



Impact Evaluation & Analysis



12.2024



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OVERVIEW

Little Rock Water Reclamation Authority (LRWRA) is the municipal utility responsible for managing wastewater collection, treatment, and water reclamation services in Little Rock, Arkansas. Serving over **70,500 homes and businesses** and 1,400 miles of public sewers, LRWRA's vast infrastructure works to manage stormwater, reclaim wastewater, and minimize pollution.¹

LRWRA maintains three water reclamation facilities across the city of Little Rock:²

- Adams Field Water Reclamation Facility
- Fourche Creek Water Reclamation Facility
- Little Maumelle Water Reclamation Facility

The Authority's primary mission is to protect public health and the environment by treating wastewater to safe levels. After LRWRA treats wastewater in one of its three water reclamation facilities, the Authority (LRWRA) releases reclaimed water that is multiple times cleaner than the Arkansas River. LRWRA's reclaimed water quality consistently surpasses standards set by the Arkansas Division of Environmental Quality (ADEQ) and the Environmental Protection Agency (EPA). Through ensuring that wastewater is properly treated and cleaned, the Authority plays a key role in promoting sustainable water practices in the region. LRWRA engaged Boyette Strategic Advisors (Boyette) to complete this Impact Evaluation and Analysis to measure the direct impact of the utility's operating expenses, employment, and capital investment. Additionally, Boyette conducted thorough secondary research to explore the social and cultural impacts LRWRA's programs have throughout the community. The following report quantifies the effect of these direct economic activities made from 2014 through 2023.

BEYOND THE SURFACE: THE "UNSEEN" UTILITY

During the stakeholder engagement process, Boyette identified widespread community misconceptions about the Authority. The average Little Rock citizen is unaware of the extensive impact of LRWRA and its crucial role in protecting public health and a high quality of life for residents. One recurring sentiment named LRWRA the "unseen" utility, a testament to the Authority's behind-the-scenes work. In addition to defining LRWRA's quantitative economic impact, this report aims to illustrate its extensive qualitative impact through reviewing the Authority's services and community outreach programs, as well as sources of impact addressed through the stakeholder input process.

"It's a silent industry, but LRWRA is visible, vocal, and engaging with the public."

- Stakeholder

To demonstrate LRWRA's deep roots in Little Rock, the following timeline demonstrates the progression of LRWRA since its inception as the Little Rock Sanitary Sewer Committee in 1935 and highlights some of the Authority's milestone moments.³





1935

Little Rock Sanitary Sewer Committee established

1961

Adams Field Treatment Plant - the city's first water reclamation facility - opens in Little Rock



1972

Secondary (biological) treatment methods introduced to improve cleaning process because of the passage of the federal Clean Water Act



1977

Congress amends Clean Water Act, requiring EPA to establish pretreatment standards for wastewater utilities



1982

Little Rock is one of only four cities in EPA Region 6 to receive approval for industrial pretreatment program



1983

Fourche Creek Treatment Plant begins operation, uses methane to generate electricity



1987

Little Maumelle Pump Station built as a temporary solution to treatment needs in the area for West Little Rock

1991 & 1992

Utility wins the Gold Award of the Association of Metropolitan Sewerage Agencies for its no-violation performance

2000

Sierra Club files lawsuit against utility due to sanitary sewer overflows (SSOs). Utility enters settlement with Sierra Club.

2006

Utility enters consent administrative order (CAO) with Arkansas DEQ due to SSOs

2011

Little Maumelle Treatment Plant opens

2013

Sewer Service Line Replacement Program (SSLRP) established to reduce inflow and infiltration. Reimburses residents for line replacements

2016

Little Rock Wastewater rebrands to Little Rock Water Reclamation Authority.

2024

Arkansas DEQ and the Sierra Club determine that LRWRA has fulfilled requirements of the CAO and Sierra Club Settlement



COMPREHENSIVE ROLE IN THE LOCAL ECONOMY

Through quantitative analysis, secondary research, and conversations with stakeholders, Boyette identified six key concepts to explore the impact of reclaimed water on a community. As a population grows, so does the need for wastewater treatment, highlighting LRWRA’s role in creating a key foundation for economic growth. With this rising need, a chain of economic development activity ensues. The six umbrellas of Infrastructure Development; Job Creation; Local Employment Generation; Technical Skills Transfer; Green Workforce Expansion; and Community Connections are characteristic of LRWRA’s integral role in economic development.

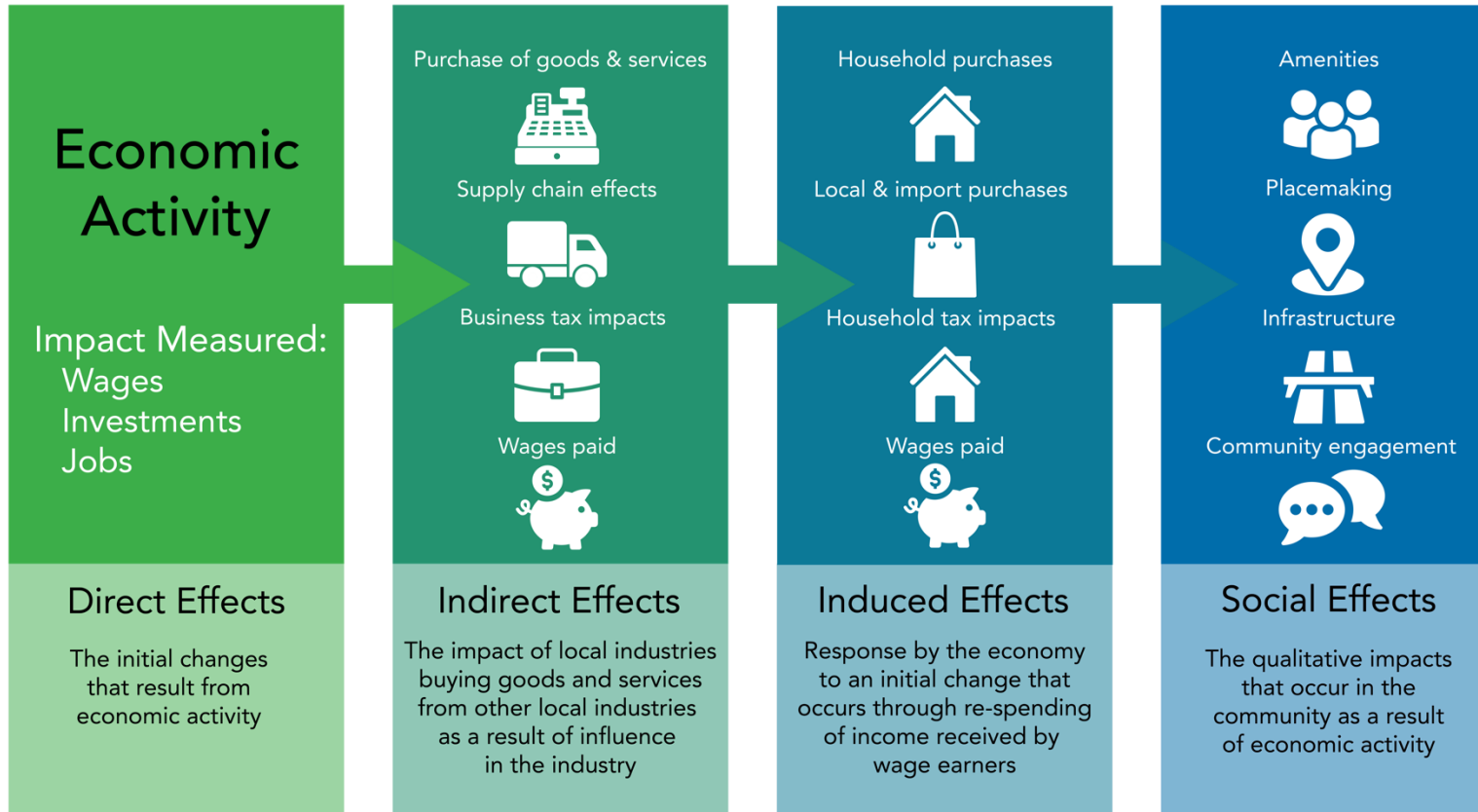
These interconnected concepts capture the multifaceted role of LRWRA in driving economic and environmental progress. **Infrastructure Development** produces robust water reclamation systems, which in turn stimulates **Local Employment Generation** and **Job Creation** to manage the systems, in addition to providing a strong water reclamation utility to serve commercial customers that create economic opportunities for the community. **Technical Skills Transfer** and **Green Workforce Expansion** equip workers with technical skills to support and expand sustainable practices, thus ensuring long-term benefits for the workforce and the environment. **Community Connections** is evident in the Authority’s extensive community engagement efforts, which are integral to LRWRA’s overall mission of protecting public health and the environment.





METHODOLOGY

The Impact Evaluation and Analysis report examines, using both quantitative and qualitative measures, the true impact of LRWRA and its programs, as well as its employment and operating expenses. The quantitative economic impact was modeled using the IMPLAN input-output model.





DATA PARAMETERS

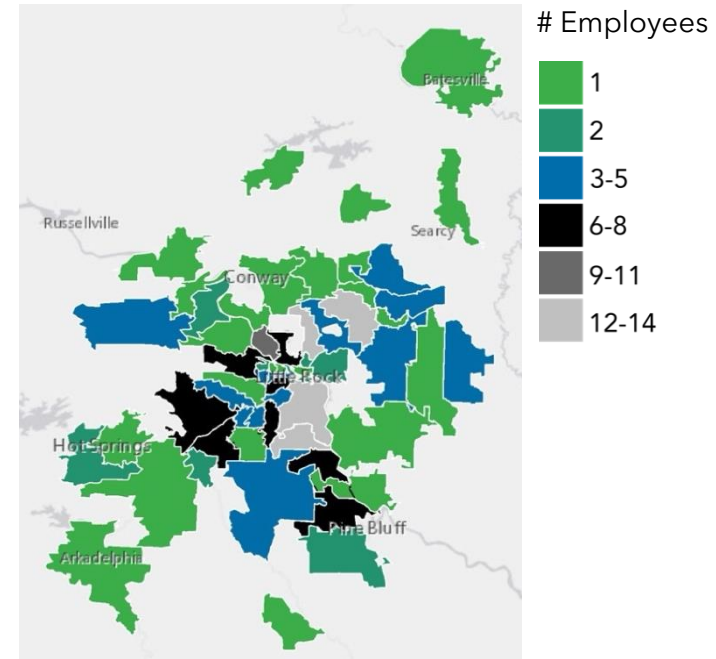
In response to an information request issued by Boyette, LRWRA provided data related to its programs, services, and expenditures. Boyette reviewed, analyzed, and summarized the given information alongside other secondary research, stakeholder interviews, and data collection. These processes yielded numerical outputs combined with qualitative stories that characterize LRWRA’s social impact.

The map at top right visualizes the geographic distribution of LRWRA employee residences, spanning 61 unique ZIP codes. Many LRWRA employees commute into Little Rock to work at the utility, which results in their spending a portion of their income with Little Rock businesses, in turn enhancing LRWRA’s overall economic impact.

LRWRA employees have residences in the 16 Arkansas counties listed below. While the majority - 113 - of the utility’s employees live in Pulaski County, the remaining 99 employees reside in another of the following counties.

- Pulaski County (113)
- Lonoke County (27)
- Saline County (17)
- Jefferson County (12)
- Perry County (12)
- Faulkner County (8)
- White County (5)
- Grant County (4)
- Garland County (3)
- Prairie County (3)
- Cleveland County (2)
- Conway County (2)
- Clark County (1)
- Cleburne County (1)
- Hot Spring County (1)
- Independence County (1)

The county map at right illustrates the unique region developed for this impact assessment. It includes the six counties shown in green on the map. that includes Jefferson County and excludes Grant County, which is based on the home counties of Authority employees.





QUANTITATIVE ECONOMIC IMPACT RESULTS

SUMMARY

LRWRA generated a total economic impact of nearly **\$2.6 billion from 2014 - 2023** in a six-county region of Central Arkansas.

This included an increase in the Gross Regional Product of nearly **\$1.3 billion**, with more than **\$711 million** in labor income in the region. These results include a state and local **tax impact of \$167 million**. Additional detail is found in the graphic and tables below.

2014 - 2023 Impact Overview	
Central Arkansas	
Total Impact (Includes LRWRA Employment & Operating Expenses & Capital Investment)	\$2,548,226,004
Contribution to Central Arkansas Economy	\$1,279,563,544
Total Labor Income	\$711,474,008
Total State & Local Taxes	\$167,174,467



\$2.55 Billion
TOTAL IMPACT 2014-2023



\$362 Million
CAPITAL INVESTMENT



\$500 Million
INFRASTRUCTURE
INVESTMENT TO MITIGATE
OVERFLOWS 2004-2024



\$167.2 Million
STATE & LOCAL
TAX IMPACT



94
CHARITABLE EVENTS
ORGANIZED BY LRWRA
EMPLOYEES



OPERATING EXPENSES

Costs associated with community programs; facility operation and maintenance; equipment purchases; and other miscellaneous costs associated with LRWRA’s programs are included in operating expenses. The Authority’s annual operating expenses have a total impact of **\$55 million**, which includes an increase in the state Gross Regional Product of **\$25 million** for the years 2014 through 2023.

Operating Expenses Impact Central Arkansas 2014 - 2023

	ANNUAL JOBS	LABOR INCOME	CONTRIBUTION TO REGIONAL GRP	STATE & LOCAL TAX REVENUE	TOTAL IMPACT
DIRECT	135	\$9,241,234	\$11,695,651	\$531,207	\$29,796,780
INDIRECT	71	\$4,174,066	\$7,744,950	\$953,708	\$15,060,052
INDUCED	58	\$2,996,851	\$5,781,632	\$605,886	\$10,217,905
TOTAL	264	\$16,412,151	\$25,222,233	\$2,090,801	\$55,074,737



EMPLOYMENT

LRWRA had 215 full-time employees in 2014, which increased slightly over the ten-year analysis period to 221 in 2023. Total payroll was approximately \$10.7 million in 2014 and \$14.0 million in 2023. The total impact of 2014 - 2023 employment is nearly **\$1.8 billion** in the region. This includes a total labor income of almost **\$432 million**, which covers direct employment and additional positions that are associated with supply chain and consumer spending.

Employment Impact Central Arkansas 2014 - 2023 (annual employment)

	ANNUAL JOBS	LABOR INCOME	CONTRIBUTION TO REGIONAL GRP	STATE & LOCAL TAX REVENUE	TOTAL IMPACT
DIRECT	223	\$193,262,191	\$482,935,333	\$101,491,918	\$969,051,783
INDIRECT	264	\$159,048,155	\$265,500,928	\$20,507,083	\$519,530,962
INDUCED	161	\$79,252,815	\$152,957,498	\$16,052,322	\$270,356,622
TOTAL	648	\$431,563,160	\$901,393,758	\$138,051,322	\$1,758,939,368



CAPITAL INVESTMENT

Maintenance and expansion of the Authority’s infrastructure includes capital investment made by LRWRA. The total capital investment over the ten-year analysis period is more than \$362 million. Those expenditures result in a total impact of **\$734 million**, which includes an increase in the state Gross Regional Product of **\$353 million** for the years 2014 through 2023.

Capital Investment Impact Central Arkansas 2014 - 2023

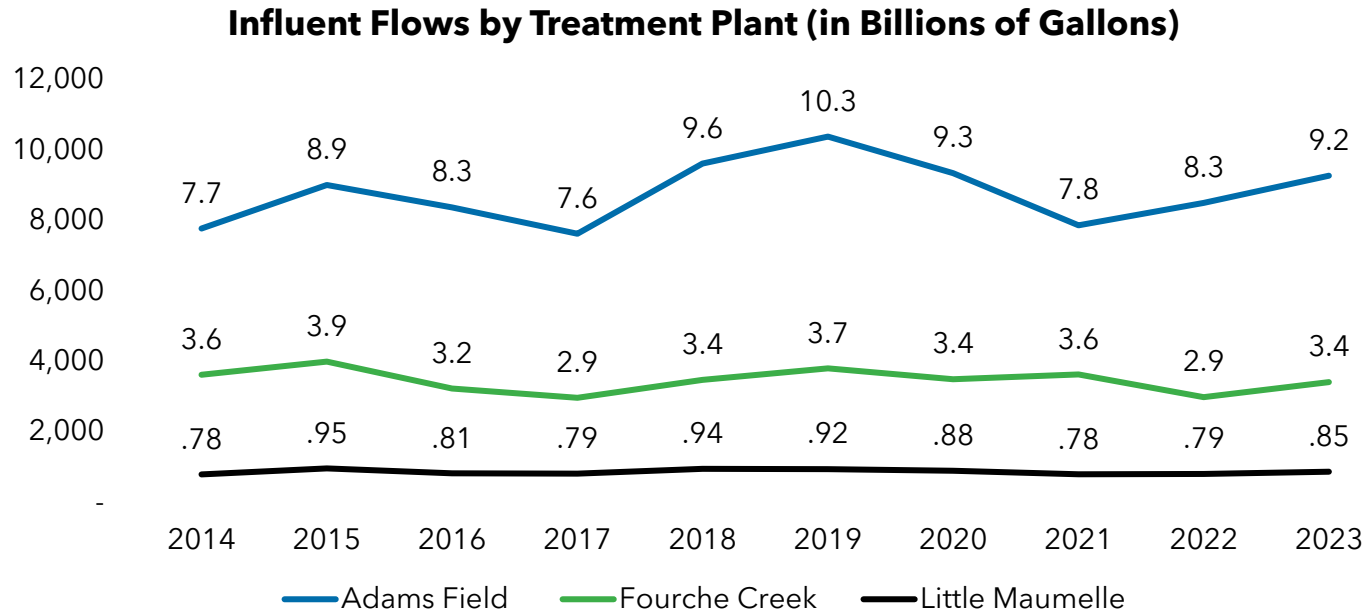
	JOB	LABOR INCOME	CONTRIBUTION TO REGIONAL GRP	STATE & LOCAL TAX REVENUE	TOTAL IMPACT
DIRECT	2,911	\$165,926,240	\$168,037,785	\$6,390,241	\$392,071,611
INDIRECT	761	\$48,938,563	\$91,090,100	\$10,812,808	\$176,336,118
INDUCED	947	\$48,633,895	\$93,819,667	\$9,829,295	\$165,804,170
TOTAL	4,620	\$263,498,697	\$352,947,553	\$27,032,344	\$734,211,899



INDUSTRY OVERVIEW

WATER RECLAMATION

LRWRA’s three water reclamation facilities process billions of gallons of influent flows annually. Influent flows refer to the untreated water entering a treatment facility, which may experience annual peaks and valleys due to fluctuations in wet weather. The graph below visualizes the annual volume of influent flow processed by LRWRA’s treatment facility from 2014 to 2023. Over the ten-year period, the Adams Field, Fourche Creek, and Little Maumelle facilities collected, treated and released a grand total of **130.7 billion gallons** of influent flows.



Source: LRWRA

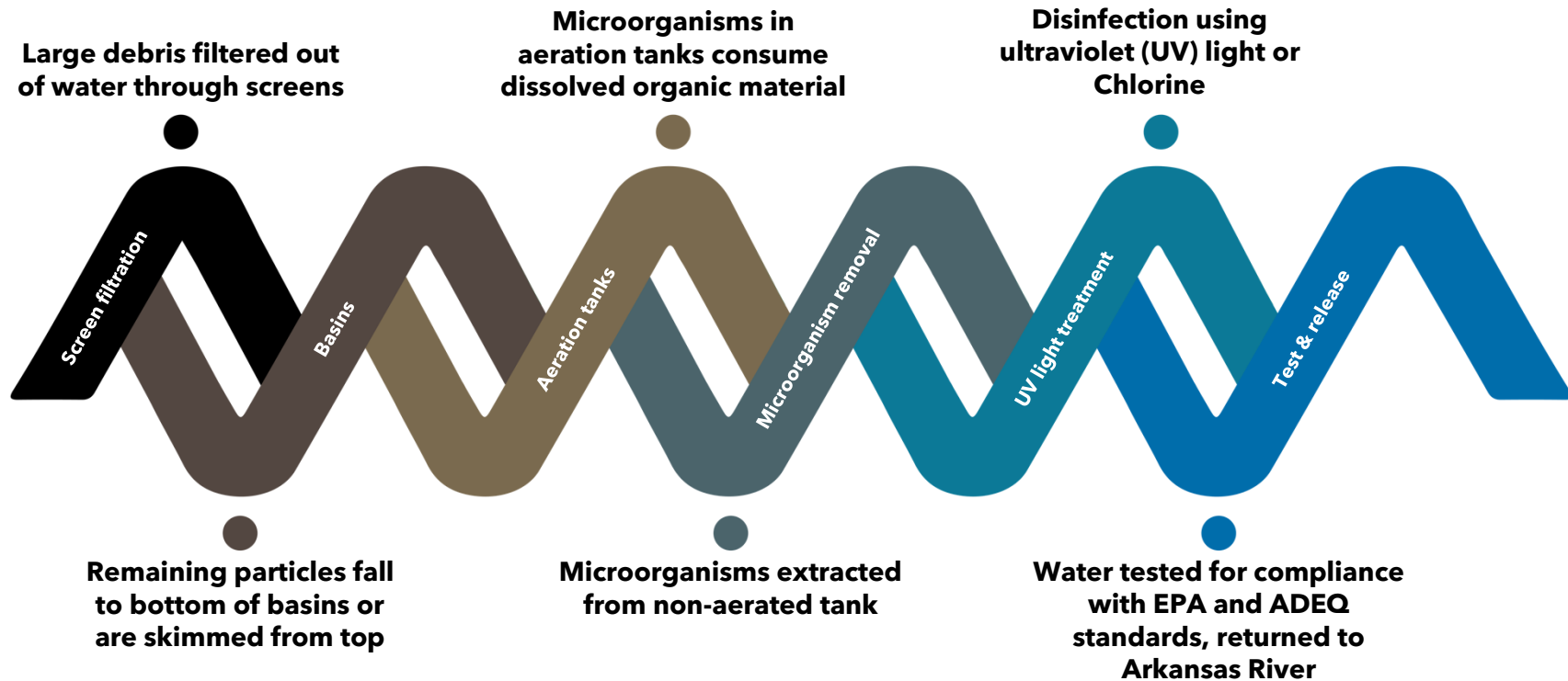




Part of LRWRA’s mission is its commitment to "One Water. One Future." This objective is founded on the idea that all residents use and reuse the same water. As one LRWRA stakeholder explained, "We have a self-sustaining facility and resources. There is only one water, and there will always be one water. Reduce, Reuse, Recycle is real."

To protect public health and prioritize sustainable water usage, LRWRA employs extensive filtration, organic and nutrient removal or reduction, and disinfection processes. Such processes ensure that the utility’s reclaimed water is multiple times cleaner than the water found in the Arkansas River, where it is discharged after treatment.

The graphic below details the six major steps of water treatment that enable LRWRA to release reclaimed water back into the natural environment.⁴





SUSTAINABILITY IN SOLIDS

LRWRA’s commitment to sustainability is apparent not only in its reclamation of water to the Arkansas River, but also in its reuse of biosolids extracted during the treatment process. The Authority breaks down all solids across eight anaerobic digestors, which produces renewable energy in the form of methane gas to heat and power the Fourche Creek water reclamation facility. Furthermore, these biosolids are land applied as fertilizer. More than 400 acres of agricultural land in Central Arkansas are permitted for such land application. According to one LRWRA stakeholder, farmers more than double their standard amount of production by using the biosolids that LRWRA provides free-of-charge. In the table below, data shows that LRWRA has land applied more than **161.5 million gallons of biosolids** during this report’s ten-year period.

Biosolids Production and Usage by Year							
Year	Biosolid Gallons Applied	Biosolid Dry Tons Applied	Avg. Percent Solids	Biogas Production MCF ¹	Biogas Utilized MCF	Percentage Flared ²	Biogas Utilized in SCFD ³
2014	16,692,000	5,962.47	8.57%	120,450	94,106	21.87%	257.82
2015	14,298,000	4,862.56	8.16%	120,450	94,796	21.30%	259.72
2016	14,418,000	5,492.46	9.14%	120,450	83,917	30.33%	229.91
2017	15,780,300	4,913.47	7.47%	120,450	117,954	2.07%	323.16
2018	14,736,000	4,295.38	6.99%	120,450	91,218	24.27%	249.91
2019	20,322,000	5,765.97	6.80%	120,450	100,780	16.33%	276.11
2020	17,028,000	5,911.19	8.32%	120,450	51,786	57.01%	141.88
2021	13,783,456	4,788.49	8.33%	120,450	42,066	65.08%	115.25
2022	17,343,000	5,301.74	7.33%	100,375	16,476	83.59%	45.14
2023	17,148,000	5,620.99	7.86%	90,337	6,526	92.78%	17.88
Total	161,548,756	52,914.72		1,154,312	699,625		1,916.78

Source: LRWRA

¹MCF = Methane Correction Factor

²Percentage Flared = Percentage of gas converted to renewable energy

³SCFD = Standard Cubic Feet per Day





REGULATION COMPLIANCE & SYSTEM MAINTENANCE

Project RENEW™

As indicated by the timeline, LRWRA has worked diligently over the past two decades to combat infrastructure challenges which prompted the Sierra Club to sue the utility in 2000. That lawsuit, which was followed by a Consent Administrative Order (CAO) in 2006 between LRWRA and State of Arkansas Department of Environmental Quality (ADEQ), was the result of sanitary sewer overflows (SSOs) between 1994 and 2000.⁵

Upon entering the CAO with the State, LRWRA agreed to “set schedules of compliance for facilities permitted under the Act necessary to assure compliance with both applicable state and federal effluent limitations,” which included addressing the SSOs and providing status updates to responding parties.⁶ Project RENEW was LRWRA’s multi-year, citywide capital improvement initiative to renew Little Rock’s aging sewer infrastructure. In total, LRWRA’s work over two decades resulted in an investment of **\$500 million** to eliminate 339 SSOs across the city.



“Our utility focus and charge as an organization is to continue to meet our permit requirements. Doing so ensures that we are being environmentally sound.”

- **Jean Block**
CEO





Project RENEW Investment Data by Year	
Year	Investment
2014	\$34,175,930
2015	\$36,820,708
2016	\$22,123,171
2017	\$23,365,822
2018	\$23,965,076
2019	\$89,470,348
2020	\$39,092,782
2021	\$25,348,294
2022	\$32,425,399
2023	\$30,750,081
Total	\$357,537,611

Developer Funded Investment in Infrastructure by Year	
Year	Investment
2014	\$1,712,815
2015	\$1,580,199
2016	\$1,402,550
2017	\$1,188,412
2018	\$2,422,545
2019	\$2,180,022
2020	\$1,807,645
2021	\$2,672,287
2022	\$1,981,012
2023	\$1,492,894
Total	\$18,440,381

Since the original lawsuit in 2000, and the subsequent Consent Administrative Order with ADEQ, the utility has taken several steps to mitigate overflow pollution across its service territory.

In March 2024, after two decades of work and significant capital expenditures, LRWRA was successfully discharged from the CAO and Sierra Club Settlement Agreement.

The Authority’s extensive cleanup projects show its consistent devotion to a sustainable mission. This mission is further exemplified by LRWRA’s elimination of overflows at Fourche Creek. Friends of Fourche Creek, an Audubon Delta coalition that encourages sustainable practices for wildlife/nature conservation, has been an important partner in reaching cleanliness standards and promoting Arkansas’s natural beauty.⁷ The creek, with the majority of its 24 miles within Little Rock city limits, is the largest urban wetland in the South.⁸ According to LRWRA stakeholder and Friends of Fourche Creek representative Norm Berner, Fourche Creek was teeming with storm sewer contents prior to LRWRA’s intervention.⁹





LRWRA's work through Project Renew to address public health concerns, improved Fourche Creek's infrastructure so that people can enjoy its vast outdoor recreation opportunities. Now, Fourche Creek Preserve and Water Trail is a place where Little Rock residents and visitors can canoe and kayak past ancient cypress trees, fish, hike, watch wildlife, geocache, learn about nature, and escape urban life, all within the heart of the city."¹⁰



Fourche Creek Urban Wetlands

Acoustic Inspection¹¹

Innovative technologies and strategies enable LRWRA to maintain and clean its sewer system with greater efficiency and at lower costs. The acoustic inspection technology, which uses sound to quickly assess the condition of sewer pipes, is the annual preventative program driving many maintenance tasks such as cleaning and repairs. Through these annual assessments, LRWRA inspection crews can identify and help proactively address factors such as blockages and broken lines before these turn into more serious environmental issues. Leveraging technologies such as acoustic inspection enables the utility to take better care of its systems and infrastructure, ultimately achieving more with the same number of employees.





ECONOMIC DEVELOPMENT

Participating in the site selection process for **34 unique projects** over the ten-year analysis period, LRWRA maintains capacity for new residential and commercial customers to establish in Little Rock.

LRWRA’s three water reclamation facilities maintain an overall peak **hydraulic capacity of 156 million gallons** per day (MGD) and a storage of 74 million gallons (MG). See below a capacity breakdown across facilities.¹²

- Adams Field Water Reclamation Facility 94MGD + 13MG Storage
- Fourche Creek Water Reclamation Facility 48MGD
- Little Maumelle Water Reclamation Facility 14MGD
- Peak Flow Attenuation Basins 61 MG Storage

A high-level snapshot of new residential and commercial customers, which total more than **4,900 over the ten-year analysis period**, is detailed in the following chart.

“Water reclamation is critical to our success. LRWRA is an equal partner at the table when we have a prospect. They help manage our growth, promote our growth, and are a vital element of what we are doing at the Port.... [The utility] is a crucial part of the city’s current growth, future growth, and economic development.”

- **Bryan Day**
Executive Director, Port of Little Rock

Number of Customers Resulting from Developer Investment by Year		
Year	New Residential	New Commercial
2014	353	77
2015	354	96
2016	341	63
2017	492	84
2018	366	96
2019	434	62
2020	442	45
2021	546	69
2022	430	50
2023	479	41
Total	4,237	683





Both residential and commercial entities generate wastewater, contributing to the influent flows that enter LRWRA treatment facilities for reclamation. During 2023, LRWRA customers produced a total balance of nearly **\$63 million**.

LRWRA also supports commercial development and job creation through a variety of programs, including the Industrial Pretreatment Program and the Opportunity Zones Incentive Program, both of which are described below.

Industrial Pretreatment Program¹³

EPA’s National Pretreatment Program (40 CFR 403) requires Publicly Owned Treatment Works (POTWs) with a design flow greater than five (5) MGD and receiving discharge from industrial users to establish a Pretreatment Program. The Pretreatment Program’s purpose is to prevent the introduction of pollutants that have the potential to cause pass through or interference at the POTW. In Arkansas, POTWs are responsible for issuing industrial discharge permits to their industrial users. These permits enforce pretreatment standards which include general and specific prohibitions, categorical pretreatment standards, and local limits. LRWRA has the authority to enforce these standards through the City of Little Rock’s Pretreatment Ordinance No. 21,776. LRWRA currently has thirty-four (34) active industrial discharge permits.

City Revitalization & The Opportunity Zones Incentive Program¹⁴

In September of 2020, LRWRA joined Little Rock Mayor Frank Scott, Jr. in the City’s Asher Avenue revitalization plan. The plan targeted property along Asher Avenue, from Woodrow St. to University Ave, rehabilitating Wards 1, 2, 6, and 7 for commercial development and waiving development fees to lessen the financial burden on the area. Mayor Scott’s engagement of LRWRA, alongside other institutions and

“The Little Rock Water Reclamation Authority team is responsive, professional, and business friendly, which helps elevate our competitive position when working with companies considering a Little Rock location.”

- **Jay Chesshir**
President & CEO,
Little Rock Regional Chamber

“To spur more economic development, we asked all our independent agencies with permanent authority to say [to prospects] - ‘if you do business here, we will waive your building permits and significantly reduce your connection fees to the sewer.’ This could mean hundreds of thousands of dollars. 52 percent of business development in Little Rock is now happening in those [Opportunity Zone] areas. It is increasing development for lower-income areas of our city.

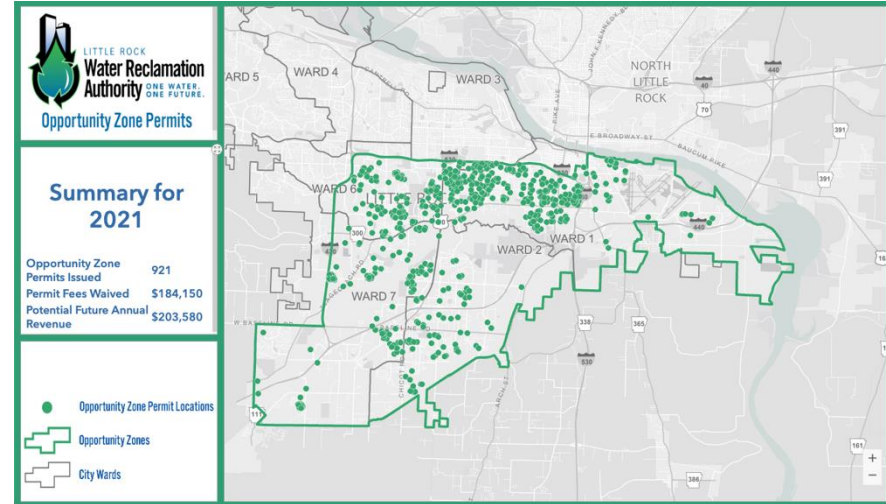
- **Frank Scott, Jr.**
Mayor, City of Little Rock





business owners, has been important to the plan’s execution, as water reclamation infrastructure is essential to the revitalization process.¹⁵

In January 2021, the utility implemented the Opportunity Zones Incentive Program to encourage and incentivize infill and redevelopment in areas with underutilized infrastructure. These affected areas include the four federally designated Opportunity Zones within the City of Little Rock and the city’s southern parts. LRWRA has suspended all Connection Fees, Inspection Fees, and Building Sewer Seal Fees in Opportunity Zones for all developments, both residential and commercial. Since January 2021 and December 2023, LRWRA sold **5,447** permits, **1,875** of which were Opportunity Zone permits. This has yielded a waived Opportunity Zone fee total of **\$233,335** over the three years. See the map at right for a visualization of the program’s 2021 impact on Little Rock’s Opportunity Zones.





PROGRAMS & SERVICES

RESIDENTIAL SERVICES

LRWRA’s mission statement - “to serve our community by protecting public health and the environment while leading the industry by reclaiming water for a more sustainable tomorrow” - is evident in its engagement of Little Rock residents as partners in protecting the shared sewer system.¹⁶ The Authority offers a variety of free programs and services to support its customers in these efforts.

Cap the Cleanout¹⁷

Cleanout pipes, which are vertical pipes that connect to a residence’s underground sewer line, are crucial to protecting a home’s sewer system. To encourage residents to maintain their personal service lines, LRWRA Cap the Cleanout initiative offers cleanout pipe caps and installations to residents free of charge.¹⁸



Can the Grease¹⁹

Can the Grease, another of LRWRA’s free residential services, empowers customers to have an active role in protecting our shared sewer system by properly disposing of grease and oils. The Can the Grease program, since its establishment in 2002, has correlated with drastic decreases in dry weather overflows. LRWRA employees distribute Can the Grease cans, heat-resistant liners, and instructional materials to customers at events and in public spaces to promote residents’ sustainable disposal of grease and oils, to maintain the program’s environmental progress, and to prevent clogged pipes.



Sewer Service Line Replacement Program (SSLRP)²⁰

Launched in January of 2013, LRWRA’s Sewer Service Line Replacement Program (SSLRP) was created to assist Little Rock homeowners with the financial burden of replacing their defective sewer service lines. Through the SSLRP, customers can receive up to **\$2,500 in reimbursement** for complete sewer line replacements. Beyond providing direct cost relief, the program adds value to properties, safeguards the overall system, and minimizes the risk

Can the Grease Kits Distributed by Year	
Year	Number Free Kits
2013	2,519
2014	4,800
2015	2,130
2016	2,340
2017	2,845
2018	2,725
2019	3,000
2020	3,700
2021	2,700
2022	2,474
2023	2,640
Total	31,873

Source: LRWRA





of wastewater backups in homes. The SSLRP is part of a broader initiative to reduce inflow and infiltration, which helps lower the costs of sewer collection and treatment, ultimately benefiting customers by reducing their monthly bills. From 2013 to 2023, LRWRA has reimbursed over **\$9 million** to homeowners for service line replacements and eliminated an estimated 224.5 million gallons of inflow and infiltration through the program.

SSLRP Contributions by Year		
Year	Applications Reimbursed	Money Reimbursed to Homeowner
2013	449	\$1,105,450
2014	236	\$587,146
2015	299	\$742,468
2016	396	\$986,561
2017	386	\$962,160
2018	423	\$1,059,366
2019	374	\$933,422
2020	345	\$851,962
2021	346	\$864,905
2022	282	\$695,621
2023	230	\$574,785
Total	3,766	\$9,363,846

Source: LRWRA





EDUCATIONAL PROGRAMS

The Learning Center²¹

Parents and teachers who, according to LRWRA, are “the keys to developing informed ratepayers” for the future, may utilize the educational materials found at LRWRA’s Learning Center to help children learn about the water cycle, water conservation and reclamation, and careers in water industries. JoJo the Water Hero, seen at right, is The Learning Center’s mascot. JoJo guides youth of all ages - from elementary to high school - to informative resources. LRWRA has prepared lesson plans to engage students inside and outside the classroom. Materials include coloring and activity pages, videos, science fair project ideas, hands-on activities, and more.



Don’t Flush That²²

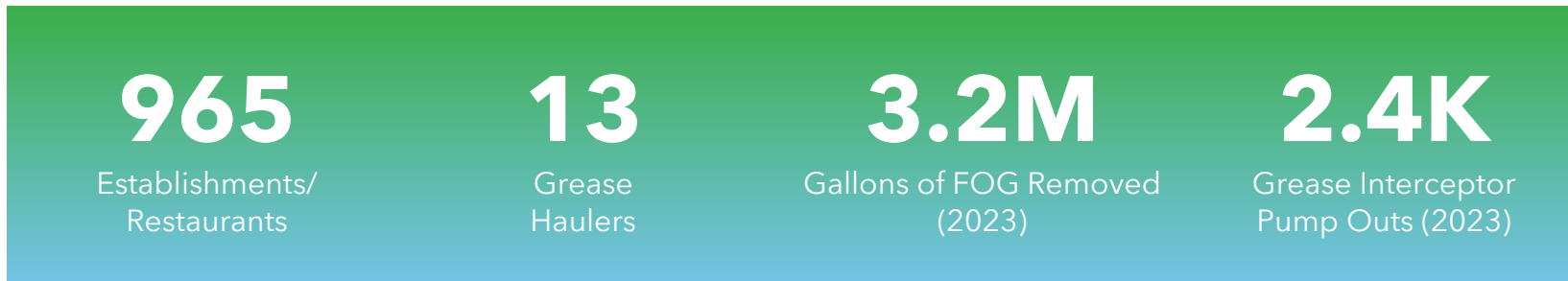
The “Don’t Flush That” educational program warns residents against the flushing of items - other than the 3 P’s down the toilet - pee, poop, and paper (toilet paper). When the campaign launched, LRWRA partnered with 18 Kroger stores to place signage on end caps and aisles throughout the stores. Also, through LRWRA’s website and at community event popups, the “Don’t Flush That” initiative provides resources about wastewater treatment and water use so that community members are aware of proper disposal of non-flushable items into the trash. This LRWRA initiative is particularly prevalent in the utility’s children’s education efforts.





FOG Program²³

The Fats, Oils, & Grease (FOG) Program is LRWRA’s educational initiative around the proper commercial and residential disposal of fats, oils, and grease. By ensuring that restaurants’ grease interceptors are regularly pumped and properly maintained, the FOG program reduces the incidence of sewer blockages and overflows. This can lower the costs for LRWRA and for other local agencies and businesses associated with cleaning and repairing infrastructure. The minimization of harmful FOG disposal practices also supports jobs, promotes regulatory compliance, and improves overall business efficiency. Thanks to strong relationships and cooperation between LRWRA and local restaurants, the FOG initiative creates a cleaner and safer community. The graphic below demonstrates the program’s impact on Little Rock establishments as of 2023.





COMMUNITY INVOLVEMENT

COLLABORATION & EMPOWERMENT

A utility with careers spanning a wide range of expertise, the LRWRA consists of seven divisions:

- Administration Division
- Collection System Maintenance Division
- Engineering Division
- Environmental Affairs Division
- Facilities Asset Management Division
- Finance Division
- Operations Division²⁴

“People don’t think about the sewer utility. But without us and the work that we are doing, we would have sewer running through the streets.”

– **Jean Block**
CEO

During Boyette’s stakeholder engagement process, respondents’ emphasis on teamwork emerged as an overarching theme. LRWRA’s internal recognitions and awards are a testament to the value the utility places on excellence and teamwork. These include the Going the Extra Mile (GEM) Awards, which recognize LRWRA team members for outstanding performance, and Women of Water & Allies (WOWA) honoring the utility’s women leaders. Recipients of these two awards can be found in the Appendix to this document.

OUTREACH & VOLUNTEER EFFORTS

“Community Champions” is LRWRA’s volunteer initiative, which provides employees with meaningful volunteer opportunities throughout the year. In an effort to pull the utility out of the shadows, the program increases the utility’s visibility and fosters cross-sector relationships. As supported by stakeholder engagement findings, LRWRA’s volunteer presence sets the utility apart from other public entities. See below a list of Community Champions’ events from 2015 to 2024.

2015

- National Night Out

2016

- National Night Out
- Arkansas Hospitality Association
- Mabelvale Career Day
- Wilson Elementary School Field Day





2017

- Community Meetings - three locations
- Summer Cereal Drive - Employees donated cereal to the AR Food bank
- Angel Tree gifts to David O. Dodd Elementary School

2018

- Community Meeting - two locations
- AR State Fair with Friends of Fourche Creek
- Arkansas Hospitality Association
- Holiday Toy Drive
- FOG Team Hospitality Association Convention

2019

- Southwest Community Block Party
- West Central Community Center CommUNITY Block Party
- Mock Job Interviews Joe T Robinson
- Arkansas Children's Hospital 5k race
- Holiday Toy Drive - employees donate toys to the LR Watershed
- eStem Charter School - Don't Flush That campaign
- Exalt Academy - classroom - 2 classrooms
- Exalt Academy - classroom - 2 classrooms
- Bale Elementary Science Fair - Mad Scientist Expo
- FOG Outreach
- Latino Back to School Event
- Latino Job Fair
- Job Fair #2
- National Night Out
- "Don't Flush That" campaign - Appeared on end caps at Kroger stores, UALR and Philander Smith College, all city operated community centers/golf courses/Jim Daily Fitness Center, the Witt Stephens Nature Center, several museums, shopping centers and many other locations around Little Rock
- AR Foodbank - employees donated enough for 500 meals
- Toy Drive - employees donated toys to the annual Watershed toy drive

2020

- LRSD Excel Hack-a-thon
- College and Career Week - made career video - distributed to 10 classrooms
- Imagine a Day Without Water - in the classrooms
- Job Fair and informational - Our House





- Job Fair and informational - St. Mark
- Toy Drive - employees donated \$1,175
- Summer cereal drive - employees donated \$925

2021

- Little Rock School District Book Donation
- School Supplies Drive w/ JA Fair Prep Academy - employees donated \$595
- Job Fair at the Watershed
- Juneteenth Celebration
- Toy Drive - employees donated \$1,254
- Summer cereal drive - employees donated \$1000

2022

- Carver Elementary School Field Day
- Carver Walkathon
- Carver Back to School Breakfast - served breakfast to teachers
- Carver Back to School - donated \$660 for school supplies
- Chicot Elementary Earth Day
- Chicot Elementary Community Cafe
- JA Fair Prep Back to School
- Arkansas Education Association (AEA) Conference - booth
- Central AR Library Summer Program
- CAW STEM Camp
- Chicot Elementary Earth Day
- Chicot Elementary Community Cafe
- Juneteenth Celebration
- Main Street Food Festival
- Museum of Discovery Girls STEM Camp
- Minority Events - Procurement
- Minority and Women Owned Business' Match Making Event
- Neighborhood USA (NUSA)
- Recruiting event at LR Air Force Base
- City Year
- Toy and Can Food Drive - collected \$1,579
- Food 4 the Holidays Telethon - answered calls
- Summer cereal drive - employees donated \$1,009





2023

- Back to School JA Fair Prep Academy
- Carver STEAM Magnet - 2nd and 3rd grades - introduced JoJo the Water Hero - 6 classrooms
- Carver STEAM Magnet Field Day
- Carver STEAM Magnet back to school/teacher workday
- Sustainability Fair - UALR
- Southwest High School WoW Panel roundtable
- Carver STEAM Elementary - 10 classrooms - Imagine a Day Without Water art contest
- Carver STEAM Elementary funday
- AR State Fair - booth with Friends of Fourche Creek
- Black Expo
- Community Meeting about Project - at Booker Arts Magnet School
- Dunbar Community Center Fall Festival
- Food Truck Festival
- UALR STEM
- UAPB Informational and Job Fair
- Metropolitan Housing Alliance Informational and Job Fair
- Job Fair and informational City of LR & Watershed
- National Night Out
- Sustainability Fair - UALR
- Matchmaking Business Event
- Toy Drive - Employees donated \$1,000
- Can Food Drive - Employees donated nearly \$700
- Summer cereal drive - employees donated \$1,273

2024

- JA Fair - in classroom
- Pulaski Heights STEM After-School Program - in classroom
- Juneteenth Celebration
- Pettaway Block Party
- Project Impact - City of LR
- Summer cereal drive - employees donated \$1,017
- Downtown Food Truck Festival
- National Night Out
- Walk for Community
- Fall Fest - Pulaski County Youth Services





The following descriptions of LRWRA community projects are just some examples of the utility’s outreach in our city. Please reference the Appendix for more community outreach/volunteer snapshots.

Little Rock Central High School Science Fair

LRWRA sponsors the Little Rock Central High School (LRCH) Science Fair annually. In addition to being a sponsor and providing materials for set-up, the utility also provides expert judges for the fair panel. Through speaking with LRCH staff, the Boyette team learned about a student whose work is particularly relevant to LRWRA.

The Boyette team connected with Olya Tryndyak⁴, a LRCH student who has shown a deep interest in the science behind wastewater. Her 2023 project, entitled “The Surveillance of SARS-CoV-2 in Wastewaters”, investigated the presence of SARS-CoV-2 in wastewater and detected SARS-CoV-2 variants, using a process called next-generation sequencing.

Olya’s mentor supported her methods by collecting wastewater samples from treatment facilities at Adams Field, Fourche Creek, Little Maumelle, and in Pine Bluff. According to Olya, she concluded that “sequence data of wastewater provides information about the genetic diversity, spread, and evolution of SARS-CoV-2 and may help to assess the impact on past and current efforts to control the pandemic.” She described wastewater as a valuable public health tool, crediting LRWRA’s treatment and research as crucial to community health and education: “Little Rock can become much healthier, safer, and informed by taking advantage of the wastewater services the Authority provides.”

Olya’s interactions with LRWRA judges are indicative of the volunteers’ involved attitudes and genuine interest in student activities. Olya placed at all local science fairs, ultimately presenting at the International Science and Engineering Fair (ISEF) in Dallas, Texas. Her story is reflective of the potential for exciting, innovative research in the wastewater sector, notably among women scientists and engineers. She aspires to continue her educational career in chemistry/biochemistry and become a physician in the future.

*“I had a wonderful experience with LRWRA **representatives** at the Central High science fair. It was amazing to be able to **share my research** with individuals who had such personal connections to LRWRA and demonstrate the immense benefits the **community of central Arkansas** can achieve through the work of LRWRA.”*

– **Olya Tryndyak**
Little Rock Central High School
Science Fair Winner



LRCH Science Fair judges from LRWRA team

⁴With parental permission





WOWA helping prepare Carver teachers' classrooms for back-to-school

"Way back when, LRWRA partnered with Friends of Fourche Creek, and it has made all the difference."
 – **Norm Berner**
 Chair, Friends of Fourche Creek

Friends of Fourche Creek²⁵

Friends of Fourche Creek, a coalition working in the creek surrounding LRWRA's Fourche Creek Water Reclamation Facility, is a diligent preservation organization. LRWRA partners with Friends of Fourche Creek to preserve and restore the Fourche Creek watershed through cleanup efforts, habitat restoration, and educational outreach. This collaborative effort improves water quality and protects vital ecosystems and marine life within the watershed. Friends of Fourche Creek, and other community partners are working toward a Fourche Creek Preserve and Water Trail for residents and tourists to enjoy the urban wetlands.

Little Rock School District^{26 27}

As a Little Rock School District Partner in Education, LRWRA provides educational programs on water conservation and environmental sustainability, leading students in hands-on learning experiences. On occasions like National STEM/STEAM Day and Volunteers in Public Schools (ViPS) Reading Day, LRWRA sends multiple employees to interface with students, staff, and faculty. Furthermore, LRWRA's Community Champions program and Women of Water and Allies group support teachers during back-to-school season by helping prepare classrooms and materials. The utility maintains a long-standing relationship with Carver STEAM Magnet Elementary, J.A. Fair K-8 Preparatory, and Little Rock Central High School engaging with the schools on multiple occasions throughout the year.



CEO Jean Block with elementary students on ViPS Reading Day



Ronald McDonald House Charities of Arkansas^{28 29 30}

The Ronald McDonald House Charities of Arkansas & North Louisiana (RMHCAR-NLA) supports Arkansas Children’s Hospital patients and their families by providing meals and housing during hospital stays. In 2023, the organization served a total of nearly 2,000 families. Through LRWRA’s Community Champions program, employees participate in RMHCA events and other volunteer initiatives throughout the year. Champions’ contributions have included serving a barbecue dinner to patient families through the Red Apron program, setting up the House Christmas tree, cooking and plating at the Greek Food Festival, and working the annual Golf Scramble event.

“The volunteers who come from LRWRA are wonderful! They initially reached out to us several years ago asking what volunteer opportunities we had. We now contact them any time we need someone, they are on our call list.”

- Janell Mason

CEO Ronald McDonald House Charities of Arkansas & North Louisiana



Cooking a barbecue dinner for RMHCAR-NLA families



AWARDS & RECOGNITION

As an industry leader and constant innovator, LRWRA has received several awards over the ten-year analysis period. Please reference the Appendix for a full list of awards received by the utility.

Utility of the Future Award³¹

The Water Environment Federation presents the Utility of the Future Award to water utilities for innovative and forward-thinking practices that provide sustainable, efficient, and value-added services to their community. In 2024, LRWRA was recognized for Partnering & Engagements and was one of 45 utilities selected throughout the nation. In 2017, LRWRA was one of 25 utilities recognized as a Utility of the Future Today. That recognition was for innovation and forward-thinking strategies to manage storm and used water across Little Rock and for sustainable use of methane gas for renewable energy at the Fourche Creek Water Reclamation Facility.

PISCES Award³²

The EPA's "Performance and Innovation in the SRF Creating Environmental Success (PISCES) Award" recognizes outstanding projects funded by the Clean Water State Revolving Fund (SRF). It celebrates innovative and successful approaches to clean water infrastructure and environmental protection. LRWRA's Sewer Service Line Replacement Program (SSLRP) has brought the utility to the forefront and earned the PISCES Award for its unique approach to supporting ratepayers.

WEF Burke Award for Safety³³

An impressive achievement for any public entity, 2024 marks LRWRA's third year in a row receiving the Water Environment Federation (WEF) Burke Award for Safety. This award honors water and wastewater utilities for exceptional safety programs, acknowledging organizations that implement rigorous standards and achieve high levels of employee and operational safety.

Individual Awards

In addition to utility-wide recognitions, LRWRA staff members often receive individual honors. Little Rock Water Reclamation and its employees are recognized each year for excellence within the organization. Past honors have included the Arkansas Business 250 Most Influential People designation and the Arkansas Water Environment Association (AWEA) Young Professional of the Year award. Please reference the Appendix for a full list of awards received by LRWRA employees.



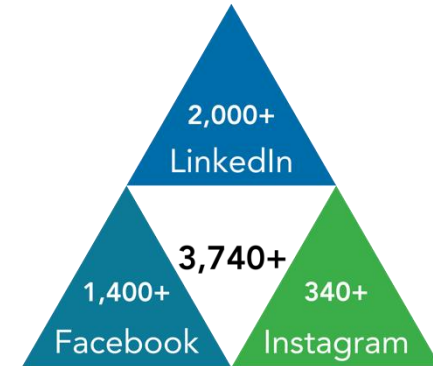


SPEAKERS & EVENTS

With education and collaboration at the heart of LRWRA’s mission, the utility often sends employees to speak at local, regional, and national events and conferences. Please reference the Appendix for a full list of events attended with presentations by LRWRA employees.

SOCIAL MEDIA & MARKETING

LRWRA stands out among utilities in its use of social media. By maintaining a strong presence on Facebook, Instagram, and LinkedIn, the utility prioritizes community engagement online. LRWRA has a combined total of 3,744 followers across social media platforms, as demonstrated by the graphic at right. Some of LRWRA’s posts include team member spotlights for promotions and excellent work, educational initiatives, awareness campaigns, holiday acknowledgements, and volunteer events. The agency also utilizes social media as an avenue to advertise open positions, detailing the roles’ responsibilities and salary information.



LRWRA CEO Jean Block, through her personal LinkedIn and Facebook accounts, is providing another avenue for the utility to spread its mission. Through her *Around the Block* series, which highlights Block’s monthly activities as CEO, she has engaged colleagues, friends, and even youth. Block shared a story about a LinkedIn comment she received from a friend: *“My friend posted a comment about her young daughter wanting my job one day. I packaged up a JoJo toy, JoJo cape, and JoJo educational book which spotlight our utility’s work in an age-appropriate way for her daughter, and we dropped it off at her house. Her daughter is thinking about water, about a utility, and being the boss of a utility, and I love all of that! And, that kind of exposure to our work is happening constantly.”*³⁴

In addition to social media, the utility’s television/radio media presence is an important piece of the public education puzzle. The utility has earned 16 total media features over the ten-year analysis period, as detailed by the following list: Fox 16 (6); THV 11 (5); KATV 7 (1); KARK 4 (2); KUAR (3); KOKY (2).

In April of 2024, just after the utility’s successful completion of the Consent Administrative Order (CAO), LRWRA appeared on multiple local news outlets to inform the public about its major investment and infrastructure development. KATV 7 interviewed Walter Collins, LRWRA Director of Operations, to detail the infrastructure improvements made over 20 years.³⁵ Collins provided additional





context to this infrastructure discussion on a THV 11 feature, giving the camera crew a tour of updated LRWRA facilities and their water reclamation processes that produce “ultra-clear water.”³⁶

CEO Jean Block also made statements about the impact of 20 years’ worth of CAO projects. She highlighted LRWRA’s wide reach, with **1,400 miles of sewer line** throughout the city: “That’s the distance between Little Rock to Las Vegas. That’s how many pipes are underground carrying used water from Little Rock homes, businesses, restaurants, and local industry to one of our facilities.”

The images at right are screenshots from Collins and Block at LRWRA facilities during news interviews on the successful completion of the CAO.





FUTURE TRENDS & OPPORTUNITIES

As indicated by the quote at right, LRWRA is a forward-thinking, constantly evolving utility. While regulations may impact the speed of progress, LRWRA is open to innovation as it comes.

According to the EPA, reclaimed water can serve a variety of uses apart from release into a river or other water source:³⁷

- Irrigation for agriculture
- Irrigation for landscaping, such as parks, rights-of-ways, and golf courses
- Process water for power plants, refineries, mills, and factories
- Indoor uses, such as toilet flushing
- Dust control or surface cleaning of roads, construction sites, and other trafficked areas
- Concrete mixing and other construction processes
- Supplying artificial lakes and inland or coastal aquifers
- Environmental restoration

These uses are not yet in effect in Little Rock, but they are potential sustainable-use applications that could be implemented.

Beyond this, technological advances though artificial intelligence and smart sensors, as well as evolving processes for wastewater collection and treatment, offer exciting opportunities for LRWRA. As a trendsetter in the water reclamation industry, LRWRA will continue to evaluate and respond to the sector’s innovation landscape, elevating its environmental impact for good.

*“My leadership approach is focused on **elevating** LRWRA to a higher level. We are an industry leader in the state of Arkansas - the biggest, best resourced, best staffed, and with the best technology. I am not satisfied with just being the best because we are the biggest. How do we push higher and think bigger because we can and should? We are reaching for higher heights.”*

- **Jean Block**
CEO






APPENDIX

COMMUNICATION IDEAS & INFORMATION

Two informational flyers, one for an adult audience and another for children, respectively, that offer fun facts about LRWRA. The utility can use these materials for marketing and public education. The flyers were created with the objective to further spread awareness about LRWRA's roles and programming. The flyers also encourage residents to help protect the shared sewer system and engage in water conservation practices.

DID YOU KNOW?

The LRWRA releases reclaimed water into the Arkansas River that is at least **7 times** cleaner than the river itself.





Fourche Creek uses **biogas**, a byproduct of the solids treatment process, to produce **renewable energy**, offsetting operational costs and **reducing carbon emissions**.

Together, the LRWRA's water reclamation plants have the capacity to treat up to **56 million gallons** of used water a day.

The LRWRA's cutting-edge **technology** and **innovative solutions**, from advanced filtration to green infrastructure, is leading the way in **environmental stewardship**.

Community members can receive various **free or reimbursed** residential services, including cleanout cap installations and sewer line **replacements**.

For more information, visit:

DID YOU KNOW?

Superhero Sewers!
Did you know there are secret tunnels under Little Rock? 1,500 miles of pipes carry the dirty water from homes and schools to the Little Rock Water Reclamation Authority's treatment plants, where dirty water gets cleaned.



Fish Love Clean Water!
Once the water is cleaned at the plants, it's sent back to the Arkansas River. The fish, turtles, and all the river creatures are happy to have fresh, clean water to swim in!



Magic Microbes to the Rescue!
At the water treatment plants, tiny living helpers called microorganisms gobble up all the bad stuff in the water.



Green Power from Recycled Water!
The water plant gets some of its power from biogas—a type of energy made from waste. That's right, even the dirty stuff helps power the plant!



You Can Help Too!
Using less water at home helps the LRWRA clean less dirty water. Turn off the tap when brushing your teeth or take shorter showers to be a water saver!



For more information and fun with JoJo the water hero, visit the Learning Center:






ECONOMIC DEVELOPMENT PROJECTS

Port of Little Rock Project Contributions	
2014	
Project Colossus	
Project Diamond	
Project Entergy	
Project Indigo	
Project H	
Project Sentinel	
2015	
Project Antelope	
Project Deacon	
2016	
Project Three Stripe	
Project Scout	
Project Greyhound	
Project Silent Noise	
Project Sunrise	
Project Tastebud	
2017	
Project Nine	
Project Flicker	
Project Flying Eagle	
Project Greenleaf	
Project Henry	
Project Holy Grail	
Project Javelin	
Project Renaissance	
Project Saturn	
2018	
Project Lego	
Project In Spirit	





Project Sunrise
2022
Project Green
Project Treehouse
Project Sirius
2023
Project Angus
Project Apex
Project Grey Platinum
Project Hammer
Project Wildflower

Source: LRWRA





EMPLOYEE RECOGNITION

GEM Awards³⁸

Going the Extra Mile (GEM) Award recognizes employees who excel in their work. The program highlights individuals who go above and beyond to contribute to the organization’s mission and demonstrate its core values. By acknowledging outstanding performance, GEM Awards foster a culture of excellence.

Women of Water & Allies³⁹

In 2019, LRWRA established an employee resources group for female employees called “Women of Water.” In 2023, the group evolved to “Women of Water & Allies” to include male employees/allies. The group does volunteer work and holds other events throughout the year. During Women's History Month, LRWRA launches a campaign which highlights WOWA members and their contributions to the success of LRWRA. The chart at right details WOWA honorees from 2019 to 2023.

OUTREACH & VOLUNTEER EFFORTS

Arkansas Food Bank

The Community Champions program collaborates with the Arkansas Food Bank to address food insecurity by donating to food drives, such as the Summer Cereal Drive. Employees also help with the distribution and packaging of food, expanding access to meals for those in need.

WOWA Honorees by Year	
Staff Member	Position
2019	
Cary Beth	Project Administrator of Facilities
Tracy	Lead Operator
Jean	Chief Legal Officer
Rebecca	Laboratory Technician
Sherree	Safety Coordinator
2020	
Amiles	Laboratory Technician
Linda	Human Resources Specialist
Valerie	Asset Management Coordinator
Ava	Collection System Analyst
Jessica	Mechanic, Licensed Heavy Equipment Operator
2021	
Kelley	Procurement Coordinator
Ashley	Facility Operator
Ganelle	Commission Chair
Brenda	Dispatcher
Kenetta	Communications and Outreach Supervisor
2022	
Lauren	Commissioner
Karlah	Accounting Clerk
Lyndsey	Lab Technician II
Tonya	Program Manager (Facilities)
2023	
Amber	Procurement Administrator
Connie	Level II Administrative Support Professional
Sarita	Communications Specialist





Adopt-A-Flower Bed & Adopt-A-Street ^{40 41}

LRWRA participates in the Parks and Recreation department’s “Adopt-A-Flower Bed” program by maintaining its designated flower beds and beautifying public spaces. Also, in partnership with the City of Little Rock, LRWRA advances its civic engagement through the “Adopt-A-Street” program. LRWRA takes responsibility for keeping designated roadways clean and litter-free, supporting a better environment for residents.

Juneteenth in Da Rock ^{42 43}

LRWRA’s commitment to community partnerships is also evident in the utility’s celebration of Juneteenth, or Freedom Day. LRWRA supports Juneteenth in Da Rock programming, sponsored by Mosaic Templars Cultural Museum, by bringing water knowledge games and activities to engage children and community members, and educating residents about LRWRA job openings, career paths, and more.

Museum of Discovery ⁴⁴

In June of 2022, the Museum of Discovery's Girls in STEM campers visited LRWRA’s Fourche Creek Water Reclamation Facility on a field trip. During their visit, the campers observed the wastewater treatment process and participated in hands-on STEM activities. Additionally, the girls collaborated to engineer screw pumps and explored various career paths for women in the water reclamation industry.



Don't Flush That activity at Juneteenth in Da Rock



Community Champions at the Street Clean Up



CEO Jean Block speaking to Museum of Discovery Girls in STEM campers



Community Gardens⁴⁵

LRWRA actively helps build, plant, and maintain local community gardens with environmental consciousness in mind. The utility offers water conservation education and sustainable practices. In addition to Broadway Community Garden, employees have planted and harvested several gardens with the Arkansas Hunger Relief Alliance.

Habitat for Humanity⁴⁶

LRWRA volunteers with Habitat for Humanity by providing labor and resources to support home rehabilitation projects on affordable housing in our neighborhoods.

Keep Little Rock Beautiful^{47 48}

Partnering with Keep Little Rock Beautiful is an avenue for LRWRA to further its beautification and preservation efforts alongside local community members. Employees participate in initiatives like the Great Arkansas Cleanup- an event that gathered over 22,000 volunteers statewide in 2023 - and other litter cleanup gatherings.

Little Rock Zoo Cleanup⁴⁹

The annual Little Rock Zoo Cleanup gives LRWRA's WOWA volunteers a chance to visit behind-the-scenes zoo operations, while working to maintain the zoo's grounds and promote environmental awareness. LRWRA's involvement fosters a clean, safe habitat for both animals and visitors, a mission consistent with both organizations.

Arkansas Drug Take Back⁵⁰

LRWRA supports the Arkansas Drug Take Back program by promoting the safe disposal of unused medications, in turn helping to protect water quality and prevent environmental contamination.

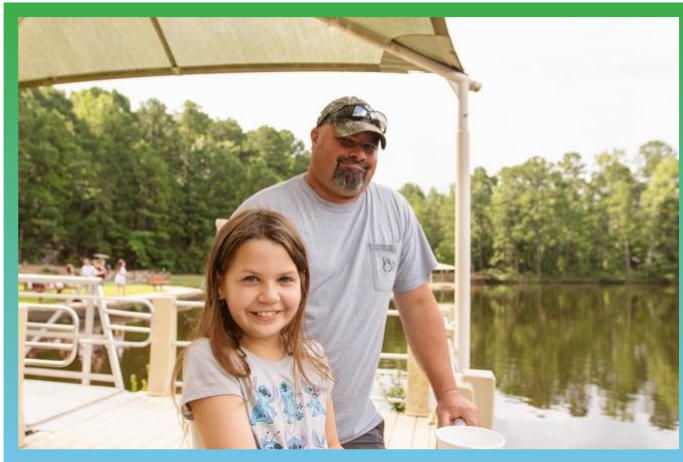


Broadway Community Garden setup



Annual Little Rock Zoo Cleanup





Camp Aldersgate Fishing Derby

Camp Aldersgate^{51 52}

Camp Aldersgate, a nonprofit camp in Little Rock, provides barrier-free outdoor experiences for individuals with special needs. Through its partnership with the camp, LRWRA helps foster inclusive recreational experiences for children and adults with disabilities. Community Champions have volunteered at fun camp activities, such as the summer Fishing Derby.



Marcus' "Fish" Manhole Art Project

Manhole Art Project⁵³

To support local artists and enhance its infrastructure in Little Rock's, LRWRA created the Manhole Art Project to establish public art installations throughout the city starting in Hindman Park. Artists painted many of LRWRA's existing raised manholes. The end results highlight the intersection of utility services and artistic expression.



Our House^{54 55}

Our House Shelter, a Little Rock organization that empowers homeless and near-homeless people to succeed, is a pioneer in the city's nonprofit sphere. LRWRA is a dedicated partner to Our House, serving meals and volunteering time to help individuals and families experiencing homelessness.

Little Rock Marathon⁵⁶

LRWRA volunteers worked the Little Rock Marathon sidelines, providing water and ensuring a safe and enjoyable experience for participants.

National Blood Donor Month

LRWRA actively supports National Blood Donor Month by hosting on-site blood donation drives and encouraging employees to donate.



Our House meal plating



Trey Baldwin filling up at the Marathon water station



LRWRA employees donating for National Blood Donor Month



AWARDS BY ORGANIZATION

LRWA Awards by Organization 2014 - 2023	
Award	Organization
2014	
Gold Peak Performance Award	AFWRF ⁵ - NACWA ⁶
Distinguished Budget Award	GFOA ⁷
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Excellence in Achievement Agency Certification Award	UPPCC ⁸
2015	
Gold Peak Performance Award	FCWRF ⁹ - NACWA
Gold Peak Performance Award	AFWRF - NACWA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Safety Award for Population over 20,000	AWEA ¹⁰
Excellence in Achievement Agency Certification Award	UPPCC
2016	
Gold Peak Performance Award	FCWRF - NACWA
Gold Peak Performance Award	AFWRF - NACWA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
George Burks Facility Safety Award	WEF ¹¹
Excellence in Achievement Agency Certification Award	UPPCC
Sterling Agency Award	UPPCC
2017	

⁵AFWRF = Adams Field Water Reclamation Facility
⁶NACWA = National Association for Clean Water Agencies
⁷GFOA = Government Finance Officers Association
⁸UPPCC = Universal Public Procurement Certification Council
⁹FCWRF = Fourche Creek Water Reclamation Facility
¹⁰AWEA = Arkansas Water Environment Association
¹¹WEF = Water Environment Federation





Gold Peak Performance Award	FCWRF - NACWA
Gold Peak Performance Award	AFWRF - NACWA
Gold Peak Performance Award	LMWRF ¹² - NACWA
Utility of the Future Today	NACWA, WEF, WRF ¹³ , WRA ¹⁴
PISCES Award	EPA ¹⁵
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Safety Award for Population over 20,000	AWEA
2018	
Gold Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Silver Peak Performance Award	LMWRF - NACWA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
George Burks Facility Safety Award	WEF
Excellence in Achievement Agency Certification Award	UPPCC
2019	
Platinum Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Gold Peak Performance Award	LMWRF - NACWA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Excellence in Achievement Agency Certification Award	UPPCC
2020	
Platinum Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Gold Peak Performance Award	LMWRF - NACWA
Leadership in Environmental Education	Arkansas Environmental Federation
Distinguished Budget Award	GFOA

¹²LMWRF = Little Maumelle Water Reclamation Facility

¹³WRF = Water Research Foundation

¹⁴WRA - WateReuse Association

¹⁵EPA = Environmental Protection Agency





Certificate of Achievement for Excellence in Financial Reporting	GFOA
Excellence in Achievement Agency Certification Award	UPPCC
Sterling Agency Award	UPPCC
2021	
Platinum Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Gold Peak Performance Award	LMWRF - NACWA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
George Burks Facility Safety Award	WEF
Excellence in Achievement Agency Certification Award	UPPCC
2022	
Platinum Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Gold Peak Performance Award	LMWRF - NACWA
George Burks Facility Safety Award	WEF
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Distinguished Budget Award	GFOA
Certificate of Achievement for Excellence in Financial Reporting	GFOA
Excellence in Achievement Agency Certification Award	UPPCC
2023	
Platinum Peak Performance Award	FCWRF - NACWA
Platinum Peak Performance Award	AFWRF - NACWA
Platinum Peak Performance Award	LMWRF - NACWA
George Burks Facility Safety Award	WEF
Excellence in Achievement Agency Certification Award	UPPCC
Sterling Agency Award	UPPCC

Source: LRWRA





INDIVIDUAL AWARDS

*Please note that the staff positions listed are at the time of receiving the award.

Individual Awards by Recipient 2017 - 2023		
Award	LRWRA Staff Member	Position
2017		
AWEA ¹⁶ Young Professional of the Year	Quentin Nelson	Project Engineer, Collection System
2018		
ARNIGP Buyer of the Year	Kelley Kelley	Procurement Coordinator
2019		
ARNIGP ¹⁷ Buyer of the Year	Tiffany Bilon	Procurement Coordinator
2020		
Arkansas Money & Politics Power 40 Women in Business	Jean Block	Chief Legal Officer
AWW&WEA ¹⁸ Aaron A. Stallmann Young Professional Award	Rebecca Burkman	Director of Environmental Affairs
2021		
AWWMA ¹⁹ Manager of the Year	Howell Anderson	Chief Operating Officer
Museum of Discovery Spark! Star Award	Jean Block	Chief Legal Officer
Arkansas Business 250 Most Influential People	Greg Ramon	Chief Executive Officer
National Above and Beyond Award from NCPP ²⁰	Amber Yates	Procurement Administrator
2022		
AWEA Safety Professional of the Year	Tommy Kelley	Collection Systems Maintenance Supervisor
AWEA Wastewater Outstanding Achievement Award	Luke Baldwin	Wastewater Treatment Senior Operator
AWEA Young Professional of the Year	Harold Hounwanou	Director of Collection System Maintenance

¹⁶AWEA = Arkansas Water Environment Association

¹⁷ARNIGP = Arkansas Chapter of The Institute for Public Procurement

¹⁸AWW&WEA = Arkansas Water Works & Water Environment Association

¹⁹AWWMA = Arkansas Water and Wastewater Managers Association

²⁰NCPP = National Cooperative Procurement Partners





AWEA Wastewater Manager of the Year	Jean Block	Chief Legal Officer
Arthur Bedell award for Extraordinary Personal Service	Walter Collins	Director of Operations & Facilities
AWWMA Exceptional Service Award	Trey Baldwin	Executive Assistant
ARNIGP Buyer of the Year	Kelley Kelley	Procurement Coordinator
2023		
AWEA Young Professional of the Year	Rebecca Burkman	Director of Environmental Affairs
Arkansas Business 250 Most Influential People	Greg Ramon	Chief Executive Officer
Arkansas Business 250 Most Influential People	Jean Block	Chief Executive Officer
Top 100 Women of Impact in Arkansas	Jean Block	Chief Executive Officer

Source: LRWRA



SPEAKERS & EVENTS

Events by Speaker 2016 - 2023		
Event/Organization	Presentation	LRWRA Staff Member(s)
2016		
NACWA ²¹ Legal Conference	Ethics Panel	Jean Block
Arkansas Society of Professional Engineers	Planning for the Future	Greg Ramon
Top 25 Breakfast Club	Planning for the Future	Greg Ramon
Audubon Arkansas and Friends of Fourche Creek	Planning for the Future	Greg Ramon
2017		
AWW&WEA Conference	PAA as a Supplemental Disinfectant to UV at Adams Field from Bench to Full-Scale Application	Walter Collins
Joint Engineers Club	Planning for the Future	Greg Ramon
Forest Heights Girls in STEM Day	STEM Careers	Jean Block
2018		
AWWMA Summer Conference	Working with Consultants	Greg Ramon
ARNIGP Conference	Political Subdivisions	Amber Yates
UCA ²² Supply Chain Students	Procurement: A Profession, Not Just a Job	Amber Yates, Kelley Kelley
AWW&WEA Conference	Process Control and The Tool Box	Eric Wassell
WEFTEC ²³	Acoustic Inspection Program	Tim Harrison
WEFTEC	Adams Field Parallel Treatment Program	Walter Collins
AWW&WEA	How the Public Views You: Having the Right Brand	Greg Ramon
2019		

²¹NACWA = National Association of Clean Water Agencies

²²UCA = University of Central Arkansas

²³WEFTEC = Water Environment Federation Technical Conference





UCA Supply Chain Students	Institute for Supply Management Fireside Chat Forum	Amber Yates, Kelley Kelley
AWW&WEA Conference	Peracetic Acid Disinfection Case Study	Mike Thompson
AWW&WEA Conference	Industrial Sampling	Mikel Murders
AWW&WEA Conference	How to Conduct Industrial User Surveys	Cornelius Jones
AWW&WEA Conference	How to Succeed Together	Walter Collins
AWW&WEA Conference	Water Reuse	Greg Ramon
Water Reuse Association Symposium	Water Reuse	Walter Collins
AWW&WEA Summer Seminar	Water Reuse	Walter Collins
ANRC ²⁴ Conference	Sewer Service Line Replacement Program Implementation & Funding	Debbie Williams, Tracy Pearson
Lions Club	LRWRA Programs	Cornelius Jones, Kenetta Ridgell, Tracy Pearson
2020		
Women’s Leadership Symposium	Women in the C-Suite Panel	Jean Block
CIFRA ²⁵ Workshop	COVID Financial Planning	Michael Rhoda
Rotary Club	Drug Take Back	Greg Ramon
2021		
Sherwood Chamber of Commerce	Women’s Summit Panel	Jean Block
AWW&WEA Central District	LIMS Implementation	Rebecca Burkman
Little Rock Mayor’s CEO Roundtable	ARBid Shared Vendor Portal and eProcurement System	Amber Yates
NIGP ²⁶ Forum	Public Utilities Networking Session	Amber Yates
PTAC ²⁷	A Beginner’s Roadmap to Public Procurement	Amber Yates, Kelley Kelley
Rotary Club	Drug Take Back	Greg Ramon

²⁴ANRC = Arkansas Natural Resources Commission

²⁵CIFRA = Council of Infrastructure Financing Authorities

²⁶NIGP = The Institute for Public Procurement

²⁷PTAC = Procurement Technical Assistance Center (Renamed to APEX Accelerators)





2022		
AWW&WEA Conference	FOG Program	Zach Crumpler
AWWMA Summer Conference	Human Resources Issues Panel	Jean Block
WEFTEC	Dual-Use Filter Expands Wet Weather Treatment Capacity and Reuse Opportunities	Mike Thompson
AWW&WEA Central District	Slug Response and Enforcement	Rebecca Burkman, Eric Wassell
AWW&WEA Conference	Stop Flushing Potential Savings	Amber Yates, Kelley Kelley
NIGP	How Supply Chain Issues Impact Public Procurement	Amber Yates
NIGP	Global Best Practice: Procurement's Role in the Use of Non-Emergency Federal Funds	Amber Yates
Leadership Greater Little Rock	LRWRA Overview	Greg Ramon
AEA ²⁸	Come Learn With US	Kenetta Ridgell
2023		
AWW&WEA Summer Seminar	Directors' Panel	Walter Collins, Harold Hounwanou, Rebecca Burkman, Tonya Wallace
AWEA Specialty Conference	Directors' Panel	Walter Collins, Harold Hounwanou, Rebecca Burkman, Tonya Wallace
AWW&WEA Central District	FOG Program	Terrian Tyler
US Water Alliance	One Water. One Little Rock. / AR Bid Vendor Portal	Kenetta Ridgell
NACWA Strategic Communications Conference	One Water. One Little Rock.	Kenetta Ridgell

²⁸AEA = Arkansas Education Association





WEAT ²⁹	Alternatives for Improving Wet-weather Resiliency	Walter Collins
AWWMA Summer Conference	Presentations to Boards & Commissions	Jean Block
Arkansas Water Young Professionals' Network Luncheon	Presentations to Boards & Commissions	Jean Block
AWW/WEF ³⁰ Presentation	Journey to Water Equity and Environmental Justice	Jean Block
City of Little Rock OpportUNITY Event	ARBid Shared Vendor Portal and eProcurement	Amber Yates
NIGP	Don't Take It for "Grant-ed": A Primer and Workshop on the Use of Non-Emergency Federal Funds	Amber Yates
Rotary Club	Drug Take Back	Greg Ramon

Source: LRWRA

²⁹WEAT = Water Environment Association of Texas

³⁰AWW/WEF = American Water Works/Water Environment Federation





IMPACT GLOSSARY

Capital - Capital is expenses paid by industries and establishments to obtain capital equipment and complete construction.

Commodity - A commodity is a product or service. It may be produced by one or by many industries. Commodity output represents the total output of the product or service, regardless of the industry that produced it. If an industry and the commodity produced by the industry have the same name, the commodity is considered to be the primary product of that industry. Any other commodity produced by that industry is a secondary product of that industry.

Direct Effects - Direct effects measure the change in final demand of directly impacted industries. It is a series (or single) of production changes or expenses made by producers/consumers as a result of an activity or policy.

Economic Impact Modeling - Economic Impact Modeling is software, data or a technique that allows for tracing spending through an economy and measuring the collective effects of that spending. The need for an economic impact analysis is normally triggered by an economic event, catastrophe, change in government policy, justification for funding, or as needed for planning.

Employee Compensation - Employee Compensation in IMPLAN is the total payroll cost of the employee paid by the employer. This includes wage and salary, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment taxes, etc.).

Event Year - The year that changes in Final Demand occur.

Gross Domestic Product - GDP by industry is the contribution of each private industry and of government to the national output, or GDP. An industry's GDP, or its "value added," is equal to its gross output (which consists of sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (which consist of energy, raw materials, semi-finished goods, and services that are purchased from domestic industries or from foreign sources). It can also be measured as the sum of incomes related to production, such as wages and salary accruals and gross operating surplus. GRP measures the same components at the regional, rather than the national, level.

General Sales Tax - General sales taxes consist of all general taxes levied at one stage only (e.g., manufacturing or wholesale or retail) plus multi-stage cumulative taxes (also known as cascade taxes) where tax is levied each time a transaction takes place without any deduction for tax paid on inputs.

IMPLAN Sector - IMPLAN's current sector scheme includes 536 sectors based on the Bureau of Economic Analysis' latest Benchmark Input-Output Study. This scheme is similar to a six-digit NAICS for manufacturing sectors but is more aggregated for service sectors.





Input-Output Analysis - A type of applied economic analysis that tracks the interdependence among various producing and consuming sectors of an economy. It measures the relationship between a given set of demands for final goods and services and the inputs required to satisfy those demands.

Indirect Effects - The impact of business-to-business spending that occurs when local industries buy goods and services from other local industries.

Induced Effects - The response by an economy to an initial change (direct effect) that occurs through consumer spending of employment income. This recognizes that labor income (employee compensation and proprietor income components of value added) is recirculated through household spending, causing further local economic activity.

Intermediate Expenditures - Purchases of non-durable goods and services such as energy, materials, and purchased services that are used for the production of other goods and services rather than for final consumption. These inputs are sometimes referred to as current-account expenditures. They do not include any capital-account purchases, nor do they include the inputs from the primary factors of production (capital and labor) that are components of value added.

Labor Income - All forms of employment income, including Employee Compensation (wages and benefits) and Proprietor Income.

Local Purchase Percentage - The amount purchases of goods and services that are made within the defined analysis geography (Study Area).

Multipliers - Total production requirements within the Study Area for every unit of production sold to Final Demand. Multipliers may be constructed for output, employment, and every component of Value Added.

NAICS - North American Industry Classification System. A system of industrial classification developed and used by the United States, Canada, and Mexico for grouping establishments by similarity of production process.

Output - Output represents the value of industry production. These are annual production estimates for the year of the data set and are in producer prices. For manufacturers this would be sales plus/minus change in inventory. For service sectors production = sales. For Retail and wholesale trade, output = gross margin and not gross sales. For further detail, please see the Output Illustration at the end of this glossary.

Personal Consumption Expenditures - National income and product accounts final-demand component for purchases by the household sector. In addition to showing what households spend, it also includes the current operating expenses of nonprofits that primarily serve households.

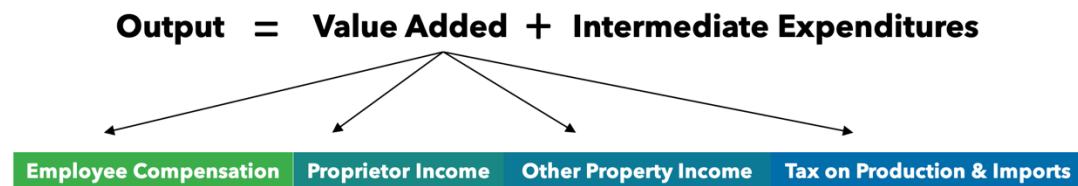


Sales Taxes – Taxes that are generally imposed by state and local governments as a percentage of the commodity's price. General sales taxes are typically shown separately on sales receipts and are typically levied as a standard percentage of the commodity's price. They include sales taxes collected by retail establishments, by wholesalers, and by service establishments. Selective sales taxes are imposed on a specific commodity at a percentage that differs from that of the general sales tax. They include taxes on motor fuels, tobacco products, alcoholic beverages, public utilities, meals, hotel occupancy, and amusements.

Social Accounts – A set of annually derived values for a Study Area that show its non-industry transactions (payments made between households and households, households and governments, etc.).

Taxes on Production & Imports – This component includes sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. It excludes most non-tax payments, and as the name indicates, subsidies are netted out.

Value Added – The difference between an industry's or an establishment's total output and the cost of its intermediate inputs, value added consists of compensation of employees, taxes on production and imports less subsidies and gross operating surplus. Gross value added is the value of output less the value of intermediate consumption and is a measure of the contribution to GDP/GRP made by an individual producer, industry, or sector.



Employee Compensation: Total income to the labor factor of production. Total cost of labor including wages & salaries, other labor-related income like health and retirement benefits and both employee and employer contributions to social insurance.

Proprietor Income: Total income to a sole proprietor or self-employed "employee."

Other Property Income: A.K.A. Gross Operational Surplus. All money collected by an industry that isn't paid into the operations of the company. This would include profits, capital consumption allowance, payments for rent, royalties & interest income.

Tax on Production & Imports: Sales tax, property tax, custom duties, and other taxes and fees less government subsidies.

Intermediate Expenditures: Repeating everyday materials required to make a final product.



ACRONYM & ABBREVIATION GLOSSARY

- ADEQ** - Arkansas Division of Environmental Quality
- AEA** - Arkansas Education Association
- AFWRF** - Adams Field Water Reclamation Facility
- ANRC** - Arkansas Natural Resources Commission
- APAC** - Arkansas Public Administration Consortium
- Arkansas Water YP Network** - Arkansas Water Young Professional's Network
- ARNIGP** - Arkansas Chapter of NIGP
- AWEA** - Arkansas Water Environment Association
- AWW/WEF** - American Water Works/Water Environment Federation
- AWW&WEA** - Arkansas Water Works and Water Environment Association
- AWWMA** - Arkansas Water and Wastewater Managers Association
- Boyette** - Boyette Strategic Advisors
- CAO** - Consent Administrative Order
- CAW** - Central Arkansas Water
- CIFRA** - Council of Infrastructure Financing Authorities
- CMOM** - Capacity, Management, Operation & Maintenance
- EPA** - Environmental Protection Agency
- EUCI** - Electric Utility Consultants, Inc.
- FCWRF** - Fourche Creek Water Reclamation Facility
- FEMA** - Federal Emergency Management Agency
- FOG** - Fats, Oils, & Grease
- GEM Awards** - Going the Extra Mile Awards
- GFOA** - Government Finance Officers Association
- ISEF** - International Science and Engineering Fair
- ISM** - Institute for Supply Management
- LMWRF** - Little Maumelle Water Reclamation Facility





LRCH - Little Rock Central High School

LRWRA - Little Rock Water Reclamation Authority

MG - Million Gallons

MGD - Million Gallons per Day

NACWA - National Association of Clean Water Agencies

NIGP - The Institute for Public Procurement

NPDES - National Pollutant Discharge Elimination System

PISCES Award - Performance and Innovation in the SRF Creating Environmental Success Award

POTW - Publicly Owned Treatment Work

PTAC - Procurement Technical Assistance Center (Renamed to APEX Accelerators)

RMHCA - Ronald McDonald House Charities of Arkansas

SRF - State Revolving Fund

SSLRP - Sewer Service Line Replacement Program

SSO - Sanitary Sewer Overflow

STEM/STEAM - Science, Technology, Engineering, and Mathematics/Science, Technology, Engineering, Arts, and Mathematics

UALR - University of Arkansas at Little Rock

UCA - University of Central Arkansas

UPPCC - Universal Public Procurement Certification Council

UV - Ultraviolet

ViPS Reading Day - Volunteers in Public Schools (ViPS) Reading Day

WEAT - Water Environment Association of Texas

WEF - Water Environment Federation

WEFTEC - Water Environment Federation Technical Conference

WOWA - Women of Water & Allies

WRA - WateReuse Association

WRF - Water Research Foundation





INTERVIEW LIST

The following is a list of stakeholders that Boyette interviewed:

Stakeholder Interview Participants		
Name	Title	Organization
Thomas Baker	Service Line Specialist	LRWRA
Norm Berner	Chair	Friends of Fourche Creek
Jean Block	Chief Executive Officer	LRWRA
Erica Carlock	Volunteer Coordinator	Ronald McDonald House
Zack Crumpler	Communication Specialist, FOG Specialist	LRWRA
Tim Daters	Principal Engineer	White-Daters & Associates, Inc.
Bryan Day	Executive Director	Port of Little Rock
Alexandria Evans	Communications Assistant	LRWRA
Allen Gatlin	Environmental Industrial Inspector, SSLRP/FOG Administrator	LRWRA
Schawnee Hightower	Director of Business Sales; Commission Chair	Verizon; Little Rock Water Reclamation Commission
Cary Beth Lipscomb	Engineering Manager	LRWRA
Beth Maris	Teacher, AP Chemistry	Little Rock Central High School
Chris Marsh	Real Estate Broker; Commissioner	Sotheby's International Realty; LRWRA
Latoya Morgan	Media Specialist	Little Rock School District
Quentin Nelson	Project Administrator, Engineer	LRWRA
Sarita Robinson Poirrier	Communications Specialist	LRWRA
Frank Scott Jr.	Mayor	City of Little Rock
Jack Thomas	Vice President, Economic Development	Little Rock Regional Chamber
Olya Tryndyak	Student	Little Rock Central High School



INTERVIEW SUMMARY

As part of the stakeholder engagement process, Boyette spoke with stakeholders related to the creation of LRWRA Impact Evaluation and Analysis. The following provides a summary of the stakeholder interviews:

What is your relationship to LRWRA?

- Commission member for the last five or six years
- Commission member for the last eight or nine years
- Fourche Creek partnership
- Interactions through site selection process
 - Almost always want to bring LRWRA to table, especially if engineers will be part of site visit
 - LRWRA there to answer questions, present services
 - Often demonstrate factors like capacity, nearest line, size of line, timing, cost for line upgrade
- LRWRA engineering manager
 - Managing everything here regarding engineering
 - All projects that come through the utility - new pipes, collection systems, assets that need upgrading, consulting engineers, contractors, etc.
 - See projects from start to finish - everything comes through my shop
- LRWRA project engineer
 - Managing our 1,400 miles of collection pipe - ensuring that wastewater stays inside those pipes
 - Managing approximately 38,000 manholes
 - Capital projects, rehabilitation, installation, or replacement of systems
- Presenting sponsor for LRCH Science Fair
 - Working with LRWRA on science fair since becoming department chair three years ago

How does the work of LRWRA impact Little Rock citizens?

- High-level answer - there is no city without us
 - Impossible to support a population this size without a sanitation sewer system to keep the water clean
- Impact on LRCH students
 - As sponsors of the LRCH science fair, LRWRA's economic impact is immeasurable
 - Getting students interested in science, getting comfortable talking about what they know and have learned - important to adulthood and education
 - Give us a budget each year for prizes that encourage teenagers to participate
 - LRWRA sends/connects us with several judges - between 60 and 75 from the local community - could not have the fair without them



- Also provides Visqueen to cover our gym floor to hold the exhibit
- Opportunities for students to interact with LRWRA judges and learn about wastewater – potential for wastewater-related science projects
 - One student who tested pre-treatment wastewater for COVID-19 – was able to discern geographic differences in virus exposure
 - Took project all the way to international fair – competed with kids from 60 other countries
 - Some students will test areas like Jimerson Creek before flow into treatment facility
- Little Rock citizens do not have to think about clean water
 - Lay person does not know or care what happens to their water once it goes down the drain
 - Have the luxury of turning on the faucet and knowing we will have clean water to drink, bathe, etc.
 - All the things we take for granted – not thinking about it until it stops working
 - Living in Little Rock my whole life, have never had an issue with our water being clean
 - “Try to connect what *the thing you don’t think about* means to you as a citizen”
 - “You don’t know it’s a multi-million-dollar organization employing hundreds of people in the city. You just expect things to work.”
- “Our audience is Little Rock residents.”
- Protecting public health and safety
 - Take every bit of dirty water and turn it into water suitable to put back into the environment
 - Turning wastewater into suitable disinfected water that goes back into the Arkansas River
- Sewer Service Line Replacement Program (SSLRP)
 - Doing 20-30 per month
 - Keeping LRWRA busy and inspectors busy
- STEM exposure for young people
 - Encouraging students to pursue fields that we have today and will have tomorrow
 - Some fields out there that we do not even know about
- Taxpayer dollars
 - Large debt service load due to deferred maintenance of system
 - Bulk of inflow/infiltration caused by older parts of town – older homes/older service lines responsible for about 40 percent of SSOs that had to be treated
 - Worked hard to get out of consent decree – spent a ton improving system in all areas of the city
 - About 40 cents of every rate payer dollar going toward debt at that point
 - Competing against communities without that debt load – e.g., Conway, Cabot

What would be the effects of not having a reclaimed water approach to wastewater in Little Rock?

- Major public health hazard





- Alternative is dangerous - raw sewage being everywhere
- Just met the 20-year consent decree - overflows were in 339 locations across the city
- "Imagine those movie scenes from the 1800s showing people throwing their sewage over the balcony and it's running through the streets... We would have a public health crisis."
- Other health consequences
 - Not feeding you your water, but imagine only having a limited amount of water in your household
 - Without us, would have sickness, could not swim, etc.
- Security issues would arise
- With all solids, sewage, particles passed through our systems, must maintain integrity of cleanliness for the betterment of our residents

What kind of efforts has the Authority taken around sustainability?

- Biosolids
 - Biological component of wastewater treatment that produces fertilizer used by farmers across central Arkansas
 - Farmers see up to three times the amount of production they would see without it
 - Ancillary process - solids used by farmers free of charge
 - Methane gas production
 - Use eight digestors to break down solids
 - Process generates methane gas to run several components of Fourche Creek facility
 - Energy that we do not have to pay for
- Consent Administrative Order (CAO) completion
 - Under state decree from 2002 to March 2024 - also sued by Sierra Club
 - Due to 300+ sanitary sewer overflows (SSOs) across the city
 - Fourche Creek was not habitable
 - Millions of dollars invested
 - Massive campaign - social/print media, videos, microsite - over last three months
 - Organization is significantly more environmentally sound through meeting permit requirements
- Fourche Creek urban wetlands
 - Many residents do not know that the wetlands exist or that sewer lines run through
 - Major improvements in last 16 years after establishing connection to Hindman Park neighborhood
 - LRWRA upgraded infrastructure that was too small for the city's growth
 - Partnership with LRWRA has opened so many doors to be public facing
 - Significant cleanup efforts over the last two decades
 - Used to see toilet paper caught on tree limbs - major SSOs throughout the area exacerbated by population growth





- People were amazed by overflows during cleanups - very harmful to environment and people living/working here
 - LRWRA team members' and contractors' hard work
 - Have made an enormous difference - now cannot remember the last time I saw an overflow
 - Supporting much more tourist activity - especially south of fairgrounds
 - Trails through urban wetlands bringing more people to Little Rock than Arkansas River trails
- Environmental stewardship
- One Water. One Future.
 - Reduce, Reuse, Recycle is real
 - We have no new water - the reason we must clean it - goes far and wide and comes back
 - Water to be one of the most impactful resources of the future
- Prioritizing environmental pieces and parks/recreation across Little Rock
 - Important to our employees/to any group recruiting businesses to come to the city
 - Ensuring that employees live in a clean, healthy city with clean rivers and streams
- Self-sustaining plant and resources

What role do you see public engagement playing in the potential impact of reclaiming water?

- Can the Grease
 - Introduced years ago, and still blows people's minds at booths - so many people do not understand that pouring grease down drain can cause a problem, especially for metal lines
 - Provides cans for people to dispose of their cooking grease/oil safely
 - Distribute them at food truck festival, state fair, any community event we can find
 - Partnerships with local grocery store chains to pass out cans, educate customers about sewer
 - Has been very successful in restaurants, following into residential piece
 - Education piece important - messaging
 - Keep the sewer out of the ground - keeps us from clogging up with grease so it is not going back into the environment
 - Funded by taxpayer dollars - responsibly investing back into the community
 - "We care and we support you."
- Cap the Cleanout
 - Residents can request a free cleanout cap.
- Career education
 - Not just one type of job here - engineers, operators, etc., that cannot be replaced by a robot
- "Citizens whom we serve should be a partner in the important environmental work we do."





- Encourage citizens to help by not pouring grease in drain, sealing private service lines through replacement program to aid our collection system, etc.
- Community Champions
 - Since 2019, have had at least one volunteer event per month - trying to double that in 2024
 - Up to 15-20 employees who might volunteer in a day - could be multiple hours
 - Partner with several organizations - always seeking new volunteer opportunities
 - E.g., Arkansas Food Bank; Little Rock Marathon; Camp Aldersgate; LRCH Science Fair; Hunger Relief Alliance; Ronald McDonald House; Our House; Greek Food Festival; monthly evening program to feed families; booths at various community events
- Educating the public is crucial
 - Utility has been under the radar for all its tenure - detrimental to the work and the mission that we pursue daily
 - If more people knew the importance of wastewater, more people would advocate for us
 - Important to demonstrate the environmental/public health benefits we provide to residents, city leaders, kids, etc.
 - Always out in the community doing public/social education at events, etc.
 - "Public engagement is one of the top priorities I see for this utility and how we operate."
 - "It is my near singular mission to elevate the understanding of the work we do."
- Jean's community engagement
 - Well-respected, boots on the ground
 - Has a comprehensive knowledge of the components of a regulated body due to her legal background
 - Has a passion for Little Rock that enhances our growth potential
- Ronald McDonald House Charities of Arkansas (RMHCA)
 - LRWRA volunteers with RMHCA at least once a year - started around 2018
 - Extremely reliable organization - will respond every time I need a volunteer
 - Great representation of RMHCA to the public
 - "The experience has been amazing. I was unaware the (Authority) even existed until Sarita emailed me one day offering to volunteer. The fact that I call her back every year speaks volumes."
 - Involvement with multiple events/outreach projects
 - Great Arkansas Beer Festival
 - PGA Golf Tournament
 - Prepared dinner from scratch for 70 RMHCA guests - family members of patients
 - Shamrock Shuffle
 - Tennis tournament
- Social media efforts, marketing, communication are unmatched - especially as a public utility
 - Unites the community around LRWRA - moving us away from being a sleeper utility
- Schools





- Speak to classes of all levels (elementary, middle, high, sometimes even post-secondary)
 - E.g., demonstrate treatment process; Don't Flush That; JoJo the Water Hero; career and STEM education; pencil pouches, Can the Grease kits for parents; colleges' career days; sustainability days at University of Arkansas at Little Rock (UALR)
 - Starting them off young and hoping they are excited
- Significant presence at partner schools JA Fair K-8 and Carver Magnet Elementary
 - "If I have an idea and need their assistance, they do whatever we need."
 - Have regular meetings with our partners in education to determine goals, how we can support them, as well
 - Carver the only school in East Little Rock/on this side of the river - important to see effort out here
 - Kids show a great interest - hands-on/interactive activities with water, etc. - love it whenever they can touch things
 - Carver Fall Fest - LRWRA volunteers have driven kids on a hayride
 - Carver Walk-a-Thon
- Important for kids to see professionals volunteer their time - something extra that is not always visible/encouraged at home - go out and do a service for someone else
- Art contest - Imagine a Day Without Water - kids rewarded with gift cards
- Jane Mendal Reading Day
 - A lot of big personalities from LRWRA - engage our students by reading to them, sharing what they do on the job
 - Gives students opportunity to see what the real world is like
 - "In the communities a lot of my students come from, there are not a lot of engineers"
 - Showing young girls that women are engineers - LRWRA women's group participation is great
 - Cool for our kids to see community helpers like police officers, firefighters - and now water reclamation workers/engineers
- Offer field trips for students to tour working labs/facilities
 - Huge economic impact on our future - introducing youth to potential jobs
 - Some students might see a research lab at UAMS/UALR, but do not realize that scientists work at diverse businesses across community - being able to talk to a practicing scientist is powerful
 - Sometimes come from summer camps at libraries or other organizations
- Outdoor classroom idea at local elementary school - hopeful that LRWRA and other partners in education can assist in that endeavor
- Did a cleanup day at our school to address drainage issues - when it rains hard it floods - tons of rocks - potential to engage LRWRA to help build retention wall to minimize sidewalk flooding
- Teacher appreciation
 - Annually help set up classrooms for back-to-school



- Brought us Chick-fil-a breakfast for a staff development meeting
 - Mutual relationship
 - Kids write thank you notes for LRWRA volunteers
 - Strong performing arts and drum department - invite LRWRA to come see our Christmas programs

What do you see as the role of “public” agencies, particularly those related to infrastructure, that impact economic development? What do you see as the role of LRWRA related to economic development?

- Aside from of Department of Health, LRWRA is the #1 public health entity from a city perspective
- CAO investments
 - Puts Little Rock in a strong position for the future
 - Many other cities our size have not invested in these things
 - Impacts our growth (industrial, residential) and overall quality of life
 - Yielded incredibly large numbers spent in Little Rock
 - Maintaining environmental integrity for residents, workers, tourists
 - The other side - Fort Smith recently fined over \$1 million for not complying with decree
- Have attracted development based on the knowledge that LRWRA exists here
- Job creation - within reclaimed water industry and beyond
- Lack of awareness that LRWRA is one of the largest public facilities/agencies
 - Must continue education so that if we need to do more or charge more, people understand us as a necessity and are open to that possibility
- Need better public agency coordination to support Little Rock’s growth
 - Would be great to bring all these entities together to focus on redevelopment and infill - get customers on existing lines
- Partnerships with other public agencies enable LRWRA’s quick response time
 - Example of flood response two years ago - investment to ensure that systems were still functioning well
 - Responsiveness of team being on call 24/7 - on-site when needed
 - Wherewithal/bandwidth to access Federal Emergency Management Agency (FEMA) dollars, etc.
- Port of Little Rock
 - Site selection crucial to economic development, job creation
 - 1.8 million gallons of capacity per day
 - Lift station at supersite that would provide additional 3 million gallons daily through airport connection - earmark approved by Senate Appropriations Committee in 2025
 - If a huge industry wants to come settle in the Port - someone like Kraft or Frito Lay - they will bring thousands of jobs to Little Rock



- LRWRA is the first step in creating this huge economic impact - without us accepting their business, corporations would move on to the next city
- LRWRA does great job being prepared, responsive, professional, business friendly - helps Little Rock's competitive position
- Some aspect of reclaimed water infrastructure needed for every prospect - having capacity gives us an edge where others might be cut out of project
- Public health
 - Preventing environmental contamination - overflows no longer happening - people not getting sick
- Showing young people that they can stay in/come back to Little Rock for a great career
- Vital to infrastructure - the way that we develop from residential/commercial standpoint

What is the city's role in ensuring adequate infrastructure that has capacity for future growth, both residential and commercial?

- Expansion to green spaces
 - In bringing industry or residential to green spaces, we are the first step
 - Cannot extend growth without sewer service
 - When building house or commercial building, must hook up to the sewer system
 - Anticipate significant residential development in West Little Rock
- Governing role
 - City has high-level involvement from policy standpoint
 - Approve rate structure, annex, and expand within boundaries of city, work with LRWRA to make sure they have capacity for expansion
 - Makes appointments to LRWRA Commission
- Port of Little Rock houses all industry coming in
 - Do not want to turn away any industry that the Port proposes - would mean turning down economic development for the city as a whole
 - Must maintain enough capacity for large water users to move in

Is there something that LRWRA could do to improve its services, particularly related to meeting the needs of high-volume commercial customers?

- Can be difficult to arrange class visits sometimes due to busy schedules/public school funding issues
 - Idea to create science kits for elementary school kids
 - Showing children that LRWRA is at work in every building
- Keeping current





- “What else could there be that we aren’t looking at? If we are not tracking it now, let’s do it.”
- Services we provide need a little more commercialization to the public
 - One of the most important jobs that exist
 - People would value water/our jobs more if they understood that water is such a precious resource
- Engaging more with prospects on sustainability
 - “Is there any sustainability/environmental piece that prospects want? What do they think? Is it a selling point? It should be.”
- To my knowledge, have never turned down a high-volume customer
 - Continue doing what we are doing so we do not have to say no
- Wish we could do better in community education about how/when to interact with us
 - Understanding citizen’s responsibilities vs. the Authority’s responsibilities
 - Many of the city’s pipes placed 50 years ago - customers often do not understand their responsibility in replacements/do not engage with aid programs before an issue arises
 - Some confusion remains around our role even with our many outreach programs

How does the Authority promote its mission internally?

- Community Champions representing LRWRA team of volunteers
 - Recognize the Volunteer of the Quarter to encourage/reward employees’ participation
- Jobs are high paying, secure, great benefits
- Variety of careers available
 - “The more we can educate young people and young adults about us and our vast range of opportunities, the better footing the utility is in from an employee standpoint moving forward.”
- Women of Water & Allies (WOWA)
 - Internal organization established as an employee resource group to support female employees,
 - Giving tools for work-life balance, mental health, motherhood, expanding uniforms to be more women-friendly, etc.
 - Have since added allies to represent our male counterparts that help us in this objective
 - Coming up on our fifth year of the program
 - A utility this large can easily become siloed - WOWA gives us the opportunity to connect internally

What “hidden” impacts from water reclamation have you seen that we might not think of?

- Amount spent to make improvements across the city
 - Not just in one ward/district/neighborhood
 - Significant dollar amount in just infrastructure
- Commission monthly meetings open to the public - can learn about voting issues, projects
- Community involvement





- Always part of community events, giving back our time to residents
- Though it is a public utility, still giving back to its people/clients/customers
- Telling the stories that expand young minds
- Many examples of outreach - a hidden gem
 - In-school programming for all ages (e.g., JoJo the Water Hero)
 - Facility tours for the public's education
 - Teach underserved communities how to fish
 - Volunteer to help schoolteachers prepare classrooms for the year
- Culture of team - representation
 - Leadership is intentional about hiring diverse group of people - speaks volumes about the organization
 - Women leading in engineering and STEM roles - inspiring others to do the same
 - Volunteerism a key part of the company culture - care about making difference in our community
 - Do-right board and organization - from the person digging a hole in the trench to CEO and leaders
- Equity
 - Unmatched leadership - very conscious of the community they serve - all the neighborhoods
 - People do not always understand our desire to think of all city constituents in fair/equitable play
 - Whether it's manhole replacements, line replacements from pipes - taking place in West Little Rock as much as in Central and South
 - Ensure that changes take place in the Asher Avenue area as well as the Chenal area so that all our citizens are getting the best quality of services
- Impact of workforce
 - People with good paying jobs, healthcare, great work culture
 - Team in itself - crucial from a retention standpoint - needs to be nurtured/understood
 - Utility is a vehicle of awareness about the diverse jobs available
 - Stability - "can't AI your way out of digging a hole for a sewer line"
 - Showing kids vast potential for careers - no better platform/team for kids interested in engineering
 - "How many utilities - especially 'wastewater' - are allowing their workforce to be so engaged with the community and sharing those jobs?"
- Location of facilities
 - Intentionality of ensuring that locations have quality of place
 - Shows commitment to Little Rock's appearance as a city
 - Even though the business is "unclean," do their best to be clean in every way possible
- Need to *pull the utility out of the shadows*

Do you foresee any potential trends or future impacts of LRWRA, particularly over the next three to five years?





- Asset management
 - Moving away from CAO-era of horizontal assets (pipes underground) and toward improving vertical assets (facilities/pumps)
 - New focus on enhancing our facility's infrastructure/assets through treatment facilities
 - Oldest facilities from 1960s, newest one now ten years old
 - 54 pump stations across the city
- Authority is always committed to being on the cutting edge
 - First ones with FOG, SSLRP programs
 - Looking to be #1 in the region, state, etc.
 - No other program close to SSLRP in the country - some select ones, but their grant funding runs out
- Capacity study in approval process now
 - Study to relieve some flows from the line that Port ties into
 - Should free up about three million gallons for Port development. In approval process now.
- Environmental regulations
 - State/federal guidelines constantly focusing on the next pollutants, etc.
 - Always adjusting our treatment facilities to meet those needs
- Growth of systems
 - Constantly fixing things that have broken, but also adding capacity
 - In the last five years, have increased from 72 to 94 million gallons
 - Focused on adding a couple of pump stations that will fix some capacity issues - a moving target to constantly make repairs and maintain system
 - In next ten years, expansion of Fourche Creek Water Reclamation Facility to better serve Port of Little Rock.
 - Although facility expansion not happening yet, exploring strategies - idea to funnel back to airport plant with greater capacity
 - Working as we speak to prepare for a supersite user
 - Facilitating growth of the Port
 - Would pump to our existing facility - pump station to get to our treatment facilities in the area
- Interested to see how we can get involved with other entities that are focusing more on water reclamation and energy use - becoming increasingly popular
- Potential for future reuse of reclaimed water
 - Do not yet have the infrastructure - interested in developing this, as is the airport
 - Economic development
 - Port of Little Rock recruits many European companies - have been requesting reclaimed water reuse for a long time
 - Responding to industry that is being courted daily





- Sustainability piece
 - From environmental standpoint, we as a utility have an interest in pursuing water reuse
 - Many drier states already implementing water reuse as necessity
 - Even though Arkansas is a water-rich state, should still be focused on sustainable use
 - Why use our wonderful drinking water when you can use safe reclaimed water for things like irrigation or cooling towers?
- Technology
 - AI and tech taking hold in every industry
 - Exploring how to utilize new AI/tech opportunities to enhance our assets, increase efficiency
 - Equipment automation to strengthen departments
 - Tech improves, but the fundamentals are timeless - water rolls downhill
 - Use of UV is our big leap into the future - good job keeping up with technology
- Trenchless rehabilitation
 - On collections side, used to have to dig a trench to replace entire length of pipes/underground infrastructure - disturbs people's yards, flower beds, etc.
 - Now can reline, do a form of rehabilitation that does not require cutting into people's properties
 - Hindman Park infrastructure - will use trenchless technology so that people can continue using the park
- Trendsetters - "In terms of water reclamation, we are kind of writing the book on it in Arkansas."





ENDNOTES

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