



THE WATER TOWER



2023

INNOVATION STARTS HERE

A N N U A L R E P O R T

THE WATER TOWER

OUR VISION

To be a thriving ecosystem of water innovation fueled by imagination, informed by research, and powered by pioneers.

OUR MISSION

The Water Tower Institute

TWTI (501c3) will be a hub for solutions in research, technology, training and engagement for water utilities ensuring access to safe, affordable and resilient water services.

The Water Tower at Gwinnett

TWTG (501c4) will develop world-class physical infrastructure and dynamic human capital needed to inspire and implement transformational programming.



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Buford, GA 30519
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THE WATER TOWER

MESSAGE FROM OUR CEO

The Water Tower innovation hub is focused on convening bright minds and dedicated professionals to collaboratively solve real-world water and environmental challenges. Looking back on the past year, I'm extremely proud of what we've achieved alongside our incredible partners.

In its first full year since opening, The Water Tower campus attracted more than 8,000 visitors to see our unique, state-of-the-art facilities and fully functioning, real-world test conditions. In 2023, we hosted programs and events on a variety of issues related to cybersecurity, water quality, treatment processes, reuse, hydraulics, backflow prevention, stormwater, workforce training and safety, women and diversity in leadership, and economic development. We were proud to be the venue for the 2023 Empowering Pumps & Industry Conference, WateReuse Association Conference Workshop, and National Backflow Prevention Day Celebration, and we look forward to hosting more in 2024!

We were awarded several multi-year grants worth more than \$778K to support cutting-edge research and targeted workforce development. In all, we supported the training of 600 workers through 51 classes and are excited to expand those numbers over the coming years. Our research efforts included collaborating with 40 utilities and 13 academic partners.

Looking ahead, we're committed to remaining agile and adjusting our sails to meet the needs of the water industry.

Our programming wouldn't be possible without the involvement of our more than 40 generous partners, including our passionate volunteers and the 10 companies that have established offices on our beautiful campus. We always welcome and encourage feedback from our partners and program participants to help us assess and improve on our programming. If you have ideas, don't hesitate to reach out.

We're also fortunate to have a dedicated Board of Directors who serve each nonprofit under The Water Tower. We recently welcomed new members and look forward to the fresh perspectives and insights they will infuse into our strategic planning for the future. Finally, words can't fully express my gratitude for the support and perseverance of our small, yet mighty staff. They amaze and inspire me daily. The Water Tower has truly become a special hub for advancing the water community. Come see for yourself how innovation starts here!



A handwritten signature in blue ink that reads "Melissa L. Meeker".

Melissa L. Meeker
CEO, The Water Tower



MEET THE TEAM

Melissa L. Meeker
Chief Executive Officer

Kristan VandenHeuvel, ENV SP
Director of Impact and Engagement

Chris Impellitteri, Ph.D.
Director of Research and Development

Chad Wilbanks
Director of Training and Technology

Peggy Alexander
Office Manager

Courtney Lee
Training Development and Events Specialist

Brittany Fitts
Data Management and Analytics Specialist

Richard Meeker
Facilities

Anna Impellitteri
Research Intern

Abbey Kennedy
Research Intern

Vivian Rodriguez
Engagement Intern



2023

TWT BY THE NUMBERS

36 States visited TWT

275+ Attendees from across U.S.
at Demo Day 2023

150+ High school students
participated in 2nd Student Water
Leadership Summit

13 Academic partners

40+ Supporting Partners

10 Companies with offices
on campus

117% Increase in training
partners

15 Countries visited TWT

\$778K Grant awards for
research and training

120+ Attendees at 4th Annual
“Watering Hole” Golf Tournament

600+ Workers trained
in 51 classes

9 Hands-on labs with training
courses

40+ Global participants in
collaborative research project

10 Technologies
demonstrated on campus

WORLD-CLASS WATER INNOVATION HUB

Located in Gwinnett County, Georgia, The Water Tower provides innovative solutions for utilities in the water sector while attracting and training the next generation of water professionals. We offer state-of-the-art laboratories, classroom and event space, living laboratory demonstration areas, a field training center, long-term tenant space and short-term co-working space, podcast studio, hydraulic training lab, and R&D facilities. A Control Room, located at The Water Tower, includes the tools necessary to visualize digital technologies being demonstrated.

The campus provides opportunities for its partners to use short-term and long-term rental space for

hosting events and training – both classroom and in-the-field, and R&D facilities – with live water quality flows, three laboratories, and equipment. Each of the spaces was designed to support TWT’s core programming in applied research, technology innovation, workforce development, and industry engagement.

The Water Tower campus attracted over 8000 visitors in our first full year of the campus being open to see the unique, state-of-the-art facilities and fully functioning, real-world test conditions. TWT welcomes organizations to host water industry conferences and trade shows on its campus.



In 2023, organizations held events to collaborate on issues related to cybersecurity, water quality, treatment processes, reuse, hydraulics, backflow prevention, stormwater, workforce training and safety, women and diversity in leadership, and economic development. The Water Tower was proud to be the location for the 2023 Empowering Pumps & Industry Conference, WaterReuse Association Conference

Workshop, and National Backflow Prevention Day Celebration, as well as TWT-hosted events such as Demo Day, Women Water and Wine Networking Receptions, lunch and learns, and more.

We partner with an impactful network of water leaders to advance the industry. Come be part of our world-class water innovation hub!



“Part of Wade Trim’s mission is to solve complex challenges to create stronger communities. Our partnership with The Water Tower exemplifies this goal by allowing us to support and staff important research conducted at The Water Tower and create awareness and opportunities for those looking to enter the water industry.”

— Herve C. Yondo, PE, PMP, CCM, Vice President and Area Lead for TWT Sustaining Partner, Wade Trim

WATER WORKFORCE SOLUTIONS

With approximately 1,200 water-related positions opening in the Northern Georgia region over the next five years, action is needed to recruit, train, and diversify our future water workforce to best serve and represent their communities.

The Water Tower is committed to assisting utilities in meeting their personnel and training needs

to ensure that essential water, wastewater and stormwater services continue to be delivered. Our workforce initiatives focus on getting trainees out of the classroom and into the field to experience real-life situations in a controlled manner, and we have designed our campus to allow for these hands-on experiences.



WATER WORKFORCE FOR RESILIENT COMMUNITIES PROGRAM

TWT's Water Workforce for Resilient Communities Program, funded by a U.S. Department of Treasury American Rescue Plan Act Grant, provides trainees with training, soft skills development, wraparound services support, and job placement assistance for water and wastewater operator positions. The program targets underserved populations and other service industry workers who lost jobs during the pandemic and offers two tracks – an 8-month work-study program for high school seniors, and a concentrated 4-month program, culminating with the state certification exam.

Once licensed, The Water Tower will help place qualified candidates at water and wastewater utilities in North Georgia who are in great need of talented, skilled operators to serve their communities. The Water Tower is partnering with local nonprofits Georgia Center for Opportunity, Boy With a Ball, and Corners Outreach to recruit program candidates.

The program's first graduate passed her certification exam in November and is working with TWT to secure her first job in the industry. This program will serve as a pilot to be scaled to include multiple training center locations in regions across the United States, led by TWT.



“At The Water Tower, you will find the support you need to advance in your career. The staff is beyond friendly and are always willing to work with you. I’m so blessed to have worked with them and I cannot wait to see the great things they will achieve.”

— Angelita Cortez, first graduate of TWT's Water Workforce for Resilient Communities Program

STUDENT LEADERSHIP SUMMIT MAKES A SPLASH

Over 150 north Georgia high school students (grades 9-12) attended a summit at The Water Tower campus in November 2023 to learn how they can “Make a Splash” with a career in the water industry. Students from seven area high schools participated in the half-day event to discover different roles,

processes, technology, and innovations involved with water industry careers. Students engaged with industry professionals during a career fair to strengthen their skills in leadership, communication, strategic thinking, team building and networking.



“The Water Tower Summit was amazing! Students were able to see how water is so much more than just water. The interactive activities were awesome and the career fair provided students with opportunities that they did not know existed.”

— Veronica Cross, Engineering Teacher, Mountain View High School

LEADERSHIP SUCCESSION PLANNING FOR DIVERSE PERSPECTIVES

Since its inception, the water industry, like many sectors, has been typically male-dominated. The Responsible Succession Leadership (ReSoLve) program, a first-of-its-kind initiative, was launched at The Water Tower in 2022 with a focus on discussing challenges and creating action plans to develop a pipeline of female leaders for senior roles in water.

Two cohorts in 2023 brought together a diverse group of senior female water leaders to discuss succession planning topics, including bias, mentoring and allyship, safe spaces, work-life integration, self-care, and more. The workshops were a great success with robust conversations, crucial takeaways and action items identified. Additional cohorts are being planned to continue important discussions around challenges facing women and minorities in the water industry.

RESOLVE
RESPONSIBLE SUCCESSION LEADERSHIP



RESEARCH AND TECHNOLOGY

The Water Tower participates in several types of research efforts to ultimately serve water and wastewater utilities by helping to ensure access to safe, affordable, and resilient water services.

Research efforts include:

<p>TWT Managed Projects</p>	<ul style="list-style-type: none"> • Developed with input from technical experts • Approved by TWT Research Advisory Committee • Managed by The Water Tower • Overseen by a volunteer Project Advisory Committee (PAC) of experts
<p>Partner Research Projects</p>	<ul style="list-style-type: none"> • Proposed to TWT or external funding agencies by partners (ex. utilities, universities, industry, other nonprofit organizations) • Often collaboratively funded and managed by TWT • Enhanced technical oversight of project by a PAC of experts • Research communicated through publication and dissemination of project outputs to TWT network
<p>Technology R&D Projects</p>	<ul style="list-style-type: none"> • Often conducted with companies interested in R&D on campus • Able to utilize TWT state-of-the-art laboratories, demo area, and staff support

DEMONSTRATION AREAS

TWT offers research and demonstration areas for lease. Collaboration with a range of partners enables the support of water-related research and evaluation of technology needs.

The TWT Demonstration Area, located adjacent to the F. Wayne Hill Water Resources Center, offers access to three live wastewater streams from the treatment plant, including primary influent, secondary effluent, advanced treated wastewater, plus potable water. The Demonstration Facility includes several research areas and exterior research pads as well as access to several well-equipped laboratories.



ACADEMIC RESEARCH TO ADDRESS INDUSTRY CHALLENGES

For purposes of research, The Water Tower offers laboratory analytics support for utilities and universities, as well as opportunities for visiting professors and students to conduct water-related research in its three labs. Current academic research partners include Georgia Tech, Georgia Gwinnett College, University of North Georgia, University of Georgia, University of Alabama, University of Texas at Austin, Auburn University, Electric Power Research Institute, and other esteemed organizations.

Multiple collaborative research projects were launched in 2023, addressing key challenges in the industry. Notably, TWT is participating on two research teams recently awarded \$2M+ EPA research grants on disinfectants, disinfectant by-products, and opportunistic pathogens in drinking water distribution systems. TWT is also collaborating with a university partner on monitoring fate and transport of PFAS in wastewater systems.



“Our engagement with the R&D Team at The Water Tower has allowed us to test and validate new water process innovations, like the direct nanofiltration system from NX Filtration.”

— Michael Watts, Ph.D, PE, Water Reuse Practice Leader for TWT Sustaining Partner, Garver

RESEARCH ADVISORY COMMITTEE

The Water Tower’s Research Advisory Committee (RAC) is comprised of high-caliber experts in the water field who help guide TWT’s applied research agenda and prioritize projects.

- **Glen T. Daigger, Ph.D., PE, BCEE, NAE, RAC Chair**, *One Water Solutions, LLC*
- **Katherine Atteberry**, *Metropolitan North Georgia Water Planning District*
- **Charles Bott, Ph.D., PE, BCEE, HRSD**
- **Gail Cowie, Ph.D.**, *Georgia Water Planning and Policy Center at Albany State University*
- **Michael Diaz, PE, MS**, *Arcadis*
- **Chris Haney, ENV SP**, *Wade Trim*
- **Kevin Middlebrooks**, *Gwinnett County Department of Water Resources*
- **Jason Mingo**, *Water Services Association of Australia*
- **Stéphanie Rinck-Pfeiffer**, *Global Water Research Coalition*
- **Orren Schneider, Ph.D., PE**, *Aclarity, LLC*
- **Eva Steinle-Darling, Ph.D., PE**, *Water Reuse Technical Practice at Carollo*

MESSAGE FROM OUR BOARD CHAIRS

Reflecting the vision of Gwinnett County's leaders, the nonprofit organizations that comprise The Water Tower have, since their inception, been laser focused on positively impacting water through collaborative innovation. Utilities face a multitude of challenges as they work to deliver high quality, reliable water for communities 24/7. Our mission is to provide resources that help address some of their most pressing issues.

The Water Tower at Gwinnett, a 501(c)4, oversees the campus, real estate development, and infrastructure. By offering world-class facilities where the water sector can connect and collaborate, we are becoming a destination for water innovators from across the globe. A variety of spaces on our campus support short-term and long-term rentals, events, co-working, and training – for classroom, field, and R&D work, including live water-quality flows and state-of-the-art laboratories. While our main building is nearly full, we have begun planning for Phase 2.

The Water Tower Institute, a 501(c)3, continues to grow our programming and adapt to industry needs. A key focus is supporting utilities with staffing and technology challenges. Water providers are projected to lose a significant percentage of their workforce to retirement over the next decade and many don't have the resources to recruit and train new operators. Our workforce initiatives include recruitment, training, and placement of new workers, as well as upskilling opportunities for existing employees. Utilities are also encouraged to visit The Water Tower for access to demonstrations and free testing of innovative technical solutions to guide their planning and decision making.

Beyond our resources for utility professionals, The Water Tower engages with the public, educators, and policymakers to increase awareness of all that it takes to provide essential water services. With support from our outstanding partners, we offer forums to engage with water-related experts from around the world, STEAM-related workshops and camps, and space for the public and academia to learn about and promote water advancements.

Together, our two nonprofits are providing access to real-world solutions for water and wastewater utilities. We're fortunate to serve alongside the dedicated water and business leaders on our boards. The Water Tower's collective team has accomplished a lot in a short time, and we're excited to see our local, national, and international impacts continue to grow.

Looking ahead, we're constantly assessing and evolving campus programming to support industry needs. Through this unique space for professionals from all sectors, industries, and organizations to collaborate on the latest water challenges, The Water Tower is reimagining the future of water for the benefit of communities across the Southeast and beyond. We welcome your ideas and involvement in our water hub – because innovation starts here!



Nick Masino
Board Chair, The Water
Tower at Gwinnett

A handwritten signature in black ink that reads "Nick Masino".



Eileen O'Neill, Ph.D.
Board Chair, The Water
Tower Institute

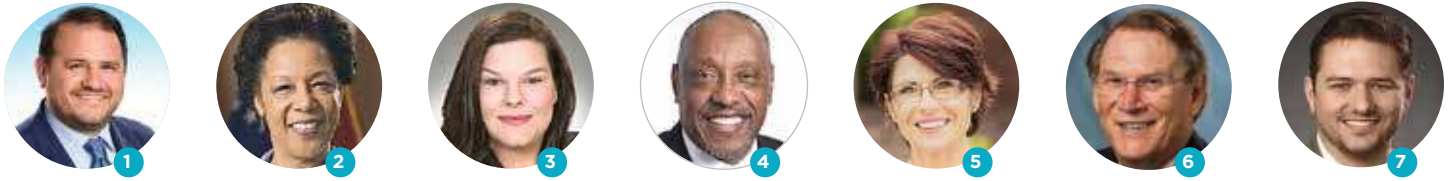
A handwritten signature in black ink that reads "Eileen O'Neill".

2023 BOARD OF DIRECTORS

The Water Tower is pleased to present our Board of Directors for each of the two organizations that comprise The Water Tower. Together, the Directors of The Water Tower at Gwinnett and The Water Tower Institute strive to ensure our campus and ecosystem are a success.

The Water Tower at Gwinnett

The Water Tower at Gwinnett (TWTG), a 501(c)4 organization, focuses on The Water Tower's real estate development and infrastructure.



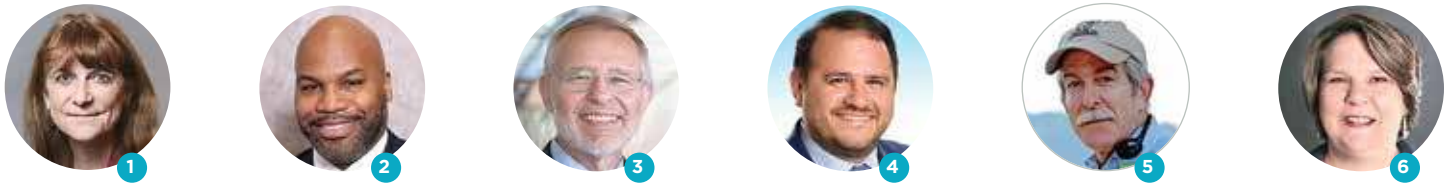
- 1 Nick Masino, Chair**, *President and CEO, Gwinnett Chamber and Partnership Gwinnett*
- 2 Jann Joseph, Ph.D., Treasurer**, *President, Georgia Gwinnett College*
- 3 Jennifer Fennell, Secretary**, *Senior Business Development Manager, Jackson EMC*
- 4 Melvin Everson**, *Vice President of Economic Development, Gwinnett Technical College*
- 5 Jessica Rantamaki**, *Business Development Specialist, Geo-Hydro Engineers, Inc.*
- 6 Ron Seibenhener**, *Retired Director of Water Resources, Gwinnett County*
- 7 Daniel R. Sosebee III, CPA**, *Associate Member in Audit, Advisory and Director of Business Development, Moore Stephens Tiller*

The Water Tower at Gwinnett looks forward to welcoming this incoming Director for 2024:

- Kyle Jones, Ed.D.**, *Director of Academies and Career, Technical, and Agricultural Education, Gwinnett County Public Schools*

The Water Tower Institute

The Water Tower Institute (TWTI), a 501(c)3 organization, focuses on The Water Tower's programming in applied research, technology innovation, workforce development, and community engagement.



- 1 Eileen O'Neill, Ph.D., Chair**, *Founding Partner, Water Principles LLC*
- 2 Terrell S. Gibbs, Ph.D., PE, Treasurer**, *Environmental Department Manager, Corporate Environmental Risk Management (CERM)*
- 3 Glen T. Daigger, Ph.D., PE, BCEE, NAE, Director, Interim RAC Chair**, *President, One Water Solutions*
- 4 Nick Masino, Immediate Past Chair**, *President and CEO, Gwinnett Chamber and Partnership Gwinnett*
- 5 Paul T. Bowen, Ph.D.**, *Retired Director of Sustainable Operations, The Coca-Cola Company*
- 6 Linda MacGregor, PE**, *Director, Gainesville Department of Water Resources*

The Water Tower Institute looks forward to welcoming these incoming Directors for 2024:

- Bruce Bharat**, *Vice President and Country Manager for Kamstrup North America*
- Erica Brown, PMP**, *Chief Policy and Strategy Officer, Association of Metropolitan Water Agencies*
- Tony V. Carnell, P.E.**, *General Manager, Henry County Water Authority*
- Ralph Erik Exton**, *VP, Chief Marketing Officer for Grundfos - Water Utility*

OUR ECOSYSTEM

Sustaining Partners



Transformative Partners



Innovation Partners



Collaboration Partners



Founding Partners



Friends of the Water Tower

Thank you to our numerous corporate and individual Friends of the Water Tower! We greatly appreciate your support in our mission to provide solutions for water utilities.



Become a Partner

Partnering with The Water Tower provides a unique opportunity to participate in leading-edge research, technology innovation, and next-gen programming.

