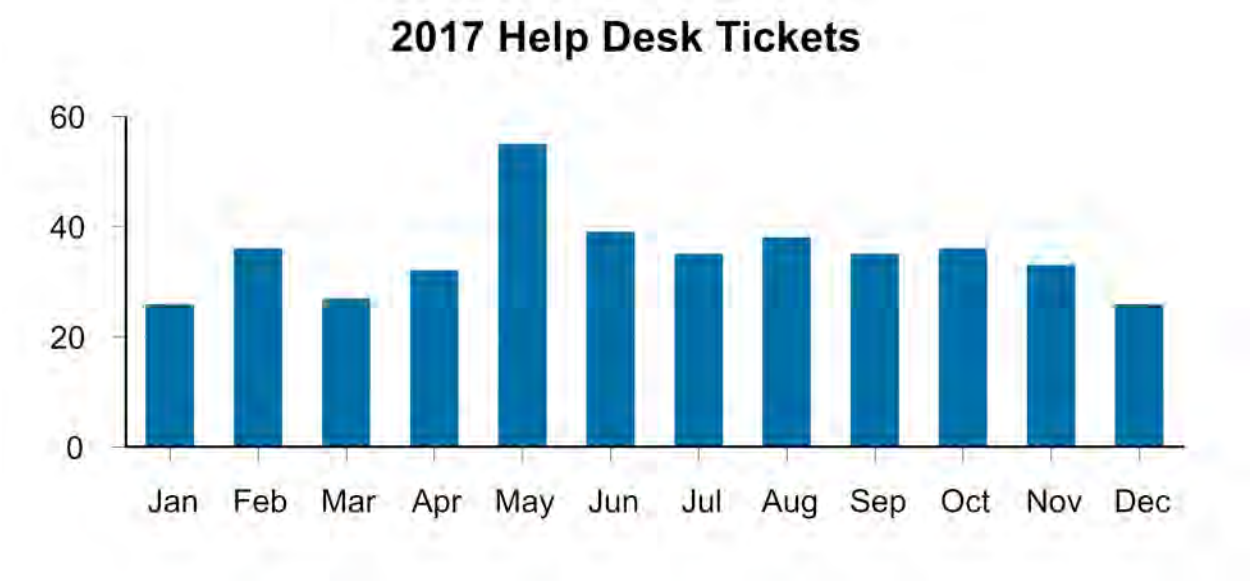


INFORMATION SERVICES DEPARTMENT

The IS Department maintains the computer hardware, software, and other electronic infrastructure that is necessary to support the day-to-day and mission-critical operations of the Utility. There are thousands of computer systems in place and hardware devices that make up CAW's wide area network to support the Utility's range of operations, from the Customer Service Call Center to the control of remote distribution system facilities.

The IS Department manages and maintains the devices and systems, provides appropriate support services, ensures availability 24 hours per day, and supplies security for data maintained on the various systems. The department also researches, evaluates, and implements emerging technologies and approaches in order to improve technological automation of the Utility and translate these investments into increased efficiency and productivity for all areas of operations.





Mission

The IS Department provides the Utility with leading-edge electronic infrastructure that ensures constant reliability and security for core elements of the Utility's operations.

EUM Attribute:	Operational Optimization
Goal:	Research and test current computer software and hardware that are on the market so that CAW implements leading industry practices in automation that will cost-effectively improve the Utility's operations, business practices, and service to customers.

Objective 1: Expand Existing GPS Fleet Tracking System.

2018 Accomplishments

In early 2018 the GIS Section completed an expansion of CAW's GPS fleet tracking system. CAW added 35 new vehicles to the system bringing the total to 85. Each vehicle is outfitted with a GPS receiver that is constantly transmitting the vehicle's location, idle time, speed, and many other bits of data. Each vehicle can be viewed in real-time on any computer or mobile device that is accessed by authorized CAW users. This allows executives, managers, and dispatchers to have a live view of where the field technicians are at any given time in the service territory. Since the system is integrated with CAW's GIS maps, the vehicle positions can be compared for proximity to work requests, customer needs, and emergency response. The data is continually analyzed by cloud-

based computers so managers can be alerted about activities such as speeding, harsh driving, vehicles inside or outside of designated areas, and/or excessive idling. Reports can be generated on-the-fly, or emailed on a schedule, that detail a driver's performance, track fuel economies, number of stops, along with many other variables. There is also a play-back function to allow a user to view a simulation of a vehicle as it has traveled over a period of time.

Objective 2: Transition Field Crews to Tablets and Provide Real-time Work Order Processing.

2018 Accomplishments

A significant effort has been given this year to system upgrades in order to facilitate the transition from laptops to tablets. Tablet devices will allow field crews to process work orders in Cityworks over a cellular network in real-time. Staff has installed, configured, and tested two new versions of the Cityworks and GIS software. Many of the business processes that are currently in place will be impacted by the transition to mobile devices. Therefore, each workflow process must be reviewed, restructured, and tested prior to training and implementation. System administrators worked with software developers to migrate several custom, legacy GIS mapping tools from the current Desktop environment to the new mobile Cityworks map environment. The mobile device management system has been expanded to track, manage, and automate setup and configuration for over 110 mobile devices. Workflows for editing Microsoft Office documents are being finalized so that each department's standard forms and other documents can be edited remotely and synchronized with the network server.

Objective 3: Information Technology Master Plan (ITMP).

2018 Accomplishments

In order to support the 2020 strategic plan, CAW contracted with EMA, Inc. to develop an ITMP for the Utility. The first stage of the project was to evaluate the current CIS and make a recommendation to upgrade or replace the system. The CAW project team worked diligently to evaluate the existing "Meter to Cash" cycle. Staff also reviewed "Meter to Cash Leading Practices" employed by similar size utilities. CAW staff participated in several education demonstrations from leading CIS vendors to see how "pain points" in the current CAW CIS are handled by other systems on the commercial market. Finally, the project team analyzed potential costs of implementing a new system, taking into account several scenarios. The result of the CIS review efforts was a recommendation from EMA, Inc. to replace the current CIS system. Concurrently with the CIS assessment, EMA, Inc. was tasked with analyzing the overall technology utilization by CAW and making recommendations for new systems, improvements to existing systems, as well as optionally to provide

implementation services. All CAW departments participated in interviews with EMA, Inc. staff to gauge overall technology use and any deficiencies. Final results for the overall ITMP were made available in March 2018.

Objective 4: MWM - Billing.

2018 Accomplishments

In May 2018, the new North Little Rock Waste Water customers that were converted over from the MWM system went live with a new winter average. The usage for the average months was converted from gallons to CCF. Months of testing from both the IS and Finance departments ensured a successful transition. During this period, a sludge removal fee was added to the Maumelle customer billing in August 2018. CAW began billing refuse for the City of Maumelle in September 2018.

Objective 5: VM Infrastructure & Storage Area Network Upgrade.

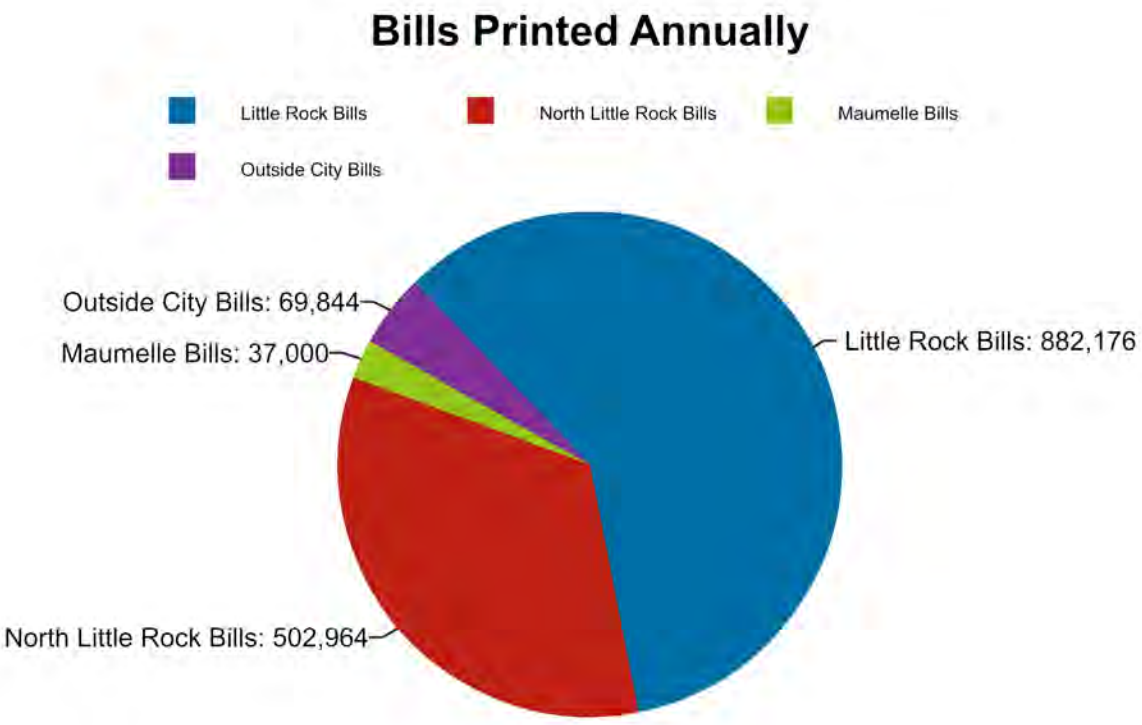
2018 Accomplishments

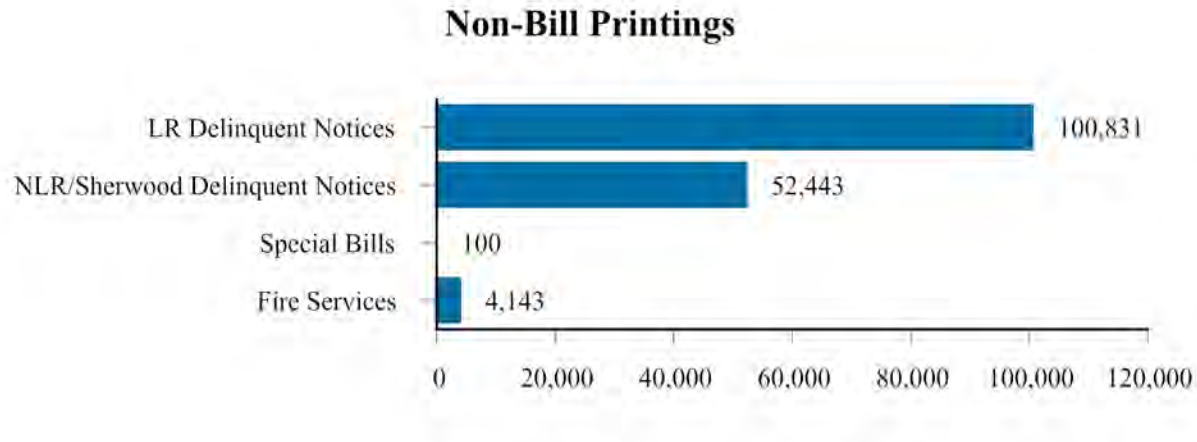
In July 2018, the old VM infrastructure, which was over 10 years old, had reached the maximum of 25 virtual servers. This restricted CAW's ability to sufficiently provide servers for continued daily operations. These were also on a disk based storage area network that greatly decreased server performance and restricted CAW from creating database servers like SQL. With the expansion, the IS team has created 30 virtual servers that only consumes one quarter of the resources on the new host servers. With the latest testing of the GIS database servers, performance has significantly improved. This allows CAW a better response time during software/hardware issues and eases disaster recovery plan implementation.

2019 Goals

In 2019, IS will continue to implement the recommendations of the 2017 ITMP. The CIS replacement will be top priority. Implementation of the new CIS is expected to play a prominent role in 2019 IS staff commitments. Other systems anticipated to be implemented as a result of ITMP recommendations are Human Resources Information System, Document Management System, Project Management and Collaboration, and Laboratory Information Management System. It is also anticipated that existing systems such as Automated Meter Reading, Project Management, GIS, FIS, and Asset Management / Intelligent Water Systems will be enhanced and expanded as a result of the ITMP. In addition to the ITMP recommendations, IS expects to continue to expand the mobile computing environment that will allow users to securely access more corporate data resources in real-time. A formal Information Technology governance structure will also be implemented in 2018 to support prioritization of all of the planned and ongoing initiatives. The GIS and Cityworks work management system will be upgraded to new and redundant

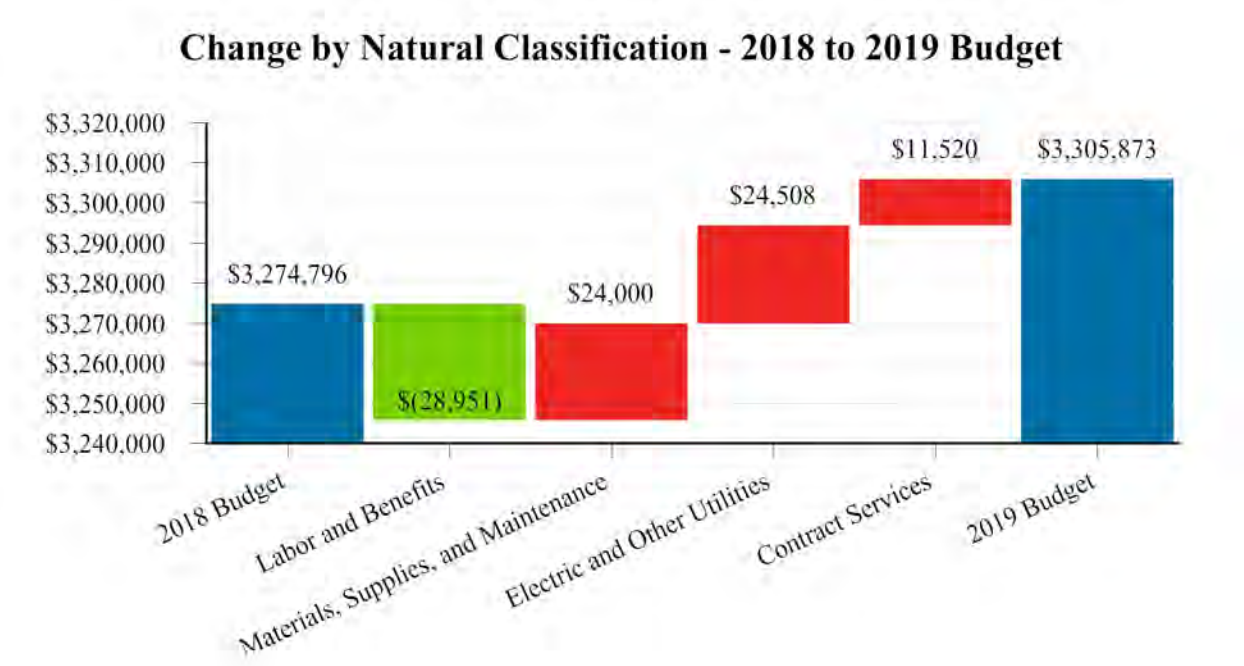
hardware to streamline failover during disaster situations. Both systems will also see upgrades to software versions that enable more mobile based web applications. Expansion of the mobile operating environment will eliminate offline data transfer in favor of access to real-time, connected data transfer. This will save staff time and make operations more effective and efficient, increasing the speed of the wide area network that connects all locations with the exception of Lake Winona. The LAN (Local Area Network) will increase to 10 gigabytes, which is a 10 fold increase on speed for all virtual servers. The new hardware purchase along with the new CIS will help solidify the Disaster Recovery Plan.





Information Services - Expense Summary

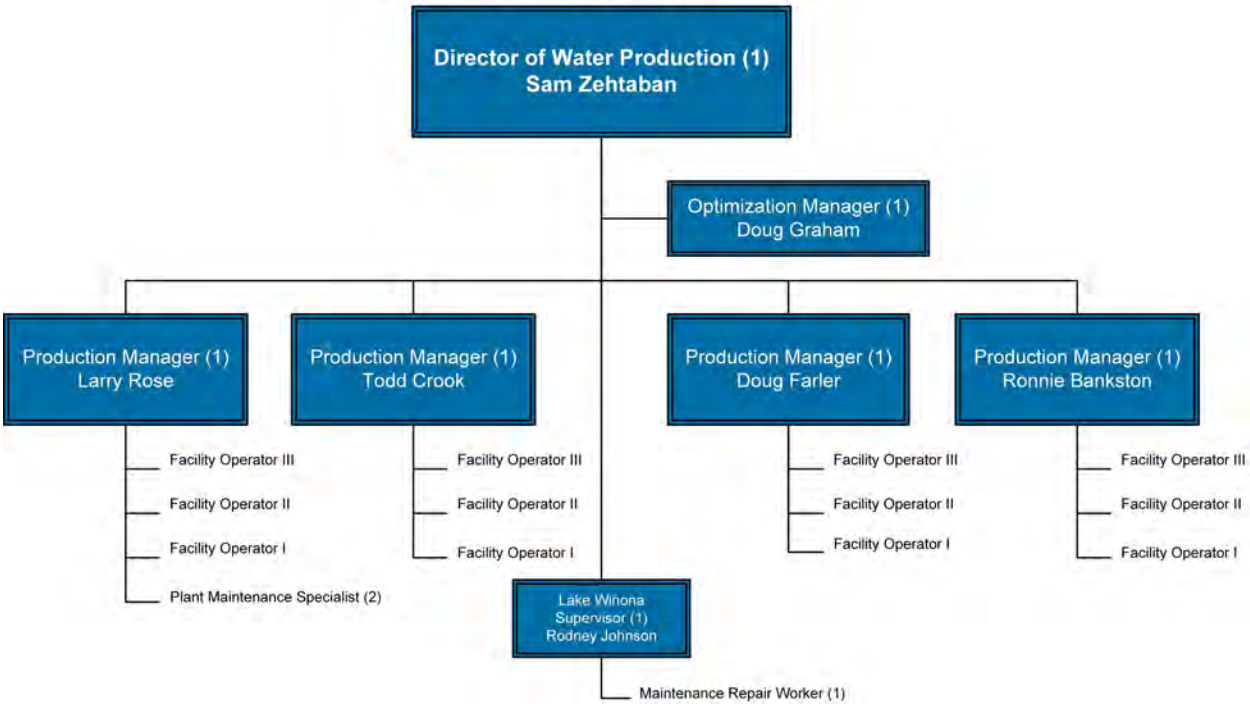
	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 1,784,596	$ 1,601,520	$ 1,752,992	$ 1,724,041
Materials, Supplies, and Maintenance	1,078,465	1,115,974	1,063,710	1,087,710
Electric and Other Utilities	450,964	455,275	437,652	462,160
Contract Services	14,759	25,754	20,442	31,962
Total Expenses	***3,328,784***	***3,198,523***	***3,274,796***	***3,305,873***
Total Capital Costs	***612,250***	***—***	***4,950,000***	***5,372,870***
Total Information Services	***$ 3,941,034***	***$ 3,198,523***	***$ 8,224,796***	***$ 8,678,743***



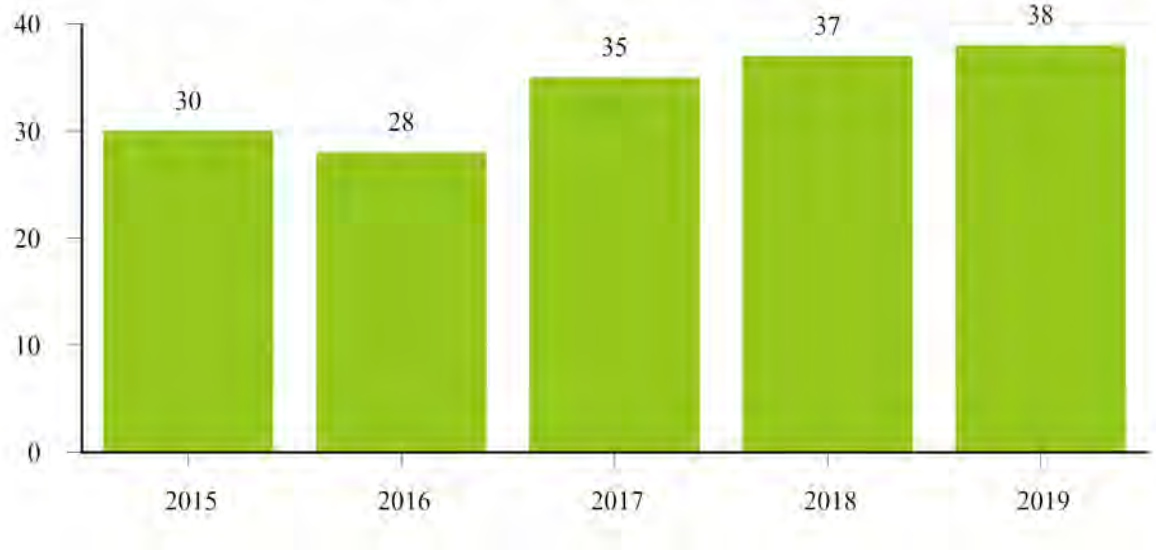
Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

WATER PRODUCTION DEPARTMENT

Effective: January 1, 2019



Departmental Staff by Year - Water Production



Water Production Department

The Water Production Department monitors and operates the water treatment and delivery facilities, ensures cost-effective performance in all facets of operation, and maintains awareness of water quality information, regulations, and operational technology development. The treatment plants produced an average of 57 MG of potable water per day in 2017, with a peak daily production of 126 MG on July 30, 2012. On a day-to-day basis, Water Production manages and administers operations of the treatment plants, distribution system pumping stations, storage tanks, and SCADA system. All staff members, with the exception of three, are required to obtain an Arkansas Water Operator's License issued by the ADH. Supervisory and some additional operating staff also hold wastewater licenses from the ADEQ for discharging water through a regulated discharge site with a National Pollutant Discharge Elimination System (NPDES) permit.

Water Production's responsibilities include operation of the Wilson Plant and Ozark Point Plant and high-service pumping stations; operation of the distribution system booster pumping stations, storage tanks, and intersystem valves; compliance with the Safe Drinking Water Act (SDWA); and the monitoring and treatment of NPDES permitted waste discharges.

EUM Attribute:	Product Quality
Goal:	Provide an uninterrupted supply of high quality potable water that meets or exceeds all SDWA regulations.

Objective 1: Maintain 100% SDWA compliance.

2018 Accomplishments

Through continued monitoring and operation of treatment processes, the distribution system, and other Utility facilities, CAW maintained 100% SDWA compliance through October 2018 and does not foresee any issue that would cause the Utility to deviate from this compliance trend.

Objective 2: 100% of monthly filtered water compliance monitoring samples ≤ 0.3 Nephelometric Turbidity Units (NTUs); NTU is measurement of water clarity.

2018 Accomplishments

Through continuous monitoring of raw water quality and the treatment process, the department has successfully managed to maintain 100% compliance at both the Wilson and Ozark Point Plants.

Objective 3: 95% of monthly filtered water compliance monitoring samples ≤ 0.1 NTUs.

2018 Accomplishments

Continue CAW's progress under the "Partnership for Safe Water" treatment performance criteria by submittal of a Treatment Baseline Report to AWWA. An assessment of CAW's achievement of Partnership for Safe Water standards will be performed by the end of 2020. Ensured high quality water throughout the delivery system by developing proactive management and monitoring practices from source to tap, including management of filter operations to evaluate if this change could improve flocculation and settling of solids, ultimately reducing finished water turbidity.

Other 2018 Accomplishments

CAW furthers its proactive approach by gauging operations using the Partnership for Safe Water criteria to improve the quality of water delivered to customers by optimizing water system operations. Staff continues to evaluate additional methods to enhance performance and improve the longevity of the granular activated carbon filter caps at the Ozark Point Plant. Installation of intermediate pump 8, at the Wilson Plant PS No. 1B, along with remotely operated valves with flow and pressure value reported to SCADA Human Machine Interface were installed providing staff the enhanced ability to operate, respond, log, retrieve, and view data for operations and compliance. Staff has worked with vendors on how to better manage power usage/cost including new operational equipment, use of equipment, Entergy rate structures and solar arrays.

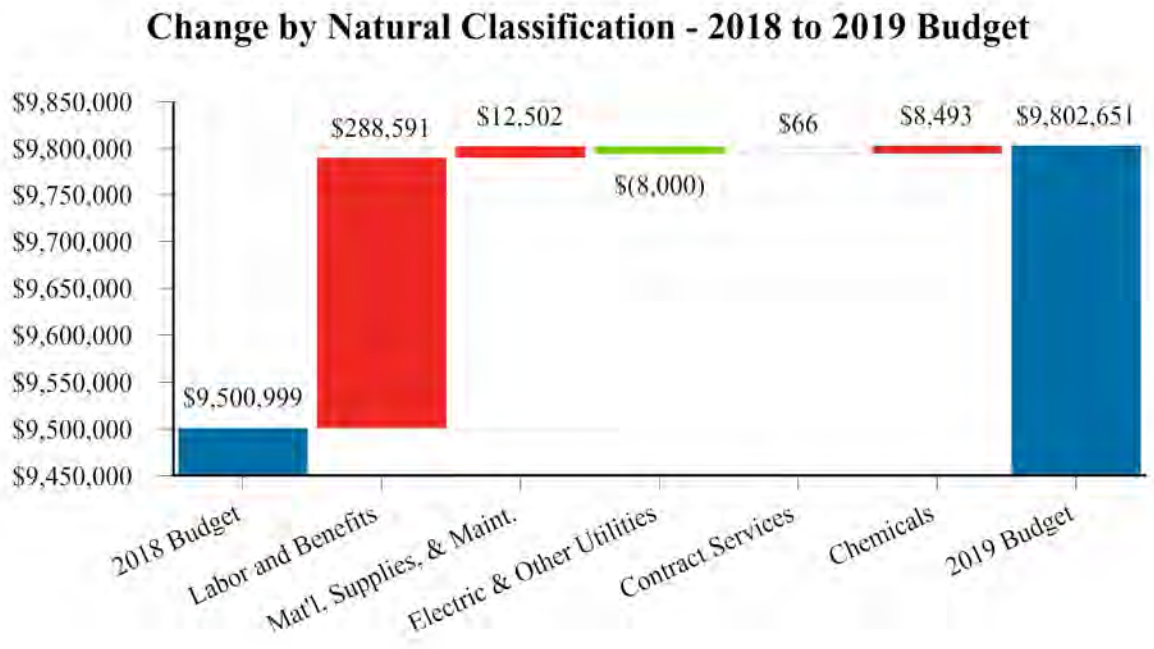
2019 Goals

In 2019, the Water Production Department will continue work on the goal of enhancing operations through optimization of treatment processes, system operation to include tank management, system enhancements, and personnel training. The department will undertake additional training, as well as more advanced cross training, for managers, operators, and other personnel in order to realize additional efficiencies in the the Water Production Department. The department will also continue to identify strengths that can be improved upon and opportunities for change that will result in a more efficient and effective operation. Rehabilitation on pumps, motors, motor controls, and all associated electrical gear has begun at Wilson Plant PS No. 1A and will provide more reliability and flexibility providing water to customers. Planning and review for the upcoming Ozark Point Plant rehabilitation/upgrade will continue through 2019.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
100% SDWA Compliance	Yes	Yes	Yes
Months 100% of Filtered Turbidity ≤ 0.3 NTUs – Wilson Plant	12	12	12
Months 100% of Filtered Turbidity ≤ 0.3 NTUs – Ozark Point Plant	12	12	12
Months 95% of Filtered Turbidity ≤ 0.1 NTUs –Wilson Plant	10	6	12
Months 95% of Filtered Turbidity ≤ 0.1 NTUs – Ozark Point Plant	5	7	12

Water Production – Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 3,789,573	$ 3,551,284	$ 3,736,168	$ 4,024,759
Materials, Supplies, and Maintenance	231,287	205,355	323,100	335,602
Electric and Other Utilities	3,530,573	3,621,102	3,793,764	3,785,764
Contract Services	90,612	38,863	35,414	35,480
Chemicals	1,699,274	1,604,054	1,612,553	1,621,046
MWM Transition Cost	—	2,310	—	—
Total Expenses	***9,341,319***	***9,022,968***	***9,500,999***	***9,802,651***
Total Capital Costs	***565,610***	***—***	***1,160,000***	***1,795,000***
Total Water Production	***$ 9,906,929***	***$ 9,022,968***	***$ 10,660,999***	***$ 11,597,651***



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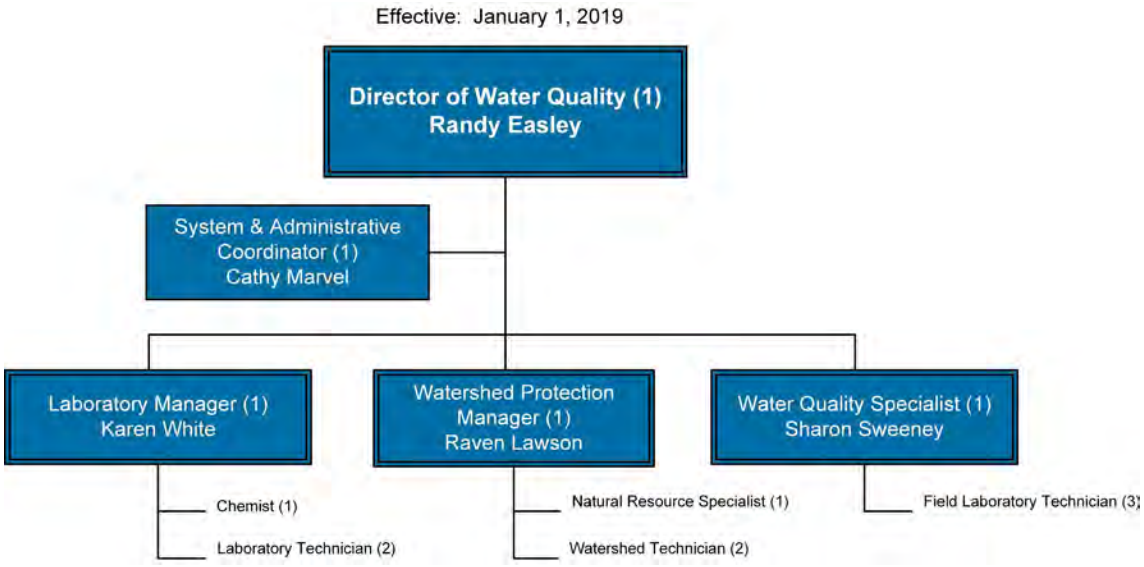
WATER QUALITY DEPARTMENT



Water Quality Department

The Water Quality Department encompasses the Utility's work related to watershed management, watershed stewardship, and water quality monitoring. The department oversees all sampling and laboratory operations including an ADH certified bacteriological lab. The WMP is the Utility's source water protection program for its two water supply reservoirs, Lake Maumelle and Lake Winona. The WMP's goals are to protect, restore, and enhance the natural environment of these two reservoirs' watersheds through a variety of pollution prevention, watershed, and source water protection approaches as part of an overall strategy to maintain and enhance ecological and community sustainability. The activities of the WMP ensure CAW is cognizant of and attentive to the impacts its watershed decisions have on current and long-term watershed health. Major responsibilities of the program include managing and monitoring water resources, managing and monitoring utility-owned forested and non-forested lands and recreation uses and use areas, managing and inspecting landscape-scale impacts and opportunities, promoting and conducting education and stewardship initiatives for homeowners and private landowners, and promoting and conducting watershed and utility-specific education and outreach.

CAW ensures high quality water at the customer's tap through a robust water quality monitoring program for both lakes, select tributaries, water treatment, and delivery systems. CAW conducts targeted studies initiated within the various elements of the system in order to better understand and assess water quality and implications for management and treatment. Water Quality staff also respond to customer concerns regarding water quality by providing information over the phone and by collecting samples when warranted.

The analytical laboratory serves a support role to the entire Utility. Through detailed analyses for a wide range of chemical and physical parameters in samples obtained both from the environment and CAW's treatment and distribution systems, the laboratory provides sound data that serves as the basis for evaluating drinking water quality compliance, watershed and source water health, treatability, and long-term monitoring initiatives. Assessment of water quality data assures the entire CAW system meets regulatory compliance, protects public health, and prevents nuisance episodes related to taste, odor, water age, and discoloration.

Mission

The Water Quality Department protects public health and promotes the economic vitality of Central Arkansas by providing customers uninterrupted service of high-quality drinking water that meets all Federal and State water quality regulations.

EUM Attribute:	Product Quality
Goal:	Provide an uninterrupted supply of high quality potable water that meets or exceeds all SDWA regulations.

Objective 1: Maintain SDWA regulated contaminant levels ≤ 80% of allowable Maximum Containment Level.

2018 Accomplishments

The monitoring, evaluation, and modification of operational elements associated with CAWs treatment and water distribution networks address a wide variety of contaminants. Increased system monitoring and data trending allow for the implementation of corrective actions which improve overall system water quality. A significant amount of resources were expended to address system lead service line replacements. These efforts lead to developing protocols that both predate and exceed the ANSI/AWWA C810-17 "Replacement and Flushing of Lead Service Lines" standard. Staff worked with GIS staff to develop and implement a Cityworks work order system for water quality use in improving distribution system water quality.

Objective 2: 100% monthly water compliance monitoring samples with Total Coliform Monitoring Rule (TCR).

2018 Accomplishments

Staff reviewed the location and status of bacteriological monitoring sites for TCR compliance monitoring and received ADH approval to install 12 dedicated sampling stations in 2018. Dedicated sampling stations will provide more consistent compliance monitoring data. Additional compliance monitoring sites and samples were added due to the merger with the MWM system and continue to be utilized to improve that systems water quality.

Objective 3: Continue land acquisition per WMP to provide greater source water protection.

2018 Accomplishments

Further refinements of the staff-developed evaluation matrix for property acquisition (for evaluating and ranking properties for purchase) were made to include additional ranking criteria. In 2018, staff evaluated over 60,000 acres for potential purchase. Acquisitions of 854.51 acres have been finalized thus far, with the potential for an additional 500 acres prior to December 31, 2018.

Objective 4: Maintain or increase Lake Water Quality Monitoring.

2018 Accomplishments

Under an ongoing agreement with USGS, long-term, ongoing water quality and flow monitoring continues for Lake Maumelle and its tributaries. As a part of the program, staff contributed $22,500 of in-kind services for work associated with the 2018 monitoring plan, thereby reducing costs associated with relying solely on USGS personnel. Additional commitments made by USGS staff have led to investigating real-time modeling of Lake Maumelle reservoir water quality. Staff developed and implemented modifications to USGS real-time web portal to include additional wind information.

Efforts to complete the first bathymetric survey (underwater topographic features) of Lake Maumelle are scheduled to be completed before December 31, 2018.

Objective 5: Comprehensive Ecology Management.

2018 Accomplishments

Reforestation of 140 acres on the former WGF took place in February 2016. This reforestation effort resulted in more than 44,000 trees of 13 different species being planted in critical, water quality protection areas of the watershed along the Maumelle River. In 2018, Water Quality conducted required follow up monitoring in partnership with the University of Central Arkansas (UCA) to assure that a 75% survival rate was being accomplished by this effort.

Prescribed burns were not conducted in the Lake Maumelle watershed; however, 195 acres were prepped in anticipation of completion. The use of prescribed fire improves water quality by reducing the amount of decaying woody debris and increasing the herbaceous understory filter, as well as a number of other benefits including reducing the risk of catastrophic wildfire; improving forest resiliency to drought, disease, and pests; and enhancing wildlife habitat, species diversity, and recreational opportunities.

In partnership with UCA, CAW initiated additional evaluation of the impacts of mountain biking in the Maumelle watershed as recommended by the Recreation Management Plan. The Mountain Bike Study Phase 1: Pilot Study was completed, and Phase II: User-Based Study has begun. The installation of experimental sites is 95% complete, and the participant selection has started. Orientation dates have been scheduled with an anticipated start date in late 2018. As part of the overall management strategy for Lake Maumelle, Lake Winona, and adjacent CAW-owned property, this plan provides a consistent process for evaluating current, proposed, and potential future recreation

opportunities in the watersheds, and responding to future requests for recreation in these areas.

Ecological timber thinning on over 341 acres in the Farkleberry Units 1 & 2 have been marked and will go to bid. This strategic thinning practice allows for additional sunlight to reach the forest floor and reduces the competition for water and nutrients among critical native plant and tree species. Under these conditions, the native forest understory and remaining healthy trees grow a better root system creating a natural filter for runoff and better stability for soils which would otherwise release sediment and nutrients into the watershed tributaries and/or Lake Maumelle.

In 2018, CAW continues to actively work with the Corps on a Section 206 Project to restore and enhance hydrological flow and stability through the section of the Maumelle River that transects the former WGF property. The hydrology flows of the Maumelle River through the property have been altered over the years with man-made low water crossings, construction of a levee system, and side-channel cut offs to provide water supply for irrigation and control flooding. These physical alterations have induced a variety of impacts to both water quality and the ecosystem over time. Enhancing and restoring these systems is part of a larger restoration and management plan for the WGF.

Other 2018 Accomplishments

CAW joined the Partnership for Safe Water in 2015 as part of the Utility's continued commitment to provide the highest quality water to customers. The mission for the Partnership is to improve the quality of water delivered to customers by optimizing water system operations. This Partnership has resulted in a more proactive direction in the treatment and system operations as CAW has begun to move toward managing the overall operation, taking a holistic approach instead of silos of raw water supply, treatment, and distributing water to customers. In 2018, baseline data submittal reports were provided to the Partnership for both the Ozark Point Plant and Wilson Plant as well as CAW's distribution system. The next phase will be the self-evaluation process which is designed to review and improve existing processes to improve operations and better protect water quality.

Water Quality Management - As a part of the overall improvement of CAW's water quality goals, participation in external industry water quality research is a mainstay of the Water Quality department's goal of continual improvement. In 2018, staff worked with the Centers for Disease Control and Prevention study to evaluate real world situations related to human health and planned/unplanned line break events. Completion was in July 2018 with a total of nine events being sampled. Water Quality staff also worked on an investigative project in partnership with IDEXX Corporation to determine the presence or absence of Legionella in potable water systems.

Water Quality staff actively participates in numerous public education outreach efforts which include: developing the Power of Water teacher training, the Citizen's Water

Academy, and the UCA Spring Environmental Capstone Course; assisting Public Relations with various tours and workshops; and co-hosting a land-owner workshop for the Lake Maumelle Watershed.

2019 Goals

The Water Quality Department will continue to build relationships with local, state and Federal agencies, as well as non-governmental organizations to advance CAW's water quality goals. Existing relationships have led to additional project funding, enhanced public education and outreach, completion of wildlife surveys, and technical assistance for forest management. As part of managing the distribution system for improved water quality, department staff plan to install field equipment to help better monitor and control chlorine residual levels and reduce disinfection byproducts, to develop methods for trending water quality changes and strategies to help mitigate a response.

In order to enhance the Utility's conservation management objectives, staff will continue the long-range plan for forest management, building off of the existing fire management plan and silviculture plans completed in 2013 and 2014. These plans, in combination with the recreation management plan and WMP, will create a road map for management activities, as well as enhance budget planning.

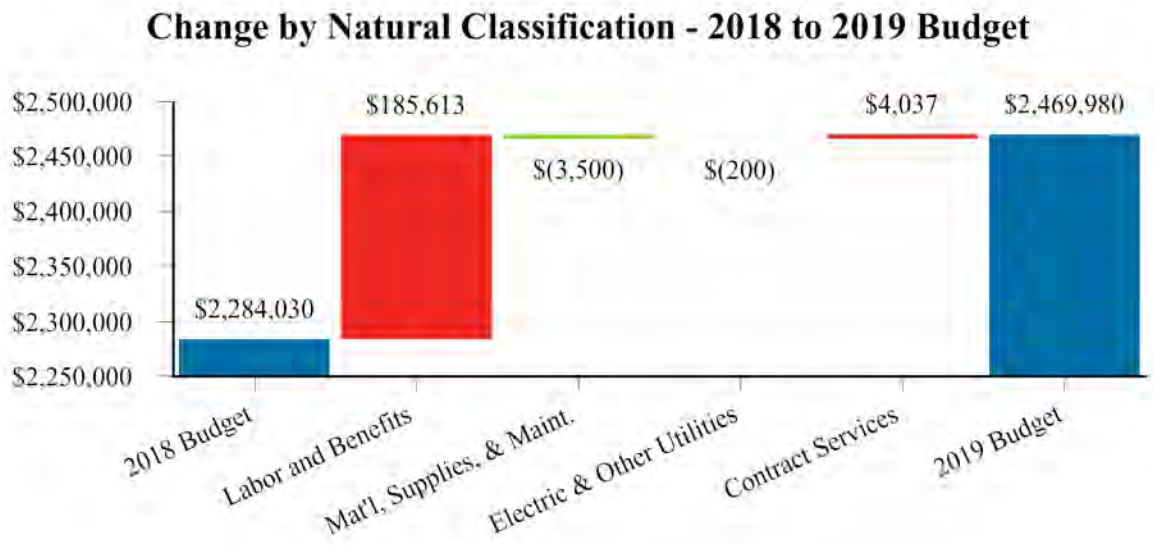
Staff will continue to focus on increasing property holdings and easements in key watershed areas and building and retaining partnerships essential for success of the program's objectives. Water Quality will continue to add and enhance biological monitoring efforts. Monitoring of biological indicators will support planning efforts and provide the basis necessary to develop metrics guiding future watershed planning while providing better understanding of the health of the watersheds and source waters.

Staff will also continue to find and implement creative strategies for watershed management and water quality enhancement through active management approaches, increased monitoring efforts; strategic education and outreach events and publications, and by seeking unique opportunities for funding projects that are congruent to the mission and goals of the department and Utility.

Performance Measures	2017 Actual	2018 Estimated	2019 Budget
100% SDWA Compliance	Yes	Yes	Yes
≤ 80% of All MCL	Yes	Yes	Yes
100% TCR Monitoring	Yes	Yes	Yes
Land Acquisition (cumulative acres of fee-simple and conservation easements)	255.3	1000	1000
Lake Water Quality Monitoring	Yes	Yes	Yes
Tributary Water Quality Monitoring	Yes	Yes	Yes
Implementation of Ecology Management	Yes	Yes	Yes
Acres Treated with Prescribed Burning (cumulative acres)	0	660	600
Acres Treated with Ecological Thinning (cumulative acres)	450	350	600

Water Quality – Expense Summary

	2017 Actual	2018 Projected	2018 Budget	2019 Budget
Labor and Benefits	$ 1,239,540	$ 1,273,650	$ 1,248,516	$ 1,434,129
Materials, Supplies, and Maintenance	278,792	278,205	333,970	330,470
Electric and Other Utilities	4,381	4,434	5,000	4,800
Contract Services	612,214	631,700	696,544	700,581
Total Expenses	***2,134,927***	***2,187,989***	***2,284,030***	***2,469,980***
Total Capital Costs	***1,231,528***	***—***	***1,942,000***	***2,041,000***
Total Water Quality	***$ 3,366,455***	***$ 2,187,989***	***$ 4,226,030***	***$ 4,510,980***



Graph shows departmental expense progression from 2018 Budget to 2019 Budget by Natural Classification. Blue bars indicate the total departmental expense for the two budget years with red bars indicating additional expense and green bars indicating less expense by category.

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APPENDIX

Statistical Information

Pulaski County is the largest county by population in the state of Arkansas, with a population of approximately 391,000. Its county seat is Little Rock, which is also the State's capital and largest city. Pulaski County has a total area of 845 square miles, of which 808 square miles are land and 37 square miles are water.[1] Pulaski County forms the core of the Little Rock-North Little Rock-Conway Metropolitan Statistical Area, which accounted for approximately 734,000 people.[2]

Local, state, and Federal government have been the area's major employers for many years. Medical facilities, banks, and other service industries are also very important to the economy. Government and medical facility employers in particular have kept the local economy relatively stable. Both the Cities of Little Rock and North Little Rock have revitalized their respective downtown areas, which in turn fueled attraction of major corporations in a variety of industries.[3]

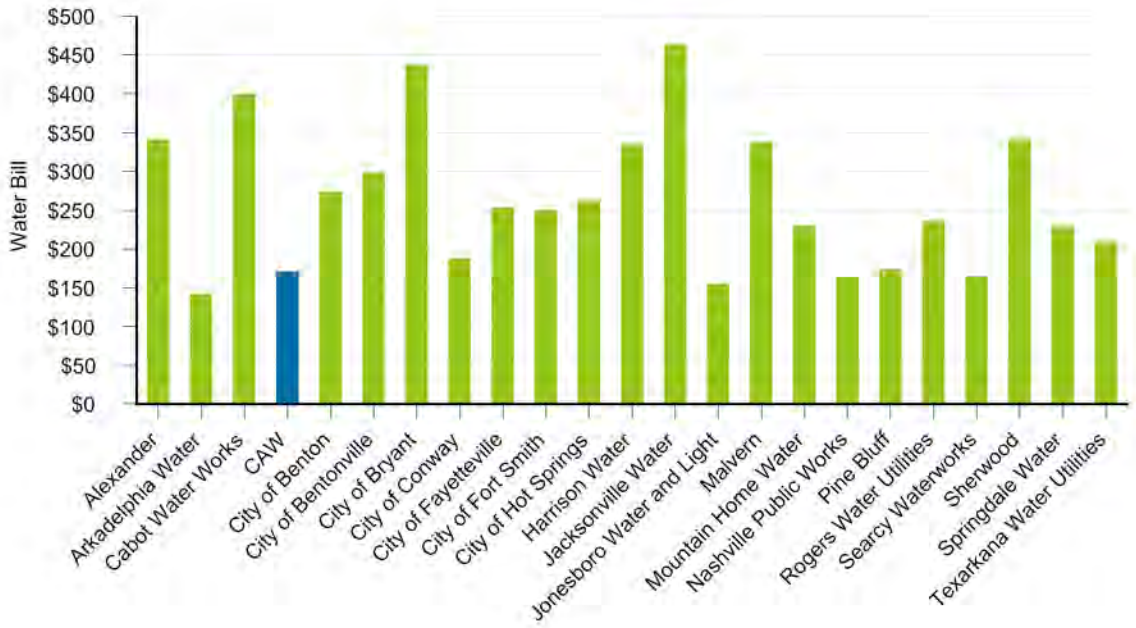
Demographics	
Pulaski County	
Population Est. (2017)[4]	393,956
Per Capita Income (2016)[4]	$28,421
Median Household Income (2016)[4]	$47,101
Unemployment Percentage Rate (2017)[5]	3.4%

Median Age (2010)[6]	36.0
Race (2010)[6]	
* White	55.4%
* Black or African-American	34.8%
* American Indian	0.3%
* Asian	1.9%
* Hispanic	5.8%
* Other	1.8%
Little Rock	
Population (2017)[4]	198,606
Per Capita Income (2016)[4]	$30,678
Median Household Income (2016)[4]	$46,578
Unemployment Percentage Rate (2017)[5]	3.2%
Median Age (2010)[7]	35.1
Race (2010)[7]	
* White	46.7%
* Black or African-American	42.2%
* American Indian	0.3%
* Asian	2.6%
* Hispanic	6.8%
* Other	1.4%
North Little Rock	
Population (2017)[11]	65,911
Per Capita Income (2016)[11]	$23,301
Median Household Income (2016)[11]	$39,723
Unemployment Percentage Rate (2017)[5]	3.8%
Median Age (2010)[8]	35.9
Race (2010)[8]	
* White	51.6%
* Black or African-American	39.6%
* American Indian	0.3%
* Asian	0.9%
* Hispanic	5.7%
* Other	1.9%
Sherwood	
Population (2017)[12]	31,081
Per Capita Income (2016)[12]	$28,555
Median Household Income (2016)[12]	$59,330

Unemployment Percentage Rate (2017)[5]	3.1%
Sherwood (continued)	
Median Age (2010)[9]	37.0
Race (2010)[9]	
* White	73.4%
* Black or African-American	18.4%
* American Indian	0.5%
* Asian	1.6%
* Hispanic	4.0%
* Other	2.1%
Maumelle	
Population (2017)[13]	18,214
Per Capita Income (2016)[13]	$39,577
Median Household Income (2016)[13]	$78,779
Unemployment Percentage Rate (2017)[16]	3.4%
Median Age (2010)[10]	37.5
Race (2010)[10]	
* White	81.3%
* Black or African-American	12.0%
* American Indian	0.3%
* Asian	2.3%
* Hispanic	2.4%
* Other	1.7%
CAW Service Area	
Square Miles	530
Miles of Public Water Distribution Pipe (2017)	2,506
Number of Meters in Service (2017)	
* Residential	117,154
* Commercial	11,779
* Large Volume	52
* Sprinkler	26,122
* Wholesale	21
Total Consumption (2017) (in billion gallons)	17.49
Average Daily Consumption (2017) (in million gallons)	57.51
Max. Day Consumption (2017) (in million gallons)	85.5
All-Time Max. Day Consumption (2012) (in million gallons)	126.0

CAW Rate Comparison - Commercial (2018)[17] 1" - Meter			
Water Provider	*Commercial (74.8k Gallons)*	*Commercial (187.5k Gallons)*	*Commercial (374.0k Gallons)*
Alexander	341.01	876.51	1,769.01
Arkadelphia Water	141.99	289.63	533.94
Cabot Water Works	400.46	986.50	1,971.90
CAW	**171.21**	**411.21**	**811.21**
City of Benton	273.54	676.33	1,342.88
City of Bentonville	297.54	716.78	1,410.56
City of Bryant	436.55	1,084.58	2,156.95
City of Conway	187.65	446.86	875.81
City of Fayetteville	253.22	622.88	1,208.70
City of Fort Smith	249.98	609.98	1,209.98
City of Hot Springs	261.72	658.97	1,311.72
Harrison Water	334.93	815.03	1,445.82
Jacksonville Water	463.82	1,098.12	2,129.46
Jonesboro Water and Light	154.82	380.22	650.56
Malvern	337.93	828.18	1,648.15
Mountain Home Water	230.36	517.75	993.32
Nashville Public Works	163.23	355.95	674.86
Pine Bluff	173.88	394.47	762.12
Rogers Water Utilities	235.96	543.19	1,037.41
Searcy Waterworks	165.40	400.95	790.73
Sherwood	341.01	876.51	1,769.01
Springdale Water	228.77	569.12	1,119.95
Texarkana Water Utilities	209.22	513.51	1,017.06

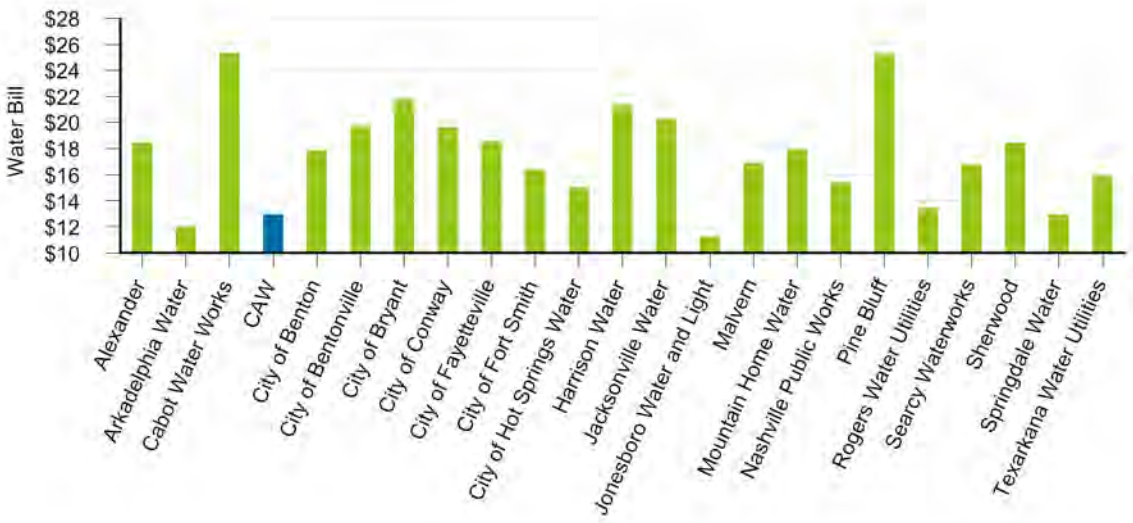
CAW WATER RATE COMPARISION - COMMERCIAL(74.8k Gallon)



CAW Rate Comparison - Residential (2018)[17] 5/8” - Meter			
Water Provider	*Residential (3.7k Gallons)*	*Residential (7.35k Gallons)*	*Residential (11.2k Gallons)*
Alexander	18.47	32.12	45.77
Arkadelphia Water	11.97	20.18	27.80
Cabot Water Works	25.34	40.00	55.54
CAW	**12.98**	**21.53**	**30.08**
City of Benton	17.83	31.41	44.63
City of Bentonville	19.74	33.73	47.49
City of Bryant	21.74	43.59	64.86
City of Conway	19.64	29.18	39.24
City of Fayetteville	18.56	33.80	48.63
City of Fort Smith	16.37	31.17	45.97
City of Hot Springs Water	15.02	25.35	36.08
Harrison Water	21.35	39.21	56.60
Jacksonville Water	20.27	44.48	68.04
Jonesboro Water and Light	11.25	18.85	26.25
Malvern	16.90	33.43	49.52
Mountain Home Water	17.96	27.65	37.08
Nashville Public Works	15.44	26.05	36.37
Pine Bluff	25.27	35.40	45.54
Rogers Water Utilities	13.47	24.83	35.89
Searcy Waterworks	16.80	24.75	32.48
Sherwood	18.47	32.12	45.77
Springdale Water	12.97	24.64	36.00
Texarkana Water Utilities	15.89	29.61	42.96

CAW Water Rate Comparison - Residential

(3.7k Gallon)

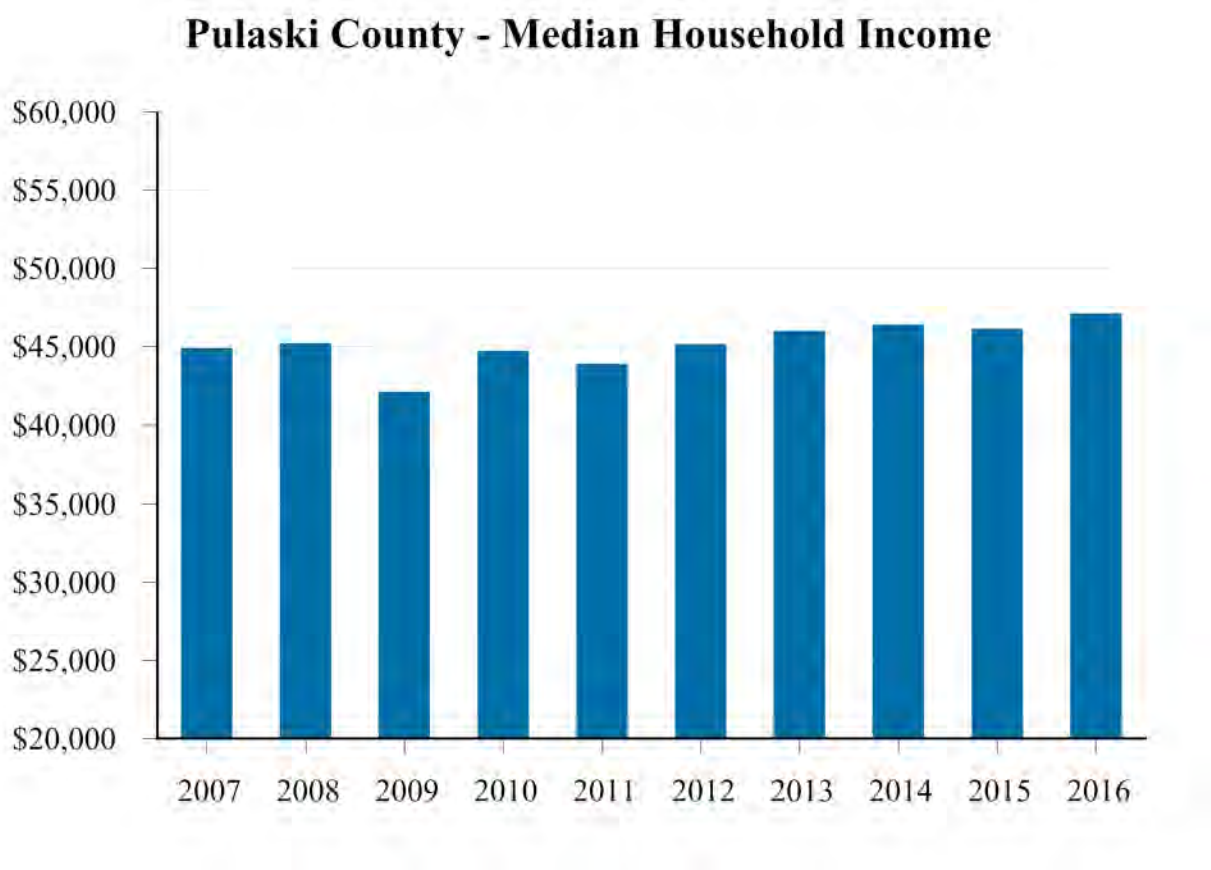


Pulaski County Largest Employers (2017)[14]	
State of Arkansas	Government
Local Government	Government
Federal Government	Government
University of Arkansas for Medical Sciences	Education / Medical Services
Baptist Health System	Medical Services
Little Rock Air Force Base	Government
Arkansas Children's Hospital	Medical Services
Little Rock School District	Education
Central Arkansas Veterans Health Care Systems	Medical Services
Entergy Arkansas	Utility (Electric)

Arkansas' Ten Largest Cities by Population[15] Unemployment Percentage Rate (2017)[5]	
Little Rock	3.2%
Fort Smith	3.5%
Fayetteville	2.5%
Springdale	2.6%
Jonesboro	2.8%
North Little Rock	3.8%
Conway	3.3%
Rogers	2.7%
Pine Bluff	5.8%
Bentonville	2.8%

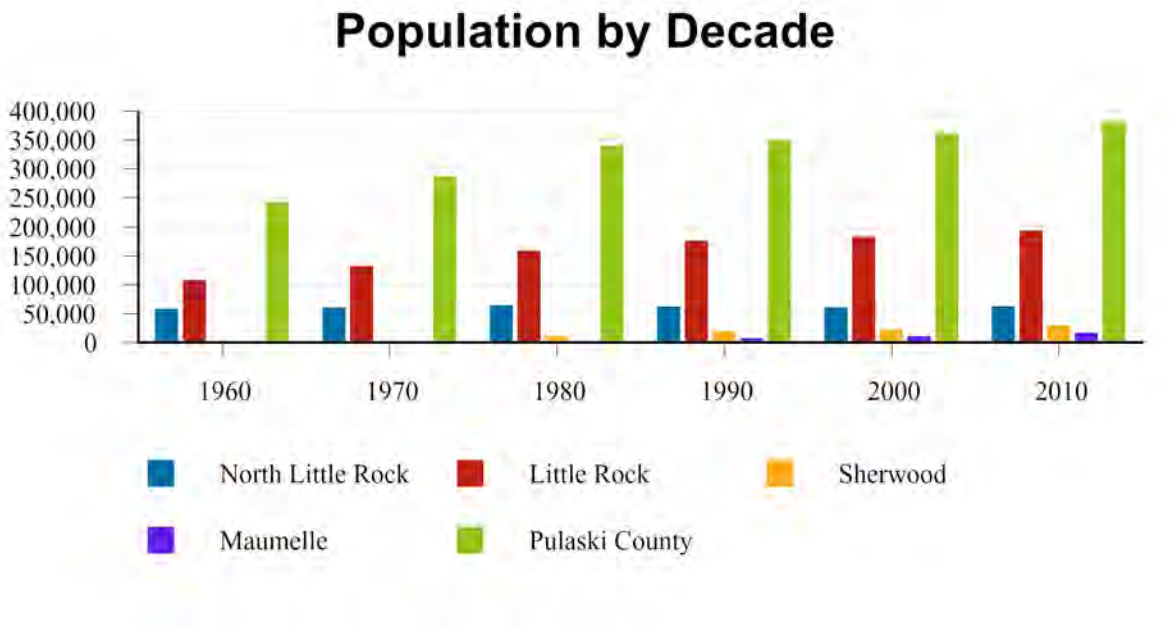
Pulaski County – Median Household Income[4]	
Year	*Per Capita Income*
2007	44,909
2008	45,215
2009	42,107
2010	44,733
2011	43,898
2012	45,135
2013	46,013
2014	46,410
2015	46,140
2016	47,101

Median Household income is a direct reflection of the local economy and resident's ability to pay water billings. During improving economic times, CAW expects to have fewer and smaller write-off accounts.



County and State Unemployment[5]		
Year	*Pulaski County*	*State of Arkansas*
2007	4.7	5.2
2008	4.6	5.3
2009	6.3	7.4
2010	7.1	7.9
2011	7.2	7.9
2012	6.6	7.3
2013	6.0	7.5
2014	5.6	6.1
2015	5.1	3.9
2016	3.4	3.8

Population by Decade					
Year	*Little Rock[4]*	*North Little Rock[11]*	*Sherwood[12]*	*Maumelle[13]*	*Pulaski County[4]*
1960	107,813	58,032	222	N/A	242,980
1970	132,483	60,040	2,754	N/A	287,189
1980	159,151	64,388	10,423	N/A	340,597
1990	175,795	61,741	18,893	6,714	349,660
2000	183,133	60,433	21,511	10,557	361,474
2010	193,524	62,304	29,523	17,163	382,748



CAW's Ten Largest Customers Percent of Revenues (2017)	
Jacksonville Water Works	2.33%
Bryant Water and Sewer Department	1.73%
Salem Water Users PWA	1.73%
University of Arkansas for Medical Sciences	0.35%
Cabot Waterworks	0.32%
Arkansas Department of Corrections	0.32%
Kimberly-Clark	0.27%
Sage V Foods, LLC	0.26%
3M Company	0.24%
Baptist Heath Medical Center	0.24%

Sources:

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[3] "Little Rock: Economy - Major Industries and Commercial Activity, *City-Data*, www.city-data.com/us-cities/The-South/Little-Rock-Economy.html. Accessed 17 August 2018.
[4] "Quick Facts Little Rock and Pulaski County." *United States Census Bureau*, www.census.gov/quickfacts/fact/table/littlerockcityarkansas,pulaskicountyarkansas/PST045217, Accessed 17 August 2018.
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[7] "Census Data." Pulaski County Demographic Fact Sheet, *Metroplan*, June 2011, www.metroplan.org/sites/default/files/LittleRock_FactSheet2010.pdf. Accessed 17 August 2018.
[8] "Census Data." North Little Rock Demographic Fact Sheet, *Metroplan*, June 2011, www.metroplan.org/sites/default/files/NorthLittleRock_FactSheet2010.pdf. Accessed 17 August 2018.
[9] "Census Data." Sherwood Demographic Fact Sheet, *Metroplan*, June 2011, www.metroplan.org/sites/default/files/media/data/Sherwood_FactSheet2010.pdf. Accessed 17 August 2018.
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[12] "Quick Facts Sherwood." *United States Census Bureau*, www.census.gov/quickfacts/fact/table/sherwoodcityarkansas/PST045217. Accessed 20 August 2018.
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[14] "Major Employers." *Little Rock Chamber*, https://www.littlerockchamber.com/major-employers.html. Accessed 20 August 2018.
[15] "Arkansas Bigger Cities (over 6000 residents)." *City-Data*, www.city-data.com/city/Arkansas.html. Accessed 20 August 2018.
[16] "Maumelle, AR Unemployment Rate Report." *Home Facts*, https://www.homefacts.com/unemployment/Arkansas/Pulaski-County/Maumelle.html. Accessed 20 August 2018.
[17] CAW Survey, Arkansas Water Rates, July 2018.

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Glossary of Key Budget Terms

Accounting Standards – the financial statements are prepared in accordance with principles generally accepted in the United States of America and all applicable pronouncements of the Governmental Accounting Standards Board (GASB).

Accrual Basis of Accounting – a basis of accounting that recognizes the financial effect of transactions when such transactions occur, regardless of the timing of the related cash flow.

Balanced Budget – planned expenses do not exceed estimated financial resources available for a specified period.

Board of Commissioners – the seven-member board that governs Central Arkansas Water.

Biota – the total collection of organisms in a region, or a time period. The biota of the Earth make up the biosphere.

Bonds – certificates of indebtedness issued by an entity that guarantees payment of principal and interest at a future date.

Budget – an annual financial plan that identifies revenue sources and amounts, services to be provided, and amounts of money to fund said services.

Capital Assets – assets that have an initial value or cost greater than or equal to $5,000 and an estimated useful life greater than one year.

Capital Outlay – fund disbursements for the purchase of capital assets, such as furniture, vehicles, machinery, and building improvements.

Clean Water Act – the Federal law that establishes how the United States will restore and maintain the chemical, physical, and biological integrity of the country's waters (oceans, lakes, streams and rivers, ground water, and wetlands.) The law provides protection for the country's waters from both point and non-point sources of pollution.

Commercial Customers – all customers receiving water service at (i) a building containing two or more apartments or family units that are rented or leased to tenants as residences and that are not separately metered; (ii) a building occupied by a retail or service business; (iii) a building owned or occupied by a public utility, a department of a municipality, or a State or Federal government agency; or (iv) a non-residential customer that does not fit the definition of an Large Volume Customer.

Contributions-in-aid-of-construction – funds or equity contributed by customers, developers, or other entities for improvements and/or extensions to the Utility's assets.

Contractual Services – goods and services that Central Arkansas Water acquires under contract from an outside company or vendor. Professional services and insurance are examples of contractual services.

Debt Service – expenses for principal and interest on outstanding bond issues.

Debt Service Reserves – funds used to pay debt service of revenue bonds, if the sources of the pledged revenues do not generate sufficient funds to satisfy the debt service requirements. Debt Service Reserves are funded in whole or part from the proceeds of the bonds or are allowed to gradually accumulate over a period of years through required payments from the pledged revenues.

Depreciation – an accounting allocation of a portion of the cost of a capital asset to the operating expenses of the current fiscal period.

Enterprise Fund – a self-contained governmental fund operated to account for services supported by user charges and fees.

Expenses – the cost of doing business in a proprietary organization. Expenses may be either direct outflows or the using up of an asset, such as the depreciation of capital assets.

Fiscal Year – a period of 12 consecutive months designated as the budget year. Central Arkansas Water's fiscal year is the calendar year.

Fund – an accounting entity with a set of self-balancing accounts that is used to account for financial transactions for specific activities. CAW is accounted for as a stand-alone enterprise fund.

Gain/Loss on Sale of Assets – income or expense that is based upon the amount of proceeds compared to the net book value of the capital assets.

Generally Accepted Accounting Principles (GAAP) – the conventions, rules, and procedures that serve as the norm for the fair presentation of financial statements.

Governmental Accounting Standards Board (GASB) – the board that establishes generally accepted accounting principles for state and local governmental units.

Horizontal Asset – underground assets such as pipelines, vaults, valves, etc.

Investment – securities purchased and held for the production of revenues in the form of interest.

Large Volume Customers – any Commercial Customer (i) who uses at least 1,500,000 cf of water per meter during the 12-month period from September 1 to August 31, or (ii) who agrees to take or pay for a minimum of 125,000 cf of water per meter per month on an annual basis. Customers who qualify for large volume service described in (i) above shall be assigned to the large volume class for the calendar year beginning the following January.

Long-Term Debt – debt with a maturity of more than one year from date reported.

Maintenance – the use of materials and services in the effort to renew, repair, or renovate existing land, structures, vehicles, and equipment.

Net Revenues – revenues less operating and maintenance expenses (excluding depreciation and amortization) and PILOT.

Non-operating Revenue and Expense – all revenues and expenses that do not meet the definitions of operating revenues and operating expenses.

Operating Expenses – costs required to provide service or maintain principal ongoing operations.

Operating Revenues – sources of income that are in connection with principal ongoing operations.

Payment-in-lieu-of-taxes (PILOT) – negotiated payment to local government in lieu of property tax.

Rating – an indication of the likelihood that an obligation will be re-paid.

Raw Water – untreated water.

Residential Customers – all customers receiving water service at a single building or building unit that is owned, leased, or rented by one party, separately metered, and occupied as a residence.

Retail Water Sales – includes Residential, Commercial, Large Volume, Sprinkler, and Raw Water Metered Services, as well as Private Fire Services.

Safe Drinking Water Act (SDWA) – Federal legislation passed in 1974 that regulates the treatment of water for human consumption and requires testing for and elimination of contaminants that might be present in the water.

Senior Debt – debt that takes priority over other debt securities sold by the issuer. Senior debt includes the Series 2010A, Series 2010C, Series 2011A, Series 2012A, Series 2014, Series 2015, Series 2016 Refinance Bonds, Series 2018A, and Series 2018B.

Sprinkler Customers – all customers receiving separately-metered water service used exclusively for irrigation sprinkler systems or other outdoor purposes.

Subordinated Debt – debt that ranks below other debt with regard to claims on revenues. Subordinated debt includes the Series 2016 Maumelle Acquisition and Construction Bonds.

System Development Charges (SDC) – a one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants, and treated water transmission facilities required to provide service to a new customer.

Wholesale Customers – all customers purchasing water through a wholesale meter contract.

Glossary of Acronyms and Abbreviations

ADH	Arkansas Department of Health
ADEQ	Arkansas Department of Environmental Quality
ANRC	Arkansas Natural Resources Commission
APERS	Arkansas Public Employees Retirement System
ARDOT	Arkansas Department of Transportation
AWWA	American Water Works Association
BCEE	Board Certified Environmental Engineer
BLS	Bureau of Labor Statistics
CAFR	Comprehensive Annual Financial Report
CAW	Central Arkansas Water
CCCP	Cross-Connection Control Program
CCF	Hundred Cubic Feet
CEO	Chief Executive Officer
CF	Cubic Feet
CFO	Chief Financial Officer
CGFM	Certified Government Financial Manager
CIC	Capital Investment Charges
CINO	Chief Innovation Officer
CIP	Capital Improvement Plan
CIS	Customer Information System
COO	Chief Operating Officer
CPA	Certified Public Accountant
DIT	Diversity and Inclusion Team
DMS	Document Management System
ECM	Energy Conservation Measure
EHS	Environmental Health and Safety
EUM	Effective Utility Management
GAAP	Generally Accepted Accounting Principles
GAC	Granular Activated Carbon
GASB	Governmental Accounting Standards Board
GC	General Counsel
GDP	Gross Domestic Product
GFOA	Government Finance Officers Association
GIS	Geographic Information System
GLP	Good Laboratory Practices

GPS	Global Positioning System
HIVIP	High performing, Innovative, Values-Driven, Informed and Passionate
HIVIP^2	Values-Driven, Informed, and Passionate People
HRMA	Human Resource Management Association
HVAC	Heating, Ventilation, and Air Conditioning
IS	Information Services
ITMP	Information Technology Master Plan
J.D.	Juris Doctorate
JTH	James T. Harvey Administration Building
LAN	Local Area Network
LL.M	Master of Laws
MAWA	Mid-Arkansas Water Alliance
MG	Million Gallons
MGD	Million Gallons per Day
MLGW	Memphis Light, Gas, and Water
MWM	Maumelle Water Management
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
OSHA	Occupational Safety & Health Administration
PAFR	Popular Annual Financial Report
P.E.	Professional Engineer
PER	Preliminary Engineering Report
Ph.D.	Doctor of Philosophy
PILOT	Payment-in-lieu-of-taxes
PTM	Project Team Member
P/T	Part-Time
RFP	Request for Proposal
SCADA	Supervisory Control and Data Acquisition System
SDC	System Development Charge
SDWA	Safe Drinking Water Act
SHRM	Society for Human Resource Management
TCR	Total Coliform Rule
UCA	University of Central Arkansas
USGS	U.S. Geological Survey
WGF	Winrock Grass Farm
WMP	Watershed Management Plan
WPF	Watershed Protection Fee

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CENTRAL ARKANSAS WATER STAFF

CAW AWARDS 2001 – 2018

Gold Award for Exceptional Utility Performance, AMWA, 2001
America's Crown Communities Award, National League of Cities, 2001
Big Heart Award, Watershed Human and Community Development Agency, 2005
Public Agency of the Year, Sierra Club of Arkansas, 2006
The International Davey Award, 2012
Platinum Award for Utility Excellence, AMWA, 2012
Jack Evans Regional Leadership Award, Metroplan, 2012
Diversity Award, AWWA, 2013
Leadership in Fitness Award, AR Governor's Council on Fitness and Baptist Health, 2013
Best Tasting Drinking Water, Central District AWW&WEA, 2014 – 2015
Government Recycler of the Year Award, Arkansas Recycling Coalition, 2015
Sustainable Water Utility Management Award, AMWA, 2015
Best Tasting Drinking Water in Arkansas, AWW&WEA, 2018
GFOA Certificate of Achievement for Excellence in Financial Reporting, 8 years
GFOA Distinguished Budget Presentation Award, 9 years
Outstanding Performance Award, Arkansas Workers' Compensation Commission, 15 years

CAW STAFF AWARDS 2001 – 2018

GLEN T. KELLOGG LEADERSHIP AWARD RECIPIENTS

Fred Glover, 2001
Steve Morgan, 2002
Bruno Kirsch, Jr., 2006
Ron Brown, 2006
Marie Crawford, 2007
Robert Hart, 2012
Dale Kimbrow, 2014
Blake Weindorf, 2016

WATER MANAGER OF THE YEAR, AWW&WEA, 2017
Terry Bice

PURCHASING MANAGER OF THE YEAR, NIGP, 2016
Elizabeth Tuck-Rowan

SAFETY PROFESSIONAL OF THE YEAR, AWEA, 2014
Robert Martin

STEM PROFESSIONAL EDUCATOR OF THEY YEAR, UALR, 2018
Jane Hurley

EDWARD J. ERXLEBEN AWARD, NIGP, 2018
Elizabeth Tuck-Rowan

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