

**Testimony of Jonathan Haswell, Chief Operating Officer of OceanWell**

**U.S. House Committee on Natural Resources  
Subcommittee on Water, Wildlife, and Fisheries**

**Hearing Entitled:  
*Advancing Federal Water and Hydropower Development:  
A Stakeholder Perspective***

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**Washington, D.C.**

Good morning, Chair Hageman, Ranking Member Hoyle, and Members of the Committee. On behalf of OceanWell, thank you for the opportunity to be here today to discuss advancing water development.

My name is Jonathan Haswell, and I serve as Chief Operating Officer of OceanWell — a water technology company, that was born and bred in California, and whose goal is tackling global water scarcity through a novel offshore, deep-ocean desalination system.

I'm here today because our innovation offers a scalable, sustainable way to strengthen U.S. water resilience — and presents a modular, fast-to-deploy alternative to traditional resource-intensive infrastructure projects.

In short: we advocate that technology can — and must — be part of the modern water scarcity toolkit. Producing abundant, affordable, environmentally friendly water at scale is now within reach. And perhaps most importantly, with OceanWell, one community's water security no longer must come at another community's expense. Guilt-free water at large scale is now possible.

**The Problem — Water Scarcity and the Historical Limits of Desalination**

The challenge of water scarcity is not new — and neither are the limitations of traditional solutions. Globally, only about 1% of Earth's water is drinkable, and nearly half the world's population faces water stress today. In the United States, this pressure is felt most acutely in the West, where prolonged droughts, shrinking reservoirs, population growth, and natural disasters have severely strained available supplies.

Traditional forms of desalination have been deployed internationally to bridge water gaps, but at a steep cost: high energy consumption, intensive chemical pre-treatment, marine life mortality, massive land requirements, and the persistent environmental challenge of managing concentrated brine discharges. Traditional plants draw from surface-level seawater — warmer, biologically active, and rich in organic material — requiring expensive, often chemical-heavy treatment to protect membranes and maintain performance. Meanwhile, the need for energy-intensive high-pressure pumps has made

desalinated water one of the costliest potable supplies available. These economic and environmental burdens have historically limited desalination's use within the United States. Further, traditional infrastructure is built to address the capacity needs of today and the predicted population of the future, however the numbers do not always pan out exactly as initially calculated and can create an issue if the plant's capacity cannot be altered. OceanWell's modular, scalable nature allows for quick capacity growth to address the needs of an expanding community.

OceanWell was founded to fundamentally rethink desalination and specifically solve for these cost and impact challenges. Like onshore desalination, OceanWell proposes to use reverse osmosis technology to separate salts from seawater. Rather than operating from the shore, we relocate the process to the deep ocean — approximately 1500 meters below the surface — where naturally occurring hydrostatic pressure provides the force needed to power the process without energy. In this aphotic zone, where less than 1% of sunlight penetrates, the water is colder, cleaner, and near limitless. As a result, we eliminate the need for chemical pre-treatment and avoid the energy costs associated with pumping and pressurization onshore. The 40-foot-long OceanWell Pod leverages the naturally occurring hydrostatic pressure of the water column above to drive the reverse osmosis process, limiting the energy use to the conveyance back to shore.

OceanWell's modular subsea Pods each produce 1 million gallons per day (MGD) of fresh potable supply. Just 50 Pods would be sufficient to meet the entire daily water needs of 380,000 households. This approach delivers cold, clean water with dramatically lower energy consumption, no marine life mortality, no need for a large onshore treatment plant, and minimal brine discharge impacts. Each Pod is engineered for a 30-year lifespan and anchors securely to the ocean floor with a small environmental footprint.

By shifting where and how desalination occurs, OceanWell offers a scalable, energy-efficient, and responsible solution — exactly the kind of new water supply needed to secure the future of the Western United States.

### **Partnership with Las Virgenes Municipal Water District**

Recognizing the urgent need to support water-scarce communities in the United States, OceanWell is planning to deploy its first Water Farm in Southern California — a region facing some of the nation's most critical water challenges.

To advance this effort, we have established a California work group of 26 California water agencies, led by Las Virgenes Municipal Water District (LVMWD). LVMWD provides potable water, wastewater treatment, recycled water, and biosolids composting services to approximately 75,000 residents across Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and adjacent unincorporated areas of Los Angeles County, spanning a service area of 122 square miles. The broader working group extends across key districts throughout Southern California, representing millions of residents across drought-prone regions.

LVMWD faces significant water supply challenges due to its limited local resources and heavy reliance — approximately 84% — on imported water. Severe droughts, including the 2022 drought that caused a 73% supply shortage, have compounded these risks. Geological and environmental constraints limit groundwater development, making innovative solutions like desalination and advanced water recycling not just desirable, but essential. LVMWD is already pursuing advanced projects such as the Pure Water Project Las Virgenes-Triunfo and is now working to pioneer OceanWell's Water Farm technology.

LVMWD has spearheaded the formation of six Southern California public agencies to advance the first OceanWell Water Farm. In addition to LVMWD, key partner agencies include: Los Angeles Department of Water and Power (LADWP), Calleguas Municipal Water District, Los Angeles County Public Works District 29, Burbank Department of Water and Power, Upper San Gabriel Valley Municipal Water District, and Santa Clarita Valley Water Agency.

The first Water Farm is projected to deliver 57 million gallons per day (MGD) of fresh water to the region — representing a major step forward in drought resilience.

On March 21, 2025, OceanWell and LVMWD successfully deployed a prototype Pod into the Las Virgenes Reservoir, which exceeds 100 feet in depth and holds approximately 9,500 acre-feet of water. The deployment will allow OceanWell to rigorously stress-test its filtration systems under real-world conditions as we advance toward full-scale operations.

### **Water Security *Is* Economic and National Security**

Water is foundational to every aspect of America's economy and national defense — yet, unlike energy or transportation, it is often taken for granted. Most people rarely think about where their water comes from until it is not there. But the reality is clear: reliable water supplies are under growing pressure, especially across the Western United States.

Las Virgenes Municipal Water District and its coalition partners recognize what many overlook — that securing new, dependable water sources is not just a local responsibility; it is a strategic imperative. Without reliable water, industries stall, agriculture contracts, military readiness is compromised, and communities are left vulnerable. Every sector that drives economic strength — from energy to manufacturing to technology — depends on stable water supplies.

Simply put, water security *is* economic security. It *is* national security. And it demands the same urgency and innovation we apply to every other critical infrastructure need and challenge.

A clean, reliable water supply directly strengthens a community's ability to grow — powering industry, agriculture, commerce, and household prosperity. Moreover, safeguarding water supplies strengthens national security by protecting critical infrastructure like military bases, ports, energy producers, manufacturers, mining operations, and disaster-prone regions. Natural disasters already cost the United States

the productive use of an average of 4.7 million acres annually from wildfires alone — with most damage concentrated in the West, but risks growing nationwide. Every storm, wildfire, and flood elevates the vulnerability of land-based water infrastructure — and degrades water quality when communities can least afford it.

OceanWell's subsea Water Farms, operating 400 meters below the surface, offer a critical layer of protection. Shielded from surface risks, our water farms deliver secure, reliable supply — strengthening both local economies and America's broader national security.

### **Public-Private Partnerships Are Key to Advancing New Water Supplies**

Water resources have historically been overlooked for investment compared to other essential utilities. OceanWell is working to change that — advancing water supply innovation through strong public-private partnerships and global innovation platforms.

We are proud to collaborate with public partners such as Las Virgenes Municipal Water District, as well as the Department of the Interior's Bureau of Reclamation, and the Metropolitan Water District of Southern California, both of whom have provided key grant support to advance our early development. We are also fortunate to work with private partners like Kubota Corporation, and to participate in Imagine H2O's global innovation ecosystem and the XPRIZE Water Scarcity Challenge — initiatives that recognize and accelerate high-potential solutions for global water supply and resilience.

Layering public and private investment is critical to developing, advancing, and deploying next-generation water technologies at scale.

Congress plays an essential role in this effort — by incentivizing the development and adoption of innovative water technologies and by strengthening support for public-private partnerships that can deliver resilient new supplies.

Additionally, Congress can further accelerate deployment by streamlining federal permitting processes to make them more efficient, predictable, and aligned with the urgent timelines water-scarce communities face.

### **Conclusion**

One key to strengthening and diversifying water supplies is protected, scalable sub-sea technology that will produce clean, cold water without causing harm to the ocean. This innovative system will continue to advance water security and thereby add to the strength of our economic and national security. To accomplish this, OceanWell will continue to work with our public and private partners including LVMWD and the U.S. Government. Together, we can create an affordable, abundant, reliable source of fresh guilt-free water.

Thank you again for having me today and for your time and consideration. I welcome your questions.