The

IS YOUR BUSINESS PREPARED?

As the world finally begins to address the dangers of climate change, industry has focused on cutting carbon emissions to prevent future calamity. But climate change is already affecting the business community in a major way through water.

by STACY VOGEL DAVIS

"WATER CRISES ARE HERE AND NOW," says Samuel Karge, senior vice president of A. O. Smith Corporation, a water heater and water treatment solutions company. "There's lack of water, there's contaminated water, there's flooding. California is out of water. Not future tense-now. Managing that today is something that companies need to prioritize."

A. O. Smith is one of several companies committed to improving their water stewardship through The Water Council, a Milwaukeebased nonprofit dedicated to solving global water challenges by driving freshwater innovation and advancing water stewardship. The Water Council has helped companies of all industries and sizes improve water stewardship performance.

Although corporate leaders increasingly realize the importance of water to business, many aren't sure what water stewardship means or how to get started. Water stewardship is generally defined as the sustainable use of water achieved through stakeholder engagement that aligns actions at the site with conditions in the watershed. Unlike carbon emissions, water stewardship can't be measured by a single metric or simple framework. Every company faces different challenges based on how they use water and where their operations or supply chains are located.

"You have to apply a different analytical lens to water," says Matt Howard, vice



Samuel Karge Senior Vice President, A. O. Smith Corporation



Matt Howard Vice President of Water Stewardship, The Water Council

"You have to apply a different analytical lens to water."

- Matt Howard

president of water stewardship at The Water Council. "It's not just using less water, although that's important in some places."

For example, Sloan, a manufacturer of commercial plumbing systems and a member of The Water Council, is based near Chicago, close to Lake Michigan. "There may be less emphasis on water savings around the Great Lakes area, because we're in this waterabundant region," says Patrick Boyle, Sloan director of corporate sustainability. "But water quality and water equity are still issues."

Sloan's efforts include educating the public about water stewardship, overhauling its wastewater treatment plant to increase effi-

ciency, and reusing water in its research and development labs. It certified its headquarters to the International Water Stewardship Standard in 2021.

Climate Change Increases Risk

So far in the sustainability movement, greenhouse gas emissions have received the most attention. But clean water is just as important as clean air, Howard says, "People will feel climate change through local impacts that are water-related, whether that's an increasing amount of rain in a given year or increasing intensity of storms or increasing droughts, which then exacerbate issues that are already happening with water resources."

These issues bring obvious risk to waterintensive industries such as food and beverage, petrochemical or data storage, especially for sites in water-stressed regions such as the American Southwest. "If facilities or suppliers rely on water resources to produce a product or its inputs, that's a supply risk like any other business risk," Howard says.

For Suntory Group, a global beverage company, water is at the heart of its business. "Water stewardship is very much an effort



"For companies that are just getting started, start with the basics."

- Patrick Boyle

to protect the value that we are providing to our customers," says Harumichi Seta, general manager of sustainability management division. "Water challenges are very local, and they are different case by case. We need to face those local water-related challenges head-on in



Patrick Boyle Director of Corporate Sustainability, Sloan

order to be able to grow our business."

Other risks are less obvious, Howard says. "You could be sourcing a product that's water-intensive from a water-scarce region, or your production process could be creating byproducts and pollutants that are terrible for the water quality in the watershed,"



Sloan headquarters in Franklin Park, Illinois. The facility was certified to the International Water Stewardship Standard in 2021.

he says. Producers of consumer goods or businesses with highly visible facilities could face reputational risk based on their perceived impacts on water sources.

Understanding Water Uses & Impacts

The first step in water stewardship is understanding how your company uses water, its impact on local water resources and the condition of the watershed(s) in which it operates. That can be intimidating for companies that are new to water stewardship, particularly those with multiple sites or complex supply chains.

"For companies that are just getting started, start with the basics," Boyle says. "Take a good look at your water consumption and uses and consider conducting a water balance of your operations. Then you can start looking at a water stewardship plan that's right for you."

The Water Council created WAVE to help companies develop thoughtful strategies, set meaningful goals and take



impactful action on water across the enterprise. The program helps companies gather the necessary data, craft a corporate water policy, prioritize sites with highest water risk, and publicly communicate a corporate action plan, goals and timeline.

Participants' efforts are independently verified by SCS Global Services, a global leader in third-party verification of sustainability claims. Upon verification, companies can use the WAVE seal, signifying they are strategically addressing water challenges based on global best practices.

Suntory Group

OR SUNTORY GROUP, protecting water isn't just a good thing to doit's vital to Suntory's business and quality of water used to make beverages and health products, including Yamazaki and Hibiki Japanese whiskies, Jim Beam and Maker's Mark bourbons, as well as the soft drinks brand Orangina.

"Water itself is very much a source of our business," says Harumichi Seta, general manager of sustainability management division. "The quality of the base water determines the finished quality that goes into the bottle or can."

The company established its Sustainable Water Philosophy in 2017, based on the principles of understanding the natural cycle of water, promoting environmentally conscious water use, conserving watersheds and engaging with the local community.

By 2050, Suntory aims to become "net water positive" in its direct operations by reducing water intensity of production at owned plants by 50% and replenishing more than 100% of water used in all of its owned plants. It will also collaborate with suppliers



Maker's Mark Natural Water Sanctuary



Natural Water Sanctuary in Japan

to improve sustainable water use in all key raw ingredients by 2050. The company has set 2030 interim targets primarily focusing on high water stressed areas.

In 2003, Suntory created its Natural Water Sanctuary Initiative in Japan aimed at

managing and conserving forests, and the biodiversity within forests, to replenish and nurture groundwater near its plants. Led by the Suntory Institute for Water Science, the initiative today is active in 21 forests areas in Japan, covering 30,000 acres, replenishing more than double the water the company uses in its plants in the country. In 2016 and 2018, the company expanded this initiative to its U.S.-based Maker's Mark and Jim Beam distilleries, and in 2021 the company launched an initiative to conserve and restore peatlands and watersheds in Scotland, which are important to the production of Scotch whiskies.

"We are currently accelerating our work to expand what we have learned in Japan to a global scale and to do more water stewardship initiatives outside Japan," Seta says. In addition to the above, the company currently conserves watersheds in India, Mexico and France, and plans to expand further by first concentrating on areas with high water stress by addressing local water challenges unique to each location.



PRESERVING BIODIVERSITY, PROTECTING BUSINESS

Biodiversity refers to the vast variety of life on Earth the animals, plants, fungi and bacteria that provide humanity with the resources needed to thrive. Due to human actions such as deforestation, overfishing and pollution, the planet is currently experiencing an unparalleled rate of biodiversity loss.



Hakushu Distillery Bird Sanctuary

eleased in February 2022, a report from the UN's Intergovernmental Panel on Climate Change details the grim effects of the changing climate on the world's ecosystems. Rising global temperatures will put almost one third of land's unique species at a high risk of extinction. During this time of environmental crisis, it is crucial for corporations to take action to protect biodiversity.

As a global beverage company, Suntory relies on water. By preserving the biodiverse environments that nurture water, Suntory



Natural Water Sanctuary in Japan

protects the resources necessary for its business. To make lasting, direct impact, Suntory tailors its water stewardship initiatives to local ecosystems where the business operates.

As far back as 1973, Suntory prioritized efforts to protect biodiversity by focusing on local bird populations, which serve as indicators of ecological wellness. To help protect important, threatened bird species, Suntory established a wild bird sanctuary in the Suntory Hakushu Distillery in Japan. Surrounded by rich forests and clear streams, the distillery serves as a relay point of migration for wild birds. In 1989, Suntory established the Suntory Fund for Bird Conservation to directly support organizations protecting birds both in Japan and overseas. As of 2021, the fund has granted a total of \$6.67 million to 451 projects.

With an aim to nurture quality groundwater around production sites in Japan, Suntory's dedication to the environment expanded to forest management in 2003 with the establishment of Natural Water Sanctuaries. In partnership with various experts and local municipalities, Suntory establishes and manages the sanctuaries from which it draws water to improve the function of

forests for recharging water resources. Today, the program's 21 locations with a total of nearly 30,000 acres of forestland nurture more than double the amount of groundwater used in Suntory's plants in Japan. Suntory is now expanding this initiative globally where it operates.

The goal of the Suntory's Natural Water Sanctuaries is to foster rich ecosystems and soil structure that will sustainably cultivate quality groundwater, with a unique and science-backed forest maintenance plan for each site. To ensure success, Suntory has mid-to-long-term agreements-some even lasting as long as 100 years—with local governments and forest owners to maintain the forests near the company's production sites.

As it becomes more evident that business health is intrinsically tied to the health of our ecosystems, corporations must take ownership to protect biodiversity-keeping the locality and longevity of commitments in mind.

SUNTORY



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

A. O. Smith is going through the WAVE process and will soon seek verification through SCS Global. "There aren't a lot of organizations focused on assisting companies in the water stewardship

journey," says Jim Stern, executive vice president. "We appreciate The Water Council's efforts to provide a framework that companies can then utilize internally to start dialoguing about the importance of water stewardship."

A. O. Smith's Lloyd R. Smith Corporate

Technology Center, located adjacent to its Milwaukee headquarters, was designed to reuse most of the water in its test cycles as it tests new water products and technologies.

Embracing Opportunity

While water stewardship helps companies mitigate risk, it also creates opportunity, Howard says. Companies that demonstrate credible water action enhance brand value and show investors they take water seriously, something that's important not only to ESG (environmental, social and governance) investors but also to any investor that values long-term operational and financial stability.

Additionally, water stewardship offers the opportunity to address common challenges among stakeholders in the same watershed, Howard says. "The upside is long-term security and sustainability of the water resource. That's good for everybody."

Dairy farms across the U.S. have embraced this opportunity for collaboration, says Karen Scanlon, executive vice president for environmental stewardship for the Innovation Center for U.S. Dairy, a forum that convenes

"We appreciate The Water Council's efforts to provide a framework that companies can then utilize internally to start dialoguing about the importance of water stewardship." - Jim Stern

the industry, partners and other stakeholders to align on shared social responsibility priorities. For example, the Turkey Hill Clean Water Partnership has teamed Turkey Hill Dairy, Alliance for the Chesapeake Bay, and the Maryland & Virginia Milk Producers Cooperative Association to bring together Pennsylvania farms and the private and public sectors to help dairy farmers improve local water quality through new housing for cows, improved manure storage, cover crops and other solutions.

"There's a significant role that dairy can play in providing those solutions," Scanlon says.

ater stewardship is a high priority for the U.S. dairy industry. In fact, two out of three environmental goals the industry has set for 2050 involve water, says Karen Scanlon, executive vice president for environmental stewardship at the Innovation Center for U.S. Dairy, a forum that convenes the industry, partners and other stakeholders to align on shared social responsibility priorities.

Those goals are:

- Achieve greenhouse gas neutrality
- Optimize water use while maximizing recycling
- Improve water quality by optimizing utilization of manure and nutrients

"Dairy farmers work every day to care for their animals, manage the natural resources under their care and produce a nutritious product, so they're continually looking at how they can improve their farming operations,

"Dairy farmers work every day to care for their animals, manage the natural resources under their care and produce a nutritious product, so they're continually looking at how they can improve their farming operations, increase efficiencies and minimize impacts." - Karen Scanlon

increase efficiencies and minimize impacts," Scanlon says.

In 2007, producing a gallon of milk required 65% less water than it did in 1944. That number was reduced by an additional 30% by 2017.

As an industry made up of nearly 30,000 dairy farmers, U.S. dairy's progress is accelerated through many different technologies, projects and collaborations. One example is

Farmers for Sustainable Food's Framework for Farm-Level Sustainability Projects. The framework, created with the support of public, private and nonprofit partners, outlines a project-based approach that helps farmers determine what conservation practices are most effective for their farms and document the environmental and financial effects. Among other outcomes, the framework will analyze how land-use decisions affect water resources and how conservation practices can play a role in mitigating these effects.

"Because we have such a diverse industry in size of farms and types of operations and locations across the country, that also means that we have a myriad of solutions that farmers are using every day and learning from," Scanlon says.



U.S. DAIRY IS COMMITTED TO WATER STEWARDSHIP

Water is a precious and versatile resource that nourishes both life and the planet. As an industry made up of nearly 30,000 farms and more than 1,200 processing facilities across America, water is essential to our livelihoods and communities. That's why a U.S. dairy farm reuses a gallon of water up to four times over, on average, to water our herds, cool our fresh milk, and clean our equipment before it's used to water our crops. And why the water extracted from milk during processing enables the reuse, treatment and return of water to local waterways.

We know the vital role water plays, which is why as U.S. dairy, we're promising to do more in water stewardship. We've set industry-wide commitments to optimize water use, maximize water recycling and improve water quality by 2050.

By protecting and conserving watersheds and their natural ecosystems, we are safeguarding one of Earth's greatest natural resources while ensuring people can continue to enjoy the benefits of dairy as a part of a healthy diet, and healthy planet, for generations to come.

See more ways U.S. dairy is committed to water stewardship here at USdairy.com/Sustainability.







We've been committed to the environment from the start.

Water is essential to life. And at Sloan, our wide array of products have been meticulously developed with that ideology in mind.

SLOAN®

Water Connects Us*

sloan.com | 800.982.5839