

Water Council Leadership Vision

7.28.14



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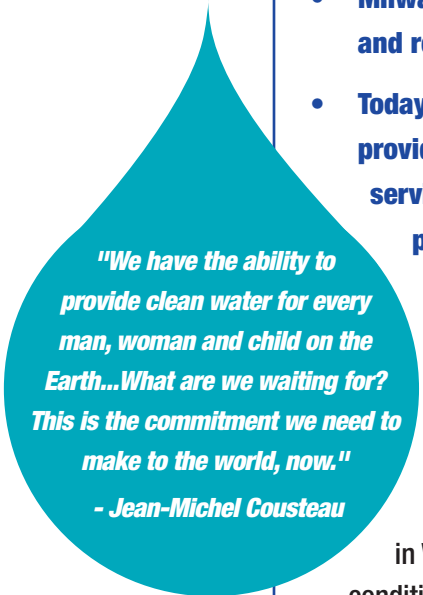
Preamble:

Why Water? Why Here? Why Now?

The essential role of water in shaping the world's civilizations past and present is readily apparent. Looking forward, water will take center stage. The world's economy will reorganize itself and water will be a crucial pivot point as the forces of global economic growth continue to collide with the forces of global resource scarcity. Those places that lead in innovating new water technologies – and master the complex blend of expertise needed to efficiently clean, store, process, distribute, and use water – will have the foundations to gain strong positions in the global economy.

Milwaukee has spent the last seven years staking its claim as the global water hub.

- **The Milwaukee region is home to more than 150 water technology companies employing approximately 20,000 workers**
- **The Milwaukee Region's water industry is a \$10.5 billion market**
- **UW-Milwaukee has the nation's only School of Freshwater Sciences**
- **Milwaukee is home to the Global Water Center – a recently-completed business and research center focused on advancing water technology**
- **Today, our water cluster includes numerous small and mid-sized businesses providing niche solutions, large global corporations providing key products and services, countless skilled engineers, renowned scientists, and higher education programs focused on all facets of water**



*"We have the ability to provide clean water for every man, woman and child on the Earth...What are we waiting for? This is the commitment we need to make to the world, now."
- Jean-Michel Cousteau*

Driven by a few key early leaders, The Water Council grew this opportunity to become the driving force in showcasing, convening, and growing the region's water industry cluster. The power of this idea is evident in the Water Council's growing success and recognition. Today, The Water Council is on the cusp of elevating the Milwaukee/Wisconsin water cluster to the next level and has the opportunity to not only be a powerful force of business and economic development in Wisconsin, but an agent of global change that can help improve the human condition around the world.

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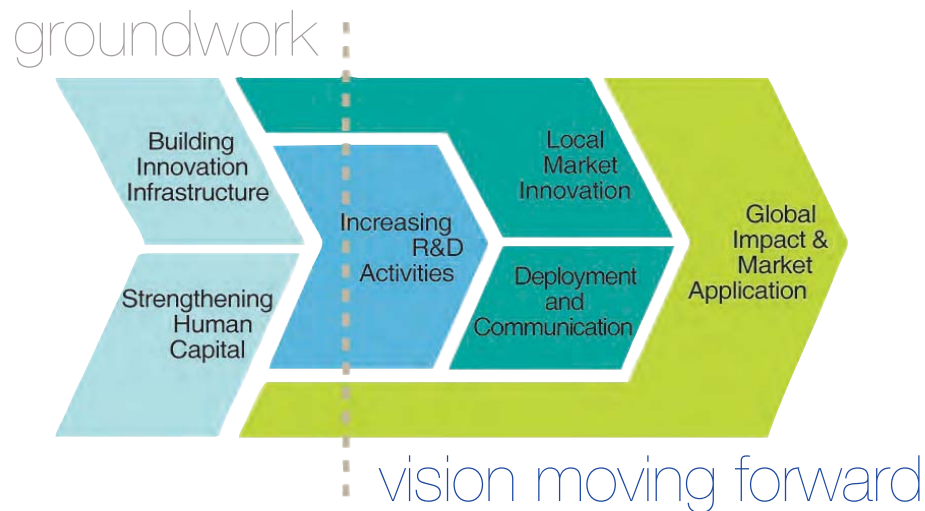
“The Global Water Center is encouraging collaboration between top-flight research, education and cutting edge business development, creating a magnet for talent and positioning southeastern Wisconsin to be the Silicon Valley of freshwater.”

- Tammy Baldwin, U.S. Senator

Introduction & Purpose

Setting forth a Vision for The Water Council's Growing and Changing Opportunities, Roles, and Responsibilities as the Epicenter of the Global Water Industry

This document is The Water Council Leadership Vision & Strategic Framework (Leadership Vision). It is a high-level, opportunity-driven vision designed to communicate the organization's trajectory and key next directions. As a next step, The Water Council should move forward with a more detailed internal strategic plan and financial strategy.



Sections and topics. The concepts and strategies in the Leadership Vision are the result of year-long dialogue among the Leadership of The Water Council. The Leadership Vision consists of the following sections:

Part I: The Wisconsin Water Industry Cluster and the Rise of the Water Council – This section briefly tells the story of how The Water Council took shape as a champion of the Milwaukee/Wisconsin water industry cluster.

Part II: Water Council Leadership Mission and Vision – Part II puts forth a clear mission for the next chapter in The Water Council as an organization, outlines what The Water Council's new role can be in improving global water health, and lays out a bold vision for the Water Council as a force for change.

Part III: Strategic Framework – Part III is the core of the Leadership Vision, and identifies the key priorities and directions for The Water Council. The Framework consists of three primary “Strategic Directions” and targeted opportunities for each Strategic Direction.

Part IV: Near-Term Next Steps: – The final section summarizes a few key ideas and identifies immediate-term next steps.

Appendix: Water Council Global Growth Strategy – The Appendix provides an international strategy that identifies specific international target markets to start focusing and tailoring The Water Council's international efforts to the most opportune parts of the world. The Water Council Global Growth Strategy is a related but separate document that supplements The Leadership Vision.

Part I: The Wisconsin Water Industry Cluster and the Rise of the Water Council

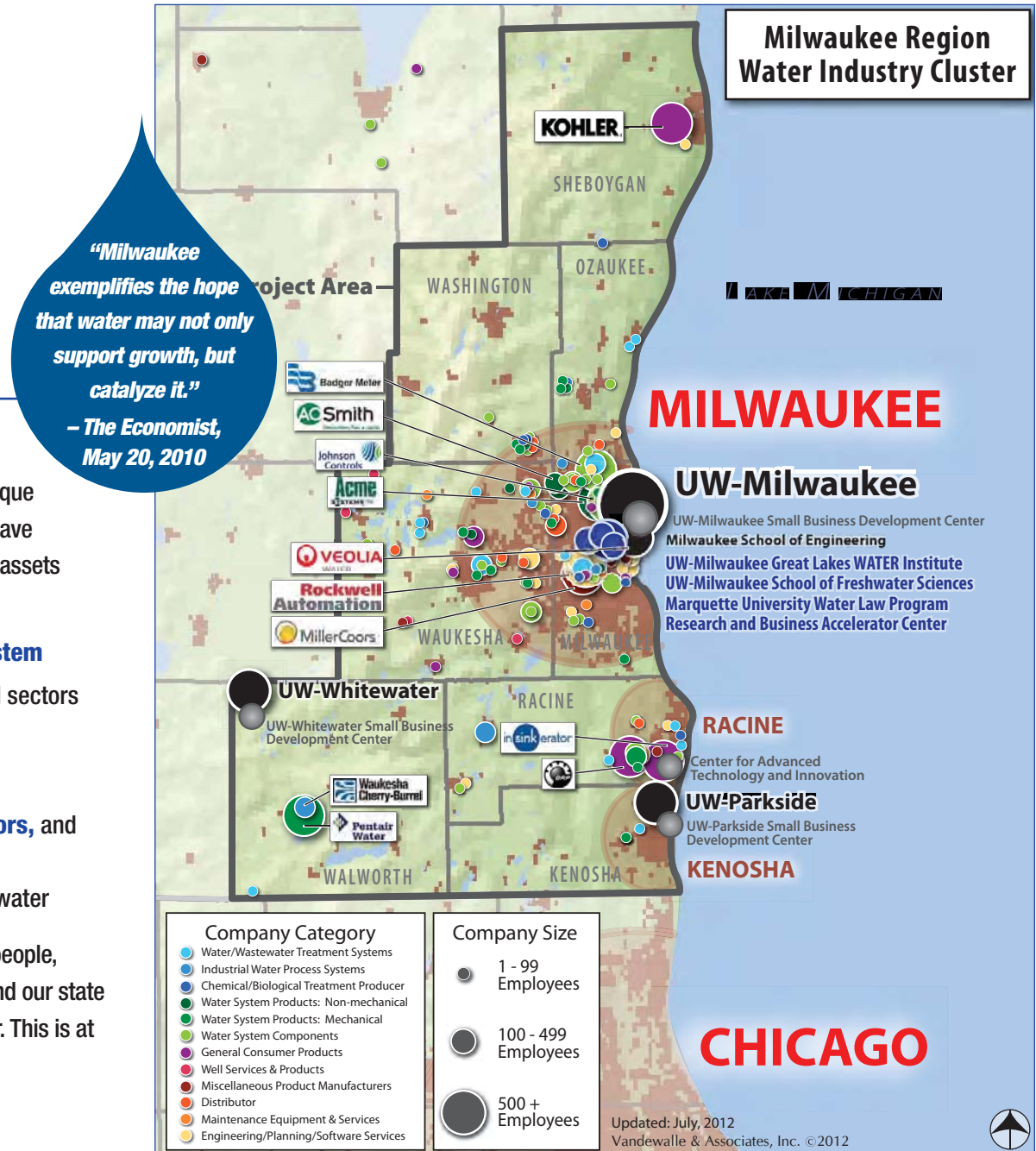
Catalyst to Advance the Water Industry

The Milwaukee/Wisconsin Water Industry

Cluster. Wisconsin and Milwaukee were bestowed a unique convergence of assets related to the water industry, and have leveraged their assets to create a world water hub. These assets include:

- **A location on the world's largest freshwater system**
- **A legacy of industrial know-how** in water-related sectors
- **Major research facilities**
- **Specialized water-related academic programs**
- **A number of key corporate leaders and innovators, and**
- **A cadre of small businesses and entrepreneurs** positioning themselves for growth opportunities in water

In short, Milwaukee and Wisconsin have a special mix of people, location, industry, history, and values that made our city and our state places that think about, know about, and care about water. This is at the core of the work The Water Council is doing.



Summary Facts about the Wisconsin/Milwaukee Water Cluster. The following table provides a high-level overview of the assets that make up the Wisconsin/Milwaukee Water industry cluster, and the reasons why we are now emerging as the world's hub for innovation in the water sector.

Market Size

- \$10.5 billion (4% of the world's water industry)

Companies

- 150+ companies directly involved in the water industry and hundreds indirectly related

Employees

- 20,000 water sector workers

Research Institutions and Academic Programs

- Great Lakes WATER Institute (the largest freshwater research institute in the world)
- University of Wisconsin-Milwaukee School of Freshwater Sciences (only one in the nation)
- Marquette University's Water Quality Center
- University of Wisconsin-Whitewater's Integrated Science and Business-Water Major
- UW-Madison's Limnology Center
- MATC Water Technology Programs

Large Water Industry Companies in the Region

- A.O. Smith Corporation
- Badger Meter
- Evoqua Water Technologies
- Johnson Controls
- Kohler Company
- MillerCoors
- Modine Manufacturing
- Rockwell Automation
- Veolia Water N.A.

Industry Location Quotients for Water-Related Occupations (1=nationwide average)

- Industrial Designers – 2.5
- Food Scientists – 1.9
- Hydrologists – 1.5
- Plumbers, Pipefitters, Steamfitters, Septic Cleaners – 1.4
- Mechanical Engineers – 1.3
- Industrial Engineers – 1.3
- Civil Engineers – 1.3
- Environmental Engineers - 1.2

Global Water Center

Opened in 2013, the Global Water Center houses water-related research facilities for universities, existing water-related companies and accelerator space for new and emerging water-related companies. The facility is a venue for attracting and creating new businesses in the water industry, and aims to address key local and global water-quality, technology and policy issues.

International Recognition

United Nations Global Compact City, one of 14 cities around the world selected for its concentration of expertise in a specific topic related to global health and development.

- Host of the Alliance for Water Stewardship's "Global Water Roundtable," a multi-year, multi-stakeholder effort to create consensus-based water stewardship standards
- Winner of the United States Water Prize from the U.S. Water Alliance for The Water Council's leadership in advancing US water sustainability
- North American headquarters for the Alliance for Water Stewardship, a global collaboration of leaders in sustainable water resource management
- One of the first cities to join IBM's Smarter Cities Challenge, and only city to focus on water

Natural Assets/Location

The City of Milwaukee is shaped by Lake Michigan, which is central to the community and regional identity. The State of Wisconsin is situated between the Great Lakes (world's largest freshwater resource) and the Mississippi River (one of the planet's great Rivers). Wisconsin also has thousands of inland kettle lakes throughout the state.

Visitor Destinations

Milwaukee's Discovery World Museum includes the City of Freshwater exhibit, where visitors learn about human and economic relationships with fresh water.

ASSET SUMMARY Wisconsin/Milwaukee Water Cluster

The Emergence of The Water Council as the Champion

"As Mayor, growing our water economy is central to my vision for Milwaukee."

- Tom Barrett, Mayor of Milwaukee, Water Council Board Member

From its very beginnings in 2007, the Water Council has been a private-sector driven economic development organization that arose through the leadership of corporate citizens dedicated to supporting water technology business growth in Southeast Wisconsin. Along with city and regional economic development officials, these leaders recognized Milwaukee's unique assets in the water

industry sector and became believers in the idea that water could be an economic growth engine for the region and the state.

Water Council History and Momentum Building

Start-Up Mode (2007-2013)

- Built organizational capacity and global awareness
- Secured local, state, and federal funding
- Positioned the region as recognized water hub
- Built critical innovation infrastructure projects

Maturing Organization Driving Change (2013+)

- Become the global water industry hub and center of excellence
- Grow synergy and "churn" between education, research, and entrepreneurship
- Penetrate international markets
- Grow the Water Cluster & exports

Momentum and achievements. The Water Council's bold leadership, passion, and commitment to the vision has kept the Water Council growing and building momentum. Between 2007 and today, The Water Council has made a number of significant achievements:

- **Awarded several major federal grants**
- **Gained buy-in and investment** from the State of Wisconsin
- **Created partnerships with University of Wisconsin-Milwaukee** and other higher education institutions on research efforts
- **Helped UWM create the Freshwater Sciences program**, the nation's only degree program in this discipline
- **Convened annual summits** with attendees from around the world
- **Hosted numerous international visits**
- **Earned widespread international recognition of Milwaukee** as an emerging global hub for water technology innovation
- **Opened the Global Water Center** – a new multi-use building with a synergistic mix of uses including water-related research facilities, several water-related companies, water-related non-profit organizations, and accelerator space for new, emerging water businesses – perhaps the most tangible evidence of The Water Council's growing success



Planet



U.S.



Great Lakes



Wisconsin



Region



City

Part II:

Water Council Leadership Mission and Vision

Expanding our role to improve Water Health around the world while continuing to strengthen our local and state economy at home

Why do we need a Leadership Mission?

The Water Council has built momentum quickly and opportunistically during its seven-year rise. The breadth and scale of its mission have evolved and expanded over time. Originally focused on connecting water companies and fostering economic development in Milwaukee, the mission of the Water Council is becoming more expansive and ambitious. Still an economic development organization at its core, The Water Council will continue its emphasis on supporting existing water companies in Milwaukee/Wisconsin and growing new ones through research, technology commercialization, and deployment. As the organization continues to evolve and move forward, our mission is also expanding and looking outward. We are placing a greater emphasis on leveraging our skillsets and capacities to address global health and environmental challenges.

As we transform from a regional economic development organization to the world's Water Center of Excellence and technology epicenter, focusing on global water challenges is not only an opportunity but an obligation. This expansion of our mission is part of our responsibility as a United Nations designated Global Compact City – and one which is becoming the world's greatest resource for freshwater technology and expertise.

Leadership Mission:

“To achieve economic growth through improving World Water Health.”

Why do we need a Leadership Vision?

The Water Council Leadership is passionate about water and fervent in the belief that pursuing research, improving technology, and growing water businesses at home can be a powerful force to not only solve some of the most challenging human and environmental health challenges around the world, but to help grow our regional economy. This is the core of the Leadership Vision.

With the completion of the Global Water Center, launch of the UWM School of Freshwater Sciences, numerous international visitors streaming to Milwaukee to learn about water, and our designation as a UN Global Compact City, the world is looking to us for leadership and solutions on water challenges. We need to be ready to take on this role.

Leadership Vision:

“Be the globally connected epicenter of freshwater research, innovation, education, and business development.”



Part III: Strategic Framework

Bold yet targeted directions to take The Water Council to the next level

The Strategic Framework is the set of directions and priority actions identified by the Leadership of The Water Council to continue fulfilling our mission and implementing our vision.

The role of the Strategic Framework is to:

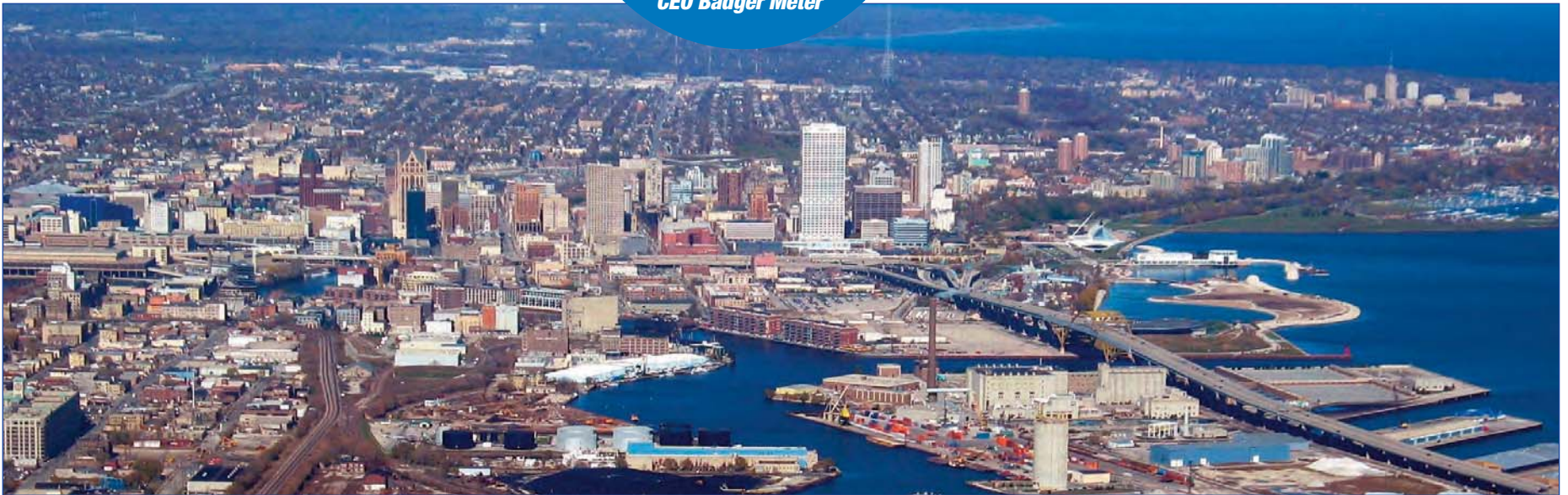
- Sharpen the focus of The Water Council going forward
- Identify priorities
- Clearly articulate how we will direct our time and resources in the years ahead
- Define initial responsibilities

“Our vision is that, someday, when a young entrepreneur has an idea for a water technology company, all his relatives, friends and neighbors will say, ‘Go to Milwaukee...that’s where it’s happening’.”

*– Rich Meeusen,
Water Council Co-Chair,
CEO Badger Meter*

The Strategic Framework is organized into three overarching “Strategic Directions.” Within each Strategic Direction are individual “Opportunities/Responsibilities” for The Water Council.

Though The Water Council’s leadership strongly believes in our potential to elevate our role in the world and increase our positive impact – both on the economy of Milwaukee/Wisconsin and on world water health – it is important to recognize that The Water Council cannot do everything. These strategies also involve collaborative partners, technology and global market networks, investors, and policy makers.





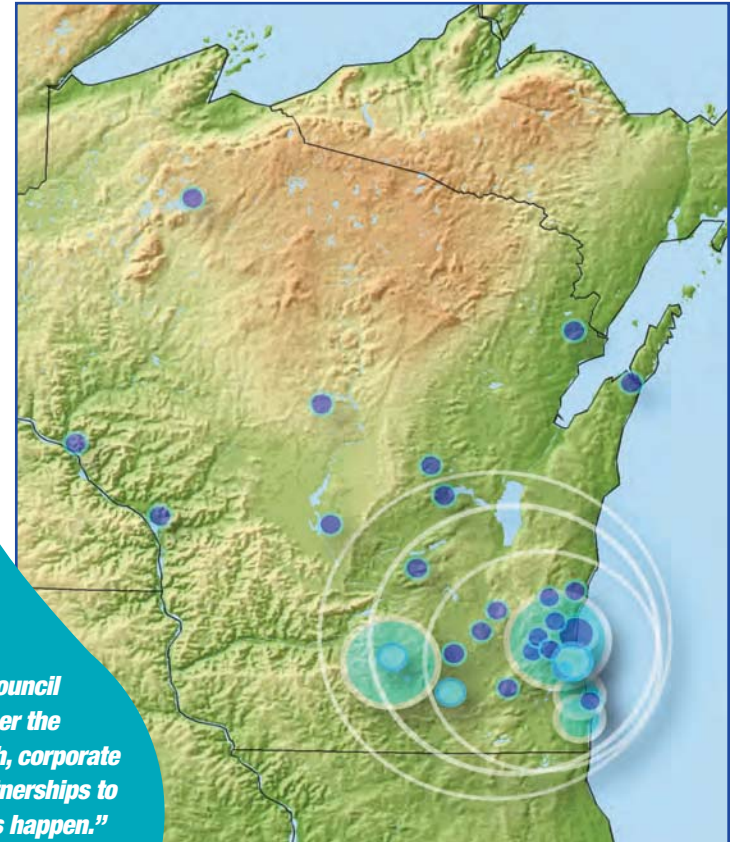
Strategic Direction #1:

Enhance our Leading Position as the Water Center of Excellence

Grow as a global destination for integrated water solutions through innovation, application and demonstration

Having become a globally-recognized center of excellence and hub of research and innovation, The Water Council's next step is to increase its ability to attract and connect global water needs with solutions. The earliest activities of The Water Council's work focused on building awareness of the existing water cluster and creating the foundational assets needed to grow. Strategic Direction #1 focuses on leveraging the success and awareness The Water Council has created to continue growing The Water Council's role as the global center of gravity where researchers, businesses, entrepreneurs, government officials, non-profits, students, and others connect to address global water challenges.

The strategy aims to increase The Water Council's "pull factor," bringing together the expertise and connecting it with the places needing solutions to water challenges. Pursuing this Strategic Direction and the six related Opportunities that follow will help the Water Council continue to grow as a global destination and resource where water-related skillsets, research capacities, policy expertise, and companies are all concentrated and accessible to the planet.



"The Water Council brings together the education, research, corporate and university partnerships to make great things happen."

***- Julia Taylor, President,
Greater Milwaukee Committee,
The Water Council***

Opportunity 1.1

Showcase Case Studies and Best Practices

Concept: The Water Council's newly created international destination still must be made into a user friendly solutions-oriented showcase that attracts people from around the world who are interested in water. Going forward, The Water Council will focus on creating a portfolio of case studies and best practices that can help us transform from a destination for learning about water technology in general, to a true solutions center where visitors and partners can find specific tools and examples of how to address their own specific water challenges.

Communication and messaging is a key component of this Opportunity. The Water Council will begin to shift its core communications from “what we’re building” to focusing on “what we’re doing.” We will utilize all that we have worked hard to build, to have a positive impact:

- **Showcasing** our successes
- **Sharing key findings**
- **Highlighting innovative projects**
- **Telling the stories** that demonstrate our methods and impacts

A case study directory and user-friendly

display exhibit should be developed by The Water Council, designed to share innovative water technology solutions or practices happening in the region and throughout Wisconsin. Such practices may include companies deploying new water technologies, collaborative research projects, communities utilizing best practices in water management, or unique watershed projects, to name a few.



gather
share
spotlight
inform

Case study examples might include:

Miller Brewing facility in Milwaukee, which uses tools and techniques that make it approximately three times more water-efficient than the industry standard. Sharing this information could help shift the industry standard around the globe.

Hanging Gardens is a “roof to Sewer Solution” that utilizes Green Infrastructure for Stormwater Mitigation, provides funding assistance and design/consultation, and offers a comprehensive green infrastructure product suite with monitoring and testing.

The Milwaukee Metropolitan Sewerage District utilizes technology that has long been at the forefront of innovation in water treatment for large cities.

The Clean Lakes Alliance in Madison is a global innovator in phosphorous reduction, and a unique example of a non-profit, business-led environmental organization focused on making the necessary investments to improve water quality in Madison's impaired inland lakes.

Partners: Members and partners should be approached to work with The Water Council on developing a directory of case studies. UWM students and faculty could potentially spearhead the effort, developing case studies and creating evolving inventory. MMSD could be a key partner as well as the overseer of the Milwaukee region's watersheds.

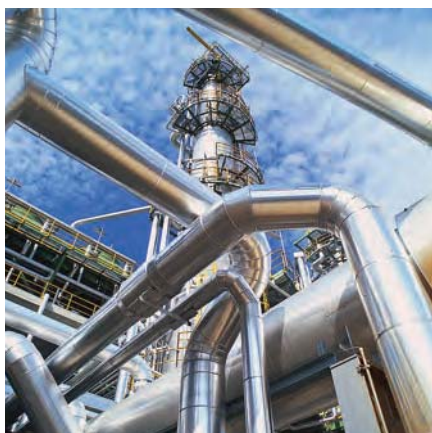
Resources: This effort will primarily require time and energy from The Water Council staff and partners to develop the case studies and gradually shift the “messaging” of the organization.

Leadership Priority Level (Scale of 1 to 5): 4.23

Opportunity 1.2

Create Wisconsin Water Innovation Pilot Deployment Program

Concept: The Water Council is proposing a new incentive program in Wisconsin that would focus on encouraging municipalities, utility districts, businesses, and others in Wisconsin to adopt advanced water technology. The Water Council suggests that the incentive program provide resources to help



The Water Council believes that helping researchers and new businesses develop new technologies on the supply side isn't enough. Wisconsin should become a place where we 'try new things' in water, starting with providing demand-side incentives that encourage municipalities, utility districts, businesses, and others to adopt new technology.

reduce the financial risk and fill financial gaps to encourage the adoption of new and advanced, market-ready water technologies that can improve efficiency and quality.

The Water Council would work with the State of Wisconsin (through the Wisconsin Economic Development Corporation or other agencies) to create a pilot-scale program of five to ten projects in the first year.

"As Governor, I strongly support the mission of the Water Council and will work to expand our global water leadership through building future partnerships with regions, provinces, states and countries across the globe."
- Scott Walker, Governor, State of Wisconsin

Benefits of this pilot incentive program include:

- **Helping Wisconsin pull better water technology** into the marketplace
- **Positioning the state** as a place where water technology is developed, tested, and deployed
- **Keeping Wisconsin at the forefront** of water technology development
- **Supporting the growth** of water businesses
- **Helping ultimately to save water and money** by fostering the early adoption of more efficient technology in Wisconsin

This program may need to be paired with regulatory flexibility in prototyping new market ready technologies while ensuring public health.

Partners: The key partner in this effort will be the Wisconsin Economic Development Corporation with potential engagement from other state agencies.

Resources: The Water Council would suggest launching a pilot grant program of approximately \$5-10 million per year in the first three years.

The purpose of this program would be to fund 5 to 10 projects around the state that utilize innovative water technologies on a scale that will improve water efficiency but would be deemed too financially risky or costly but for the grant program.

Leadership Priority Level (Scale of 1 to 5): 4.0

Opportunity 1.3

Collaborate to Build the World Fresh Water Health Monitoring and Intelligence Center

Concept: The World Freshwater Health Monitoring and Intelligence Center (Water Intelligence Center or WIC) will be an international data portal that maintains information on water health, water threats, and water supply around the world. Housed near the Global Water Center, this one-of-a-kind water command center will collect and process a wide range of data that may include information on pollution hotspots, climate change, water-borne disease outbreaks, national disasters, water scarcity, water demand changes, and more.

Elements and users. The WIC will be a destination and vital resource for researchers studying water issues, and advocates tackling the world's water challenges. It will be the world's "water control room," an engaging portal for up-to-date information on the state of water on the planet. Elements will include:

- **Data kiosks** to access collected data – some of which will be exportable, and some which may be proprietary
- **Interactive displays**
- **Monitors** that highlight key information that will be understandable and accessible to a range of audiences

Users and audiences include:

- **University faculty researchers** studying a water issue
- **Leaders of an international NGO** trying to solve a health crisis
- **Government officials** responding to a water crisis or disaster
- **Businesses looking to locate** in high demand markets
- **Students or visitors** interested in water issues



Goal and Benefits. The overarching goal of the WIC will be to raise awareness of areas where water management is of greatest concern, to identify issues, and to guide solutions. Additional benefits include:

- **Creating new revenue streams** for The Water Council via programming that steps into a new role of analysis and reporting
- **Helping guide Water Council businesses** by helping them determine where there is the greatest need for their particular products and expertise
- **Building awareness of water issues** by collecting and communicating data on water
- **Providing a resource** for academic research and advocacy
- **Maintaining information** to help support water businesses
- **Monitoring the state of water health** on Earth

Partners: Developing the Water Intelligence Center will require a range of partners. This includes funding partners who will provide upfront capital to implement the idea, and ongoing operational partners who will work with The Water Council to input and analyze data and operate the facility. UWM's School of Freshwater Sciences will likely be the lead partner, with funding secured through a large federal or foundation grant award. Key operation partners may include the United Nations, the World Health Organization, NOAA, National Geographic, the University of Wisconsin System, and a variety of international health and environmental organizations.

Resources: The WIC will require a significant upfront capital investment. The Water Council will need to work with a team of experts on a preliminary design of the system to develop an initial budget. The WIC may require ongoing operational support but also may be a revenue source that could create operational sustainability once implemented. An initial operating plan, vision, conceptual design, budget, and partnership strategy should be developed.

Leadership Priority Level (Scale of 1 to 5): 3.54



Opportunity 1.4 Attract National and International Centers/ Organizations

Concept: The Water Council will focus on becoming a convergence point for key national and international trade organizations, advocacy groups, and certification and credentialing programs

focused on water efficiency and best practices, by helping them explore ways the region can support their core missions through practice. To do it, The Water Council will lead Milwaukee and Wisconsin in “walking the talk” when it comes to water quality, efficiency and sustainability:

- **Leading and encouraging Water Council members and Wisconsin companies to adopt and implement** the latest and most ambitious industry standards and certification programs
- **Becoming a first adopter** in implementing the AWS water standards
- **Becoming a showcase** for how to implement AWS water standards
- **Being a center of excellence** to attract these organizations and programs

If we are to be the global water hub, it is incumbent on us to lead by example. The Water Council does not plan to expend time and resources to heavily recruit organizations, but to attract through being a water center of excellence.



Partners: The partners in this opportunity will include Water Council member businesses, academia, Wisconsin communities, and Wisconsin companies in water-intensive industries who will be encouraged to adopt high standards and best practices with regards to water. Further, The Water Council will partner with advocacy organizations and trade groups for water-related industries.

Resources: This effort should be coordinated with the grant program recommended in Opportunity 1.2.

Leadership Priority Level (Scale of 1 to 5): 3.69

"Water is a game changer for Milwaukee. We are going to a whole new level. The community is behind it and everyone is working on this—from business to universities to government. I haven't seen anything like this in the 50 years that I've lived here."
— Dean Amhaus, President & CEO, The Water Council

Opportunity 1.5

Define / Build Water Visitor “Experience” and Capacity

Concept: The Water Council will begin offering more tailored tours and visits to its domestic and international visitors that are customized to the specific interests of each visitor.

“Water concierge service.” Working with partners in the City and around the state, The Water Council will begin to provide a “water concierge” service that helps visitors select from a menu of different sites, training programs, meetings with leaders, etc. in the region.

Embedding the water theme in Milwaukee. At a broader level, as the world’s water hub, we should strive to make water ingrained in everything we do in Milwaukee. From the moment a visitor gets off a plane at the airport or enters the city by train or highway, they should know that they are in a place that is passionate about water. Working with the City of Milwaukee, the Milwaukee Convention and Visitor’s Bureau, and others, the Water Council should help lead an effort to imbed water into the visitor experience of the City. If we are to be the planet’s “go to” location to learn about water and see best practices in action, we need to proudly wear our passion and expertise on our shirtsleeves.

Partners: The Partners in this effort should include VISIT Milwaukee, the City of Milwaukee, Milwaukee Public Museum, Discovery World and others involved in the “showcasing” of Milwaukee and Wisconsin’s passion for water.

Resources: Building the visitor experience will take time, energy, and funding. The Water Council and partners should develop a detailed plan for how this effort will be coordinated and implemented. This may include things like budgeting for signage and marketing materials, as well as better coordination of existing assets and features. The Water Council should take the lead in the “Water Concierge” for visitors and this will require staffing.

Leadership Priority Level (Scale of 1 to 5): 3.25

*“The
Global Water
Center is like Disney
World but for water
geeks.”*

*- John Tillotson,
CMO & Principal,
Phigenics*



Opportunity 1.6

Plan to Convene a World Water Innovation Exposition

Concept: The Water Council should continue evolving the annual Summit, as well as look ahead to convening an International Water Exposition sometime in the next five to eight years.

Convening the world's best minds. This Exposition will extend its reach to invite collaboration among key stakeholders from multiple disciplines. This “must-attend” occasion will bring together water innovators, leading advocates, and governments impacted by water, in a forum structured for intensive collaboration and problem-solving.

Focused conversations, solutions, and international market development. The event will be planned as a several-week-long exposition and workshop that is centered in Milwaukee, with a solutions showcase that may also extend across the state of Wisconsin as well as to Chicago and other Great Lakes cities.

One of the most impactful ways to demonstrate our role as a solutions provider is to invite key leaders to come to Milwaukee for focused conversations about solving their region's water-related challenges. Visitors can gain first-hand experience with product research and innovation facilities, and help develop new international markets. Assistance from the Water Solutions Teams would be integrated into these activities.

The exposition may also have offerings for larger groups of water-related entrepreneurs, investors, and advocates, such as:

- **Business planning competitions** where entrepreneurs compete for venture capital
- **Intensive day-long charrette-style solutions sessions** in which teams of experts work together to solve specific challenges



Partners: City and regional convening partners, Wisconsin's Department of Tourism, WEDC, and federal/national organizations should be involved in the planning and execution of the Exposition and it should be billed as something that happens across the entire state and potentially into Chicago and other places in the Great Lakes region. As the host City, the City of Milwaukee and the City's business leaders should be helping The Water Council lead this effort. The team will need to work closely with event venues, hotels, and the region's entire hospitality and tourism sector on this effort.

Resources: The World Water Innovation Exposition should be planned several years in advance and should have a high-level team of government, business, and academic leaders behind it. It will take time and significant investments of resources to make this happen. Akin to hosting a Worlds Fair of Water, The Water Council and its partners should carefully design the venues, experiences, and programming of the event and should plan for large-scale investments to make it happen.

Leadership Priority Level (Scale of 1 to 5): 3.83

Strategic Direction #2: Target R&D&D on Global Needs

Support star talent to meet global needs, lead, and attract investment

The Water Council should continue to play a vital role in growing the region as a Water Technology R&D&D hub, accelerating the commercialization of new technology, and expanding the reach and impact of research.

Connecting research to market opportunity. The Water Council is not itself a research organization and will not strive to become one. However, it can play a critical role as a bridge-builder between research and market opportunities, by linking the academic realm to businesses that need the technology. With the UW-Milwaukee's School of Freshwater Sciences now a recognized research and education center, and the Global Water Center up and running, the Water Council offers a powerful "1-2 punch:" combining platforms for research with opportunities for technology commercialization and scale-up to market viability.

Helping with grant writing and private-sector connections. The Water Council can also play a support role to UWM and other higher education institutions by assisting with grant writing and facilitating private-sector connections – increasingly prioritized by federal research agencies as they direct funding programs. The Water Council has already stepped into this role by spearheading several major grant writing efforts that are bringing research dollars to Milwaukee linked with economic development goals.

Celebrating and showcasing R&D&D.

The Water Council can celebrate and showcase breakthroughs that emerge from research within the Freshwater Sciences Program at UWM, the Limnology Program in Madison, and other research institutions in Wisconsin. Doing this will help elevate the profile of these programs in the research community, help them attract new talent, and help increase the reputation of The Water Council and the Milwaukee/Wisconsin water cluster as a place that blends innovative businesses with advanced research.

"The opening of the Global Water Center is another significant step forward for Milwaukee and UW-Milwaukee ... Our operations on the seventh floor will help our university engage in research and commercialization opportunities that previously were not possible."

- Michael Lovell, UW-Milwaukee Chancellor



Opportunity 2.1

Assemble Industry and Academic R&D Collaboratives

Industry and Academia should work together to secure federal and state investments for research, development, and deployment. The Water Council and its research partners should focus these efforts on the specific areas

within the water sector where we have competitive advantages. The six opportunity areas that follow are technology priorities identified by The Water Council Leadership, where the Milwaukee/Wisconsin academic and corporate communities have the strongest research strengths, greatest existing business muscle, deepest expertise, or greatest potential to capitalize on emerging opportunities. They are listed with a 1-5 ranking.



Opportunity 2.2 Water Treatment Systems

Priority Ranking: 3.69



Opportunity 2.4 Watershed Management and Green Infrastructure

Priority Ranking: 4.0



Opportunity 2.6 Materials, Sensors, and Instrumentation

Priority Ranking: 3.85



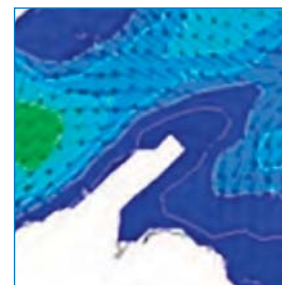
Opportunity 2.3 Aquaponics / Aquaculture

Priority Ranking: 3.5



Opportunity 2.5 Water / Energy Nexus

Priority Ranking: 4.08



Opportunity 2.7 Remote Sensing and Modeling

Priority Ranking: 3.67

Partners: The University of Wisconsin-Milwaukee School of Freshwater Sciences, UW-Madison's Limnology Program, UW System, Marquette University's Water Quality Center, and corporate partners should all be looped in to R&D&D efforts. The Water Council should be a connector and champion to help secure research funding and link the academic research to commercialization opportunities.


Resources: The Water Council will continue working with its partners in higher education institutions to identify funding opportunities and secure grants. This will require a continuing investment of staff time by The Water Council.

Strategic Direction #3: Grow International Market Readiness, Networks, and Innovation Capacity

Elevating our impact as we expand to new markets

Strategic Direction #3 focuses on taking our skills, expertise, and capacities, and deploying them around the world. With more and more companies, researchers, and government converging on Milwaukee to be part of our work, The Water Council can leverage its rapidly growing international presence, to:

- **Translate The Water Council's increasing global awareness into strategic actions**, growth for the region's companies, and positive impacts
- **Build stronger global networks** and capabilities
- **Deploy our expertise and technology** in water industries to become a force for positive change around the world



**4.8 billion people
(52 percent of the world population)
will be exposed to severe water
scarcity by 2050.**
- Veolia Water: Finding a Blue Path
to A Sustainable Economy

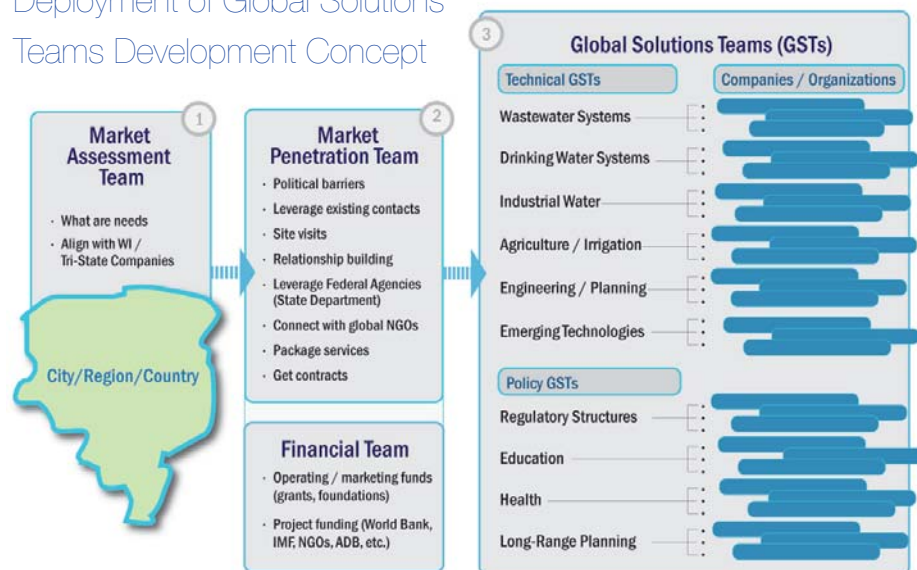
Opportunity 3.1

Create Global Solutions Teams and Deploy on Inquiring Markets

Concept: The Water Council will create “Global Solutions Teams” (GSTs) that are designed to tackle specific water issues, aiming to fulfill our opportunity and responsibility to help solve global water challenges. Drawing from our research talent and business expertise, these GST’s will be custom designed for the particular water problems faced by places that reach out to The Water Council for help. These teams will include:

- **“Assessment Teams”** that work with nations, cities, provinces, etc. to identify problems and create plans and strategy to solve them
- **“Action Teams”** that can then be deployed to execute plan and solve problems

Deployment of Global Solutions Teams Development Concept



Addressing technology needs, policy, and culture. Globally, water infrastructure projects designed to solve complex challenges often fail because of a failure to address the “wrap-around” policies, cultural norms, and human behaviors that are needed to make the technology work. By offering a holistic approach that not only addresses technology needs, but also interweaving policy interventions and the human behavioral aspect of water issues, The Water Council’s GST model could achieve lasting positive results. The GST will combine:

- **Expertise in technology**
- **Policy guidance**
- **Expertise in the socio/cultural realms of water**
- **Education**

The GST model will not only help solve global problems but it will help grow foreign market opportunities for our companies and potential revenue streams for the Water Council through consulting agreements. **Additional guidance on how to target the efforts of Water Council Global Solutions Teams can be found in the Water Council Global Growth Strategy Provided as an Appendix to the Leadership Vision.**

Partners: The Water Council will work with key membership companies to use their knowledge and connections of the global water marketplace. Further, The Water Council will work closely with the Wisconsin Economic Development Corporation’s International Office, the International Trade Administration, US Commercial Service as well as the University of Wisconsin System’s International teams.

Leadership Priority Level (Scale of 1 to 5): 4.08

Opportunity 3.2

Work New Innovation Infrastructure and Grow Venture Capital Partnerships

Concept: Emphasis will be placed on putting The Water Council's powerful new "innovation infrastructure" to work, maximizing its impact as it helps businesses access and penetrate new global markets. The Water Council has successfully put itself in a position to succeed and we should apply the assets we have created to the greatest extent possible.

Helping small- to mid-sized companies connect with capital. One thrust of these efforts will be creating opportunities for small and mid-sized companies to connect with venture capital they need to scale up to compete at an international level.

Partners: The Water Council should work with the financial community including local and regional venture capital outfits and angel networks to plug in to funding opportunities. Further, The Water Council should look at examples of where industry-clusters have close ties to funding networks including Silicon Valley's information technology cluster and Boston's biomedical cluster.

Resources: The Water Council will need to devote staff time and resources to researching strategies to build venture capital networks and may need to use seed funding to engage consulting experts on this topic.

Leadership Priority Level (Scale of 1 to 5): 3.62

"Water should not be treated as a 'sector' alone, but as a cross-linked issue given its crosscutting nature and essential roles in social and economic development and environmental integrity."
- World Water Assessment Program (2009) "Water in a Changing World"

Opportunity 3.3

Align and Grow Capacity and Resources for Next Stage

Concept: As a next step in strategic planning, The Water Council should create a detailed funding plan focused on building connections to foundations, federal agencies, and the State of Wisconsin.

The Funding Plan. The Plan should:

- **Create stable and consistent funding** for programs and initiatives needed to advance The Water Council
- **Move beyond a membership-based funding model combined with miscellaneous grants** toward a more robust, consistent, long-term funding plan

Reed Street Yards. The Water Council will work with development partners and the City of Milwaukee to advance the buildings for the next round of water-related businesses and partners. The Reed Street Yards is a model urban water business technology park next to the rapidly filling Global Water Center and will be home to many of The Water Council's future business and organizational partners.

Partners: The Water Council should lead the effort, while forging relationships with large foundations and federal agencies to develop a long-term pipeline of resources needed to continue implementing the vision.

Resources: The Water Council will benefit from devoting time and resources to developing a clear, long-term fundraising strategy that aligns with the expanding and changing vision of the organization. This may require the expertise of a professional fundraising consultant or the addition of Water Council staff expertise focused squarely on this aspect of the organization's future.

Leadership Priority Level (Scale of 1 to 5): 4.18

Opportunity 3.4

Prepare a Domestic and International Policy Strategy

Concept: The Water Council will prepare itself to enter water policy conversations with confidence, expertise, and clear positions on challenging topics. If The Water Council is to be the world's water hub, there will be an expectation that the Leadership of the organization has the courage to take positions, provide advice and leadership, and share its voice on policy matters both around the world and in our backyard.

To accomplish this, The Water Council should begin to:

- **Draft a strategy on how it will partner** on policy related positions and research
- **Begin to draft and publish policy “white papers”** on key issues
- **Begin to engage in dialogues** about water pricing, watershed management, pollution, climate change, etc.
- **Take a head-on approach to challenging water policy questions at home**, in the greater Milwaukee area, the State of Wisconsin, and the Great Lakes basin, to set an example of leadership

Partners: The Water Council should work with the UWM School of Freshwater Sciences Center, Marquette University, as well as state and national water policy non-profit organizations on the Policy Strategy.

Resources: The Water Council may need to consider hiring a “policy director/ policy specialist” as part of the core staff.

Leadership Priority Level (Scale of 1 to 5): 3.09

Opportunity 3.5

Build Export Preparedness for Small/Mids

Concept: The Water Council will work to prepare small- and mid-sized companies to have a role in international efforts and do business overseas. This is important, because while Wisconsin is home to several large water industry companies that are already major global players, currently about 80% of the water industry companies in the state do not have an international presence.

Partners: The Wisconsin Economic Development Corporation will be a key partner in this effort through its Export Tech program within WEDC's international office. The UW System and the Water Council's business members who are already in foreign markets will be important partners as well.

Resources: WEDC's existing program will be critical in this effort. The Water Council will need to devote time and research to identifying the water industry companies that have the highest potential for success.

Leadership Priority Level (Scale of 1 to 5): 3.33

Additional guidance on how to target international market growth efforts can be found in The Water Council Global Growth Strategy Provided as an Appendix to the Leadership Vision

“Investors should focus on water-related companies that own high-end technologies, that treat water generated when fossil fuels are extracted and those that remove salt from sea water...Those changes will help fuel growth of 4 percent to 6 percent over the next year.”

– Forbes, June 8, 2011

Opportunity 3.6

Explore Opportunity to Become an International Training / Certification Center

Concept: The Water Council should explore opportunities to become a centerpoint for training and certification programs, in support of the numerous training programs and certification programs related to water. This includes supporting trade groups that certify experts as well as supporting programs geared toward certifying water-saving technologies.

Partners: The Water Council will reach out to existing training certification programs to gauge interest in collaboration.

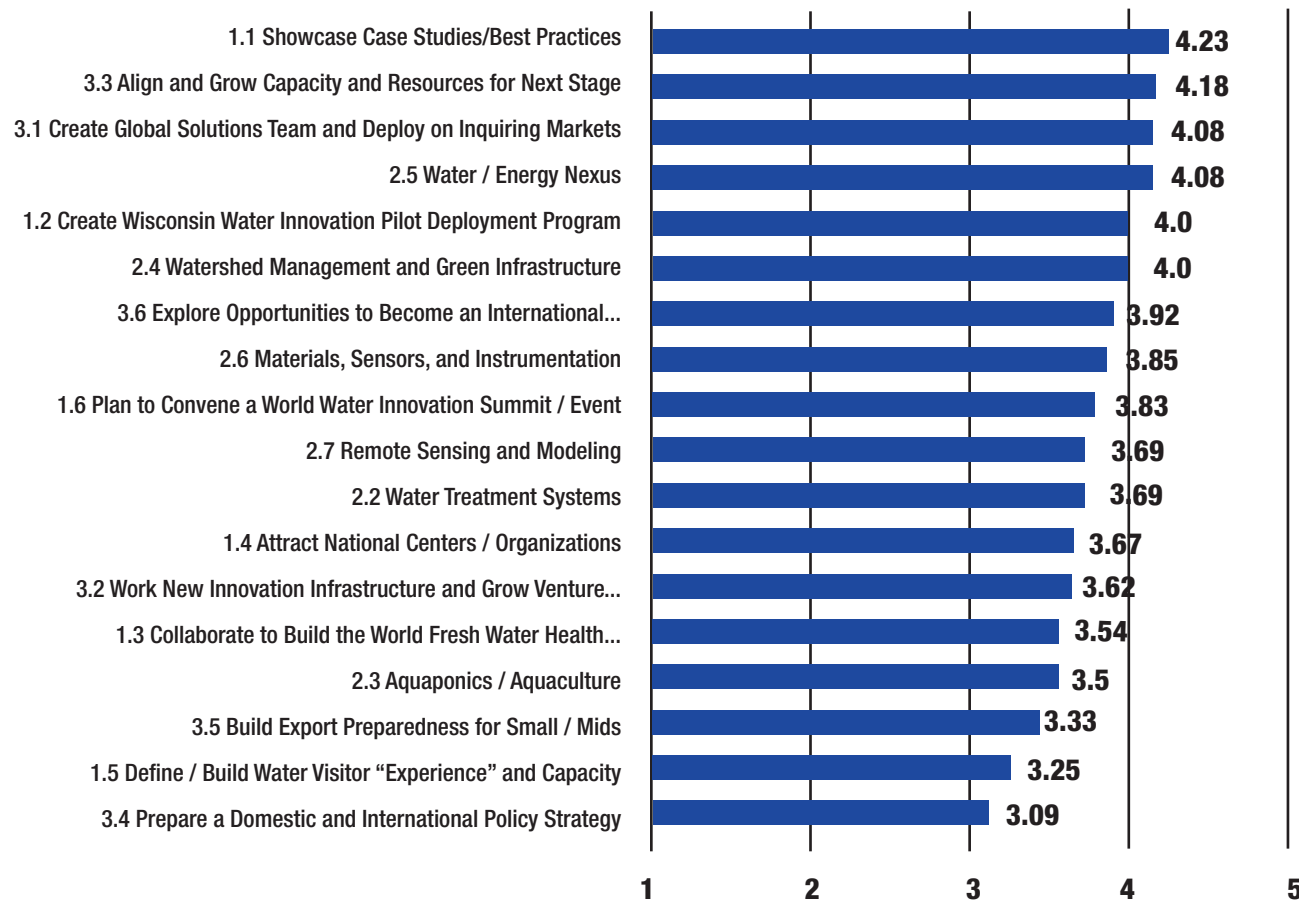
Resources: Staff time and effort will be devoted to this opportunity.

Leadership Priority Level (Scale of 1 to 5): 3.92

Prioritization of Opportunities and Responsibilities

The Strategic Framework lays out three overarching “Strategic Directions” and six specific opportunities for each resulting in a total of 18 individual opportunities. These opportunities were sifted and winnowed by The Water Council Leadership over a year-long effort.

The following chart summarizes that prioritization of the 18 Opportunities/Responsibilities identified in the Strategic Framework.



The Water Council worked diligently to identify these opportunities and they were ranked on a 1 to 5 scale by the Board of Directors. It is important to note that these opportunities were culled by The Water Council Leadership and they all were given a ranking of 3 or higher on a 1 to 5 scale so they are all considered to be important priorities going forward. Nonetheless, the rankings may provide some direction on timing and resource allocation going forward.

Part IV: Near-Term Next Steps and Conclusion

Rollout. Rolling out this Leadership Vision to The Water Council membership, key stakeholders, state partners, and international partners is one of the key next steps that overlay with all of the strategic directions and opportunities identified in the Leadership Vision.

Funding. Funding is an overarching challenge that relates to every component of the Leadership Vision. The Water Council has been creative in developing approaches to funding, and will need to continue exploring new funding models and opportunities that align with the organization's growing and changing role.

Adding capacity and resources. Looking ahead, The Water Council should spend time with this Leadership Vision and work on translating its long term recommendations in day-to-day operational planning for the organization's staff. As noted in several of the opportunities discussed earlier in this document, implementation of the Leadership Vision may require additional staffing and specialized consulting expertise.

Startup
Building Organization Capacity & Focus
Regional & National Awareness & Momentum
Pursue Funding

2007-2010

Building Organization, Global Awareness, and Critical Projects

Travel/Speaking Engagements (5%)
Major Projects (5%)
Host Visitors (5%)
Advancing Partnerships (15%)
Organizing Summit & Events (20%)
GWC Development and Leasing (15%)
Pursue Funding (15%)
Communication/Website (10%)
Admin (10%)

2010-PRESENT

International Center of Excellence, R&D, and Global Readiness

Pilot Deployment Program
Showcase Case Studies/Best Practices
Create/Deploy Global Solutions Team
Implement Water Intelligence Center
Investigate Training/Certification Center
Seed Accelerator
Microwater System
Travel/Speaking Engagements
Major Projects
Host Visitors
Advancing Partnerships
Organizing Summit & Events
GWC Leasing and Building #2
Pursue Funding
Communication/Website Redesign
Admin

2014 →



Conclusion: Our changing role. From 2007 to today, the Water Council has grown from a few business leaders interested in organizing Milwaukee's water technology businesses to an internationally-recognized center of water research, business development, and technology innovation. Our role is changing. It is important to take stock of what The Water Council has achieved in a very short amount of time. Looking ahead, we need to rise to the challenges we have created for ourselves. This includes pursuing opportunities for our water businesses to penetrate new markets, cultivating young talent and fledgling entrepreneurs, and leading the world in water research. We need to continue focusing on growing our economy at home while recognizing our growing obligation to use our capacities, skillsets, and connections to help solve some of the greatest challenges facing our planet in the 21st century. By implementing The Water Council Leadership Vision, Strategies and associated Opportunities, we will be able to fully embrace the greater mantle of leadership we have built.



THE WATER COUNCIL