

From the Director's Desk

Looking back at 2025, it feels like many of us have been a tennis shoe in a dryer, getting knocked around and left to dry out.

We've seen many of our friends and colleagues at EPA, NOAA, and other agencies lose their jobs, their research, and our partners within the alliance lose funding for critical projects and programs. We've seen the US pull out of the Paris Climate Agreement and countless other assaults on environmental and public health protections. Internationally, we watched the chaos



Jasmine Fournier EXECUTIVE DIRECTOR

of the plastics negotiations falling apart, while at the same time living through the third warmest year on record with global carbon emissions set to be the highest ever recorded.

At OSA, we are used to dealing with <u>a</u>, and this year we've seen a lot.

At the same time, OSA has stabilized, grown, and launched a campaign for a Global Sewage Treaty. We published our first-ever analysis and report detailing the economic impacts of sewage and wastewater pollution in conjunction with the Economist Impact Group, calculating losses globally of over four trillion dollars annually due to sewage and wastewater pollution, garnering international press. We grew our alliance and welcomed five incredible new Steering Committee members. We hosted webinars for our alliance and wider stakeholder network on forever chemicals with leading experts in the field, such as 3M whistleblower Dr. Kris Hansen, and organized a webinar focused on the Indigenous Roots of Circularity, centering the knowledge of Indigenous scholars and leaders like Dune Lankard from the Native Conservancy. We were fortunate to present at the UN Ocean Conference (UNOC) and the World Ocean Summit. Behind the scenes, we worked with partners and other key stakeholders to better understand how OSA can create more meaningful impact and support our coalition.

As I look toward 2026, I am focused on gaining momentum and working to make our dream of a Global Sewage Treaty a reality (which you can read about later in this report). This work will be a new course for OSA, and we are excited to learn and grow through this process. After our launch at UNOC in June, we've been fortunate to bring in endorsements and gain critical expertise on how to make a Global Sewage Treaty happen. I've been humbled by the high-level environmental leaders, ministers, and other nonprofits taking on this cause. I continue to be grateful for our incredible staff, Steering Committee, and partners who will help us bring this movement into reality. Full steam ahead!

MISSION

To eliminate sewage and wastewater pollution from our ocean and waterways, advancing equitable and holistic actions that benefit people and nature.

Growing Our NETWORK

OSA welcomed eight incredible new partners in 2025, each bringing unique expertise and innovative approaches to tackle the global challenge of ocean sewage and wastewater pollution.



Leverage cutting-edge satellite imagery and Al technologies to monitor and address critical threats to marine ecosystems, including pollution from plastics, sewage, and oil, as well as habitat degradation.



Creating and implementing innovative products that reuse our waste on site, and decrease the waste entering water bodies and the ocean.

EUndertoW

MARKETPLACE X COMMUNITY

Inspire 10 million new ocean connections and unlock \$5 million in ocean action by World Ocean Day 2030.

Created for the purpose of addressing social and environmental challenges in South Africa, through a scalable franchise model, which promises high impact whilst building the Circular Economy and advancing the SDG goals, especially SDG6 – the right to clean water and sanitation.



Restore and enhance Santa Monica Bay through actions and partnerships that improve water quality, conserve and rehabilitate natural resources, and protect the Bay's benefits and values.



shower thoughts

Protecting and restoring the world's bodies of water starting with the way that we care for our own. Shower Thoughts™ is a water wellness and personal care company inspired by the human-ocean connection, designing everyday solutions to reduce the impact.



Advance transparency, stewardship, and workforce development in shaping community-driven, sustainable, and globally informed water policy.



Unite people, data, and insights to accelerate credible, real-time decisions for thriving ecosystems, communities, and livelihoods.

Reaching NEW AUDIENCES

In 2025, OSA expanded its reach, increasing sewage and wastewater pollution awareness to new and influential audiences worldwide. We demonstrated that solving the sewage crisis is integral to ocean health, economic stability, and a regenerative future.

At the <u>United Nations Ocean Conference</u>, our two dynamic, solutions-driven sessions on coastal resilience and coral reefs tackled hard truths about barriers to progress. In a bold campaign, we launched our <u>Action</u> <u>Pledge for a Global Sewage Treaty</u> by placing compelling messages in conference bathrooms, ensuring our message reached delegates directly and memorably.

To calculate the costs of inaction, we launched <u>"The Scourge of Untreated Wastewater" at the World Ocean Summit.</u> By translating sewage pollution into a staggering \$19.6 billion in annual losses across key economies, we made an undeniable financial case for urgent investment.

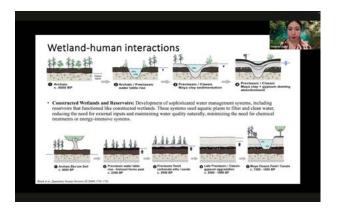
Our message reached experts working at the intersection of climate and food as Jasmine attended **The Climate Underground** conference. Hosted by Al Gore and Alice Waters, this event positioned wastewater solutions within the critical dialogue on regenerative agriculture, connecting with farmers, investors, and policy leaders.

We bridged communities of knowledge by convening a webinar on the "Indigenous Roots of Circularity," which elevated the voices of Indigenous scholars for water managers and policymakers. Simultaneously, our expert panel on "Advancing PFAS Safety for Public Health & Resource Recovery" co-hosted with The Nature Conservancy, translated complex science into actionable insights, engaging public health officials and utility managers on the urgent need for source control.

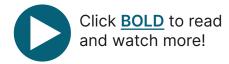
Finally, our Earth Day partnership with Community Document Night and EcoOwls fostered dialogue, using the powerful film "Crapshoot" to educate and raise awareness, building a broader, more informed base of support for our vital mission.









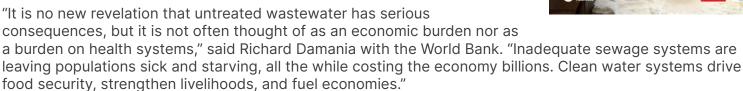


Money Down The Drain

New Report Exposes Billions in Economic Losses from Poor Sewage and Wastewater Treatment

In March, OSA, in partnership with Back to Blue, brought the staggering human and economic costs of sewage pollution into the light. Our <u>landmark</u> <u>report</u> reveals a silent emergency that is sickening communities, depleting food sources, and stifling economic potential. Our findings across five nations—Brazil, India, Kenya, the Philippines, and the UK—paint a stark picture of the consequences of inaction.

Untreated or inadequately treated wastewater released into the environment is a major source of pollution and disease. In the most extreme cases, Kenya, as little as 11 percent of wastewater is adequately treated. When improperly treated wastewater enters rivers, oceans, and drinking water supplies, the consequences are severe.



Brazil, the world's largest exporter of soy and sugarcane, suffers staggering agricultural losses of \$16 billion annually from untreated wastewater, which decreases yields of staple crops and jeopardizes food security, exports, and sustainability. India faces the highest financial losses from fisheries collapse, with contaminated waterways costing its fisheries sector more than \$2 billion.



The report also revealed a staggering human toll. Diseases associated with inadequately treated sewage present a significant health risk, resulting in substantial economic losses. The model indicates India incurs the highest healthcare costs associated with diarrhea from contaminated drinking water. Despite having a higher wastewater treatment rate (20%) than Kenya (11%), nearly three times as many people are affected, leading to costs of \$246 million annually.

"It is often the local communities that suffer the most from sewage pollution," said Dr. Amelia Wenger at Wildlife Conservation Society. "Lost wages and expensive medical bills put an enormous strain on families. Yet these financial losses caused by poor infrastructure and failed policies are entirely avoidable."

The cost of inaction is clear. Investing in adequate sewage and wastewater infrastructure is the only viable solution. In cases where large-scale infrastructure is lacking, decentralized wastewater systems can offer practical alternatives and there are an increasing number of new, high tech innovations. Policymakers that go beyond investing in the right infrastructure and instead focus on circularity, can also ensure wastewater is repurposed as organic fertilizer, biogas, or even a source of renewable energy.

OSA is calling on governments, the private sector and policymakers to invest now in their sewage infrastructure for a healthier and more vibrant future for citizens and economies.

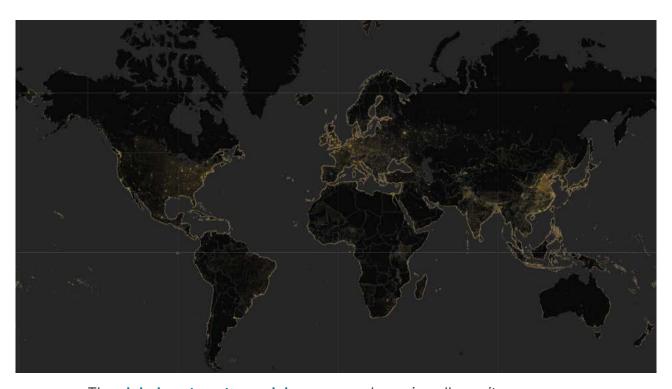


The world needs a

GLOBAL SEWAGE TREATY

In June, OSA launched a campaign to bring a Global Sewage Treaty to the United Nations. Drawing on critical insights from our colleagues working on the plastics treaty negotiations, the BBNJ Agreement, also known as the High Seas Treaty, and other international policy initiatives, we have decided that now is the time for bold action on sewage and wastewater pollution. Our Global Sewage Treaty Campaign is the first of its kind to garner broad coalition support for addressing sewage and wastewater pollution on an international scale, demanding action in the form of a Global Treaty.

Led by the Ocean Sewage Alliance, our coalition includes coral reef conservationists, public health practitioners, policy-makers, financiers, coastal communities, and anyone else who uses a toilet and believes that our sewage should not be dumped untreated into our ocean: it's time for a sea change.



The <u>globalwastewatermodel.com</u> map shows in yellow, nitrogen sources, plumes, open and septic discharges.

WHAT IS THE PROBLEM?

Sewage pollution is ubiquitous, and it is a big, big problem. The global burden of sewage pollution is staggering. Some estimates indicate that 80percent of sewage enters the environment untreated. This pollution is not limited to low-income countries; rich countries lack critical infrastructure to deal with sewage pollution as well. Some of the world's most famous cities, such as Paris, New York, and San Francisco still discharge untreated sewage into local bodies of water. In short, it impacts everyone. With the global population nearing 8 billion people, that is a lot of sewage coming out of a lot of people. From New York, to Tijuana, to Lagos, to Sydney - we've got some serious sewage pollution problems.



SEWAGE POLLUTION IS A TRANSBOUNDARY ISSUE

Water knows no boundaries, neither does pollution. At the border between Mexico and the US, billions of gallons of untreated sewage are being discharged into the Pacific Ocean. Untreated sewage and wastewater from the Mississippi River flows into the Gulf of Mexico and to the Caribbean Sea, resulting in a deadzone (an area of water where marine life cannot survive) of over 4,000 square miles. This is not unique to these rivers and bodies of water. Using the source-to-sea framework, sewage travels downriver, contaminating bodies of water thousands of miles away, across borders, across countries, and ultimately across our ocean.

SEWAGE POLLUTION IS BAD FOR THE OCEAN

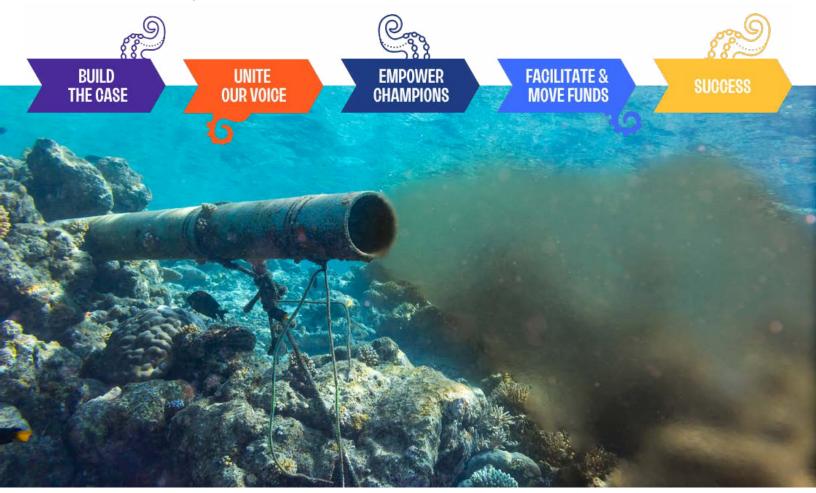
While many can identify plastic pollution on a beach or in the water, sewage pollution is often invisible to the untrained eye. Algal blooms, fish kills, dead reefs, dead zones, and foul smells are all products of sewage and wastewater pollution, but rarely garner much attention. Sewage brings plastics into our waters, exacerbates stress in marine ecosystems from climate change, and causes biodiversity loss. Along our coasts, sewage and wastewater pollution are often the dominant stressors in coastal ecosystems (Tuholske, 2021). Sewage contains a slew of nutrients, chemicals, pharmaceuticals, forever chemicals, heavy metals, and sediment that damage reefs, mangroves, seagrass beds and wetlands. Some estimates indicate that 58 percent of corals and 88 percent of seagrass beds are exposed to sewage pollution (ibid); another study looking specifically at coral reefs found sewage present in 92 percent of the reefs in the study (Wear, 2015).

SEWAGE POLLUTION IS COSTLY

In 2025, OSA published The Scourge of Untreated Wastewater, an economic study detailing the cost to three sectors (fisheries, agriculture, and public health), and we found that the annual global burden of sewage and wastewater pollution is over four trillion dollars. This is money, put simply down the drain. Treated sewage and wastewater can be transformed into an incredible asset. It can provide potable water for irrigation, agriculture, drought resilience, and more.

SEWAGE POLLUTION CAN BE CLEANED UP

Despite all this, incredibly, data show that when sewage pollution is removed from our water, marine ecosystems heal and become more resilient to other stressors, like climate change. Wetlands and reefs regrow, fisheries rebound, and communities can access the incredible resources of our ocean. In short, taking action on sewage pollution presents an incredible opportunity for both effective action, scalable solutions, and ecosystem regeneration. We have case study after case study demonstrating that monitoring, regulation, and improved infrastructure effectively solve these problems with a ripple effect of benefits for human health, climate resilience, ocean ecosystem health, and biodiversity.



WHY IS A GLOBAL TREATY NECESSARY?

Sewage is often overlooked as an ocean threat, while plastics, climate change, and biodiversity loss often take center stage. According to data from Our Shared Seas, of the one billion in philanthropic dollars for ocean funding in 2022, less than 0.3 percent was earmarked for sewage and wastewater pollution compared to \$238 million for climate (23 percent of total funding) and \$34 million for pollution and other stressors (3 percent of total funding). Other treaties, such as BBNJ, the Paris Climate Agreement, and the ongoing plastics negotiations, do not address sewage and wastewater pollution.

We need a global framework and binding agreement for sewage and wastewater pollution with funding mechanisms to ensure action happens given the depth, breadth, and global impact of this pollution. An international treaty is the only tool that can bring the scale of attention necessary to take significant action to solve this global problem.

WHAT ARE WE HOPING TO ACCOMPLISH?

A successful Global Sewage Treaty will have a profound impact on ocean and human health, establishing monitoring, regulation, improved treatment, and infrastructure, as well as financing. Our treaty campaign envisions a world with robust monitoring systems for sewage and wastewater pollution, where countries collaborate to develop scalable solutions to sewage pollution, utilizing state-of-the-art infrastructure and nature-based solutions, with plans for continued maintenance and monitoring. Similar to our colleagues working on the plastics negotiations, we envision that this treaty will enable country-level action plans tied to improvements in water quality, monitoring, regulation, and infrastructure while also meeting global standards set by the treaty.

Globally, this work calls for enhanced standards for sewage and wastewater pollution, ensuring that all sewage has some level of treatment before being discharged into the environment. As mentioned above, our global baseline is 80 percent of sewage entering the environment untreated, so global minimum standards for treatment would have a seismic impact.

Ultimately, we believe this treaty will introduce innovative financing mechanisms that enable countries to achieve their goals and improve infrastructure, monitoring, and regulation. This treaty should garner attention from large banks, conservation organizations, philanthropies, and other major financiers called to fund these solutions.

NEXT STEPS

This work requires global champions to amplify our messaging and secure multilateral support and global commitments. Our coalition will promote these key tenets, gain momentum in the coming year, and engage with UN member states and ministries to bring our treaty proposal to the UN stage for a vote. You can endorse our action pledge at <u>oceansewagealliance.org/action-pledge</u>, and join us as we take the next step toward a Global Sewage Treaty.

Advancing Our GOALS

- BUILD THE CASE FOR ACTION
 - Build an intersectional, evidencebased case on the impact of sewage on ocean and human health to drive action and support decision making to eliminate wastewater pollution.
- UNITE OUR VOICE

Be the uniting force for diverse, global representation in eliminating sewage and wastewater pollution, resulting in silo busting and catalytic awareness building.

- EMPOWER CHAMPIONS
 - Serve as the preeminent knowledge and learning hub across sectors and scales, dedicated to holistic ocean and coastal communities health, to support sewage and wastewater pollution elimination.
- FACILITATE AND MOVE FUNDS

for innovative wastewater research, project design and implementation, delivering measurable change on the ground and lessons for the wastewater pollution agenda

Sparking GLOBAL CONVERSATION

OSA ignited a vital global conversation on sewage pollution, driven by the launch of our landmark report, The Scourge of Untreated Wastewater. Our findings were picked up by major news outlets and influential podcasts, demonstrating the growing urgency of this issue.



The report's revelations on economic losses garnered significant attention in Forbes, Smart Water Magazine, and Oceanographic Magazine, effectively framing the crisis in financial terms for a broad audience. The story gained further dimension with a feature in **Inside** Climate News, where Executive Director Jasmine Fournier connected the global problem to a local crisis in Hawaii, stating that continued inaction on wastewater means "we're going to see more ecosystem

> loss." Meanwhile, in-depth discussions on the Water Action Platform and Waste(d)water with The Nature Conservancy podcasts allowed us to detail solutions for specialized audiences of practitioners and leaders.







Complementing this external coverage, OSA's original Potty Talk Blog published eight stories that explored the past, present, and future of sustainable sanitation. We showcased modern innovation with features on nature-based treatment creating an urban oasis in Tijuana and a California lodge reusing greywater to combat drought. We looked ahead to cutting-edge solutions, profiling technology that turns **sewer** sludge into biochar and initiatives that harvest human urine for fertilizer.

The blog also provided crucial historical context, revealing how the **Aztecs** perfected nutrient recycling and how

19th-century innovators grappled with waste. This historical lens underscored a timeless truth: treating waste as a resource is not a new concept, but a rediscovered one. This theme continued with profiles on the "humanure" movement and disaster-ready, waterless toilets, demonstrating that safe, circular sanitation is achievable from the individual to the community level.





By marrying high-impact external media with deeply researched original storytelling, OSA successfully framed the sewage crisis not as an isolated environmental issue, but as a critical challenge, and opportunity, intersecting with economics, history, agriculture, and climate resilience, inspiring a more informed and engaged global community.

POST & PROFILE **IMPRESSIONS**

SOCIAL MEDIA FOLLOWERS SUBSCRIBERS MEMBERS

NEWSLETTER

A Warm Welcome

Ocean Sewage Alliance was thrilled to welcome Dr. Helen Fox, Conservation Science Director at the Coral Reef Alliance, as the new Steering Committee Chair. A founding member of OSA, Helen has served on the steering committee for the past four years, providing invaluable strategic direction.

"Having been there at the start of the OSA, it's incredibly exciting to now help steer its future," said Fox. "This isn't just about committees; it's about catalyzing tangible action. I can't wait to get to work with this brilliant team to protect the ocean places I love."



Dr. Helen FoxCORAL REEF ALLIANCE

"Helen has been a driving force behind OSA since its inception, and her transition to Chair ensures our strategy remains rooted in science and practical action," said Jasmine Fournier, executive director. "She is the ideal leader to integrate the fantastic expertise of our five new steering committee members."

Alongside Helen, OSA welcomes an additional five, new steering committee members representing the Water Environment Federation, Lift Louisiana, All Things Green PR, UNICEF, and The Nature Conservancy.



Dr. Kim Falinski
THE NATURE CONSERVANCY



Stewart Sarkozy-Banoczy
WORLD OCEAN COUNCIL



Katie Heffner RARE



Jennifer Sackeyfio
LIFT LOUISIANA



Jos Hill
THE NATURE CONSERVANCY



Lori 'L.J' Sinsley **ALL THINGS GREEN PR**



Fidan Karimova WEF



Ann Thomas
UNICEF



Dr. Stephanie Wear
CONSERVATION INTERNATIONAL



Amy Zimmer-Faust
THE NATURE CONSERVANCY



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PAUL M. ANGELL FAMILY FOUNDATION





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Ocean Sewage Alliance operates as a project of Multiplier, a tax-exempt nonprofit 501(c)(3) organization that accelerates impact for a bold initiatives working to foster a healthy, sustainable, resilient, and equitable world. Through this partnership, Ocean Sewage Alliance is supported by a team of experienced professionals and trusted advisors who collaborate on operations, strategy, and shared learning. This collective approach helps our team stay focused on impact while working within a values-aligned organizational home. Learn more at multiplier.org.