

# MILWAUKEE: WHERE WATER WORKS<sup>TM</sup>

**2016 ANNUAL REPORT** 

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# LEADERSHIP VISION

Be the globally connected epicenter of water research, innovation, education, and business development.

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Patrick Schultz of Veolia, Maureen Stapleton of San Diego County Water Authority, Kevin Shafer of US Water Alliance and Milwaukee Metropolitan Sewerage District, and Charles Fishman author of "The Big Thirst" talking Resilient Economics at our annual Water Leaders Summit in Milwaukee.

### MESSAGE FROM OUR CO-CHAIRS

2016 was a year driven by tremendous energy and all-star members. You stepped up to the plate to advance innovation by supporting startups, pilot sites, and talent; sponsoring the Water Leaders Summit; and emphasizing the **One Water** conversation. Thank you. It is with your achievements and dedication that The Water Council (TWC) was able to accomplish the following highlights:

#### **Expanded our voice.**

Discussions ignited around water concerns at the federal level during the White House Roundtable on Water Innovation, and TWC made formal commitments to the Administration in response to their call-to-action to agencies across the country to provide commitments to address key water issues. TWC President & CEO Dean Amhaus attended the 1<sup>st</sup> ever, invitation-only, White House Water Summit and pledged to increase the commercialization of federally funded waterrelated research with the Federal Laboratory Consortium for Technology Transfer.

#### Grew our global footprint.

Team members spoke at conferences in Australia, Denmark, Germany, Spain, China, Canada, and throughout the US, and welcomed delegations representing 21 countries to Milwaukee.

#### Attracted business.

A soft-landing package for companies looking to enter the US water market was developed while working to secure tenants for Global Water Center II, Zurn Industries opened their new facility in Milwaukee's Water Technology District, outreach teams were deployed to targeted global conferences, and three startups from France and Mexico were hosted in the Global Water Center.

#### Launched commercialization initiative.

The ICE Institute ushered in a new era, as it looks to scout, catalog, and connect research at national and university labs, and technologies from international and domestic entrepreneurs to members from multiple industries.

#### Hired first CTO.

Dr. David Garman was recruited as TWC's first Chief Technology Officer to lead operations of the ICE Institute, while continuing his position as Associate Vice Chancellor for Water Technology Research and Development at the University of Wisconsin-Milwaukee (UWM). Dr. Garman is the Founding Dean of UWM's School of Freshwater Sciences and past-President of the International Water Association. Our focus for 2017: scouting and attracting new businesses, research and commercialization, stewardship, and government relations.

The energy doesn't stop here. Our team understands that water policy and security will play a substantial role from a human life interest to an economic interest to a security interest, and now, more than ever, it's vital for future-forward technologies to get in front of the right people. We invite you to explore our 2016 Annual Report to learn how Milwaukee makes water work for industry, government, academia, and utilities.

**Thank you** deeply to our members, partners, Board of Directors, funders, community, and staff for your commitment to advancing the world water industry. We look forward to working in partnership with you in 2017.

Paul Jones, TW2 Co-Chair and Retired Chairman, A.O. Smith Corporation

Rich Meeusen, TWC Co-Chair and President/CEO/Chairman of Badger Meter, Inc.



#### STATEMENT OF ACTIVITIES

	Year ended December 31, (in thousands of dollars)	
Revenue	2016 unaudited	2015
Grants, Contracts & Contributions	\$1,500	\$1,143
Membership	581	257
Global Water Center	532	707
Water Summit	240	234
Other	48	17
Total Revenue	\$2,901	\$2,358
Expenses		
Programs	\$1,386	\$1,161
Operations	802	605
Global Water Center	728	700
Water Summit	104	79
Marketing	79	123
Total Expenses	\$3,099	\$2,668
Changes in Net Assets	(198)	(310)

#### STATEMENT OF FINANCIAL POSITION

	Year ended December 31, (in thousands of dollars)	
Current Assets	2016 unaudited	2015
Cash and cash equivalent	\$799	\$732
Accounts receivable	200	332
Pledges receivable	40	20
Prepaid expenses	22	140
Total Current Assets	1,061	1,224
Net Property and Equipment	297	329
Long-term Assets		
Investment in GWC II LLC	30	30
Pledges receivable-net of curren	t 20	40
Total Long-term Assets	50	70
Total Assets	\$1,408	\$1,623
Current Liabilities		
Accounts payable	\$115	\$51
Deposits	28	30
Deferred revenue	215	349
Program payables	135	80
Total Current Liabilities	493	510
Net Assets	915	1,113
Total Liabilities and Net Assets	\$1,408	\$1,623

#### 

The charts above provide unaudited financial information as of December 31, 2016.

The excess of expenses over revenues in 2016 is due largely to lower than expected revenue from various contributed sources of approximately \$497,000. This shortfall was partially offset by new ICE Institute membership and other earned revenue of \$251,000 and overall expense savings of \$143,000. In addition, revenues (both rents and contributed income) from the Global Water Center were lower than budget by approximately \$135,000.

The excess of expenses over revenues in 2015 is due to the planned use of restricted funds recognized as revenue in 2014. The use of these funds added approximately \$394,000 in expenses in 2015.

### BOARD OF DIRECTORS & STAFF

he **Board of Directors** of The Water Council (TWC) generously donate their **time, knowledge and passion** for the water industry. Their leadership is vital to the success of TWC and we thank them for their contributions. We also thank TWC staff (pictured right) for their passion and enthusiasm every day.



**Co-Chair Rich Meeusen** President/CEO/Chairman Badger Meter, Inc.

**Co-Chair Paul Jones** Retired Chairman A. O. Smith Corporation

**Treasurer** Julia Taylor President Greater Milwaukee Committee

Secretary Open

Todd Adams President & CEO Rexnord

**Kirk Allen** President & CEO Sloan Valve Company

**Tom Barrett** Mayor City of Milwaukee



**Steve Booth** President & CEO Robert W. Baird & Company, Inc.

**Preston Cole** Commissioner, Department of Neighborhood Services City of Milwaukee

**Glen Daigger** President One Water Solutions LLC

Katherine Gehl

**Mary Jean Huston** State Director The Nature Conservancy

**Dennis Klein** CD Smith Construction

Michael R. Lovell President Marquette University

**John Matthews** Principal Matthews Strategic Services, LLC Mark Mone Chancellor University of Wisconsin-Milwaukee

**Puon Penn** Executive Vice President Wells Fargo Technology Banking Group

Kevin Shafer Executive Director Milwaukee Metropolitan Sewerage District

**Jim Stern** Executive Vice President A. O. Smith Corporation

Lee Swindall Vice President, Sector Strategy Development Division Wisconsin Economic Development Corporation

**Deon van As** Vice President, Global Supply Chain Excellence MolsonCoors

**Dean Amhaus** President & CEO The Water Council

### MEMBERS & PARTNERS

A network more than 100 years in the making.

Our **members and partners** are fueled by innovation and sustained by motivation.

Thank you for your dedication and support.



Pictured top to bottom: Hensley from Stonehouse Water Technologies and Shajan from New Works welcoming visitors to the Global Water Center during Milwaukee's Doors Open event. GZA GeoEnvironmental team members Kara, Anne, and Janee smiling for the camera at our Member Appreciation Party. Justin from CornCob Inc., a 2016 BREW Accelerator winner, at our innovation open house.







Association – Corporate Partnership Award



Dean Amhaus appointed to the Environmental Technologies Trade Advisory Committee for a two year term as representative of The Water Council, and the business cluster segment of the U.S. environmental technology industry

### MEMBERSHIP 2.0

WC consists of 190+ members, representing a wide range of interests from industry, academia, municipal utilities, public sector, and others. In 2016, TWC completely revamped the **membership benefits** and dues structure to accurately reflect our diverse member network and evolve to meet the needs of an ever-changing world water market.

The new structure empowers members to choose a level of engagement and interaction that aligns their business goals with TWC through a new tier system.

Pictured: Members from Visit Milwaukee and Concordia University connecting at the Great Lakes Distillery.

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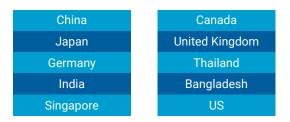
### VISIBILITY & REACH



Co-hosted the Water Innovation Virtual Forum with the Federal Laboratory Consortium for Technology Transfer.

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#### Top countries sharing TWC news:



Nearly **8000** media placements, including outlets **Bloomberg, The Huffington Post, and Yahoo! Finance** 

Pictured top to bottom: Mr. Kwon Young-Jin, Mayor of Daegu Metropolitan City in Korea, visiting the Wisconsin Innovation Pavilion at WEFTEC (Daegu and Milwaukee are Sister Cities). TWC being introduced at the Smart City Expo World Congress in Barcelona.







9<sup>th</sup> Annual Water Leaders Summit unveiled a new format with big idea conversations and technology showcases, and welcomed 300+ attendees from 20 states and 7 countries. Charles Fishman, author of "The Big Thirst," served as our conference moderator.

TWC spoke at conferences around the world:

Australia, Canada, Denmark, France, Germany, Israel, Japan, Scotland, and Spain



### ATTRACTION & EXPANSION

new menu of soft-landing options was developed to offer potential businesses looking to enter or expand into the US marketplace, specifically in Milwaukee's water technology cluster. The soft-landing package leverages the location advantage of Milwaukee, including access to a talent-pipeline, shared facilities and labs, investment services, and various TWC services available to small/ medium water technology businesses. Beginning in 2016, TWC is hosting Odyssee Environnement (France), HelioPure Technologies (France), and Aquor (Mexico) at the Global Water Center as part of this market entry program.

Pictured: The Global Water Center, the physical embodiment of TWC's work and vision, opened in 2013 and currently houses over 40 organizations in the water space.



#### MILWAUKEE WATER TECHNOLOGY DISTRICT

New Zurn Industries headquarters opened in Reed Street Yards Educational signage installed detailing smart water systems put into practice Several multi-million ancillary development projects completed or announced

Bubblr Bike station installed at 2<sup>nd</sup> and Freshwater Way

### WORLD-WIDE OUTREACH



Hosted international delegations representing 21 countries

Signed a Memorandum of Understanding with the German Water Partnership to **enhance** economic and business development growth opportunities; **advance** scientific and institutional research/ development, and **promote** interpersonal, professional and cultural exchanges



#### Outreach team deployed at several key destinations throughout the year:

IFAT 2016 in Munich, Germany

American Water Works Association Annual Conference in Chicago, IL

Startup Nation Central in Tel Aviv, Israel

WEFTEC with the Wisconsin Economic Development Corporation in New Orleans, LA

Great Water Cities Summit 2016 in Aarhus, Denmark

### TALENT CAMPAIGN

WC's Talent Campaign partnered with Milwaukee 7's talent initiative to form a larger regional partnership and develop strategic themes that mobilize members to take action. TWC is also the official industry partner for the National Science Foundation's Sys-STEM program with The Business-Higher Education Forum (BHEF). In 2016, we added Milwaukee

School of Engineering and St. Thomas More High School as new student chapters, joining already established Marquette University, University of Wisconsin – Milwaukee, University of Wisconsin – Whitewater, University of Wisconsin – Parkside, and Gateway Technical College.

Pictured clockwise, top to bottom: Dean Amhaus of TWC and Cate Rahmlow of the Wisconsin Economic Development Corporation meeting with the German Water Partnership and Hessen Trade & Invest at IFAT 2016. Lead to Succeed participants learning about careers in water. Students from Carmen High School of Science & Technology in Milwaukee working on projects in the Global Water Center. Local Brownie troop learning about stormwater management with Mike from Southeastern Wisconsin Regional Planning Commission during a hands-on educational event for children.

### INVESTMENT

ilwaukee was named one of 16 VilCap Communities across the United States by Village Capital in Washington, D.C. The partnership aims to spread venture capital across the country in several cities underserved by the venture capital community. Other partners in the program include The Commons in Milwaukee, Food & Beverage Industry Organization of Wisconsin (FaB), Mid-west Energy Research Consortium (M-WERC), and CSA Partners.

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### ENERGY WATER NEXUS

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Capital

he Energy Water Nexus (EWN) strategic roadmap project was a close collaboration between the Mid-west Energy Research Consortium (M-WERC) and TWC. The report, which will be released in 2017, is a first-of-its kind compilation of currently available national and global EWN data, supplemented by input from dozens of experts from industry, government, and academic institutions. The report seeks to provide a usable tool for M-WERC and TWC members to identify specific applications, benefits, target markets, industry categories, technologies and products, and active companies within the EWN market space.

> Pictured clockwise, top to bottom: Milwaukee, situated along the beautiful shores of Lake Michigan, is undergoing significant development downtown with the Northwestern Mutual Headquarters, Northwestern Mutual Mixed-Use Tower, Milwaukee Bucks Arena, Marquette University Athletic Performance & Research Center, and the Lakefront Gateway project to name a few. Professor Rudi Strickler, Shaw Distinguished Professor of Biological Sciences at the University of Wisconsin-Milwaukee, in his optics lab.

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### **RESEARCH & COMMERCIALIZATION**

#### **ICE INSTITUTE**

#### he\_ICE (Innovation Commercialization Exchange) Institute was launched

to aggregate, evaluate and connect emerging technologies that address water issues across a wide range of industries, including utilities, agriculture, and manufacturers. Working with the Federal Laboratory Consortium for Technology Transfer, TWC will offer members technology scouting, screening, and delivery of the best options for commercialization. ICE Institute will also identify water-related innovations in universities and by domestic and foreign entrepreneurs, in addition to the untapped federal research. Founding Members of the ICE Institute include: A. O. Smith, Badger Meter, Marquette University, Milwaukee Metropolitan Sewerage District, Rexnord Corporation, and University of Wisconsin – Milwaukee.

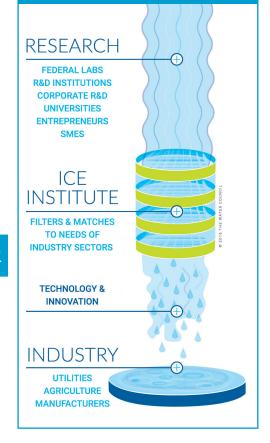
#### WATER EQUIPMENT & POLICY RESEARCH CENTER

#### he<u>Water Equipment &</u> Policy (WEP) Research

**Center** operates under the auspices of the National Science Foundation Industry/University Cooperative Research Center (I/UCRC) Program, and resides on the seventh floor of the Global Water Center. WEP is a collaborative non-profit organization of research universities and members including corporations and government agencies whose annual membership fees fund pre-competitive research in four areas important to the water industry: materials, sensors and devices, systems, and policy.

#### HOW DOES ICE INSTITUTE WORK?

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#### National Science Foundation Spotlights NanoAffix Watch Video

2016 Highlights



Added four new members: City of Fond du Lac, Sloan Valve, New Water (Green Bay Metropolitan Sewerage District), and U.S. Environmental Protection Agency





Since inception, 67 students have been supported with WEP grants, and 28 faculty researchers have participated in the program



### ENTREPRENEURSHIP & SMALL BUSINESS DEVELOPMENT

New video about TWC's BREW Accelerator developed by students at the University of Wisconsin -Whitewater <u>Watch Video</u>



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WC made several commitments to the White House. The first is focused on commercializing innovative technologies to address global water issues. TWC's **BREW Accelerator** committed to help 75 new water-technology startups get their ideas launched into successful businesses over the next five years through a mentorship and intensive 6-month, strategic training program. We also announced an expansion of BREW Corporate, with A. O. Smith Corporation and Rexnord joining Veolia in the program to support startups in water technology.



ey entrepreneurship and small business development events throughout the year included co-hosting a 1 Million Cups gathering with Milwaukee Startup during the first annual Milwaukee Startup Week; 3-day intensive Counselor Salesperson training program to equip companies with the resources necessary to compete in a global market; and the second annual "Exportech for Watertech" cohosted with the Wisconsin Manufacturing Extension Partnership.

> "Our participation in the BREW was critical to developing our understanding of the North American water technology market."

> > -Wayne Byrne, Oxymem's Managing Director

Pictured top, from left to right: Winners and coaches of TWC's BREW Accelerator: Arsalan – WISRAN; Doug – CornCob; Mark – DMRI; Ludek – CornCob; Rick – DMRI; Elizabeth – TWC; Pat – SofTap; Charles – CornCob; Justin – CornCob; Tim – MetaMateria; Rakesh – SofTap; Dave – Rice Technology; Dick – CornCob; Dawn – CornCob; Bill - University of Wisconsin-Whitewater. Pictured bottom: Awards for BREW Accelerator 2016 Graduates Iconac, Oxymem, Optiktechnik, Solar Water Works, IX Power Cle Water; and Radom.

#### ENTREPRENEURSHIP & SMALL BUSINESS DEVELOPMENT cont'd

Through the end of 2016, TWC and our affiliate, the Wisconsin Water Co-Investment Fund, have invested in 12 startups that participated in the BREW Accelerator.

Since 2013



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of 25 winners with patents granted or pending

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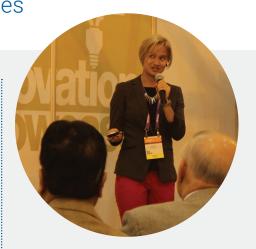


Facilitated 115 contracts, pilot sites or MOUs





customer interviews conducted



Provided 65+ full-time positions



\$2.6m additional capital raised

### 2016 Portfolio Successes

#### Nano Gas Technologies

Raised \$385.600 in 2016 from a combination of angel investors, an equity fund and advisors and they are now focused on raising a Series A round for 2017.

#### **OxyMem**

Secured a substantial investment from DOW Chemical Company.

Pictured above left to right: BREW Accelerator graduates strategizing. Attendees at an event in the Global Water Center during Milwaukee's first Startup Week. Nutrient Recovery Upcycling, a BREW Corporate powered by Veolia winner, pitching in the Innovation Pavilion at WEFTEC.



#### Wellntel

Expanded by opening the Global Groundwater Center in Milwaukee to accelerate and expand production, customer service, and new product development.

#### Microbe Detectives

Signed six new Alliance Partnerships with value added resellers in industrial and municipal wastewater, food and beverage, and paper industries covering the US and Canada.

### ONLINE RESEARCH & COLLABORATION

ur second commitment to the White House focused on enabling public data access to Federal lab's water and water-related technologies. Working with the innovationExchange LLC, TWC launched the Global Water Port in 2015, an online research tool which enables access to thousands of real-time water-data sources. In 2016, TWC partnered with the FLC and the U.S. Water Partnership to make data from Federal labs more accessible through the Global Water Port. 28 demos were provided throughout the year and new functions were rolled out including a Splashlink RSS feed and a Prizes & Challenges Module.



### PILOT & DEMONSTRATION SITES

WC's Pilot Program is still in its infancy with program development focused on prototyping and deploying technologies, and securing and monitoring sites over an extended period of time. The second round of the competition was launched in 2016 with up to \$350,000 in available funding thanks to our partners Wells Fargo, Fund for Lake Michigan, and the Milwaukee Metropolitan Sewerage District. Selected winners to date for the Pilot Program include Veolia Water Milwaukee, with Opti RTC, Inc., and Solar Water Works.

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Pictured top to bottom: We call the Global Water Port 'Google on steroids' – seriously, it's that robust for the water industry. Examples of the types of indoor and outdoor space that TWC is seeking to host pilot sites for entrepreneurs we work with.



### ALLIANCE FOR WATER STEWARDSHIP-NORTH AMERICA

TWC was named the North American Regional Headquarters for the Alliance for Water Stewardship (AWS) in 2015. In 2016, <u>Alliance for</u> <u>Water Stewardship – North America</u> (AWS-NA) increased activities and launched a membership campaign, detailed below. AWS-NA serves as a division of TWC focused specifically on water stewardship and sustainability.



Over 50 sites in North America are in active implementation or otherwise using the AWS Standard to identify/mitigate risk in direct operations and supply chains. Several high profile companies became members of AWS including Mars Inc., McDonald's and Merck while many others have made commitments to using the AWS Standard in North America: General Mills, MillerCoors, Zurn Industries, Global Water Center, Olam, Ecolab, Nestle and Nestle-branded companies like Purina.



AWS-NA hosted 5 regional training sessions since 2015 in Chicago, Tempe, Milwaukee, Los Angeles, and Washington, DC. Nearly 80 individuals have been trained in the AWS Standard.



#### **MEMBERSHIP**

AWS has 59 members globally with 17 members based in North America: Alberta Energy and Environment Leadership Initiative, ASQ, Care USA, Council of Great Lakes Industries, Ecolab, Future500, General Mills, Mars Inc., McDonald's, Merck, NSF International, Pacific Institute, The Pinero Group LLC, SCS Global, Sloan Valve, Southeastern Wisconsin Watersheds Trust Inc., and University of Wisconsin - Milwaukee School of Freshwater Sciences.





#### WORLD-WIDE REACH

AWS-NA has been invited to speak at 30 conferences and workshops all over the country and Canada. In many cases, AWS-NA was the keynote speaker, establishing AWS-NA and TWC as the "go-to" organization in North America for corporate water stewardship expertise.



### AWS GLOBAL WATER STEWARDSHIP FORUM AND 1ST ANNUAL GENERAL MEMBERS (AGM) MEETING

AWS established itself as the global convener of expertise and best practices in the area of water stewardship by hosting its Global Water Stewardship Forum and AGM in Edinburgh, Scotland. Attendance exceeded the registration cap of 100 and included international water experts from private sector, government, nonprofits, and civil society groups. AWS-NA and TWC led plenary sessions on the AWS Regional Partners and the

AWS Business Case. Following the Forum, AWS held its 1<sup>st</sup> AGM, which was attended by 40 members from around the world. Primary outcomes included voting for the first official Board of Directors, voting for the Technical Committee to lead revision of the AWS Standard, and approval to research the feasibility of putting AWS marks on product labels.



#### ALLIANCE FOR WATER STEWARDSHIP—NORTH AMERICA cont'd



#### ADDITIONAL 2016 HIGHLIGHTS

GLOBAL WATER CENTER 1<sup>st</sup> commercial office building in the world to implement AWS Standard

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Founding member of the California Water Action Collaborative to actively address industrial and agricultural water use during drought

Developed partnerships with: Electronics Industry Citizenship Coalition, Water Institute of the Gulf, Arizona State University, and Global Impact Investing Network

Matt Howard, AWS-NA Director, was re-appointed by the EPA Administrator to a two-year term serving on the National Advisory Council on Environmental Policy and Technology

AWS-NA held the inaugural meeting of its newly established Advisory Board

> Awarded grant from the Fund for Lake Michigan to assist with Standard implementation in the Milwaukee-area

# BECOME A MEMBER



### Join Now

The Water Council 247 W. Freshwater Way, Suite 500 Milwaukee, WI 53204 USA 1.414.988.8750 thewatercouncil.com