

HOW CAN WE ENSURE THAT COMPANIES  
KEEP WATER CLEAN AND SAFE?

# Source

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## DON'T CALL IT WASTE

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treasures  
in our sewage

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How China's cities  
are turning sludge  
into power



**Nick Michell** spoke to leading water experts about what needs to be done to ensure the private sector secures clean and safe water

**What is the single most important measure that government officials in local, state and national water agencies should take to ensure large and small businesses secure clean, safe water and why?**



## Governor Christine Todd Whitman

President, The Whitman Strategy Group

“The most important thing that officials at the local, state and federal levels can do to ensure access to clean water is to help people understand the importance of watersheds and water usage. There is as much water deposited along the United States coastline from nonpoint source pollution as was released during the Exxon Valdez oil spill, which was our nation’s largest environmental disaster until Deepwater Horizon. Water agencies need to work

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with communities to understand the impact that nonpoint source pollution has on their water quality. Along with grasping the impacts, communities and agencies need to work together to ensure that this pollution doesn’t occur, and where it is not preventable, see that it is adequately addressed.”



## Greg Koch

Senior Director of Global Water Stewardship, The Coca-Cola Company

“Governments should invest to establish and maintain accurate data on available supplies and uses of water. In any location, a business has considerable investments in land, buildings, machinery, and employees. To preserve the life of those assets and the ability to grow, a company has a vested stake in the sustainability of the water resources they share. This perspective first leads business to track water use, improve efficiency, and manage water discharges. As water stress increases, many companies, realising broader risk to their business, are looking outside direct operations into the surrounding watershed and community. After collecting information to better understand vulnerabilities to water supplies, many seek collective action. This often leads to projects with civil society, other business, and governments.

A question that often arises is how much work must be done to bring the watershed into balance to ensure a sustainable flow of water. This concept of ‘sufficiency’ applies not only to an individual company’s efforts but also the collective impact of all such work. What is often missing, especially in the case of groundwater resources, is complete data on available supplies, their natural and augmented recharge rate from precipitation and upstream flows, and the amounts being abstracted and whether such water use is consumptive. Given the scale of water resources, we are all dependent on government to collect, maintain and publish such data.”



## Dominic Waughray

Head of Public-Private Partnership, World Economic Forum

“A technological and digital revolution is happening around all of us. This “4th industrial revolution” as the World Economic Forum has termed it, is roaring through the economy at exactly the same time as the perception of water as a global economic risk is peaking. This presents a significant opportunity to identify and deploy potentially transformative technological innovations to manage our water sources more effectively. From blockchain and big data to IOT and artificial intelligence, we have tools and information at our finger tips that can fundamentally alter our approach to water resource management.

Businesses are realising the need to move swiftly on this opportunity if they are to adapt to climate change, manage water-related risks, and capitalise on efficiency improvements that will affect their bottom line. But they cannot seize this opportunity alone. New forms of multi-stakeholder collaboration are necessary to successfully bring these solutions to bear. Governments have a critical role to play in creating the enabling environment for this step change to occur—including working alongside a range of private sector actors to pursue innovative new financing mechanisms.”





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## Tensie Whelan

**Clinical Professor of Business and Society, Director, Center for Sustainable Business, NYU Stern School of Business**

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“Governments can help protect water sources by charging corporate users the real cost of water and use the proceeds to protect the water source; provide communities with funds to protect the forests in their watersheds; and build green infrastructure to reduce stormwater runoff into waterways. Charging for water at realistic rates will likely encourage businesses to install water conservation technologies (in order to reduce their fees), especially if government also provides subsidies for those technologies. Currently, the corporate sector uses a significant amount of water in manufacturing processes—from making bottles to processing minerals.

Because water is cheap, it is treated as an externality by corporates. If it were more realistically priced, they would reduce their use (as they are currently doing with energy) and the proceeds would give fiscally strapped governments more funds to invest in water stewardship. Most governments are chronically underinvesting in the protection of water sources. To complement this action, government could require companies to publicly release data on their water footprint much as the US has required factories to release a list of the type and amounts of toxic chemicals they use. Government will need to enforce water pollution regulations as well, as many regulations are only sporadically enforced.”



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## Peter Schulte

**Senior Digital Engagement Associate, Pacific Institute**

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“Strategic sustainable water management planning is the most important measure governments can take to ensure sufficient water for business. Such plans enable stakeholders across a watershed to understand key challenges (scarcity, pollution, and/or failing infrastructure), what measures are required to address those challenges, and individual stakeholders’ roles in achieving sustainability. Such plans should strive to attain sustainability over the long-term, as well as offer contingency plans in cases of short-term drought.

Ultimately, sustainable water management requires action from a diverse set of stakeholders. These plans are critical because they create the foundation for strategic, collaborative action among stakeholders. Ideally, they should be developed in consultation with relevant stakeholders, including business, so as to achieve buy-in. Without them, action on water may be disjointed, lack coherence, or not happen at all.

Central to such plans is offering the resources that allow various stakeholders to fulfill their roles and implement the plan. Specifically for business, governments can: disseminate resources that raise awareness of water challenges, outline how such challenges create risk for business (thus offering an incentive for action), and describe the technologies and practices that help businesses advance water sustainability.”



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## Kirsten James

**Director, California Policy, Ceres**

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“One critical step that government officials can take to ensure that businesses have secure access to clean and safe water resources is to invest in local water solutions, like groundwater recharge, wastewater reuse, watershed restoration and water efficiency. Though there’s a tendency to think that big water infrastructure projects, like new pipelines, storage reservoirs or desalination plants, are what’s required to keep up with business growth, these capital intensive projects are costly.

Local solutions that rely on natural water infrastructure are typically far more cost-effective and arguably just as important for ensuring a secure water supply as the construction of new dams or canals. Groundwater recharge, or the practice of diverting floodwater to farmland or other land use areas, and watershed restoration projects allow groundwater aquifers to do what they do best—store water. Groundwater aquifers have far more capacity for water storage than surface water in places like California, which is why recharge makes so much sense. It’s also a more climate resilient solution to store water underground because surface water reservoirs are subject to increased rates of evaporation as temperatures rise.

Water recycling projects are a growing interest among businesses operating in water-constrained regions, and are also more cost-effective than big new water infrastructure projects.”