



# Green Bond Report

Investing in Green-Gray Infrastructure FY 2021

# Who is Central Arkansas Water?

## Chapter 1:

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## Introduction

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3	Foreward
5	Service Areas
6	By the Numbers
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*Central Arkansas Water is the largest water supplier in the state of Arkansas and, as such, plays an integral role in the quality of life for residents and the economic health of the communities it serves.*

The utility's primary mission is to protect public health and the environment through world-class, cost-effective water resource management, leadership, and partnerships.

CAW developed a 2050 Strategic Plan focused on increasing efficiency in energy and transportation, improving water and air quality, and reducing waste. These sustainability efforts are aligned with the 17 UN Sustainable Development Goals with emphasis on Goal 6: Clean Water and Sanitation. Other sustainability efforts in the 5-year Capital Budget include the reduction of its Scope 1 and 2 carbon emissions, such as the purchase of electric vehicles, implementing electric vehicle charging stations, lighting upgrades, and installing variable speed drives that reduce large motor energy use by 30%. CAW has also initiated a Power Purchase Agreement for 4.8 MW of solar energy that began producing in 2022, replacing approximately 20% of the utilities' 2021 electrical demand and locking in current rates for 30 years.

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The projects funded by the 2020 green bond are important steps in our work to provide safe, clean, reliable drinking water to Central Arkansas for years to come.



This large solar field with over 11,000 panels was constructed on CAW land in Cabot, Arkansas. Additional solar projects are in the design phase.

One of CAW’s biggest achievements in implementing the Strategic Plan, and the key focus of this report, is the green-gray infrastructure bond. In 2020, CAW issued its first green bond earmarked for low-carbon infrastructure projects and the protection of key drinking water sources, including Lake Maumelle. The low-carbon infrastructure projects funded by the green bond focus on improvements to pipelines and delivery systems to reduce leakage and repairs, increase water efficiency, and build infrastructure improvements. These improvements

increased the resiliency of CAW’s ability to deliver clean, quality drinking water.

The green bond also allowed CAW to purchase land and conservation easements in the watershed from willing sellers at an accelerated rate. Land acquisition and conservation easements allow CAW to maintain the forested watershed and prevent significant development that might harm water supplies. These protections maintain working forest lands and enhance the natural ability of the land to provide filtration services for clean drinking water. In addition, maintaining the watershed as a working forest increases CAW’s inventory of carbon, which can support its efforts to become

a net zero carbon emissions utility. In recognition of its achievements in sustainability, the CAW Board of Commissioners received the Water Now Impact Award. This Award recognizes and honors leaders of extraordinary vision who have had a major impact in advancing sustainable water management strategies and protecting water resources for the future.

CAW would like to thank its partners, the World Resources Institute and Encourage Capital, for their partnership in issuing the green bond, as well as its funding partners — the United States Forest Service, United States Environmental Protection Agency, and United States Endowment for Forestry and Communities. Without their generous support, this work would not have been possible.

With CAW’s entrepreneurial spirit and commitment to environmental leadership, CAW is well-positioned to take on the major environmental challenges of the future. The projects funded by the 2020 green bond are important steps in our work to provide safe, clean, reliable drinking water to Central Arkansas for years to come.



*Tad Bohannon*  
Tad Bohannon, CEO

# Service Areas

*Central Arkansas Water serves a population of nearly 500,000 people, which is one in every six Arkansans.*

In addition, CAW supplies the water needed by industries that compete in regional, national, and international markets. In fact, CAW serves approximately 205,000 metered connections through retail and wholesale service to customers in Pulaski, Saline, Grant, Perry, Lonoke, White, and Faulkner counties (Figure 1).

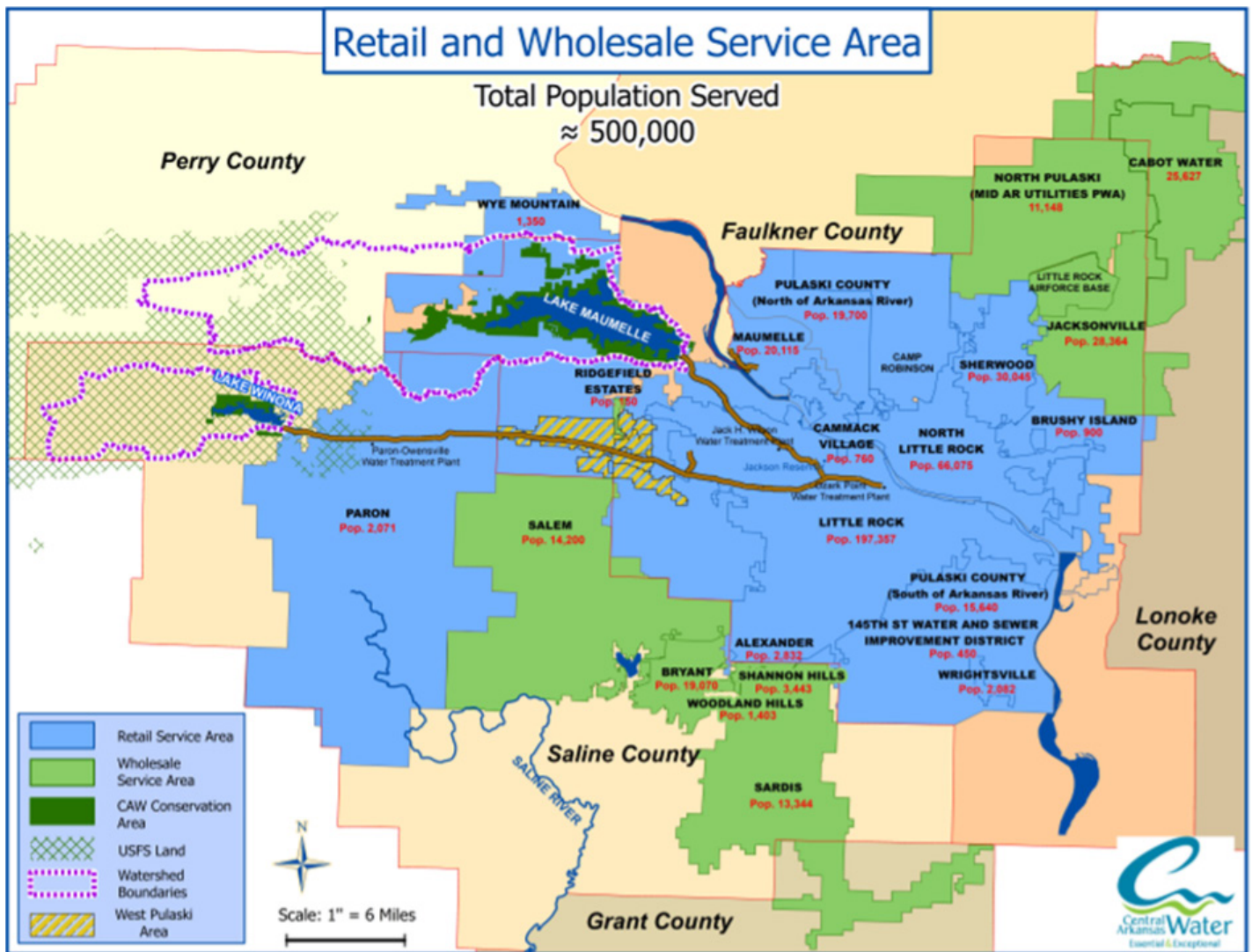


FIGURE 1 Map of Central Arkansas Water’s retail and wholesale service area, watershed boundaries, and raw water treatment lines.

# By the Numbers

**18.2 billion**

gallons sold

**2,672**

miles of pipe

**23**

communities served

**75.5 million**

gallons of storage

**721.18**

sq miles of service area

**7**

counties served

**490,280**

population served

*\*per 2020 census*

**323**

hivip employees

**3**

water treatment plants

**156,266**

metered services

**120**

pumps

**2**

lakes

**40,485**

valves

**39**

tanks

**1**

reservoir

**13,333**

fire hydrants

**35**

pump stations

**FIGURE 2** Central Arkansas Water by the numbers/statistics as of year end December 31, 2021

CAW manages, operates, and maintains an extensive array of water treatment facilities and forested landscapes in its primary watersheds, Lake Maumelle and Lake Winona. These two source lakes provide high quality drinking water delivered by pipelines to the Jack H. Wilson (Wilson Plant) and Ozark Point Water Treatment Plant (Ozark Point Plant) located in Little Rock, Arkansas. The raw water pipelines from both lakes also interconnect with Jackson Reservoir, a regulating reservoir inside Little Rock located between the two treatment plants. The combined safe yield from the two surface water sources is 120 million gallons a day (MGD). The maximum treatment capacity of the Wilson Plant is 133 MGD, and the treatment capacity of the Ozark Point Plant is 24 MGD.

# Watershed Protection

Protecting and maintaining the quality of drinking water sources is a primary focus for CAW as it determines:

- (1) The amount of treatment required to exceed federal and state of Arkansas standards for safety and health,
- (2) The cost consumers pay for water service, and
- (3) The quality of drinking water that ultimately flows from taps.

CAW integrates nature into the mainstream infrastructure system to produce lower-cost and more resilient services. Its management program consists of measures to protect the two lakes from sediment, pollution, and other sources of possible contamination that could affect the quality of our drinking water. A critical factor is to monitor and address potential sources of contaminated runoff that feed the reservoirs and ultimately, after treatment, become drinking water. The two lakes, as shown in Figure 3, are:

**LAKE WINONA**

which is protected by the surrounding U.S. Ouachita National Forest.

**LAKE MAUMELLE**

whose watershed lies within Pulaski, Perry, and Saline counties. Even though it is about 90% forested, it is vulnerable to development and other land-use changes. Current land uses include small residential sites, limited agriculture, and forestry activities. Stormwater from the surrounding landscape flows over lands, into the reservoirs, which can increase the number of pollutants introduced to the water source.

CAW encourages a culture of environmental stewardship through addressing the social, environmental, and economic balance for the utility. CAW is guided by commitments to the following principles: Leadership, Inclusivity, Transparency, Integrity, Stewardship and Continuous Improvement. CAW strives to identify and promote sustainable practices and strategic initiatives within the CAW business culture

that protect and enhance the natural environment for future generations.

To this end, CAW has set aggressive watershed protection goals and developed a comprehensive approach to protecting its Lake Maumelle watershed, as initially outlined in the Lake Maumelle Watershed Management Plan in February 2007. CAW can best manage source water from the watersheds of Lake Maumelle and Lake Winona through the acquisition of land and conservation easements. On the lands that CAW owns and manages, it adopts and enforces science-based practices, sustainable land, and water management strategies. These management and protection efforts ensure safe drinking water, thriving wildlife, and aquatic ecosystems for current customers and future residents of Central Arkansas.

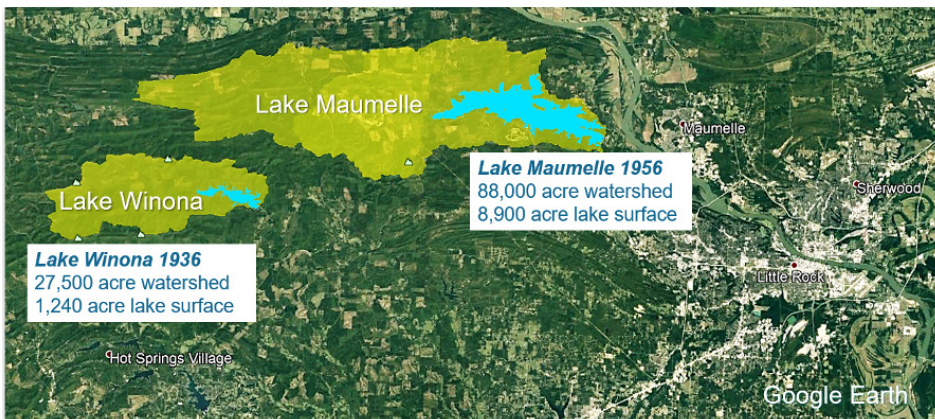


FIGURE 3 CAW Watersheds

# Central Arkansas Water's Goals

## Chapter 2:

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## Achieving Net Zero by 2050

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# Proactive Efforts

*Central Arkansas Water manages a significant network of interconnected lakes, reservoirs, pump stations, water towers, and water treatment plants that include enough buried pipes to transverse the whole United States.*

On average, the utility delivers about 60 million gallons of water to customers and businesses every day. Moving and treating water is an energy-intensive process that results in greenhouse gas emissions mainly from fleet and electrical power use.

A rising suburban population and climate change mean that without action, CAW's emissions would increase as it moves and treats more water for more distant areas. Despite these challenges, there are 'win win' decarbonization opportunities that will also help the central Arkansas economy. For instance, CAW is focused on reducing energy with efficiency gains throughout the water delivery system, such as installing variable frequency drives on pumps to increase performance and reduce peak energy costs by up to 30%. CAW is encouraging green energy utilization through a 4.8 MW DC solar power plant through a joint partnership with Scenic Hill Solar, which will result in immediate annual power cost savings (approximately 20% of CAW's current energy expenses). With support from federal, state, and local regulators, CAW can deploy green measures at large scale and with greater speed, while also testing emerging technologies.

CAW is just beginning to gather and report its emissions data. In years to come, CAW will report emissions using water industry and Environmental Protection Agency (EPA) developed tools. Prior analysis shows that CAW's emissions have increased as it has added over 10,000 accounts through growth, and the consolidation of the Maumelle Water and Paron Water Associations. As it increases its service area, the pace of change to reduce emissions will need to increase to reach Net Zero by 2050.



*To meet its ambitious climate targets, CAW is working on a number of proactive efforts to increase sustainability across its operations, including:*

#### **1. GREATER EFFORT TO CONSERVE VALUABLE WATER RESOURCES**

Accelerating reductions in unaccounted-for water leakage beyond industry standards coupled with per capita consumption falling as a result of consumer appliance labeling and other demand-side efficiency measures.

#### **2. RAPID DEPLOYMENT OF RENEWABLE ENERGY GENERATION**

Making use of the changing power market to invest in up to 80% of CAW daily demand with solar power to meet electricity needs by 2050.

#### **3. DELIVERING GREATER ENERGY EFFICIENCY**

Identifying equipment renewals in energy-intensive areas, such as process treatment, pumps capable of higher efficiencies operating in smarter networks, and newer, more environmentally friendly chemical treatments to provide water when our customers need it the most.

#### **4. PLANTING TREES AND RESTORING HABITATS**

Laying the foundation for sequestration of carbon for decades to come by converting CAW lands to carbon-retaining uses and working with partners to manage environmental improvements in the watershed. CAW promotes sustainable forestry management practices by integrating reforestation and forest health treatments through prescribed fire and ecological thinning to enhance the soils, water quality, and wildlife and plant habitats. CAW focuses on protecting native species and native aquatic and riparian habitats, and removing low-water crossings and stabilizing streambanks to maintain water quality and enhance carbon sequestration.

#### **5. DEPLOYING NATURAL SOLUTIONS**

Prioritizing nature-based solutions to meet growth and new treatment demands, CAW's watershed management efforts seek to achieve both enhanced water quality protection by reducing runoff of sediment, nutrient, and pollutants, as well as increased carbon sequestration and storage through its acquisition and protection of the surrounding forestlands.

#### **6. DEPLOYING ELECTRIC VEHICLES**

Transitioning operational and maintenance vehicles away from gasoline and diesel and working with vehicle manufacturers to boost the availability of suitable vehicles that run on low carbon fuels such as electricity and locally produced biodiesel.

#### **7. TACKLING PROCESS EMISSIONS**

Deploying new measures to directly monitor process emissions and designing measures to mitigate the impacts ahead of 2050.

#### **8. DEVELOPING OFFSETS**

Identifying the best opportunities for decarbonization in our communities and supporting the development of a robust US market for businesses to procure offsets to counter hard-to-abate emissions. CAW undertook a preliminary study to estimate the tons of carbon sequestered on protected CAW lands, yielding estimates of 195,000 tons of carbon sequestered every 6 years.

# Central Arkansas Water Cares

## Chapter 3:

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## Green Bond Funding

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12 Green Bond Allocations

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# Green Bond Allocations

CAW issued its first green bond in November 2020 to finance climate initiatives that will achieve energy efficiencies and water savings, implement nature-based solutions, and enhance infrastructure resiliency and redundancy. CAW's green bond financed a green-gray approach, where the "gray" or low-carbon infrastructure projects include pump upgrades and water main replacements. The "green" or nature-based solutions (NBS) interventions represent nearly 33% of the bond's total proceeds (\$10.6 million) and will be utilized to acquire forestlands and place conservation easements in the watershed for permanent protection to maintain water quality.

To date, CAW has allocated 29% of the green bond proceeds towards two different categories: Infrastructure Resiliency and Redundancy and Watershed Protection (as shown in

Table 1). Future allocations will include a third category titled Operational Optimization and Energy Efficiency.

CAW is committed to tracking the positive environmental impacts of the green bond's use of proceeds. What follows is a description of the projects and activities with current or planned green bond funding allocations for low-carbon infrastructure and "green" NBS investments. In addition, two areas are highlighted where green bond proceeds delivered significant social and environmental benefits, including the water main replacements and relocations and the watershed protection program. CAW was conservative in its approach to only include quantifiable metrics that provided benefits since the bond's issuance in 2020 through the fiscal year 2021.

Approach	Category	Description	Total Expenses	Expenses Allocated to Green Bond		
				2021	2022	2023
Gray	Infrastructure Resiliency and Redundancy (SDGs 9, 11)	Water Main Replacements and Relocations	\$14,095,025	\$4,128,346		
		Infrastructure Improvements for Redundancy	\$5,555,000	\$1,017,206		
	Operational Optimization and Energy Efficiency (SDGs 6, 9, 11)	Pump Renewal for Energy Efficiency	\$350,000	—		
		Reduced Emissions through Installations of Electric Vehicle (EV) Charging Stations	\$15,000	—		
Green	Nature-Based Solutions through Watershed Protection (SDGs 14, 15)	Conservation Easement	\$600,000	\$600,000		
		Forest Acquisition	\$6,500,000	\$1,447,039		
		2018 Bond Refinancing (forest acquisition)	\$3,509,397	\$3,509,397		
<b>TOTAL</b>			<b>\$30,624,647</b>	<b>\$10,701,988</b>		

TABLE 1 Green bond allocations for 2021

# Green Bond Impacts

## Low Carbon Gray Infrastructure

### I. Infrastructure Resiliency and Redundancy

#### A. Water Main Replacements and Relocations

The renewal and replacement of aging infrastructure has been the number one priority identified by respondents in each of the American Water Works Association’s (AWWA) Annual State of the Water Industry Report for the past six years. Like many larger U.S. water utilities, CAW has aging infrastructure, that includes pipelines and treatment basins, that are over 100 years old (Figure 4). While this infrastructure continues to provide dependable services, maintaining and enhancing the performance of this infrastructure is a significant and ongoing challenge. With an emphasis

on identifying and replacing aged pipes in its distribution system, CAW has proactively inventoried and completed replacement of all lead service lines in 2020, ahead of all mandated deadlines. In 2014, CAW created a dedicated Asset Management Team that focused on the below-ground replacement of aging pipelines to enhance system delivery and reduce leaks using a methodology within a new Linear Asset Management Plan. The team successfully developed an ‘in-house’ geographic information system (GIS)-based linear asset management platform, which rates condition and criticality of water mains throughout the distribution system based on 25 unique attributes, including: age, condition, and criticality; life-cycle costing; proactive operations and maintenance; and capital replacement plans based on cost-

### Water Main Replacement & Relocation Project Complete

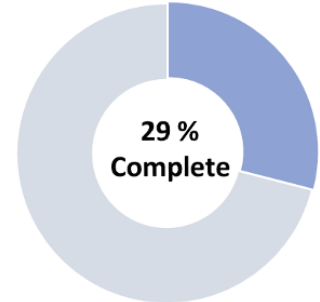


FIGURE 5 Percentage of water main and relocation projects completed using green bond allocations

benefit analyses. This tool has allowed staff to prioritize and target the poorest performing mains for replacement.

Using CAW’s extensive inventory of physical assets along with detailed maintenance histories, the utility can optimize its water main replacements by targeting the worst-performing water mains in its distribution system (Figure 6).

(Figure 7) outlines an example of the scoring for a section of 2” galvanized water main that was replaced in 2021 with funding from the green bond.

Specifically, CAW invested \$4,128,346 in water main replacements and relocations in 2021, representing only 29% of its planned water main replacement and relocation projects using green bond proceeds (Figure 5). This funding has allowed CAW to increase its water main replacement rate, which has a direct benefit to the climate and rate-payers. Investments in renewing the distribution system means that customers experience fewer outages and the utility saves water and reduces maintenance costs. The increase in system performance

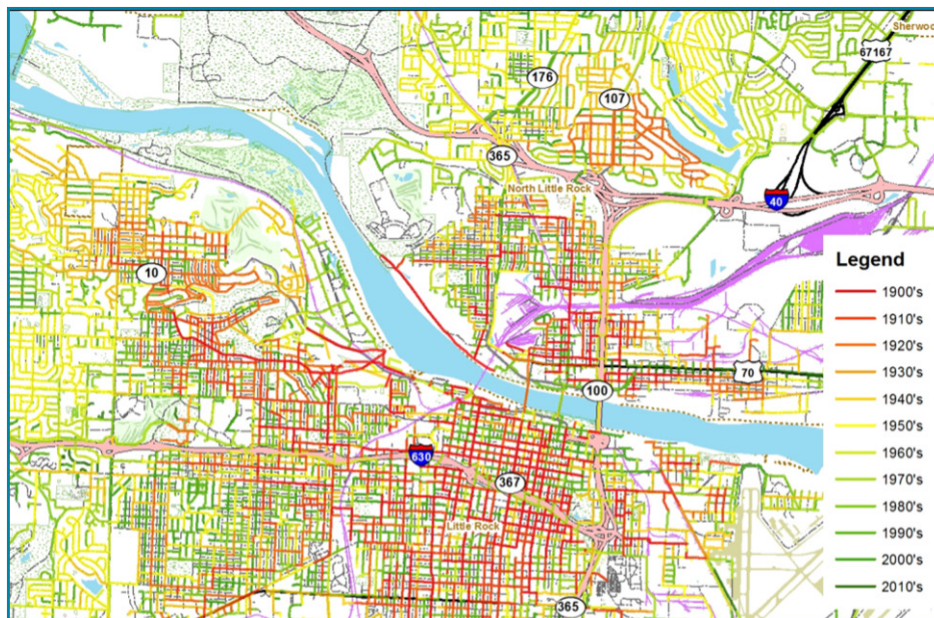


FIGURE 4 Heatmap of CAW's Aging Distribution System

	A	B	D	E	F	G	Z	AA	AB	AE	AF	AG
1	ObjectID	FacilityID	Material	Diameter	Main_Year	Feet	CriticalityScore	ConditionScore	TotalScore	WOCost	EstCostPerFToReplace	EstReplaceCost
2	15350	P0131342	STL	30	1984	70	23	24	47	\$3,618	\$530	\$36,889
3	53790	P0006537	STL	16	1942	379	11	28	39	\$18,140	\$260	\$98,653
4	53415	P0000051	GAP	2	1927	375	9	29	38	\$1,858	\$100	\$37,521
5	53412	P0000054	GAP	2	1927	350	9	29	38	\$1,427	\$100	\$35,045
6	53407	P0000059	GAP	2	1924	364	9	29	38	\$2,378	\$100	\$36,388
7	53408	P0000700	GAP	2	1958	323	9	29	38	\$3,912	\$100	\$37,344
8										\$0	\$330	\$45,592
9										\$827	\$330	\$9,864
10										\$1,337	\$100	\$19,121
11										\$3,601	\$220	\$137,829
12										\$2,402	\$260	\$129,652
13										\$0	\$530	\$5,347
14										\$0	\$530	\$35,917
15										\$0	\$220	\$187,734
16										\$826	\$280	\$177,577
17										\$163	\$280	\$221,983
18										\$1,664	\$180	\$116,371
19										\$1,353	\$280	\$2,513
20										\$0	\$180	\$94,136
21										\$3,062	\$220	\$250,683
22										\$1,243	\$100	\$42,963
23										\$0	\$330	\$27,776

ObjectID	FacilityID	Material	Diameter	Main_Year	Feet	Rating	Pressure	SoilCorrosivity	Wrapping	Age	StdLife	RemainLife	PrcntLifeUsed	LessLifeThanYearVariable	RatingUsefullLife	RatingWOCCondition	TotalBreaks	BreaksLast2Years	BreaksLast10Years	RatingBreaks	CriticalityScore	ConditionScore	TotalScore	WOCost	EstCostPerFToReplace	EstReplaceCost
23						23												47	24	17	23	24	47	\$3,618	\$530	\$36,889
11						11												39	28	22	11	28	39	\$18,140	\$260	\$98,653
22						22												39	17	22	22	17	39	\$1,176	\$600	\$1,853,093
9						9												38	29	9	9	29	38	\$1,858	\$100	\$37,521
9						9												38	29	9	9	29	38	\$1,427	\$100	\$35,045
9						9												38	29	9	9	29	38	\$2,378	\$100	\$36,388

FIGURE 6 Linear Asset Condition and Criticality Rating Matrix

and level of service is represented in the reduction of the main break rate to 15.7 breaks per 100 miles of pipe in 2020, approaching the Partnership for Safe Water Optimization Standard of 15.

This is greatly reduced from the recent high of 33.6 breaks per 100 miles of pipe in 2010. Unfortunately, breaks in 2021 saw an increase directly related to extreme winter weather, which directly added over 100 breaks to the year's total (Figure 8).

CAW has successfully increased replacements and with a renewed focus on linear asset replacement since 2015, has replaced over 44 miles of aged water mains. Proceeds from the green bonds have allowed CAW to increase its replacement funding by 35% in 2021 compared to 2020 (Figure 9).

Notably, CAW was able to replace a total of 13 miles of water mains in 2021.

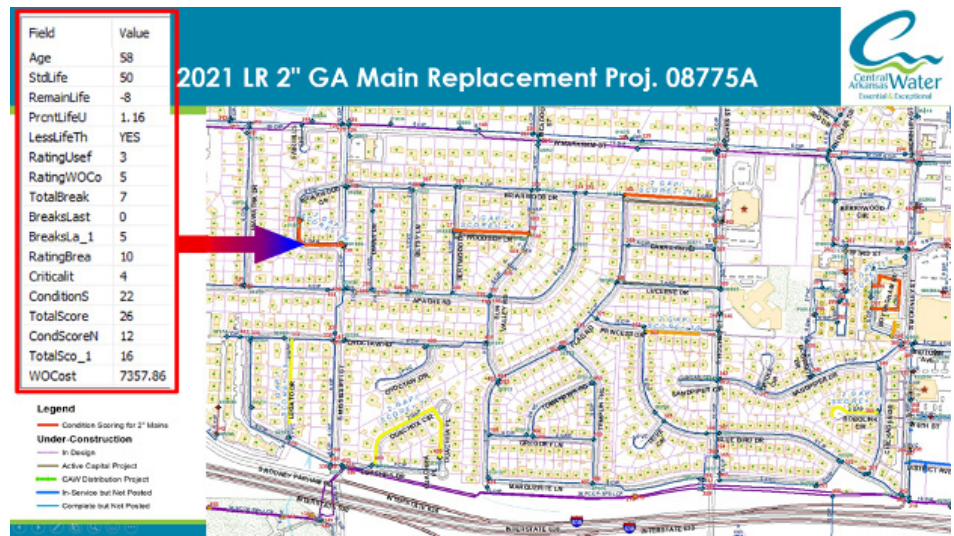


FIGURE 7 Water Main Scoring Data

In reviewing the asset management metrics, these water mains accounted for 119 breaks over the past 10 years. Based on the average leak rate per break, this investment saved roughly 16 million gallons per year of unaccounted water as well as over \$14,000 per year in Operations & Maintenance (O&M) costs

(Table 2). Furthermore, breaks can often impact the delivery of water to CAW's customers, and with the 2021 upgrades, approximately 200 customers per year will no longer experience outages on these sections of mains (see Table 2). In addition to water loss savings and reduced customer impacts, main

replacements also offer significant energy savings to the system. By replacing old pipes with rough interior surfaces, which are associated with higher friction factors, with newer pipes with smoother walls (lower friction factors), water is able to flow more efficiently through the system. While CAW has not quantified the exact energy savings, the renewed system reduces the amount of pumping force required to push water through the system.

Future green bond proceeds will continue to support main replacements, which will deliver additional water savings, reduced maintenance costs, and fewer disruptions to customers.

*B. Infrastructure Improvements for Redundancy*

In 2021, CAW spent \$1,017,206 of green bond proceeds to upgrade a pump station, which will increase energy efficiencies. Future infrastructure improvements for redundancy will include enhancements to CAW’s traditional infrastructure assets to ensure continuous flow of high-quality water throughout CAW’s service area. Projects in this category are designed to loop existing water mains in the distribution system to increase water quality and deliver a redundant supply of water to dead-end mains, new transmission water mains and pump stations to ensure adequate supply, as well as projects at

the intake and other critical structures at both Lake Maumelle and Lake Winona.

**II. Operational Optimization and Energy Efficiency**

In addition to continued investment in infrastructure improvements, future green bond proceeds are earmarked for operational optimization investments and energy efficiency upgrades including high-efficiency motors and pumps. Specifically, these proceeds are targeted for upgrades to Finished Water Pump Station No. 11 at Doyle Springs as well as Raw Water Pump Station No. 12 at Jackson Reservoir. Installation of electric vehicle charging stations will also be a part of these upgrades.

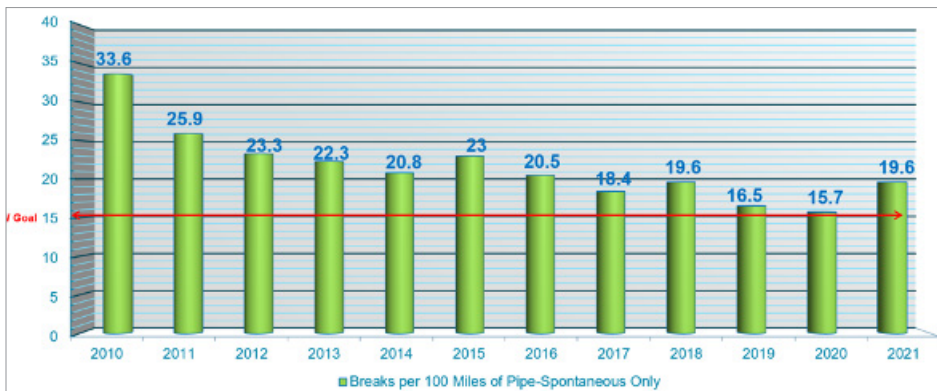


FIGURE 8 Water Main Break History

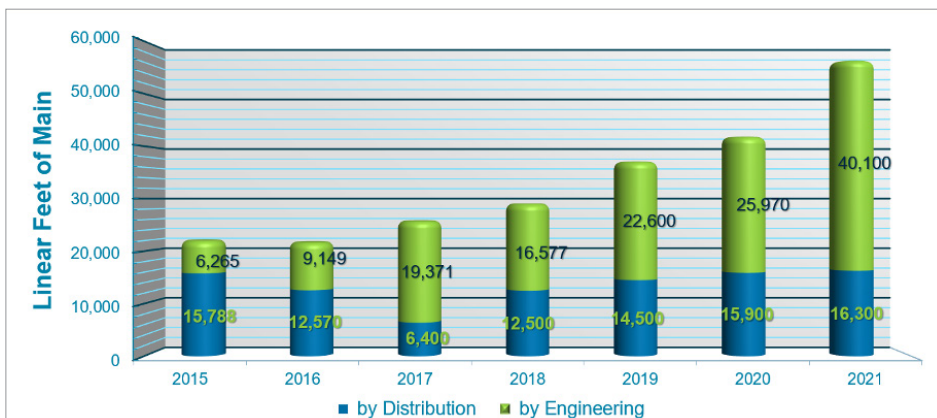


FIGURE 9 Pipeline Replacements from 2015-2021

<b>Miles Replaced</b>	<b>13</b>
<b>10 Year Break History</b>	19
<b>10 Year WO Costs</b>	<b>120,721</b>
<b>Gallon Water Savings per Year</b>	16,075,000
<b>Money Loss Water Savings per Year</b>	\$9,645
<b>O&amp;M Savings per Year</b>	\$14,395
<b>Outages per Year</b>	15
<b>Customers Impacted per Year</b>	201

TABLE 2 2021 Main Replacement Scorecard

## Green Infrastructure: Nature-Based Solutions

### I. Nature Serves as a Source Water Protection Strategy

Lake Maumelle and Lake Winona in Central Arkansas are blue gems boasting some of the nation's best drinking water. These lakes' forested headwaters originate in the United States Ouachita National Forest (ONF) and serve as the water source to 500,000 people in and around Little Rock. Rich forests of short-leaf pine, oak, and hickory are a critical feature to CAW's climate resilience strategy. However, due to significant development pressure, these forests are being sold and subdivided, threatening drinking water quality and quantity.

#### A. Watershed Protection Strategy through Land Acquisition and Conservation Easements

The 2007 Lake Maumelle Watershed Protection Plan recommended the purchase of 1,500 acres of undeveloped property to offset the impacts of legacy landowner development in the watershed. This birthed CAW's very active real estate program that engages with willing sellers to acquire parcels in the watershed or put into place conservation easements, restricting activities and development. To finance the target acreage identified in the Plan, ratepayers involved in development of the Plan, through the stakeholder process, championed a dedicated watershed protection fee.

This fee, proposed to be \$0.45 per meter per month at the start, was unanimously supported by the CAW

Board and their represented city officials. As part of CAW's adaptive management approach, a rate study determined the need for increasing the fee structure to accelerate land acquisitions. Today, the watershed protection fee has doubled to \$0.90 per meter per month, which accumulates approximately \$2.3 million annually to finance source water protection activities. It has propelled the success of the land acquisition program, which has purchased 5,265 acres since the Program's inception.

The 2020 green bond provided immediate capital (\$5.55 million in 2021) to purchase available properties, acquire conservation easements, and refinance a 2018 land acquisition. Historically low interest rates below the value of forest land appreciation, provide additional incentives for purchasing properties now at a better overall value to CAW ratepayers.

#### B. Active Management for CAW Forested and Non-Forested Lands

In 2021, CAW became the first and only water utility in the world to certify all utility-owned forests to the Sustainable Forestry Initiative (SFI) management standard — more than 12,500 acres. This third-party verification system ensures forest health and helps demonstrate to ratepayers CAW's commitment to practicing the highest level of sustainable management of the natural resources it manages around the source water reservoirs. CAW's management activities are intended to achieve the strongest outcomes for water quality, while also

delivering co-benefits to surrounding communities, including increased carbon storage, enhanced biodiversity, increased recreation access, and providing suitable habitats for wildlife.

The Program is active in managing and restoring the forested and non-forested lands owned by CAW. It deploys sustainable forestry management practices by integrating reforestation and forest health treatments through prescribed fire and ecological thinning that protect soil, water quality, and wildlife and plant habitats. It also enhances non-forested lands through native species restoration by replanting native wildflowers and grasses. These enhancements are critical for soil health and retention, thus also enhancing water quality across the watersheds, in addition to providing critical habitat for native bees, butterflies, other pollinators, and other wildlife (such as quail, turkeys, and other species).

#### C. Green Bond Financed Nature-Based Solutions

The green bond proceeds were utilized to finance three watershed protection initiatives: conservation easements, forest acquisitions, and refinancing a 2018 bond whose proceeds were used to buy forestlands in the watershed. With the green bond proceeds, CAW now possesses the capital to finance large-scale acquisitions, which helped secure an estimated 40% in cost savings through lower land acquisition prices — reducing the overall costs of watershed protection to ratepayers.



In 2021, the green bond proceeds were utilized for the following projects:

**CONSERVATION EASEMENTS**

CAW purchased a 74-acre conservation easement on a property jointly owned by local conservation partners – The Nature Conservancy and the Arkansas Department of Parks, Heritage, and Tourism. This property, the Rattlesnake Ridge Natural Area, is home to unique habitats that support a rare natural community of plants typically found in the western United States and is documented to have habitat supporting three species of conservation concern for the state of Arkansas, including Wright’s cliffbrake (a western desert fern), the western diamondback rattlesnake, and the southeastern bat. This rocky ridgeline serves as the watershed divide for the Lake Maumelle Watershed. By placing permanent protections on this ridgeline, CAW is protecting the future water quality of Lake Maumelle by maintaining forest cover near the Lake’s shoreline. In addition, the natural area also boasts a host of recreational uses on the property, including hiking, mountain biking, and climbing, offering important outdoor access to local communities. Public use and support for this natural area have surpassed expectations and led the conservation partners to seek similar protection and recreation strategies for adjacent and nearby properties.

**FOREST ACQUISITION**

In 2021, the green bond proceeds were used to acquire 316 forested acres in the watershed, which serve as connectors to properties already owned by the utility. These acquisitions were targeted to place permanent protections on one of Lake Maumelle’s key tributaries, Reece Creek, which in recent years has witnessed

significant development pressures. These purchases allow the utility to protect resources and streamline management by eliminating access issues and creating contiguous forested corridors. One of these properties had experienced a recent clearcut of non-native pine species, and CAW successfully reforested the area with native shortleaf pine.

**REFINANCING 2018 FOREST ACQUISITIONS**

CAW took advantage of the 2020 low interest rates to refinance a 2018 bond that was used to purchase 460 acres in the watershed. The acres were purchased in a single transaction adding significant footprint to protection efforts and creating contiguous corridors of large intact forest lands and smaller lake tributaries. The purchase of the larger tracts allows for better management access to several CAW properties.

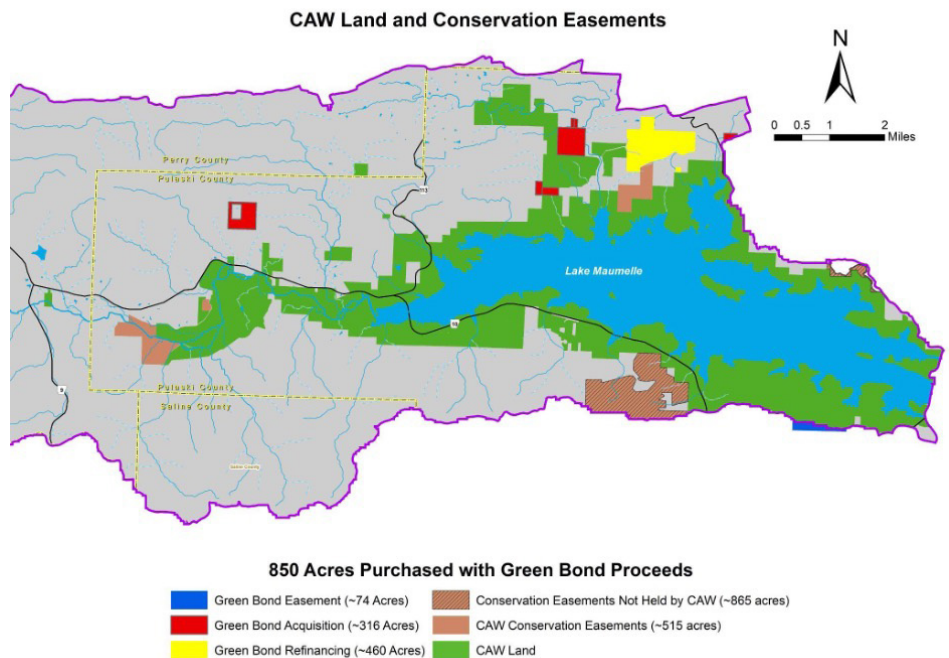
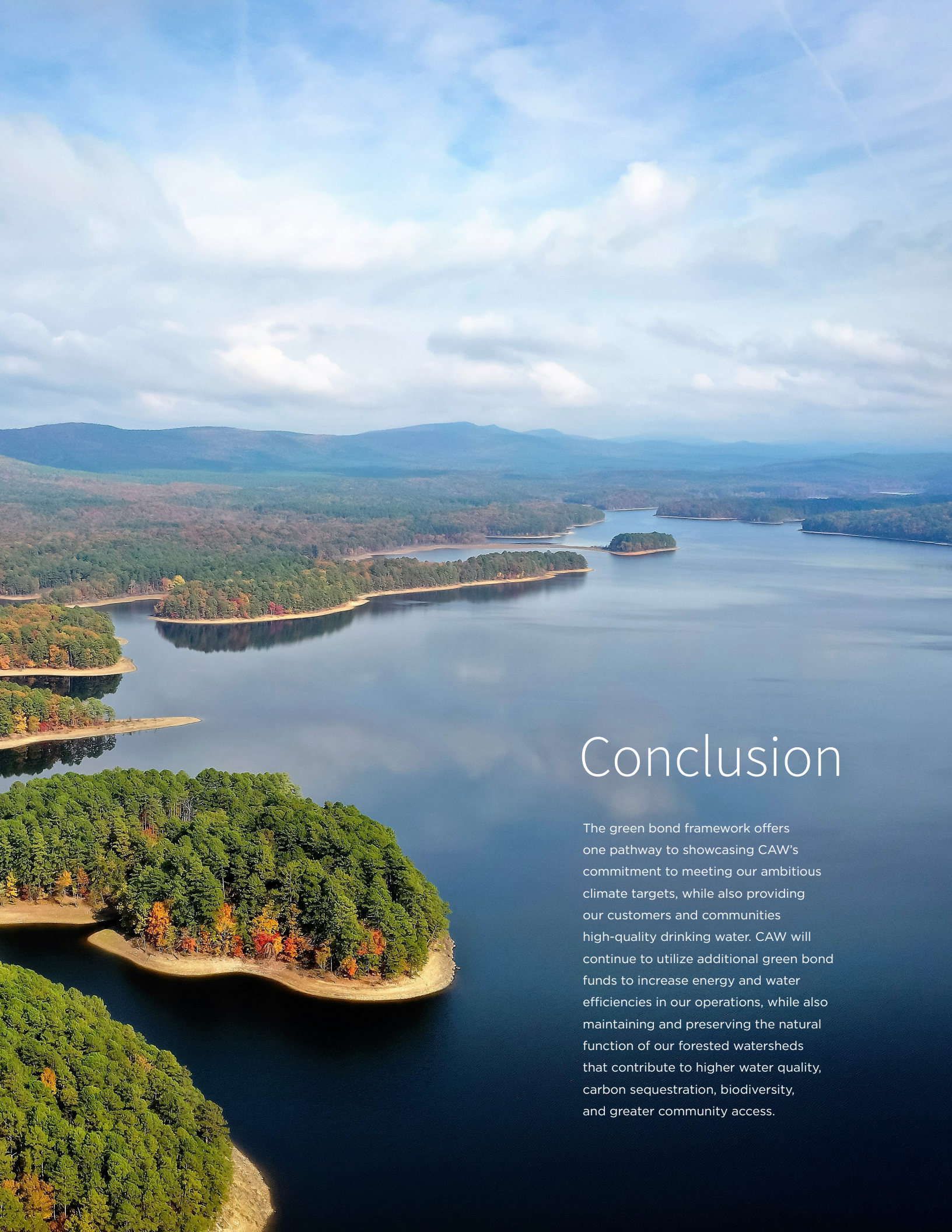


FIGURE 10 CAW managed lands and conservation easements



# Conclusion

The green bond framework offers one pathway to showcasing CAW's commitment to meeting our ambitious climate targets, while also providing our customers and communities high-quality drinking water. CAW will continue to utilize additional green bond funds to increase energy and water efficiencies in our operations, while also maintaining and preserving the natural function of our forested watersheds that contribute to higher water quality, carbon sequestration, biodiversity, and greater community access.



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