



MOONSHOT
MISSIONS

IMPACT REPORT 2024



Photo Credit: Caroline Gutman



“I just love the way everyone brainstorms solutions, it is very “Justice League of the utility sector!!” There doesn’t seem to be anything that at least one of you doesn’t have experience with.”

- City of Beggs, OK

WHO WE ARE

Moonshot is a non-profit organization that employs a unique business model to help utilities enhance water access and quality while promoting financial sustainability. Our goal is to help utilities re-imagine themselves in a way that not only improves water quality and supply, but also strengthens their financial position to deliver these services in an affordable, sustainable and resilient manner.

WHAT WE DO

The Moonshot business model is based on collaborative peer-to-peer advisory services. Our staff, comprised of water professionals with over 600+ years of collective experience, practices humble listening with local leaders to learn about key challenges and aspirations for their water resources. Working on-site, we help discover, assess, select and implement new strategies - often including new technologies that improve performance and frequently reduce costs or generate new revenues.

OUR VISION

For every community in the United States to have affordable and reliable systems that deliver clean water at their tap and in local waterways.



Scaling for Impact

Scaling for Impact. Three words that capture the essence of Moonshot Missions.

Six years ago, we successfully launched a non-profit, peer-based consulting model designed to help utilities – particularly those with limited resources – assess, select, finance and implement solutions to deliver cleaner water at the tap and in local waterways at lower cost. Starting with 1 community and 2 personnel, we have scaled up and are currently serving 198 communities with 37 personnel. We have proven our model works with communities of every size and demographic.

Now, with over 100 success stories under our belt and a stellar team of world-class water professionals, including PEs, PhDs, MBAs, MPHs and more, we are poised to substantially scale our reach. This report, following a simple structure, highlights seven areas of impact and tells a story for each that outlines the challenge, solution, and outcome we helped achieve. Inspired by these outcomes, we are reinvigorated to both renew our passion to serve and to redouble our efforts and to further expand our assistance to communities in need. We will continue to be guided by our North Star, the Moonshot trifecta:

- 1) Improving water quality and quantity, more challenging and essential by the day as systems continue to age and new threats emerge.
- 2) Improving utility finances by reducing costs or generating new revenues, more important in a marketplace that offers so little personnel and financial support for thousands of communities.
- 3) Offering nimble, humble and experienced hands-on support, founded on fostering a culture of curiosity and newfound confidence that drives continuous innovation.

I look forward to your feedback and welcome any comments or ideas on our goal of “Scaling for Impact.” Please reach out, especially if you know of a community that could benefit from our help, at info@moonshotmissions.org.

Onward!




George J. Hawkins

George Hawkins, CEO and Founder

in @george-hawkins

in @moonshotmissions/mycompany/

 @moonshotmissions

 @MoonshotWater

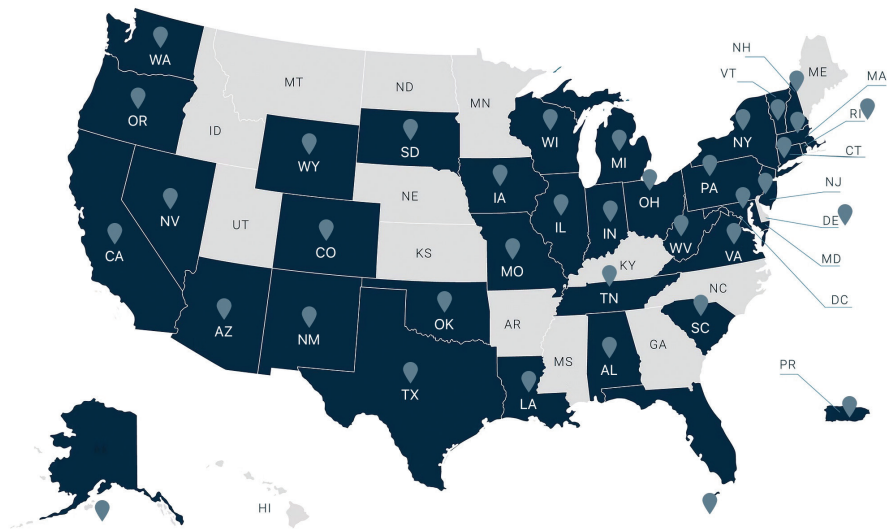
Impact

BY THE NUMBERS
AND ISSUES
ADDRESSED

Issues Addressed:

- ◆ Drinking water quality
- ◆ Source water protection
- ◆ Reduced sewage discharges
- ◆ Nutrient removal
- ◆ Consolidation
- ◆ Rising sea levels and flood control
- ◆ Resource recovery and clean energy
- ◆ Water leakage and loss
- ◆ Treatment optimization and savings
- ◆ Technology - adoption
- ◆ Failing well and septic

Moonshot's Model is Working!



Measures of Success

49 states, territories and tribal lands

12,253,013+ people served

198 communities assisted to date

73% serve less than 10,000

52% wastewater **41%** drinking water
7% storm and/or both

142 site visits

37 team members in 18 states

600+ years of experience

Our focus is on communities that have often felt left behind – from the smallest rural hamlets to larger rust belt cities, and across tribal lands.



HIGHLIGHTING OUR Impact

Reducing Emerging Contaminants

Improving Utility Resiliency
and Sustainability

Capacity Building in Small Systems

Sharing Best Practices

Adopting New Technology
for Improved Management

Transforming Management
through Strategic Planning

Connecting Systems to
Regional Water Sources

This year, Moonshot Missions has been at the forefront of helping communities tackle their most pressing water challenges. From addressing emerging contaminants to securing funding for infrastructure improvements, we've worked alongside local governments, utilities, and stakeholders to craft innovative, sustainable solutions.

Our team is focused on delivering tangible outcomes that benefit the environment, the community and the financial condition of the utility.

We are proud of the reoccurring themes highlighted below, all with the goal to secure cleaner water at the tap and in local waterways. This is the promise of Moonshot Missions.

IMPACT

CHALLENGE

SOLUTION

OUTCOMES

REDUCING EMERGING CONTAMINANTS

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
WIGWAM MUTUAL WATER COMPANY	1,300	DRINKING WATER	IMPROVED UTILITY FUNDING, WATER SCIENCE AND INNOVATION

CHALLENGE: Wigwam Mutual Water Company, located in central Colorado, faces a pressing challenge with PFAS (per- and polyfluoroalkyl substances) contamination in their drinking water well. In response, the utility decided to pursue an alternative treatment technology to remove the PFAS in the well. The Colorado Department of Public Health and Environment (CDPHE) identified the need for a pilot study to evaluate the proposed treatment technology for PFAS removal and was connected to Moonshot Missions to provide expert guidance and support to the utility.



SOLUTION: Our team worked closely with the utility and the state to procure a local engineering consultant to launch the project successfully. We navigated the complex Emerging Contaminants in Small and Disadvantage Communities Tier 1 grant application process, gathering critical information and coordinating meetings to define the project scope.

OUTCOMES: Our efforts helped Wigwam Mutual Water Company secure a \$300,000 grant to fund the pilot study, which will evaluate electrocoagulation for PFAS removal. Moonshot continues to support the project with grant management and engineering oversight. If successful, this could be an approach adopted by utilities across the nation confronting PFAs in drinking water sources.

“They have been there for Wigwam from the first day we spoke. They have made things happen [...] and made my life a lot easier.”

- Keith DeVore, Water Operator, Wigwam Mutual Water Company

IMPROVING UTILITY RESILIENCY AND SUSTAINABILITY

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
PRICHARD WATER WORKS AND SEWER BOARD	18,816	DRINKING WATER & WASTEWATER	BUILDING COMMUNITY TRUST, IMPROVED WATER INFRASTRUCTURE

CHALLENGE: Prichard, Alabama's drinking water system loses 60% of its treated water, the sewer system frequently overflows, and residents are burdened by high bills. The system had been placed under receivership and the EPA referred our team to Prichard.

SOLUTION: Our first step was to engage directly with the community. We met one-on-one with local stakeholders, listening to their concerns and working to build trust. With a clear understanding of the challenges, we explored governance alternatives, including consolidation with the neighboring Mobile Area Water and Sewer System. This move would bring more resources, expertise, and long-term sustainability to Prichard.

OUTCOMES: Moonshot's provides support for Prichard as a National Environmental Finance Center funded by USEPA. Our role is to connect communities with federal funding. In the immediate term, the receiver's recommendations to Arizona Department of Environmental Management and the appointing judge aligned with Moonshot's recommendations and have been approved by the court. Moonshot is currently exploring federal funding to support the consolidation leading to the repair of the town's vital infrastructure.



CAPACITY BUILDING IN SMALL SYSTEMS

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
TOWN OF VICTORIA	1,747	DRINKING WATER & WASTEWATER	IMPROVED WATER QUALITY, UTILITY COSTS SAVINGS

CHALLENGE: In the heart of southeastern Virginia, The Town of Victoria was grappling with the same struggles faced by many small communities: limited resources, aging infrastructure, and outdated water systems. While the town's leadership was dedicated to improving services, they recognized a critical gap in knowledge when it came to managing their water infrastructure for long-term success.

SOLUTION: Our work with Victoria began in 2022 with their sewer system, building trust that led to them seeking our help with their drinking water system. Our role was clear: assess their facility, identify actionable solutions, and empower local staff to take control of their water system management.

OUTCOMES: Our goal wasn't just to offer technical fixes but to equip the staff with the tools and knowledge to make informed decisions and take ownership of their system's future. A key success was addressing a manganese issue that caused black stains on fixtures. After spending a few days on-site, we helped the team adjust chemical treatments based on real-time water quality, reducing costs and improving operational efficiency. We continue to assist Victoria and connect them with peer utilities adopting similar technologies. Our involvement doesn't end with solutions—we stay engaged, empowering staff to manage their systems independently.





SHARING BEST PRACTICES ACROSS THE SECTOR



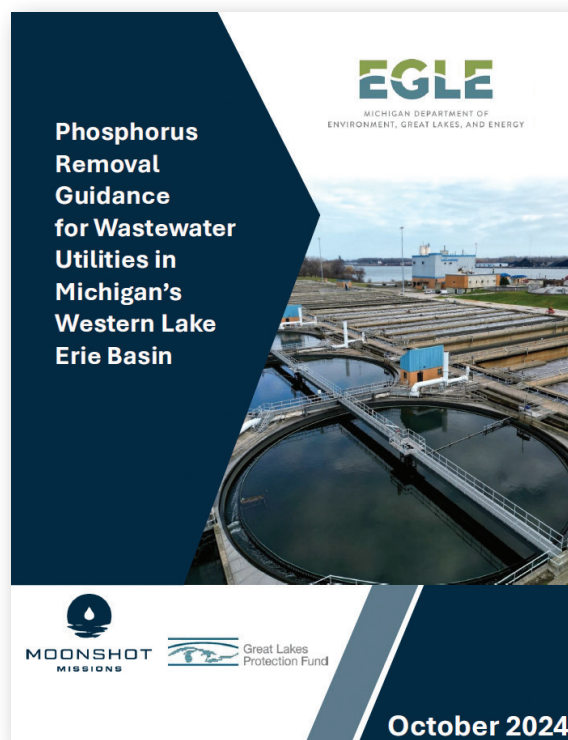
SHARING BEST PRACTICES ACROSS THE SECTOR

COMMUNITY	SYSTEM TYPE	ADDITIONAL BENEFITS
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY	WASTEWATER	IMPROVED WATER QUALITY, UTILITY COST SAVINGS

CHALLENGE: To tackle the growing threat of harmful algal blooms in Lake Erie, the Michigan Department of Environment, Great Lakes, and Energy (MI EGLE) set stricter phosphorus limits for 26 sewage treatment plants. To help, EGLE turned to Moonshot to create a phosphorus removal handbook that focused on cost-effective operational strategies to avoid burdening utilities and ratepayers with costly capital upgrades.

SOLUTION: Our team developed a comprehensive resource outlining practical, field-tested strategies to optimize phosphorus treatment processes, each backed by a real-world case study showing successful implementation. This guidance document empowers utilities to meet the new phosphorus limits efficiently and affordably.

OUTCOMES: Moonshot is working alongside MI EGLE and regional regulatory agencies to distribute the resource throughout the Western Lake Erie Basin and EPA Region 5. By prioritizing operational improvements, we are enabling facilities to achieve compliance and protect the Great Lakes from phosphorus pollution, while keeping costs manageable for communities.



“EGLE appreciates the collaborative efforts of Moonshot Missions to produce this Phosphorus Guidance document and fully expects this to be used for WWTPs tributary to the Western Basin and other WWTPs in the region.”

- Phil Agrioff, Water Resources Division Assistant Director, Michigan EGLE

ADOPTING NEW TECHNOLOGY FOR IMPROVED MANAGEMENT

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
CITY OF AKRON	188,701	WASTEWATER	IMPROVED WATER QUALITY, UTILITY COSTS SAVINGS, WATER SCIENCE AND INNOVATION

CHALLENGE: The City of Akron, Ohio is on the verge of completing its Long-Term Control Plan (LTCP), a crucial initiative to eliminate untreated Combined Sewer Overflows by 2027. With 24 out of 26 major projects already finished, the city has made tremendous strides in improving water quality in the Cuyahoga River, cutting down pollution, and supporting the local ecosystem. Yet, these improvements have come at a steep cost, with sewer rates climbing by 269% over the past decade. The final piece of the puzzle adds a staggering \$209 million to the bill, an additional financial strain on ratepayers.

SOLUTION: Seeking a more cost-effective solution, Akron turned to Moonshot with support from the Great Lakes Protection Fund. We facilitated a partnership with the EPA Office of Research & Development and coordinated a pilot study to evaluate Peracetic Acid (PAA) for disinfecting water. The results were promising: PAA treatment showed comparable results to the facility at just one quarter of the price.

OUTCOMES: This innovative solution will help Akron meet its regulatory goals without further burdening residents. Akron is now exploring this cost-effective alternative, aiming to protect both water quality and its ratepayers' wallets.





“The City of Akron appreciate[s] the immense knowledge base Moonshot Missions brings to the table. Their ability to connect people and come up with collaborations and solutions is invaluable. I have enjoyed working with them on multiple projects.”

- Steven Baytos, Superintendent, City of Akron Water Reclamation Services

TRANSFORMING MANAGEMENT THROUGH STRATEGIC PLANNING

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
MIAMI-DADE WATER AND SEWER DEPARTMENT	2,701,767	DRINKING WATER & WASTEWATER	BUILDING COMMUNITY TRUST

CHALLENGE: Moonshot partnered with the Miami-Dade Water and Sewer Department (WASD) on the WAVE: Water – A Vision for Excellence initiative to help enhance resilience, efficiency, and workforce engagement across its operations. WASD needed a strategic roadmap to drive change within the organization.

SOLUTION: We provided direct mentorship to WASD leaders, facilitated change management workshops, and structured teams to break down silos and foster collaboration. Our approach empowered staff at all levels to contribute to the department's vision, ensuring alignment and building internal support for change.

To engage the workforce and community, our team led ten Roadshow events, developed a comprehensive communications strategy, and integrated feedback from employees and stakeholders into every phase of implementation. We also provided prioritization frameworks, project planning tools, and leadership guidance to ensure long-term sustainability.

OUTCOMES: This partnership demonstrates Moonshot's ability to support utilities of all sizes in executing strategic plans. By focusing on capacity-building, workforce engagement, and actionable strategies, we are helping WASD create a more resilient, efficient future for both its staff and the people they serve.



CONNECTING SYSTEMS TO REGIONAL WATER SOURCES

COMMUNITY	POPULATION	SYSTEM TYPE	ADDITIONAL BENEFITS
MOBILE HOME COMMUNITIES IN COACHELLA VALLEY	SYSTEMS SERVING <500	DRINKING WATER	BUILDING COMMUNITY TRUST, IMPROVED WATER INFRASTRUCTURE

CHALLENGE: The Coachella Valley Water District (CVWD) serves a 1,000-square-mile area, home to over 100 rural mobile home communities not connected to CVWD's potable water system. Their median household income is below 60% of the state average and they face aging infrastructure, elevated arsenic and fluoride levels, and insufficient financial capacity to sustain long-term operations. Many lack formal water rates, making maintenance and cost recovery difficult. While CVWD aims to eventually connect these systems to their network, identifying funding and addressing urgent issues is critical to ensure reliable drinking water.

SOLUTION: In 2022, Moonshot partnered with the EPA and other stakeholders to assess conditions of an initial four communities. This year, under our National EFC project, we entered phases two and three with an additional eight communities. Our technical, managerial, and financial assessments provided a comprehensive evaluation of system infrastructure, operations, and management, identifying critical areas requiring immediate attention as well as minor recommendations for property owners..

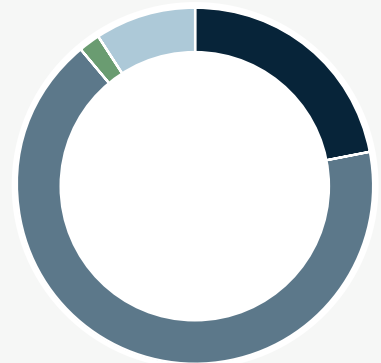
OUTCOMES: To advance solutions, we are working on securing funding for the necessary capital improvements and consolidation. By collaborating with EPA WaterTA to secure no-cost engineering services, we are supporting communities with their funding applications. Collaboration with local community organizations has been key in building trust with system owners, reinforcing the importance of community-driven solutions in achieving long-term sustainability.



	FY2024	FY2023
	Provisional	Actual
Revenue		
Contributions and Support	3,340,711	2,026,751
Earned Revenue	332,660	300,473
Total Revenue	\$3,673,371	\$2,327,224
Expenses		
Personnel Expenses	2,618,969	1,192,316
Consulting Expenses	583,745	1,029,759
Programmatic Expenses	199,137	113,491
Non-Personnel Expenses	124,848	97,343
Total Operating Expenses	\$3,526,699	\$2,432,909
Investments	25,043	1,497
Change in Net Assets	\$171,715	(\$104,188)
Assets		
Total Assets	\$1,583,247	\$1,563,932
Liabilities and Net Assets		
Liabilities	135,020	282,077
Total Current Liabilities	382,562	387,904
Total Long-Term Liabilities	517,582	669,981
Net Assets		
Total Net Assets	1,065,665	893,951
Total Liabilities and Net Assets	\$1,583,247	\$1,563,932

2024 INCOME

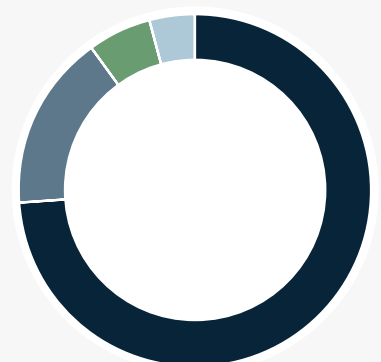
\$3,673,371



22% Contributions and Grants
67% Grant Revenue - Governmental
2% In-Kind Revenue
9% Earned Revenue

2024 EXPENSES

\$3,526,699



74% Personnel Expenses
16% Consulting Expenses
6% Programmatic Expenses
4% Non-Personnel Expenses

THANK YOU TO OUR PARTNERS



THANK YOU TO OUR BOARD



Oluwale McFoy
City Engineer,
Houston Public Works



Debra Coy
Advisor,
XPV Water Partners



Carla Reid
Former General Manager,
WSSC Water



Michelle Bixler
Deputy Town Manager,
Town of Woodstock



Anne-Marie Jones
President & COO,
DigDeep



Eleanor Allen
Former CEO,
Water for People



5207 Portsmouth Road
Bethesda, MD 20816

Email: info@moonshotmissions.org

Phone: 202.256.1981

www.moonshotmissions.org

in [@moonshotmissions/mycompany/](https://www.linkedin.com/company/moonshotmissions/)

ig [@moonshotmissions](https://www.instagram.com/moonshotmissions/)

X [@MoonshotWater](https://twitter.com/MoonshotWater)