



Global Compact
Network USA



From Ripples to Waves

The Value
of Corporate
Water Stewardship

Patrons

S&P Global

xylem
Let's Solve Water



Network USA

About UN Global Compact Network USA

Global Compact Network USA is the US Chapter of the United Nations Global Compact, the largest corporate sustainability initiative in the world. We are a powerful network of companies and stakeholders dedicated to advancing the Sustainable Development Goals.

By connecting our partners with the resources of the greater UN, we support companies that are committed to fully integrating our principles of human rights, labor, environment, and anti-corruption into their business strategies and operations.

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Gordon
Executive
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United Nations
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Network USA

I am proud to present the following white paper, 'The Ripple Effect: The Value of Corporate Water Stewardship.' This white paper, by United Nations Global Compact Network USA (Network USA) with contributions from the CEO Water Mandate and Ceres, underscores the important role of the U.S. private sector in advancing Sustainable Development Goal 6 (SDG 6): ensuring clean water and sanitation for all.

As the U.S. chapter of the UN Secretary General's corporate sustainability initiative, Network USA brings both the UN and U.S. business perspectives to this white paper. Recognizing the need for specialized expertise, Network USA sought input and contributions from two leading organizations in the field. The UN Global Compact's CEO Water Mandate provided robust technical knowledge and a comprehensive understanding of corporate water engagement. Ceres contributed two important case studies on best practices (Cargill and Microsoft), highlighting how ambitious water strategies can address material risks arising from the sector's impacts on and dependencies on water systems. Together, these contributions have enriched the white paper, providing a nuanced perspective on corporate water stewardship.

The inspiration for this white paper stems from the 2023 United Nations Water Conference—the first UN gathering on water in nearly half a decade. Over 10,000 participants, including world leaders, civil society representatives, and businesses, came together to affirm their commitment to scaling water action and achieving SDG 6.

At the UN Water Conference, businesses rose to the occasion, signaling their determination to confront the freshwater crisis head-on. Led by the UN Global Compact's CEO Water Mandate, 50 companies committed to the Business Leaders' Open Call for Accelerating Action on Water. This initiative calls on businesses to drive a **net positive water impact** in 100 vulnerable basins by 2030. The ambition of the Open Call has since been woven into UN Global Compact's "**Forward Faster**" initiative, which urges companies to rapidly scale and accelerate their water initiatives to achieve SDG 6 by 2030. Concurrently, at the

UN Water Conference, Ceres secured commitments from the finance sector to advance the Water Action Agenda through the Valuing Water Finance Initiative. As of January 2024, 96 investor signatories to the Initiative, representing \$17.5 trillion in assets under management, committed to engaging with their companies to advance ambitious water stewardship practices in alignment with Ceres' six Corporate Expectations for Valuing Water.

Building on this momentum, this white paper serves as inspiration for businesses seeking to engage in these initiatives, enhance their corporate water stewardship practices, and contribute to positive impact in vulnerable water basins.

The foreword discusses the value of water, emphasizing the gravity of the current water crisis and its paramount importance to business, humanity, and our planet. We then turn our attention to the water stewardship practices of six companies across different sizes and sectors. These case studies present tangible examples of how leading businesses integrate water risk as a core business consideration, creating a business and environmental case for actions that engage diverse stakeholders to drive positive water impacts.

I commend these companies and, at the same time, acknowledge that this journey has just begun. The scale and stakes of the water crisis demand a clear vision, collaboration across key stakeholders, and exponential ambition. Every organization, large or small, has a role to play. By uniting our efforts, we amplify our impact and expedite progress toward achieving SDG 6.

As you dive into the pages of this white paper, I hope you are compelled to engage and contribute to collective action that protects and restores our most precious resource. By embracing the practices and principles laid out in this white paper and by valuing each drop of water, I believe we can mobilize a wave of change to ensure a secure, sustainable water future for all.

Foreword



Diamond-Water Value Paradox





Why do we place a higher value on diamonds, symbols of luxury and wealth, than on water, the essence of all life? This age-old question, first posed by economist Adam Smith, takes on new significance amid a devastating global water crisis.¹

Economists explain the diamond-water value paradox with a straightforward principle: the law of diminishing marginal utility. This law states that the more we have of something, the less we value each additional unit. Picture a parched traveler stranded in a desert: initially, they would likely trade a diamond for a bottle of water. The first sips of water would be treasured, and the traveler would preserve every drop. Once their thirst is quenched, however, the value of each additional bottle of water declines. Since water is perceived as abundant and easily accessible, its value remains low.

The perception of water's abundance, however, is dangerously misguided. According to the 2018 UN World Water Development Report, 47% of the world's population, or 3.6 billion people, experience water scarcity for at least one month every year. This is expected to rise to 57% by 2050, affecting more than half the global population.² The crisis is not confined to the developing world. In the United States, for example, 2.2 million people lack access to running water, and between 9 million and 45 million are served by drinking water systems with health-based quality violations.^{3,4} Over the coming decade, groundwater depletion, infrastructure challenges, and climate change are expected to compound pressure on our already strained water systems. Given mounting threats to its quality and availability, one might expect a surge in water's perceived value. After all, if a stranded traveler in the desert might trade a diamond for a bottle of water, shouldn't we, on the precipice of a global water crisis, reassess the value of water?

In many parts of the United States, unsustainable groundwater pumping is leading to the rapid depletion of aquifers. Groundwater reserves are indispensable for everything from drinking water and sanitation to the energy sector and agriculture. The New York Times recently conducted a nationwide study of tens of thousands of groundwater monitoring wells in the United States. The analysis revealed the scale and stakes of groundwater exhaustion. Every year since the 1940s, the number of wells with falling water levels exceeded those rising. Replenishing these aquifers could take centuries or even millennia.⁵

Climate change intensifies the strain on our water systems, leading to increased variability in the water cycle and more frequent, severe weather events. Such changes

result in varied regional impacts, from heightened water stress and drought in some areas to increased flooding in others.⁶ In the American Southwest, for example, warming temperatures and drought conditions have decreased snowpack and runoff that feed the rivers. The flow of the Colorado River, once termed the 'lifeline of the West,' has decreased 20 percent over the last century.⁷ This depletion threatens the drinking water supply of 40 million people, disrupts hydroelectric power generation across eight states, and jeopardizes 45 million acres of farmland.⁸ In addition to depleting supply, climate change compromises water quality. Extreme flood-drought cycles, warmer temperatures, and strained wastewater infrastructure create ideal conditions for pollutants, including sediments, pathogens, and pesticides.⁹

To address our most urgent water challenges, the health of freshwater ecosystems is paramount. Rivers, wetlands, and floodplains act as natural flood defenses by regulating water flows. These floodplains and wetlands also absorb and gradually release water, replenishing aquifers and mitigating water scarcity during low flow periods. Moreover, freshwater ecosystems play a crucial role in climate mitigation by sequestering large amounts of carbon.¹⁰ Despite their immense value, freshwater ecosystems face imminent threats from damming, draining, regulatory changes, pollution, and climate change. Over the past 50 years, one-third of the world's remaining wetlands disappeared, and the populations of freshwater species declined by an average of 83%.¹¹ The collapse of these freshwater ecosystems compounds existing water challenges and perpetuates a harmful cycle as we lose our best natural defenses against climate change, water pollution, and scarcity.



47% of the
world's
population
experience
water scarcity
for at least one
month a year.

In a UN Global Compact study, 45% of businesses identified water insecurity as a business risk, with financial exposure exceeding \$425 billion.

In tandem with the human and ecosystem impacts, the freshwater crisis is a significant financial risk. Clean water is essential for production across industries, and shrinking water resources threatens business continuity and economic growth. A recent UN Global Compact study found that nearly half of responding businesses—around 45 percent—identified water insecurity as a business risk, estimating financial exposure exceeding \$425 billion.¹²

This number is expected to increase considerably as the water crisis worsens. Industries are not just heavily dependent on clean water for their operations; they are also key drivers of water system degradation. Industries drive water scarcity, contribute to the pollution of rivers and groundwater aquifers, and intensify competition for water resources in communities and ecosystems facing water shortages.¹³

Given the escalation of the water crisis, why has society's perception of water's value not adjusted to reflect these profound risks? The diamond-water value paradox, at its core, stems from this flawed perception. Economics teaches us that value is determined not by objective reality but by subjective assessments. Water remains undervalued because our collective perception does not align with the stark reality of the crisis. Humans tend to act decisively in response to immediate threats. It is more difficult, however, for us to grasp the severity of multifaceted, looming dangers. The water crisis, like climate change, is complex and characterized by gradual progression. Widespread water shortages often emerge gradually, and impacts vary significantly across regions. This makes the impending crisis easier to overlook, leading to an inadequate global response.

It is possible that only at a critical tipping point will business and public perceptions of water's value align with the reality of the crisis. However, the pendulum may swing too far

by waiting until water scarcity is universally palpable. Imagine a world where a drop of water surpasses the value of a diamond. We can—and must—proactively reassess water's worth before that tipping point forces a permanent recalibration of its value. The value of water is not only determined by price but also shaped by the actions we take to protect and manage it responsibly.

The Role of the Private Sector

In this context, the private sector is pivotal in shaping value perception and inspiring collective water action. As major consumers of water, the private sector's adoption of sustainable and resilient water practices creates a significant impact both within and beyond their operational boundaries. Through corporate water stewardship, companies lead by example and demonstrate their commitment to valuing water as a precious resource.

Effective corporate water stewardship has two key considerations. The first calls on companies to identify and manage water-related risks within their own operations and supply chain. Mitigating immediate and long-term water risks requires that companies adopt a resilience mindset. In other words, companies are encouraged to address immediate water stresses and proactively invest in solutions to build long-term resilience against evolving water challenges.¹⁵ These resilience actions might include improving water use efficiency, enhancing wastewater discharge quality, investing in water reuse technologies, and ensuring employees have access to **water, sanitation, and hygiene (WASH)** facilities at work. This is not just an ethical decision; it's a smart business move. Water resilience leads to long-term cost savings, lowers operational risks, and better prepares companies for shocks and stressors. A 2021 CDP report found that the cost of water-related risks to businesses is five times

Defining Corporate Water Stewardship

Corporate water stewardship is an approach that allows companies to identify and manage water-related business risks, understand and mitigate their adverse impacts on ecosystems and communities, and contribute to more sustainable management of shared freshwater resources.¹⁴

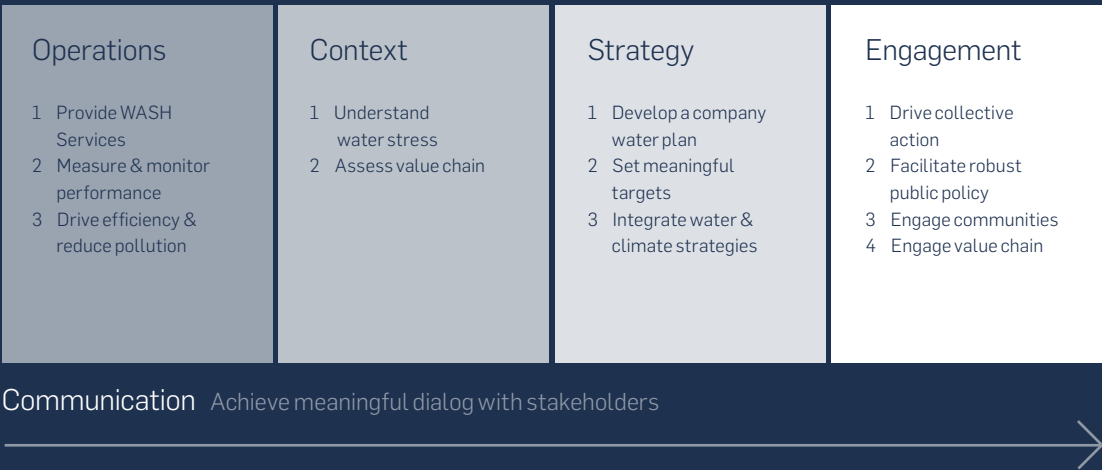


Figure 1
"The Water Stewardship Journey"
Adaptation of graphic by CEO Water Mandate,
"Water Stewardship 101: The Basics,"
Water Stewardship University

To learn more about how your company can adopt water resilience practices, please reference the **Water Resilience Assessment Framework Corporate Guidance**.

For more information on how companies can disclose and measure their water impacts and risks through, please see **CDP Water Security Disclosure**.

greater than the cost of preventative action.¹⁶ Companies that reported through CDP's 2020 water security questionnaire risk losing a cumulative \$301 billion due to water-related risks. In contrast, the cost of action totals \$55 billion, less than one-fifth of potential losses. Incorporating water risks into financial models, business strategies, and investment decisions can also influence water's value more widely. By taking steps to internalize the value of water in a way that quantifies its complex risks, companies set a precedent that reverberates through our economic and social system, challenging others to acknowledge and treat water as a valuable resource.

The second facet of corporate water stewardship broadens the focus to include communities and watersheds across a company's value chain. It asks that businesses improve water outcomes in the basins where they operate and counteract the harmful impacts of industry on water systems. This wider focus on communities and watersheds necessitates collaborative efforts with various stakeholders. By actively engaging with local authorities, NGOs, and community groups, companies contribute to the resilience of the entire water system. Such partnerships lend themselves to a more holistic approach to water management, addressing interconnected challenges and building the resilience of water systems beyond company boundaries. Examples of these efforts include initiatives focused on aquifer replenishment, pollution reduction efforts in local waterways, investment in **Water, Sanitation, and Hygiene (WASH)** programs, and participation in community-based water conservation programs.

By striving to positively impact **water-stressed** basins, companies not only manage risks and build resilience but also improve brand reputation

and, potentially, create new market opportunities. A 2022 study from Harvard Business School emphasizes the growing expectation that modern businesses need to go beyond profit and act as agents of positive societal change. Of 14,000 global survey respondents, the majority believe businesses have a responsibility to tackle pressing global challenges, including climate change and water insecurity.¹⁷ This evolving perception of the role of business is supported by numerous recent studies, indicating a preference among consumers, investors, and employees for value-aligned companies.¹⁸ Avoiding harm isn't enough; businesses are expected to positively impact their communities and environment. As water risks mount, corporate water stewardship is key to long-term profitability and sustainability. Companies improving water outcomes in vulnerable basins will contribute to water resilience while also attracting investors, loyal customers, and dedicated employees.

A comprehensive watershed-based strategy unites diverse stakeholders—local communities, policymakers, businesses, and nonprofits—underscoring the collective action required to tackle the water crisis. No company operates alone in a watershed, so coordinated efforts are necessary to manage the shared resource and build long-term resilience against water challenges. Moreover, companies' commitments to preserve and restore freshwater in vulnerable basins send a powerful message about its value, highlighting that this resource deserves careful investment, management, and protection.

Using this White Paper Corporate Water Stewardship in Action

The following white paper showcases the business models, tools, and strategies of six companies committed to corporate water stewardship. These companies, ranging from medium-sized enterprises to large multinational corporations, come from diverse sectors and are at different stages of their water stewardship journey.

Whether your company is new to corporate water stewardship or looking to enhance existing efforts, this white paper can serve as a valuable resource to learn and draw from. It provides a portfolio of examples to demonstrate how businesses can make meaningful contributions toward a more water-resilient future.

In the context of the diamond-water paradox, this form of corporate stewardship emerges as a crucial shift in how we value this indispensable resource. Corporate water stewardship is a call to action that recognizes water's value before we reach a critical tipping point. In this effort, every drop counts, and every action has the potential to create a powerful ripple effect.





Case
Studies

Actionable Lessons for Businesses





This white paper features six case studies, each highlighting a unique approach to corporate water stewardship. S&P Global showcases a tool to help companies implement corporate water strategies. Meanwhile, Gotham Greens and Xylem offer insight into how business models can integrate water considerations, and PepsiCo, Microsoft, and Cargill delve into their specific corporate water stewardship strategies. Each case study offers unique insights and cross-cutting themes to inform your company's water strategies.

The following case studies serve as a resource for companies looking to develop or enhance their water stewardship strategies. Chosen from a diverse range of industries and sizes, the case studies are intended to offer relatable, actionable insights for companies with similar characteristics. Simultaneously, the white paper highlights cross-cutting themes, providing lessons and strategic guidance for a wide array of companies.

Readers should consider how the broader lessons and overarching themes from the case studies can be adapted and integrated into their unique corporate contexts to enhance their own water stewardship initiatives.

Companies are encouraged to focus on the following cross-cutting action areas to develop and grow their water stewardship strategy:

1 Conduct Comprehensive and Proactive Risk Assessments

Conduct comprehensive water risk assessments that consider local and regional contexts. A holistic understanding of water context, including how your business depends on and impacts water systems, is vital for accurately identifying water-related risks and developing strategies to proactively mitigate them.

2 Customize Strategies for Local Water Needs and Collective Action

Tailor water stewardship initiatives to align with localized water needs within the communities and watersheds of different operational areas. When possible, actively engage a range of stakeholders—such as your employees, researchers, communities, the public sector, and nonprofits—to inform your water stewardship strategy. This amplifies the impact and reach of water stewardship initiatives, brings specialized knowledge and expertise, and builds resilience to water-related challenges beyond your operational boundary.

3 Adopt a Holistic Approach to Water Stewardship

Develop comprehensive water management strategies that integrate environmental (water quantity, water quality, ecosystem protection), social (water access), and governance (board oversight, public policy). This holistic approach supports the sustainability of business operations, freshwater ecosystems, and society.

4 Continuously Track and Benchmark Progress

Establish a transparent system for data collection, analysis, and benchmarking of water stewardship initiatives. Regularly monitoring progress against key performance indicators (KPIs) and industry standards enables your organization to adapt strategies, identify areas for improvement, and demonstrate a continued commitment to sustainable water management. Harnessing technology, like artificial intelligence and geospatial analytical tools, can streamline these processes and enable your organization to make more informed decisions.

APPROACH

Developing
a Roadmap

SECTOR

Financial
Services

SIZE

39,950
employees
2022

ANNUAL REVENUE

\$11.18
billion
2022

LOCATION

New York
New York
United States

UNGC AFFILIATION

Signatory
since 2014

Foundation for Success A Planning and Measurement Tool Up to the Task

Many firms looking to build a more sustainable water strategy turn to technology to help navigate the complexities of water stewardship. One such tool is the **Smart Water Navigator (SWN)**, powered by Ecolab and S&P Global. It helps organizations better understand their operational water risks, build partnerships with basin stakeholders, and drive positive water impacts. The SWN assists businesses at all stages of their water stewardship journey, from initial baseline use assessments to advanced year-over-year performance tracking. With automated water use analysis, users set goals that consider local water conditions. The tool also provides companies with resources and instruction on tackling shared water challenges and engaging with other water basin stakeholders.

S&P Global Guides Companies in their Journey Toward Smarter Water Management

Risk Approach

The water crisis poses several business risks, yet water remains widely undervalued and underpriced. Traditional water targets tend to focus largely on operational consumption without understanding the water-related risks that emerge from local water conditions and watershed impacts. The SWN aims to provide organizations with a holistic view of their water dependencies and risks, both within their operations and local watersheds. This approach enables businesses to set informed targets and take meaningful action that aligns with the severity of the water crisis.

Strategy

The SWN assists companies in assessing water-related risks and setting appropriate action plans through a four-step strategy. The first step identifies and monetizes water-related business risks. The tool calculates the disparity between the cost of water and its operational value to the business, using local water basin data for a precise risk evaluation. The SWN also allows companies to benchmark their water-use efficiency against industry and internal standards across facilities, guiding the prioritization and development of water strategies.

Next, the tool helps companies set water targets informed by local water conditions and catchment contexts. While water is expected to become scarcer and costlier in the years to come, water quantity and quality conditions vary significantly by location. The SWN helps companies identify risks and water strategy targets based on current water withdrawal volume and local water conditions.

After identifying specific business risks and setting targets, the tool provides organizations with a 13-question framework that guides the implementation of smart and sustainable water practices. As part of this action plan, companies can use a Risk Analysis Investment Calculator, which provides financial insights to guide decision-making, prioritize water reduction projects, and support the business case for water stewardship. This approach empowers companies to address local water challenges, managing risk while driving positive change in community watersheds and ecosystems.

Smart water management is an ongoing process. The SWN's final step enables companies to actively monitor and track progress over time. The tool provides a platform for businesses to track facility performance, evaluate progress against goals, and continually reassess operations for new risks and growth opportunities.





Implementation

Using the SWN, companies prioritize action and implement tailored water management plans. Microsoft, featured in Case Study #5, leveraged the Water Risk Monetizer, a component of the Smart Water Navigator, to reevaluate its water usage at a data center in San Antonio, Texas, within the water-stressed Leon Creek Watershed. The tool discovered that, after adjusting for risk, the true value of water to Microsoft's facility was more than 11 times greater than the utility bill from the San Antonio Water System.

Cargill, featured in Case Study #6, set its targets for water availability and quality across its supply chains within the local context of watershed health by quantifying water withdrawal volume and calculating an ideal replenishment rate. As a result, Cargill set 2030 targets based on calculated watershed targets for 81 priority facilities across 25 priority watersheds.¹⁹



Lessons Learned To Date

1 Engage Locally for Targeted Solutions

Water challenges, including sourcing, availability, and the impact of regional climate conditions, often emerge locally. By developing strategies specifically tailored to local water challenges, companies more effectively manage risks, implement impactful water management strategies, and foster stronger community ties.

2 Integrate Water Stewardship into Broader Business Strategy

Water risk management intersects with operational efficiency, financial performance, and corporate reputation. By integrating water risk management into a business' core strategies, companies mitigate risks and uncover opportunities for innovation, efficiency improvements, and improved stakeholder relationships. The approach ensures that water stewardship is not an isolated effort but integrated into the broader business strategy.

3 Technology Makes Measurement More Efficient and Effective

Local measurement and management are resource-intensive and create challenges for firms. Technology, like the Navigator, provides solutions to make data collection and measurement more efficient and effective. Using technology streamlines the process and ensures water management efforts are both impactful and sustainable at the local level.

For more information, please see:
[SmartWaterNavigator.com](https://www.smartwaternavigator.com)

Gotham Greens

APPROACH

Efficient
Technology

SECTOR

Agriculture

SIZE

700
employees

LOCATION

Brooklyn
New York
United States

UNGC AFFILIATION

Signatory
since 2022

Foundation for Success Building Around Efficiency

Founded in Brooklyn, New York, in 2009, and now operating 13 greenhouses in 9 states, Gotham Greens is redefining fresh food production by growing perishable produce closer to consumers through its network of high-tech, climate-controlled hydroponic greenhouses. Gotham Greens emerged from a recognition of inefficiencies in traditional produce supply chains, which typically transport leafy greens thousands of miles from farm to table. Water stewardship is not just a sustainability goal but a byproduct of its green mission.

Gotham Greens Leverages Urban Farming Innovations to Drive Water Savings



Risk Approach

As with all farmers, water remains a substantial material risk to Gotham Greens. Although its resource-efficient indoor agriculture techniques afford more control than conventional 'outdoor,' open-field farms, Gotham Greens is not immune to risk. For example, a breakdown in local water quality strains on water filtration systems, posing risks to product quality. Many of Gotham Greens' greenhouses operate in urban areas facing water stress, namely in the parched Western and Southern United States. These locations face regulatory risks due to increasingly stringent water usage regulations. Mitigating this risk involves proactively improving water management practices and engaging with stakeholders to advocate for water governance that provides an enabling environment for sustainable stewardship.

Strategy

Maximizing the crop yield of high-quality leafy greens in the tight quarters of its urban greenhouses can mean less energy and less water usage, keys to Gotham Greens' business model. This requires managing its greenhouses using tight Environmental Control Systems, including sensors and software, which enable precision management of growing climate and irrigation strategy.

Gotham Greens' strategy not only promotes optimal plant growth for high crop yields but also significantly reduces volumetric water consumption compared to conventional farms and insulates harvests from water-related shocks. Within its greenhouse operations, Gotham Greens closely scrutinizes water use with real-time data, identifying opportunities for improved efficiency. This monitoring tracks monthly usage tracking with water meters, frequent laboratory testing of facility water quality and local pollution, and training employees to report leaks and other problems. Gotham Greens builds long-term relationships with centralized suppliers and ensures they adhere to its Food Safety Quality Assurance program, including water management.



This holistic technique reduces water consumption up to 90% compared to traditional open-field farming methods.

Implementation

Gotham Greens' water stewardship wins are largely driven by its innovative greenhouse system design, which carefully assures optimum plant nutrition and crop management. The company jointly relies on sensors, controls, and automated systems along with skilled human capital. A closed-loop hydroponic growing system recirculates nutrient-rich water through gutter systems that make continuous contact with plants, resulting in higher growth and recycled water usage. This holistic technique reduces water consumption by up to 90% compared to traditional open-field farming methods, saving 300 million gallons of water in 2022 alone. Gotham Greens' location in regions with high water stress makes its water strategies even more pertinent. The company is committed to driving positive change in their communities by delivering locally-grown, nutritious leafy greens that are grown using fewer finite natural resources. Gotham Greens actively engages with local communities, universities, governments, and water stewardship councils to continue to grow and scale the impact of their corporate water stewardship initiatives.

Lessons Learned To Date

1 Measurement and Management is Resource Intensive

Investing in water stewardship technologies and practices can be resource intensive. Leadership and employees must understand both the ethical purpose and business case of measuring water impact and implementing responsible water management practices. This knowledge and multi-level support is vital to sustaining and scaling this work.

2 Cultivating Data Systems Pays Off

Gotham Greens' in-house Environmental Management System ensures adherence to the tight environmental controls necessary to promote an ideal indoor growing environment. Delivering precision to greenhouse growers requires continuous data and systems maintenance, including consistent data input, regular reviews, and analysis of trends and potential strategies for improvement.

3 Risk Mitigation Grows from the Ground Up

Gotham Greens proactively mitigates potential environmental risk, even before the construction of its facilities. Site assessments include scenario planning and a tailored selection of operational technologies based on geographic suitability and local risk factors.



APPROACH

360° Water
Solutions

SECTOR

Industrials

SIZE

22,000
employees

ANNUAL REVENUE

\$5.5 billion
2022

LOCATION

Washington D.C.
United States

UNGC AFFILIATION

Signatory
since 2002

Foundation for Success Understanding the Business of Water

Water is Xylem's business. As the leading global water technology provider, the company addresses the world's critical water, wastewater, and water-related challenges through technology, innovation, and expertise. Xylem provides customers with a portfolio of products, services, and solutions, harnessing its technology and expertise to help clients tackle pressing challenges across the water cycle. At the same time, the company applies these practices within its own operations, leading by example. Xylem's water solutions benefit both customers and the company itself, promoting sustainable water management externally and internally.



Xylem Approaches Water Stewardship Through a 360° Lens That Considers Internal Operations, Customers, and Communities

Risk Approach

As climate change and extreme weather events accelerate, water scarcity, quality degradation, and infrastructure strain often follow. This poses risks to Xylem's customers, utilities, and industrial users of water that rely on water availability and quality. It also creates challenges to Xylem's own value chain as a global manufacturer.

To manage internal risk, Xylem employs frameworks like the Task Force on Climate-related Financial Disclosures (TCFD) and the **World Resource Institute's Aqueduct tool**. These resources enable companies to assess risks, make informed decisions, and prioritize actions to protect and adapt value chains in the face of evolving climatic and water conditions. For instance, in 2022, Xylem used TCFD's scenario analysis to identify and subsequently focus stewardship efforts on Xylem facilities and key suppliers in high water-stress regions. Beyond internal risks, Xylem's core business is developing innovative solutions to help customers, primarily utilities and industrial users of water. In doing so, Xylem safeguards its operations from climate-related water risks while enabling customers to manage their water risks.

Strategy

Xylem takes a 360° approach to water stewardship. The company aims to 1) Reduce water use within its internal operations, 2) Help customers tackle pressing water challenges, and 3) Drive positive change in the communities and watersheds where the company operates. Xylem aims to achieve 100% process water recycling at its 22 highest-impact facilities by 2025 through education, engagement, and tailored solutions. In parallel, through its products and solutions, Xylem strives to help customers stop over 7 billion cubic meters of polluted water from reaching communities and waterways by 2025. Xylem commits to driving positive water impacts through corporate investment, supplier engagement, and employee volunteer efforts.



Implementation

The Xylem operations team works closely with 22 prioritized facilities to reach its goal of 100% process water recycling by 2025. For example, Xylem developed a water treatment reuse and recycling approach at one of its priority facilities in Sweden, following alarmingly low water levels in prior years. Combining a suite of Xylem solutions, the system recycles and reuses process and stormwater from nearby ponds. The facility uses energy-efficient pumps for water movement, multi-stage purification processes for ensuring water quality, and real-time monitoring for optimal operation, effectively recycling 20 million liters of water each year.

Xylem's corporate social responsibility program, Watermark, exemplifies its efforts to drive positive water impacts in the communities where it operates. Xylem earmarks 1% of its profits and employee volunteer time to water-related causes. Through Watermark, Xylem employees directly engage in local water conservation efforts, including youth education and waterway cleanups. In 2023, employees volunteered over 184,000 hours, underscoring the team's dedication to positively impacting their communities and watersheds. Xylem is also dedicated to engaging suppliers in these issues. Over 400 of Xylem's suppliers have committed to the WASH4Work pledge, which ensures access to safe water, sanitation, and hygiene at the workplace. Xylem continues to work with suppliers to scale this commitment.



Lessons Learned To Date

1 Adopt a Proactive Risk Management Approach

Xylem demonstrates the value of a forward-looking approach to water risk management. Using tools and assessments to identify and prioritize risk areas shows how proactive management can safeguard businesses against future water-related challenges. This approach is crucial for companies to ensure long-term sustainability in the face of evolving environmental conditions.

2 Engage Employees and Partners for Broader Impact

Xylem's commitment to water stewardship is driven by the passion of its employees, who address customer challenges and support local communities through the Watermark program. Watermark demonstrates the value of engaging staff, suppliers, and customers in water action efforts. Encouraging employee and partner participation in community projects amplifies the company's impact while fostering a culture of sustainability and responsibility.

APPROACH

Collaborative
Partnerships

SECTOR

Food and
Beverage

SIZE

315,000
employees
2022

ANNUAL REVENUE

\$86 billion
2022

LOCATION

Purchase
New York
United States

UNGC AFFILIATION

Signatory
since 2008

Foundation for Success Recognizing the Critical Role of Water

Global food and beverage leader PepsiCo is renowned for iconic brands, including Pepsi, Aquafina, Gatorade, and Lay's. Its journey toward leadership in water stewardship follows from a deep understanding of water's critical role throughout its value chain: irrigating crops it uses, composing an essential ingredient in many of its products, maintaining quality standards in its manufacturing processes, and supporting the communities and local ecosystems where it operates. PepsiCo's **pep+ strategy** has put sustainability at the center of how the company will create growth and value by operating within planetary boundaries and inspiring positive change for the planet and people.

In accordance with its efforts to build a Positive Value Chain, PepsiCo has a vision to become net water positive by 2030, leaving water resources wherever it operates in a better state because of its presence. PepsiCo is one of the first companies of its size to acknowledge water access as a basic human right. While 2 billion people lack access to safe drinking water and approximately 3.6 billion people lack adequate sanitation services, upholding clean water remains a prerequisite to ensuring the health and safety of PepsiCo's employees and host communities.²⁰

PepsiCo Invests in Collective Action for Net Water Positivity in High-Risk Watersheds

Risk Approach

PepsiCo's water stewardship is rooted in comprehensive water risk assessment. The company evaluates local water scarcity, quality, and socio-economic issues such as overburdened watersheds, fragile ecological systems, and potential saltwater intrusion. To mitigate the impact of these challenges on the business, PepsiCo regularly estimates water-related risks at each point along its value chain. PepsiCo prioritizes mitigative and adaptive action at high-risk facilities according to a rolling global operational assessment of its physical, regulatory, and reputational risk. The process relies on diverse data sources, including the World Resources Institute's (WRI) Aqueduct tool, site surveys, and third-party independent expert experience within watersheds.

Strategy

PepsiCo's strategic roadmap to achieving net water positivity includes (1) improving water-use efficiency across the value chain; (2) adopting the **Alliance for Water Stewardship (AWS) standard**, a globally applicable framework for major water users to understand their water use and impacts, in all high-risk facilities by 2025; (3) replenishing water within high-stress watersheds, leaving basins with more than 100% of the water consumed while promoting watershed health beyond volumetric measures by 2030; and (4) increasing safe water access for communities that face water insecurity, with the goal of providing 100 million people with access to safe, clean drinking water by 2030.





In collaboration with The Nature Conservancy, in 2022, PepsiCo replenished nearly 5.5 billion liters into watersheds distribution.

Implementation

PepsiCo's Positive Value Chain ethos comes to life in the water projects across its worldwide operations. In collaboration with The Nature Conservancy, in 2022, PepsiCo replenished nearly 5.5 billion liters into watersheds. This success was the result of effective water replenishment initiatives, including promoting water-efficient crops in farming communities along Arizona's Verde River. Moreover, PepsiCo partnered with the Arbor Day Foundation between 2020 and 2021 to replant two million trees along 2018 wildfire burn scars, the impacts of which will last for years. In another collaboration, the company worked with Ducks Unlimited to restore 669 wetland acres in San Luis National Wildlife Refuge, catalyzing natural solutions by reinstating key ecological functions within the water catchment. These projects exemplify PepsiCo's integrated approach to water replenishment, ecological health, and community support.

Lessons Learned To Date

1 Start Local and Engage All Stakeholders

PepsiCo works to understand water challenges at a local level and supports collaborative solutions that address the specific needs of a given watershed. The company believes the only way to tackle water stress is to get all stakeholders engaged and, through collective action, work towards a common goal of improving water governance and conservation. This includes increased collaboration among all stakeholders in impacted watersheds, advocating for solutions that drive fairness and address specific needs of a given locality, the open sharing of ideas, best practices, and innovations, and collaboratively driving investment and scale.

2 Partner with the Experts

PepsiCo collaborates with a number of external partners, experts, NGOs, and local communities on watershed-level collective action and watershed replenishment projects, as well as to identify water-saving technologies. The company is also a member of the Alliance for Water Stewardship (AWS) and has partnered with organizations such as The Nature Conservancy and World Wildlife Fund. Through the AWS, PepsiCo benefits from a rigorous framework for best practices in holistic water stewardship. By drawing on the expertise and historical knowledge of local communities and leaning into the competencies and networks of such environmental groups, PepsiCo maximizes project impact. These partnerships also lend credibility to PepsiCo's stewardship efforts.

3 Establish Measures and Data Governance Structures

PepsiCo's data governance structure is managed and centralized within its Global Sustainability Office. This organization streamlines the collection of the water management metrics necessary for long-term planning while driving accountability among local and sector teams. At the same time, PepsiCo's risk assessment process remains inclusive of highly specialized and localized data needs, such as expert experience within specific watershed contexts.

APPROACH

Deploying
Technology

SECTOR

Technology

SIZE

238,000
employees
2023

ANNUAL REVENUE

\$211 billion
2023

LOCATION

Redmond
Washington
United States

UNGC AFFILIATION

Signatory
since 2006

Foundation for Success Advancing & Informing Water Benefit Accounting Methodologies

Microsoft's water stewardship strategy is firmly rooted in 5 pillars: reduce, replenishment, increase access to water and sanitation services, innovate, and advocate. Water replenishment, whereby a company develops or supports projects outside of the company's direct operational footprint to restore an amount of water equal to some portion of the company's water use, is a foundational element. Microsoft sees water replenishment as one mechanism to tackle water risks across its operations.

Microsoft Links Technology with Water Utilities for Sustainable Water Management



After conducting a water risk assessment using World Resources Institute's **Aqueduct tool**, Microsoft identified 40 priority sites with high water stress to prioritize for its replenishment work. In designing water replenishment projects, Microsoft partners with 1) project implementers, 2) project scoping partners, and 3) communities to deploy the project.

For Microsoft, these projects at times focus on water access, another element of Microsoft's water strategy. Critically, Microsoft measures a project's benefits using rigorous methodologies, such as Volumetric Water Benefit Accounting (VWBA) guidance, that create a transparent and systematic process for companies to claim the benefits derived from their water stewardship activities.

The development of VWBA is an iterative process, and the guidance is **currently being revised** by expert stakeholders, including nonprofits, strategy consultants, and companies such as Microsoft that are trialing new approaches to water stewardship. The latest iteration of VWBA, which is currently in review, explores activities that are not strictly drop-for-drop water accounting, but instead incorporate holistic strategies that increase knowledge and technical

capacity to address water risks and challenges outside of the company's operations. These activities include projects that incorporate water stewardship approaches such as data collection/monitoring, assessment, hydrological modeling/development of modeling tools, management plans, training, information sharing, education and awareness, and collective action convening.

Another piece of Microsoft's water strategy is technology- or knowledge-based water replenishment solutions that are transferable—and scalable—across watersheds. While the updates to VWBA calculation methods are still in review and being piloted, this case study describes an example of a new tactic deployed by Microsoft and its technology partners to aid with leak detection and subsequent leak repairs that can be quantifiable based on the newly revised VWBA guidance to support water replenishment.



Strategy

Microsoft has recognized the value of pairing technology innovations—the company's bread and butter—with its water stewardship program. An example of this innovation-based activity is the company's work around leak detection innovation. Leaks in the United States' water infrastructure result in an average 14% unrecoverable loss of potable water supplies, and some water systems report volumetric losses exceeding 60%.²¹ Leaks are a systemic challenge in the civil infrastructure within watersheds and diminish water supplies available for industry, communities, and the environment. Identifying and repairing leaks takes time and significant financial investment, but technological innovations can greatly increase the efficiency and efficacy of these efforts. Together with FIDO Tech, a UK-based artificial intelligence (AI) technology solutions provider, Microsoft has initiated a leak detection and repair project and plans to quantify the water savings after identified leaks are repaired and tie those to its water replenishment goals.

Leaks in the United States' water infrastructure result in an average 14% unrecoverable loss of potable water supplies.

Implementation

To initiate this project, Microsoft and FIDO Tech, are piloting a leak detection AI-led process that runs on Microsoft Azure, a cloud computing service. The tool both identifies leaks and, importantly, ranks them by size. This data can be used by decision makers to target investments to prioritize repairs to the largest leaks in a water infrastructure system, maximizing water savings benefits after successful repairs.

Putting the solution into practice, Microsoft and FIDO Tech worked with EPCOR, the largest private utility in Arizona, and FIDO Tech's U.S. partner, Oldcastle Infrastructure, to deploy the leak detection technology into the utility's water management system in the Phoenix metropolitan area. Over the next 10 years, the project will continuously monitor the Phoenix region's water infrastructure network to identify and repair leaks in over 350 kilometers of water pipeline. The leak detection solution will help Arizona's water managers, such as EPCOR, comply with Arizona's Groundwater Management Act of 1980, which requires water providers to keep the rate of lost and unaccounted water to 10% or less.

In addition to Arizona, Microsoft is exploring how the technology can scale to other watersheds, including piloting the solution in London, UK and Querétaro, Mexico. Microsoft's approach for innovating replenishment demonstrates how companies can pursue replenishment-focused activities as part of their water stewardship strategy—helping to expand market opportunities for innovation while concurrently advancing sustainability goals. Additionally, this example demonstrates the potential value of public-private partnerships and opportunities for companies to scale water stewardship solutions through collaboration. Microsoft's focus on replenishment demonstrates a novel approach to water stewardship that can harness a company's assets to create scalable opportunities with quantifiable benefits to the business, society, and the watershed.



Lessons Learned To Date²²

1 Contribute insights on implementation methods to quantify water benefits

Companies can collaborate with nonprofits, academia, strategy consultants, and the public sector to provide critical insights to support the development and piloting of water benefit accounting methodologies, like the forthcoming revisions to VWBA. These methodologies help to establish consistent metrics for companies to use in assessing the outcomes of their projects—and for investors and the public to assess how a company is (or is not) effectively managing its water-related risks and dependencies.

2 Collaborate with partners in the scoping, design, and implementation of projects

Companies can—and should—work with partners to support their water stewardship programs. Collective action can provide a mechanism for cost-sharing among companies while gaining buy-in from key community stakeholders, like nonprofits, utilities, local governments, and advocacy groups. Furthermore, external stakeholders provide critical environmental, social, and governance contexts to design—and deploy—projects in a way that maximizes impact in the priority watershed.



APPROACH

Engaging Directly
with Suppliers

SECTOR

Food & Agriculture

SIZE

160,000+
employees

2023

ANNUAL REVENUE

\$177
billion

HEADQUARTERS

Minnetonka
Minnesota
United States

UNGC AFFILIATION

Signatory
since 2017

Foundation for Success Water Risk Assessment & Corporate Governance Structure that Oversees Water

Cargill employs a comprehensive risk assessment approach—developed in partnership with the World Resources Institute—to design enterprise-level water targets informed by local context.¹ This approach allows the company to prioritize specific regions and commodities based on the water-related risks they face. Broadly, water risk emerges in several key areas of Cargill's business: rain-fed and irrigated agriculture impacted by drought and climate change, operational water use in water-stressed regions, and river transport disrupted by changing water levels.

Cargill estimates that 90% of its water footprint is in its supply chain. The first step the company takes to assess supply chain water risk is overlaying the supply chain inventory with global water risk data, using publicly available datasets such as Aqeduct. Cargill further assesses risk for these identified regions and commodities through the local teams, who develop interventions to address shared water challenges. In this second step, the local teams engage stakeholders within the region to better understand the local context and partner to develop farmer-centric solutions that address farmer livelihoods, climate resiliency, biodiversity and other co-benefits in addition to the identified water challenges.

Cargill Partners with Farmers to Scale Regenerative Agriculture Solutions that Improve Livelihoods and Watershed Health

Within Cargill's operations, the company prioritizes facilities for water stewardship interventions based on water use and exposure to water stress.

The company conducts an additional water risk screening at all its manufacturing sites with material water use, which may trigger a more in-depth water risk assessment. The in-depth water risk assessment covers a wide range of impact- and dependency-based risk for each facility's specific location, including physical risk, financial costs associated with water interventions, compliance risk, water-related disruptions (e.g. floods, drought), reputational risk, and stakeholder engagement.

From a governance standpoint, Cargill incorporates water-related risks and regulatory compliance requirements in business planning decisions. For instance, the information gleaned from the operational-level water risk assessments informs decisions on capital resources, internal audit frequency, and other systems Cargill has in place to ensure regulatory compliance. Additionally, water is a core consideration in business strategy as Cargill explores new projects, mergers, and/or acquisitions. Specifically, Cargill assesses the potential increase in its water footprint in direct operations and across the agricultural commodities value chain that may intersect water-stressed regions. When the company analyzed expanding its soybean crush capacity in North America for example, they completed a detailed analysis of the origination regions over the coming years to understand the dependency on both irrigated and rain-fed agriculture.

The insights gleaned from Cargill's water risk assessments inform the company's ambitious goal to enable water positive impact across its operations, supply chains, and surrounding communities by 2030. Specifically, Cargill set the following targets for 2030:

Operations

Implement water stewardship practices at 72 priority facilities facing high water risk.

Supply Chains

Enable restoration of 600 billion liters of water and reduction of 5,000 metric tons of water pollutants in water-stressed regions.

Communities

Enable improved access to safe drinking water and sanitation, reaching 500,000 people in priority communities.



Strategy

Due to its central role as a connector within the agriculture and food value chain, Cargill's water strategy relies on partnerships with the farmers, ranchers, and on-the-ground suppliers who grow the ingredients that are processed into Cargill's agricultural products, including food ingredients, feedstocks and meat and poultry products. Together with partners and Cargill teams, suppliers provide critical insights into local, on-farm conditions that help Cargill prioritize water interventions. Drawing on risk assessments informed by both corporate-level analysis and local context, Cargill designs water stewardship projects to mitigate risk by strengthening water resiliency in the watersheds where the company operates and sources from. Projects generally fall into three categories: (1) regenerative agriculture, from row crops to ranchers (e.g. practices including conservation tillage, cover crops and sustainable grazing) (2) nature-based solutions in the regions where Cargill operates and sources from (e.g. nature restoration, land conservation and riparian buffers) and (3) technology-informed precision agriculture (e.g. nutrient management and drip irrigation).

Cargill's water stewardship strategy is informed and validated by robust datasets that quantify the company's water dependence across its value chain and the impact of its supply chain and operations on water resources. All of Cargill's operational sites report monthly water use data,

and facilities with material water use provide additional granular data such as withdrawal data by water source and water discharge volumes. Sites located in water-stressed basins have additional reporting requirements based on local water challenges. For example, sites in regions with water quality challenges will report on the pollutant loads in water discharges.

Additionally, Cargill tracks the results of its water stewardship programs twice a year, including progress-to-date and forecasted impacts, in accordance with the external industry standards outlined in the Volumetric Water Benefit Accounting (VWBA) guidance and the forthcoming guidance on Water Quality Benefit Accounting. These standards are informed by a range of external organizations—including World Resources Institute, LimnoTech, Bluerisk, The Nature Conservancy, and World Wildlife Fund—and are iterative, adapting to feedback, challenges, and solutions identified by companies as the standards are implemented across the value chain.



Implementation

One example of how Cargill is advancing its water strategy is **Cargill RegenConnect®**, a regenerative agriculture program that pays farmers for positive environmental outcomes, such as soil carbon sequestration. Additional outcomes generated through regenerative practices such as no-till and cover crops can also improve soil health and soil water retention, along with reducing pesticide and fertilizer runoff. Leveraging the program, farmers are also able to pinpoint solutions (e.g. cover crops, no-till, or reduced-till) that are appropriate to the specific crop being grown and the landscape conditions (soil, climate, etc.) of each farm. Cargill RegenConnect, which launched in 2021, has enrolled nearly 1 million acres across 24 states in the U.S. Last year, the program also expanded to four countries in Europe where Cargill sources key commodities. So far, farmers enrolled in Cargill RegenConnect in the U.S. have restored 2.2 billion liters of water and reduced 41 metric tons of pollutants (expressed as Nitrogen Equivalents), as quantified based on Water Benefit Accounting guidance and leveraging the verification of the practice changes done by Regrow. These outcomes contribute to Cargill's water restoration and water pollution reduction targets for 2030 and provide ecosystem co-benefits by improving the water holding capacity in soil, making farms more resilient to impacts from drought, extreme rainfall, and other climate patterns.

In addition to financial support, Cargill has seen that farmers often face barriers to adoption of regenerative agriculture practices, including lack of access to education, technical assistance or training. To address this barrier, Cargill launched a new grant program in 2022—Success from the Ground Up—to help farmer-focused soil health organizations in the U.S. accelerate the adoption of regenerative agriculture practices that increase farmer resiliency and support robust agriculture systems and communities. Last year, Cargill awarded over \$700,000 in funding to six soil health organizations in the U.S. that are focused on providing training and education to help row crop farmers adopt soil health practices.

These examples illustrate how companies can collaborate with farmers and local soil health organizations to harness solutions that are tailored to local conditions and incorporate water strategy into overall business planning, allowing for potential profitability and positive environmental impacts to go hand-in-hand.

A study conducted by the Soil Health Institute across 100 corn and soybean farms in the U.S. further supports the positive economic benefits for farmers adopting regenerative agriculture practices.

This study found that soil health management systems increased net income for 85% of farmers growing corn and 88% of farmers growing soybean, and increased net farm income by an average of \$52/acre for corn and \$45/acre for soybean.

In addition, 97% of the farmers interviewed reported their soil health management system increased crop resilience to extreme weather.



Lessons Learned To Date



1 Trace your supply chain and prioritize hotspots

Any company supplying or sourcing agricultural commodities needs to understand the water risks across its entire supply chain by using a quantitative water risk assessment approach that incorporates local contexts, such as the approach developed by Cargill and World Resources Institute, detailed in this practice note.²³ Having sufficient visibility to identify which commodities are water intensive and primarily sourced from water-stressed areas is critical to prioritize water interventions. When possible, cross-checking risk assessments and integrating suppliers' input is essential to understanding local contexts and tailoring solutions that can improve watershed health while meeting supplier needs.

2 Harness data for transparency

Leveraging data is essential to effectively measure basin health and quantify the impact of water stewardship programs. For agriculture companies, data-driven programs, like Cargill RegenConnect, can provide transparency around program benefits and quantifiable evidence of project impacts.

3 Incentivize best practices

Providing a variety of incentives—from payments to education and training—can encourage farmers' and ranchers' uptake of regenerative agriculture and water solutions.







Conclusion





The case studies highlighted offer a glimpse of what can be achieved when businesses implement innovative water stewardship practices. We encourage businesses to explore how the principles demonstrated in these case studies can be integrated, adapted, and scaled within their organization. The gravity of the water crisis demands a shared ambition across stakeholders and collaboration within watersheds.

Reducing harm and minimizing your company's water impact is an important first step. However, the deeper, more lasting change comes when businesses engage in collective action, amplifying their efforts to drive **net-positive water impacts** for the company and broader society. It is through collective action and multi-stakeholder collaboration that businesses can ignite a ripple effect, reshaping the way we collectively value, use, and manage our most precious resource.

The companies featured in this report have adopted innovative tools, business models, and strategies to help meet their water ambitions, mitigate risk, and build water resilience. Spanning diverse sizes and sectors, they have taken meaningful strides to implement water interventions that drive positive water impacts. This holistic approach to corporate water stewardship benefits communities, ecosystems, and companies. By adopting a holistic water stewardship strategy, businesses improve brand reputation, attract investors, and build long-term resilience as water risks mount. Considering both the stakes of this water crisis and the tangible benefits of action, there's every reason for businesses to join us on this journey.

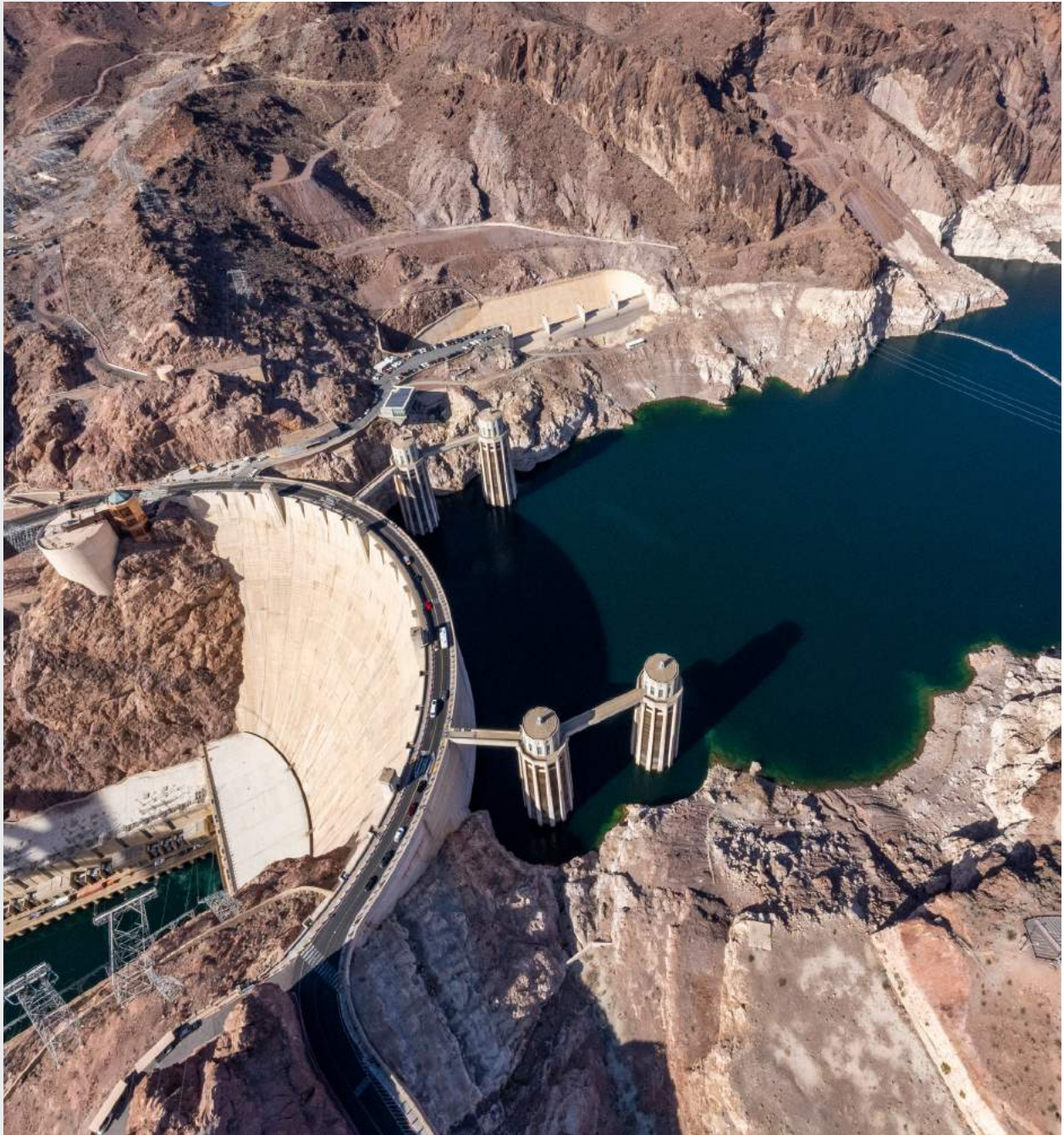
For companies ready to take the next step in their water stewardship journey, we encourage them to engage with the UN Global Compact CEO Water Mandate and Pacific Institute, as well as the other resources, tools, and initiatives listed [here](#). These offerings can help companies integrate water into business strategies by building water resilience, engaging in collective action, and supporting the human right to water.

Ultimately, action—not intention—will shape a water-secure future. Drawing from this wealth of resources and best practices, the business community is well-positioned to act, lead, and scale impactful change. The road ahead is challenging, but the stakes are higher than ever. With unity, shared vision, and unwavering commitment, we can keep Sustainable Development Goal 6²⁴ within reach. It's time to rise to the occasion and make waves in water stewardship. For the sake of our businesses, communities, and planet, let us make every effort, every innovation, and every drop count.

It is through collective action that businesses ignite a ripple effect, shaping the way we value, use, and manage our most precious resource.



Resources, Tools, and Initiatives to Support Your Company's Water Stewardship Journey



Action Area	Resources, Tools, and Initiatives to Support Your Company
Conduct Comprehensive and Proactive Risk Assessments	Aqueduct Tool 1 CDP Water Security Disclosure 2 Water Resilience Assessment Framework Corporate Guidance (WRAF) 4
Customize Strategies for Local Water Needs and Collective Action	Aqueduct Tool 1 Water Resilience Assessment Framework Corporate Guidance (WRAF) 4 Cost-Benefit Analysis Framework 7 100 Priority Basins 8 Setting Contextual Site Water Targets Guidance 9 Benefit Accounting for Nature-Based Solutions Guidance 11 Wash4Work 15 Net Positive Water Impact 17
Adopt a Holistic Approach to Water Stewardship	Water Resilience Assessment Framework Corporate Guidance (WRAF) 4 100 Priority Basins 8 Setting Contextual Site Water Targets Guidance 9 Benefit Accounting for Nature-Based Solutions Guidance 11 Volumetric Water Benefit Accounting (VWBA) 10 Wash4Work 15 Corporate Expectations for Valuing Water 16 Net Positive Water Impact 17
Continuously Track and Benchmark Progress	CDP Water Security Disclosure 2 Volumetric Water Benefit Accounting (VWBA) 10
Cross-Cutting These resource hubs, tools, and initiatives can support companies across all four action areas.	Smart Water Navigator 3 Water Action Hub 5 Science-Based Targets Network's Freshwater Hub 6 UN Global Compact CEO Water Mandate 12 Water Resilience Coalition 13 Alliance for Water Stewardship (AWS) 14

Resources and Tools

1 Aqueduct Tool

The World Resources Institutes' Aqueduct tool maps water risks such as floods, droughts, and stress using open-source, peer reviewed data.

WRI.ORG

2 CDP Water Security Disclosure

Through CDP's Water Security Disclosure, companies and investors can measure their water impact to manage risks and opportunities, report on progress with transparency, and commit to proactive action.

CDP.NET

3 Smart Water Navigator

S&P Global's SWN is a free online tool to help organizations better understand their water risks, set water risk reduction targets, develop a plan, and track water management progress over time.

SMARTWATERNAVIGATOR.COM

4 Water Resilience Assessment Framework Corporate Guidance (WRAF)

This guidance provides a standard approach across industries for corporates to measure and build water resilience.

CEOWATERMANDATE.ORG

5 Water Action Hub

The UN Global Compact's Water Action Hub provides a central library of water stewardship tools, resources, and opportunities from around the world.

WATERACTIONHUB.ORG

6 Science-Based Targets Network's Freshwater Hub

The Science Based Targets Network's Freshwater Hub provides frameworks, tools, methods and guidance for water impact assessment, management, and reporting.

SCIENCEBASEDTARGETSNETWORK.ORG

7 Cost-Benefit Analysis Framework

This brief introduces a framework to estimate both costs and benefits of engaging in water stewardship, enabling companies and investors to gain a more complete financial picture, better understand the full value of water, and prioritize action where it matters most: to the business and to society.

CERES.ORG

8 100 Priority Basins

This list from the UN Global Compact's CEO Water Mandate identifies priority basins for collective action projects, based on economic and water risk factors. This resource can help companies decide where to prioritize collective water action projects.

WATERACTIONHUB.ORG

9 Setting Contextual Site Water Targets Guidance

Developed by the CEO Water Mandate and Pacific Institute, this resource provides a guide to help companies set effective site water targets informed by catchment context.

CEOWATERMANDATE.ORG

10 Volumetric Water Benefit Accounting (VWBA)

The VWBA provides a common method for assessing the benefits of water stewardship activities, ensuring strategies address current or projected water challenges and contribute to public policy priorities.

WRI.ORG

11 Benefit Accounting for Nature-Based Solutions Guidance

This guidance provides a standard approach and tool to measure and value the combined water, carbon, biodiversity, and social benefits of Nature-Based Solutions (NBS) in watersheds.

CEOWATERMANDATE.ORG

Initiatives and Collaboratives

12 UN Global Compact CEO Water Mandate

The CEO Water Mandate is a special initiative of the UN Secretary-General and the UN Global Compact, implemented in partnership with the Pacific Institute. By endorsing the Mandate, companies become part of a global network committed to water action.

CEOWATERMANDATE.ORG

13 Water Resilience Coalition

The Water Resilience Coalition, a sub-initiative of the CEO Water Mandate, is a CEO-led group, committed to elevating water stress to the top of the corporate agenda. WRC members work to preserve the world's freshwater resources through collective action in water-stressed basins.

CEOWATERMANDATE.ORG

14 Alliance for Water Stewardship

AWS is a global membership collaboration of businesses, NGOs, and the public sector committed to the International Water Stewardship Standard. This standard provides a framework for large water users to manage water impact responsibly and collaboratively, improving water stewardship practices and contributing to wider sustainability goals.

A4WS.ORG

15 Wash4Work

WASH4Work is a multi-stakeholder initiative hosted by The United Nations Global Compact's CEO Water Mandate to mobilize business action on water, sanitation, and hygiene (WASH) in workplace operations, in communities where companies operate, and across supply chains.

WASH4WORK.ORG

16 Corporate Expectations for Valuing Water

The Corporate Expectations for Valuing Water serve as an ambition around the full range of water issues large companies should strive to achieve by 2030. The expectations also serve as the framework for investor engagements with companies as part of Ceres' Valuing Water Finance Initiative.

CERES.ORG

17 Net Positive Water Impact

NPWI (Net Positive Water Impact) is an enterprise ambition from The UN Global Compact CEO Mandate and its Water Resilience Coalition that calls on companies to take steps to drive net positive water impacts in stressed basins.

CEOWATERMANDATE.ORG

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