2022 ANNUAL REPORT







# **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.



2500 Clean Water Court Buford, GA 30519 470-822-0502 www.theh2otower.org

## MESSAGE FROM OUR CEO



What a premiere year for The Water Tower! In the Spring, we officially opened the doors to our beautiful new facility. celebrating with a March ribbon-cutting followed by the grand opening and inaugural Demo Day on Earth Day, April 22. We welcomed hundreds of utility and industry professionals from across the

state and country to connect in our new space to innovate and elevate.

Since opening, our campus has become a worldclass hub for solving critical water and environmental challenges. Throughout the year, we hosted many forums, workshops, and events for business and water sector groups from around the globe and right in our backyard. By bringing tech companies, consulting and engineering firms, universities, NGOs, regulators, and utilities together and breaking down silos, we're developing an ecosystem of innovation where collaboration is key.

We engaged with more than 150 north Georgia high school students at our inaugural Student



Leadership Summit in September and inspired them to learn how they can make a splash with a career in the water industry. We also launched the Water Workforce for Resilient Communities program to train existing and attract new water and wastewater operators. These efforts are critical to addressing the significant workforce shortage facing water utilities everywhere.

We are immensely grateful to our Board of Directors who serve each nonprofit under The Water Tower. Their guidance and experience in water, environment, business, non-profits, and government are invaluable to our success. We also welcomed many new partners and tenants and are appreciative of their contributions, expertise, and influence to make our programming not only possible, but impactful.

Finally, I'm so proud of all our small, dedicated staff has achieved. They amaze me daily with their passion and hard work, providing value to advance our mission and the incredible people we serve. Stop by to visit and join our hub to continue innovating and elevating the water community!

Melissa L. Meeker CEO, The Water Tower

#### **MEET THE TEAM**

Melissa L. Meeker Chief Executive Officer

Kristan VandenHeuvel, ENV SP Director of Applied Research and Engagement

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

**Chad Wilbanks** Director of Training and Technology

**Peggy Alexander** Office Manager

**Michael Betancourt Research and Engagement Intern** 

Whitney Lamillo Data Warehouse Project Manager Intern

Devi Dehaney not pictured Social Media Intern







# YEAR AT A GLANCE

**Spring 2022:** Ribbon cutting and official opening of The Water Tower campus

**400+** attendees from across U.S. at inaugural Demo Day

**150+** high school students participated in first Student Leadership Summit

**125+** attendees at 3rd Annual "Watering Hole" Golf Tournament

**35+** Supporting Partners

**4** major companies opened offices on campus

\$237,520 received in grant funding for training programs

600+ workers trained in 43 classes

**40+** global participants in collaborative research project



8 technologies demonstrated on campus

# HUB FOR WATER INNOVATION AND COLLABORATION

The Water Tower campus, educational programs, and robust network of partners and collaborators are working together as a dynamic water innovation hub to produce real-world solutions for advancing water and wastewater utilities. We offer state-of-the-art laboratories, classroom and event space, demonstration areas, a field training center, long-term tenant space and short-term H2Co-Working space. Come join us!



"Since opening their doors, The Water Tower has had great success in connecting water professionals, creating research opportunities, demonstrating new technologies, and overall, built a stronger water community in the metro Atlanta area and beyond."

- Chris Clark, Carollo Engineers, Sustaining Partner and Tenant

# SHAPING THE FUTURE WATER WORKFORCE

The Water Tower is committed to assisting utilities in meeting their personnel and training needs with workforce initiatives that include recruitment, training, placement, and upskilling with programming covering a variety of topics, over multiple platforms.

# **30-50% of the current water workforce will be at retirement age within the next 5-10 years.**

A 2019 scan of 200 utility job openings revealed the following workforce needs:

#### **KEY UTILITY CHALLENGES**

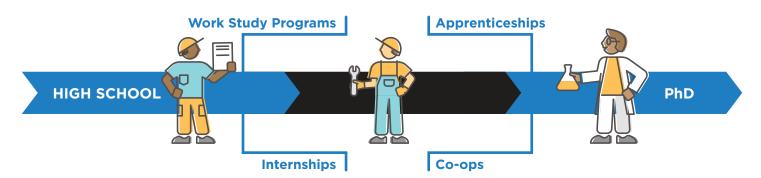
- 69% Attraction & Retention
- 67% Aging Workforce
- 58% Recruitment

- 58% Lack of Interest by New Workforce
- 31% Limited Upward Job Mobility
- 21% Insufficient Training
- 17% Diversity & Inclusion
- 7% Job is Becoming Too Technical
- 4% Other

#### **OUR SOLUTION**

The Water Tower offers specialized, hands-on training programs for workers with varying education and experience — from entry-level to mid-career. We also offer internships, apprenticeships, co-ops, and work study programs for high school graduates and those looking for a career pivot into the industry.

**Strategic training partners:** TWT works with key training partners to upskill and expand the knowledge of water industry workers to set individuals, utilities, and water-related companies they work for up for success for a brighter water future.



#### Water Workforce for Resilient Communities Program

Launched in September 2022 and funded through the American Rescue Plan Act, the program targets underserved populations and other service industry workers who lost jobs during the pandemic. The program 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, TWT will help place qualified candidates at water and wastewater utilities in North Georgia.

TWT is partnering with local nonprofits Georgia Center for Opportunity and Corners Outreach to recruit program candidates. Interested candidates may contact info@theh2otower.org to learn more and apply.







# WATER INNOVATION & LEADERSHIP SUMMIT





157 students 30 staff and volunteers
12 event sponsors
11 career fair booths
10 STEAM activity stations
5 high schools 2 inspirational speakers **E 1 AMAZING DAY**

#### **TWT Hosts Inaugural Student Leadership and Innovation Summit**

More than 150 north Georgia high school students attended a summit at The Water Tower campus in Buford in September 2022 to learn how they can "Make a Splash" with a career in the water industry. Students (grades 9-12) engaged with the summit speakers from water-related businesses and organizations and experienced hands-on learning about water career opportunities, including treatment plant operations, water sampling and lab analysis, pipe system design and engineering, stream restoration, wildlife assessment, robotics in water and more.

# **PROVIDING SOLUTIONS THROUGH RESEARCH AND TECHNOLOGY**

The Water Tower participates in various research efforts — from managing applied research projects and collaborating on teams to working with our partners and universities to perform research using the amenities on our campus. Unique only to TWT, we provide access to three state-of-the-art living laboratories with live water streams from the F. Wayne Hill Water Resources Center, and other Gwinnett County system assets to conduct water-related research and demonstrate technologies and solutions for the benefit of water utilities.



"The Water Tower provides an ideal environment for Olea's demonstration site, which also serves as a testing bed for R&D and new technology. By partnering with The Water Tower, Olea is able to more rapidly and confidently bring new technology to the water industry."

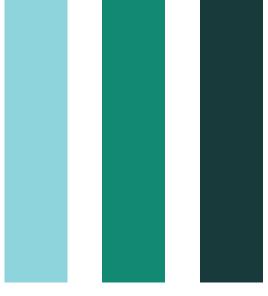
- Quinn Jackson Elliot, Olea Edge Analytics, Transformative Partner

#### International Group of Utility Leaders Advancing Innovation Initiatives

In partnership with global consulting firm Arcadis, TWT hosted a group of international water and wastewater utilities in October 2022 for one of a series of three workshops to advance innovation initiatives in the water sector. More than 35 participating utilities and partners are contributing over \$465,000 in monetary and in-kind support to complete a one-year global research project with the goal of presenting utilities with a roadmap of best practices for successful innovation programs. The project has support from a technical advisory panel of representatives from the American Water Works Association, Water Environment Federation, Association of Metropolitan Water Agencies, Water Research Foundation and Water Services Association of Australia.



The TWT demonstration area, located adjacent to the F. Wayne Hill Water Resources Center, offers access to live wastewater streams from the treatment plant, including primary influent, secondary effluent, advanced treated wastewater, and potable water. TWT works with demo companies and provides access to additional assets found in Gwinnett County, including 3,800 miles of distribution system, 3,000 miles of collection system, 220 pump stations, and 1,500 miles of stormwater system for research and testing in real-world conditions. In addition to Gwinnett County's assets, TWT works with utilities throughout the southeast to host demonstrations at their facilities, which provides utilities with valuable information when making key decisions.





F. Wayne Hill Water Treatment Plant located adjacent to TWT

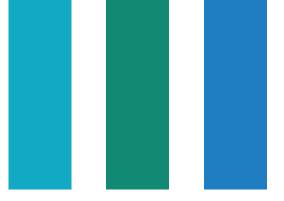


In August 2022, TWT hosted a reception to honor and thank our Founding Partners for their early and critical support of The Water Tower. These early champions believed in the idea of TWT when it was still just a concept. Thank you to Gresham Smith, Gwinnett County Government, JEA, Mueller Water Products, and Siemens for your foundational support!



## **MESSAGE FROM OUR BOARD CHAIRS**

Water resources are foundational to the vitality of communities across the globe. Yet, water planners and providers face a wide array of complex challenges as they provide safe, reliable water services 24/7. To help utilities and communities tackle these challenges, Gwinnett County leadership launched The Water Tower initiative in 2019, creating two nonprofit organizations with separate missions to achieve collective goals.



#### The Water Tower at Gwinnett, a 501(c)4, focuses on the campus, real estate development, and

**infrastructure.** Our aim is to become an international destination in water innovation by offering world-class facilities to encourage collaboration in the water sector. Our variety of spaces supports short-term and long-term rentals, events, co-working, and training – for classroom, field, and R&D work, including live water-quality flows and laboratories.

We've created this unique space to "innovate and elevate" and the contributions of our partners and tenants provide even more value to our many campus visitors. While our main building is nearly full, phase two construction will begin in 2024. Come join us at The Water Tower and experience the benefits of this collaborative and frontier water space!

The Water Tower Institute, a 501(c)3, focuses on the development of our ecosystem of innovation and programming to support solutions in research, technology, training, and engagement. Water utilities are projected to lose from 30 to 50 percent of their workforce to retirement over the next decade. The Water Tower is helping utilities with their personnel and technology challenges through workforce initiatives, including recruitment, training, placement, and upskilling, as well as access to demonstrations and free testing of innovative technical solutions.

In addition to resources for water industry professionals, The Water Tower seeks opportunities to engage with the public, educators, and policymakers to increase awareness of all that it takes to provide essential water services. With the support of our partners, we offer engagement opportunities with water-related experts from around the world, STEAM-related workshops and camps, and space for the public to see research and technology in practice.

**Together**, our two nonprofits have created this special water hub for innovation — the campus, educational programs, and a broad network of partners and collaborators — to provide real-world solutions for advancing water and wastewater utilities. There is nothing more vital for our communities than safe, affordable, and resilient water services, and we're proud to play a dynamic role in supporting organizations that make these services possible every day.



**Nick Masino** Board Chair, The Water Tower at Gwinnett



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

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# **2022 BOARD OF DIRECTORS**

The Water Tower is pleased to present our esteemed Board of Directors who provide leadership 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













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

#### **The Water Tower Institute**













- **1 Paul T. Bowen, Ph.D., Director,** *Retired Director of Sustainable Operations, The Coca-Cola Company*
- 2 Glen T. Daigger, Ph.D., PE, BCEE, NAE, Director, Interim RAC Chair, President, One Water Solutions LLC
- **3 Terrell S. Gibbs, Ph.D., PE, Treasurer,** Chief Operating Officer at Corporate Environmental Risk Management (CERM)
- 4 Linda MacGregor, PE, Director, Director of Water Resources, City of Gainesville, Georgia
- 5 Nick Masino, Immediate Past Chair, President and CEO, Gwinnett Chamber and Partnership Gwinnett
- 6 Andrew D. Morris, J.D., Secretary, Natural Resources Counsel and Water Policy Officer, Atlanta Regional Commission & Water Policy Officer, Metropolitan North Georgia Water Planning District
- 7 Eileen O'Neill, Ph.D., Chair, Founding Partner, Water Principles LLC

# **RESEARCH ADVISORY COMMITTEE**

The Research Advisory Committee (RAC) provides key guidance, input and direction for TWT research programs.

Glen T. Daigger, Ph.D., PE, BCEE, NAE

One Water Solutions, LLC RAC Committee Chair

Katherine Atteberry Metropolitan North Georgia Water Planning District

Charles Bott, Ph.D., PE, BCEE Hampton Roads Sanitation District (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

Hazen and Sawyer

#### Jason Mingo

Water Services Association of Australia Stéphanie Rinck-Pfeiffer

Global Water Research Coalition

Orren Schneider, Ph.D., PE

Aclarity Rebecca Shelton, PE

*Gwinnett County Department of Water Resources* **Eva Steinle-Darling, Ph.D., PE** *Water Reuse Technical Practice at Carollo* 

## **OUR ECOSYSTEM**





### **Become a Partner**

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