

SUPPLEMENTAL ENVIRONMENTAL PROJECTS

Funding Cesspool Conversions in Hawai'i

WASTEWATER ALTERNATIVES & INNOVATIONS

NOWRA Presentation
2026

the materials being presented represent WAI's own opinions, and do NOT reflect the opinions of NOWRA.

About WAI

WAI is a 501(c)3 non-profit working to protect water quality, reduce sewage pollution, and restore healthy watersheds by providing innovative, affordable and eco-friendly solutions to waste and wastewater management for all people

WAI WASTEWATER ALTERNATIVES & INNOVATIONS

Clean Water and Healthy Communities for Hawaii's Future

Our Five Pillars

- **Innovative Technology**
- **Community Water Quality**
- **Workforce Development**
- **Education & Advocacy**
- **Financial & Community Resources**

WAI's TEAM



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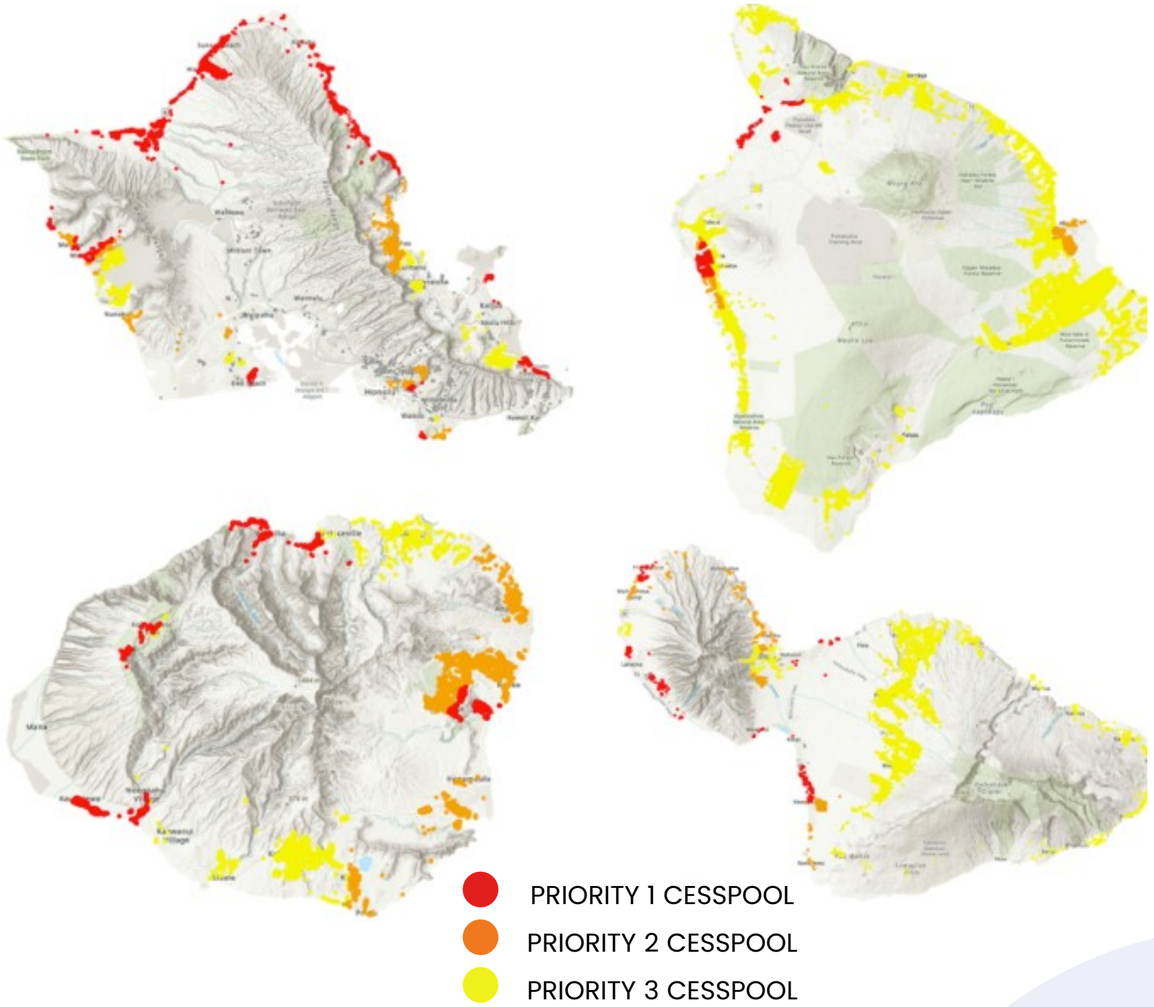


Lei Brown
Community and Grants Manager

The Cesspool Crisis

Hawaii has approximately **83,000 cesspools**, the highest concentration in the United States, which significantly threatens water quality and public health across the islands.

An estimated **53 million gallons** of inadequately treated wastewater are released daily into groundwater and coastal areas, exacerbating environmental issues and risking marine ecosystems.



State Mandate

Act 125 mandates the **full phase-out of cesspools by 2050**, yet funding gaps for low and moderate-income homeowners hinder progress in achieving this critical goal.

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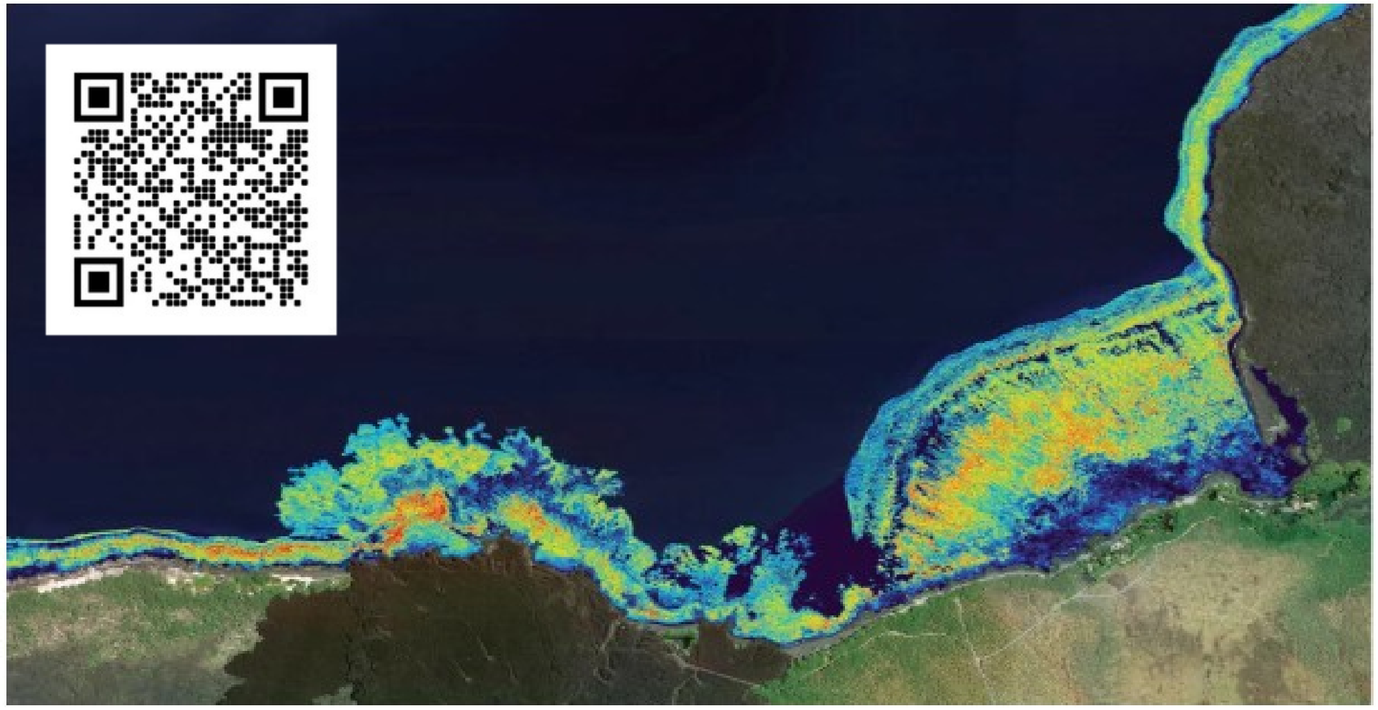
Stuart Coleman,

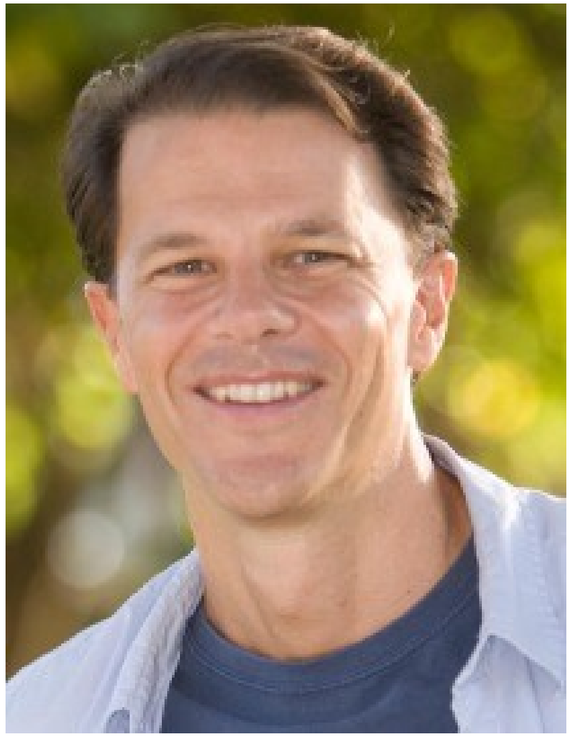
Executive Director of WAI

Cesspools Are Killing Hawai‘i’s Coral – But It Doesn’t Have to Be That Way

An expert explains how to reverse the damage from the state’s 83,000 cesspools, including using treated wastewater for irrigation and landscaping.

SEPTEMBER 25, 2023 BY STUART COLEMAN





Article written by Stuart Coleman

published in the Hawai‘i Business Magazine

Excess Nutrients & Coral Reef Impacts

WAI began working with Dr. Greg Asner, a renowned coral reef scientist, who in a 2023 study in *Nature* links wastewater and stormwater runoff to accelerated reef decline (Nature, Gove et al, 2023).

In places like Puakō and Maʻalaea coral cover dropped from over 70% to 5% in 50 years, driven by a combination of pollution and rising ocean temperatures.

Reducing cesspool discharge is a direct, measurable lever for reef resilience, tying WAI's work to the broader health of Hawaii's marine ecosystems.



Gove et al., Coral Reefs Benefit from Reduced Land-Sea Impacts Under Ocean Warming, *Nature*, 2023

What Is a Supplemental Environmental Project?

1. Violation Occurs

Most EPA enforcement actions against businesses for violating federal environmental laws are resolved through a settlement agreement.

2. SEP Proposed

As part of that settlement, a company may voluntarily propose a SEP: a project providing a tangible environmental or public health benefit closely related to the violation.

3. Factored Into the Penalty

The voluntary agreement to perform a SEP is one factor EPA considers when determining the final settlement penalty.

Financing Options for Homeowners

Loans, Grants, and Rebates

Financing Option	How It Works	Fully Covers Cost?
Bank Loans & HELOCs	Conventional home improvement loans and HELOCs are common, but require good credit and add years of interest.	– No
HGIA Revolving Loan Fund	Launching in November 2026. The State of Hawaii created a fund to issue low-interest or forgivable loans for low-income homeowners.	– No
Kaua'i Conversion Rebate	Reimburses up to $20,000 per household from the DOH Water Pollution Control Revolving Fund (Hawaii's CWSRF).	~ Rarely
NAHASDA / DHHL Home Rehab	Native Hawaiian Housing Block Grant funds can cover cesspool conversion as part of a full home rehab for DHHL beneficiaries at or below 80% AMI.	✓ Yes
CWSRF Direct-to-Homeowner	Can technically fund individual homeowner loans directly, but Hawaii hasn't built the intermediary structure to administer it.	~ Potentially
SEP-Funded	Through SEP agreements, WAI has fully covered conversion costs for five households.	✓ Yes

What Can Trigger a SEP?

Beyond Large-Capacity Cesspools

Triggers

Clean Water Act	NPDES and discharge violations
Clean Air Act	Emissions and permit violations
RCRA	Hazardous waste violations
Safe Drinking Water Act	UIC and public water system violations
TSCA / EPCRA	Lead paint and right-to-know violations

Any civil enforcement settlement, federal or state

What Is a Large-Capacity Cesspool (LCC)?

An LCC serves multiple dwellings, or a non-residential property with 20 or more people per day. EPA banned new LCCs in 2000 and required existing ones closed by April 5, 2005 under the Safe Drinking Water Act's Underground Injection Control Program. Enforcement against unclosed LCCs remains the most common SEP trigger in Hawai'i.

Where Can SEP Funds Go?

Projects must have a strong connection (“nexus”) to the violation being resolved



Watershed and habitat restoration



Air quality and emissions reduction



Lead paint abatement



Emergency response equipment and training



Community water quality monitoring



Climate resilience projects

WAI's Approach to SEP’s

Transforming Environmental Penalties into Solutions

WAI strategically identifies and structures Supplemental Environmental Project agreements, partnering with corporations to convert fines into impactful community solutions for cesspool conversions.

While SEPs are intended to benefit communities near the site of violation, WAI has successfully applied this mechanism across islands to reach the homeowners who need it most.

EPA

Issues a consent agreement and final order (CA/FO) for large-capacity cesspool violations

→

Cited Company

Agrees to fund a Supplemental Environmental Project to offset penalties & help local homeowners

→

WAI

Works with the company fo fulfill the SEP agreement and identify homeowners in need in Priority Areas

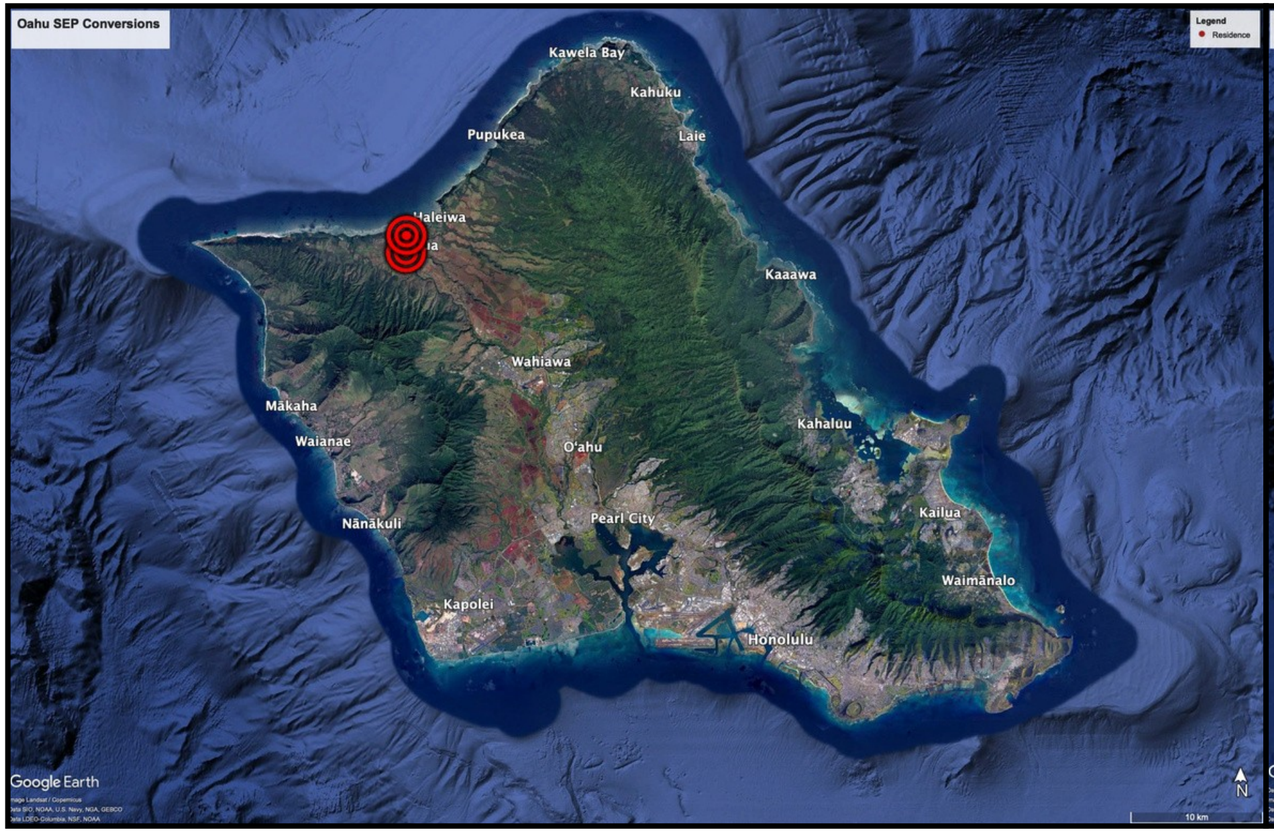
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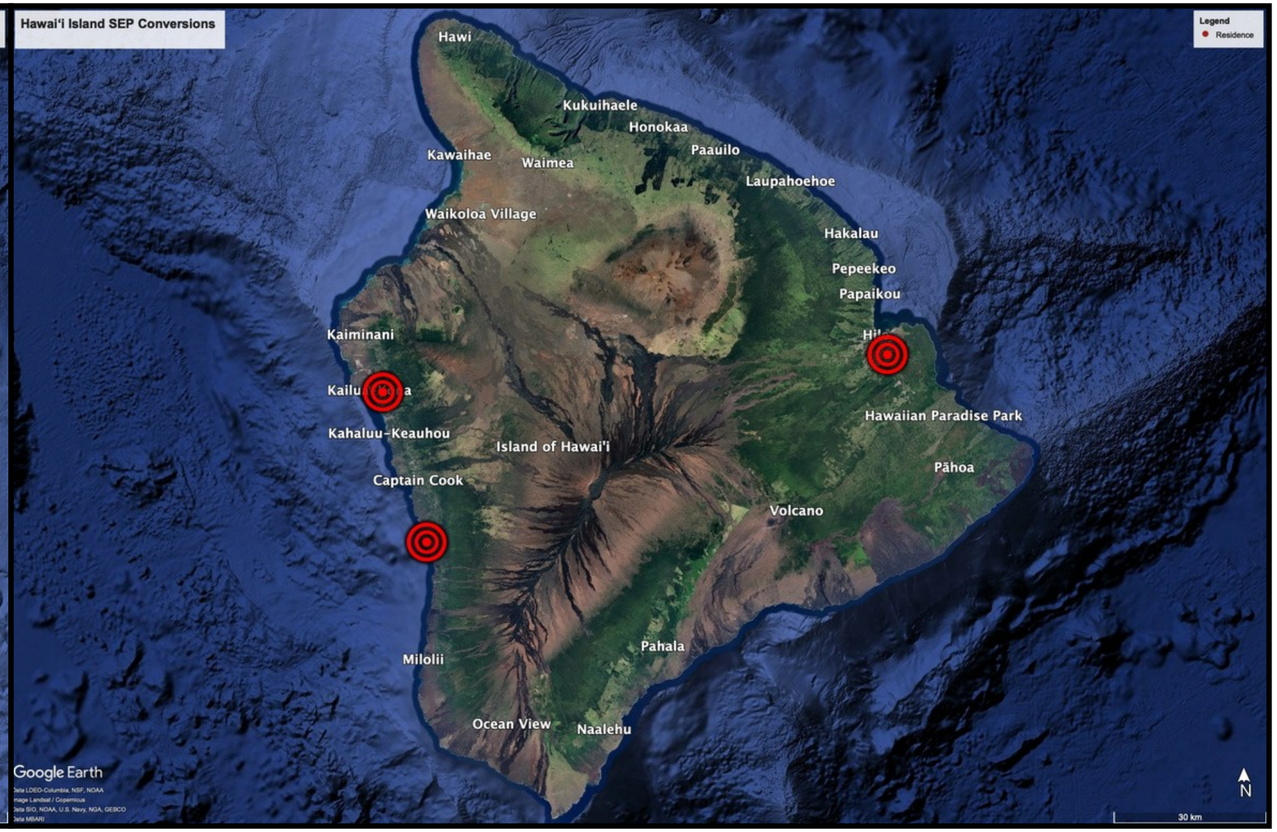
Homeowner

Cesspool is converted to a certified onsite treatment system for a low- to moderate-income level homeowner

Project Map

Where WAI's SEP Conversions Are Located





Oahu SEPs
In partnership with Hawai‘i Gas







Klimkiewicz Residence
Waialua, Oahu
2025

NSF 40 Treatment Standard

Infiltrator IM 1060 Septic Tank*

Infiltrator Aerofin ™







Teixeira Residence
Waialua, Oahu
2025

NSF 40 Treatment Standard

FujiClean CE-10 ATU*

Prinsco Onsite Chambers

*Equipment was generously donated by WAI‘s technology

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Hawai‘i Island SEPs

In Partnership with American



Kenison Residence
Captain Cook, Hawai‘i Island
2025

NSF 245 Treatment Standard

Infiltrator IM 1060 Septic Tank*

Eljen Geotextile Sand Filter (GSF)



Gomes Residence
Hilo, Hawai‘i Island
2025

NSF 40 Treatment Standard

Infiltrator IM 1060 Septic Tank*

Infiltrator Aerofin ™



Dale Residence
Kailua-Kona, Hawai‘i Island
2025

NSF 245 Treatment Standard

FujiClean CEN7 ATU*

*Equipment was generously donated by WAI‘s technology

WAI WASTEWATER ALTERNATIVES & INNOVATIONS

WAI’s Technology Partner Program

Partner With Us

WAI is committed to finding the best sanitation solutions to protect water quality & help restore Hawai‘i’s watersheds and natural reseources.

We value:

- **Cutting-edge technologies driving innovation.**
- **A deeply ingrained commitment to our mission.**
- **Offering pro-bono and low-bono products and services to fulfill our mission.**
- **Dedicated to addressing Hawai'i's wastewater challenges.**
- **Implementing sustainable practices for resource utilization.**



Our Technology Partners

WAI partners with organizations that share our commitment to innovative technology, resource reuse, nutrient reduction, and workforce development.

Infiltrator Water Technologies and ACSI/FujiClean have generously donated septic tanks and treatment units for our SEP conversions.

LIXIL

INFILTRATOR® water technologies

INNOVATREAT® Innovative Treatment Products, Inc.

FujiClean USA™ Toward Clean Water…

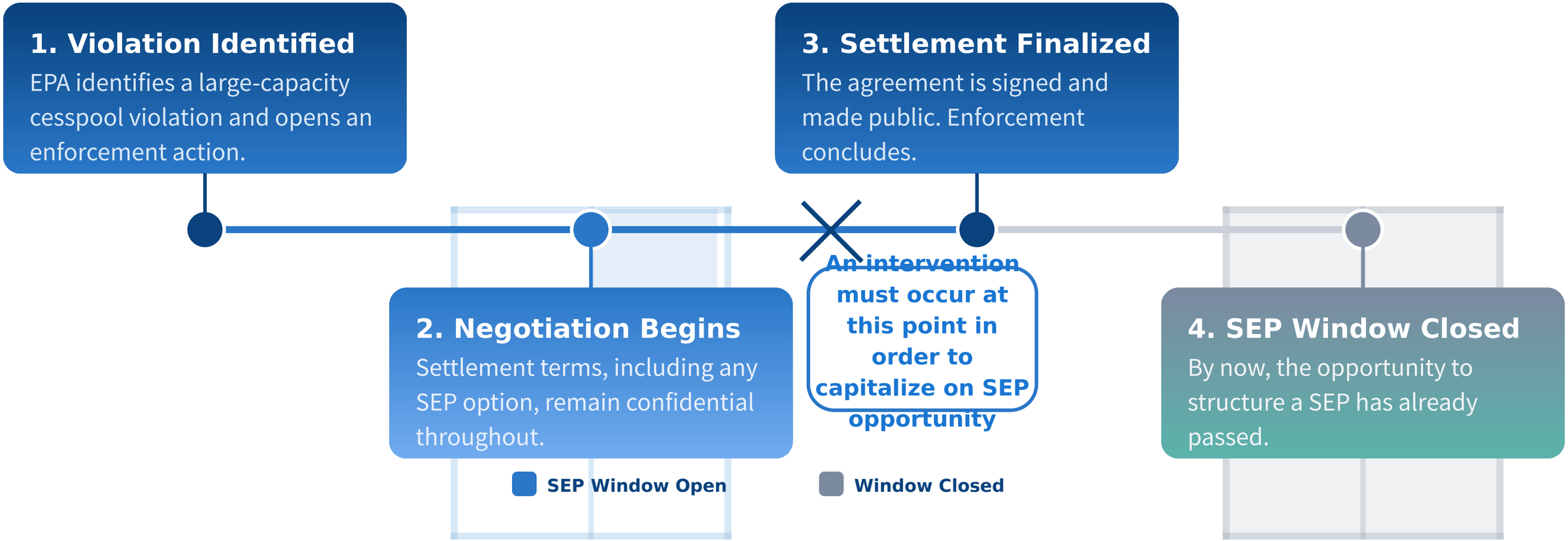
Orenco® SYSTEMS

REGEN

The Policy Catch-22

Navigating Confidentiality and Timing Challenges

The window of time to structure a SEP project is limited



By the time the public sees a settlement, the opportunity to shape it is already gone.

Can SEP Fees Feed a Revolving Loan Fund?

Turning One-Time Settlements Into Lasting Capital

Open Question

Beyond funding single conversions, WAI would like to explore whether SEP dollars could help capitalize a revolving loan fund, such as the one administered by HGIA, or one established by a local financial organization like a community development financial institution or credit union.

As loans are repaid, the fund keeps lending, converting more cesspools with the same initial dollars.



An All-of-the-Above Approach

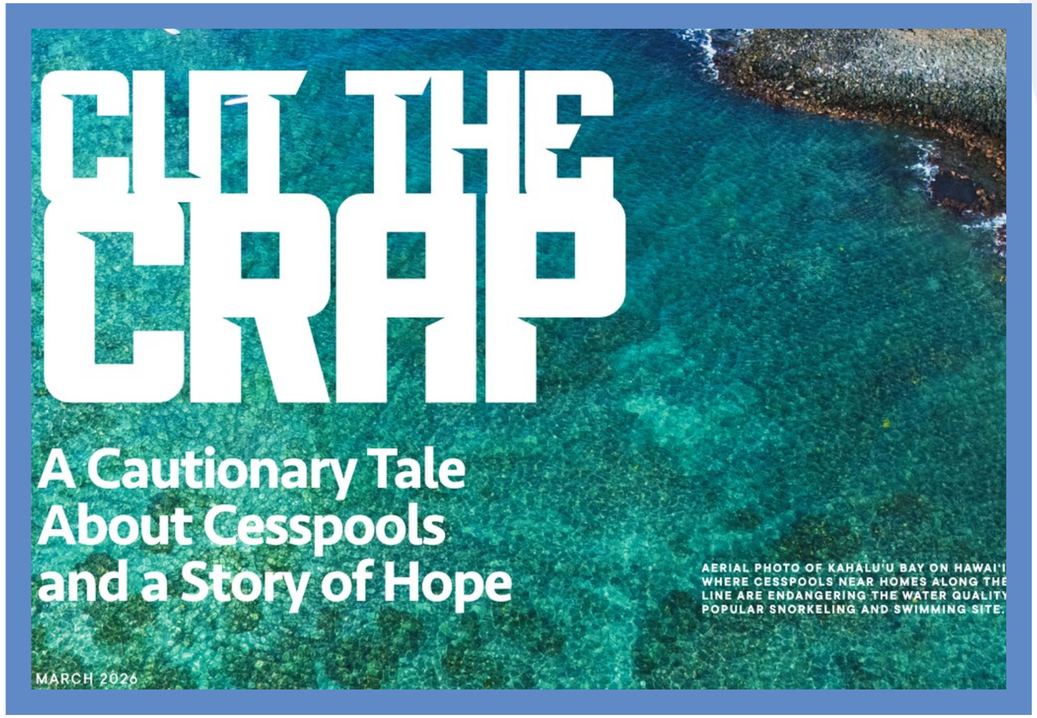
What Suffolk County's Financing Innovation Teaches Us

Suffolk County, NY--Long Island

Home to over 380,000 cesspools — the only place in the US with more than Hawaii. Nitrogen loading triggered toxic brown tides that collapsed 99% of the shellfish industry.

Suffolk's Playbook: Creative, Multi-Pronged Financing

- Raised a dedicated 1/8-cent sales tax, generating hundreds of millions in homeowner grants
- Fast-tracked approval of new treatment technologies
- Streamlined permitting to speed conversions
- Sent staff on a multi-state "listening tour," borrowing the best regulatory, funding, and technology ideas from Rhode Island, Maryland, and Massachusetts



Solving Hawaii's cesspool crisis will take the same kind of tools and innovative thinking: SEP, revolving loan funds, NAHASDA, state grants, and creative solutions we haven't tried yet, all working together.

Call to Action

Recommendations for SEP Impact

1. Proactively Notify

The EPA could promote SEPs and inform penalized entities about eligibility during enforcement proceedings, not after.

2. Expand Eligibility

Broaden SEP eligibility criteria to prioritize low- and moderate-income homeowners.

3. Formalize NGO Role

Create a defined channel for organizations like WAI to broker community-benefit solutions before settlements close.

4. Replicate the Model

Use WAI's Hawaii SEP program as a template that other states and territories can adopt.

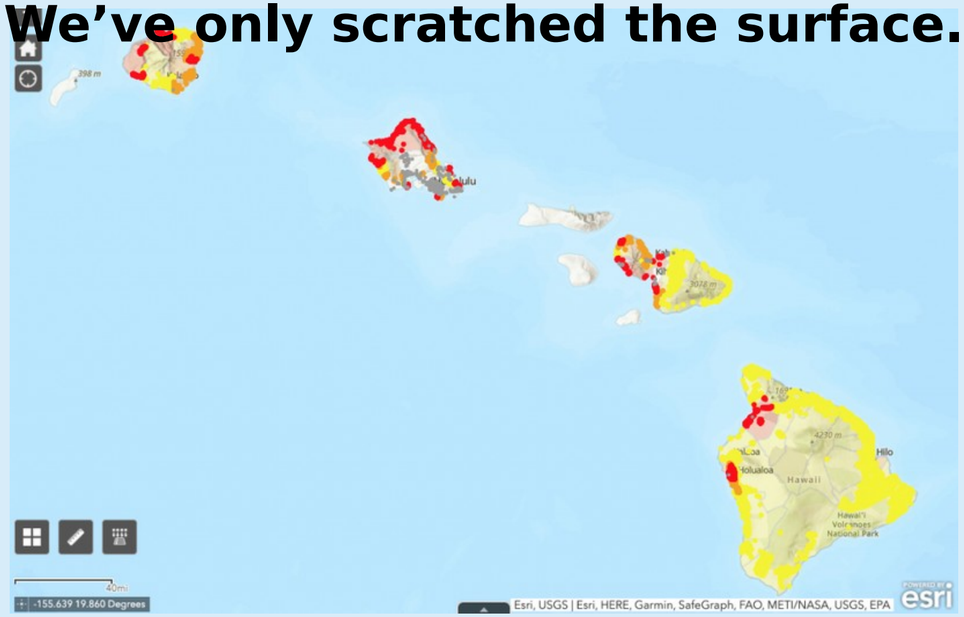
The Ask: Can we work with the EPA to raise SEP eligibility with penalized entities BEFORE settlement finalization? Can we expand the program to help more homeowners?

Conclusions

Five Conversions, Countless Possibilities

SEP is a proven, replicable mechanism to fully cover the cost of conversion for communities in need of solutions.

We’ve only scratched the surface.



"Hawai‘i Cesspool Prioritization Tool (HCPT)." Map screenshot. University of Hawai‘i Sea Grant Program

Proven Results

Five cesspools converted across Hawaii, delivering certified NSF 40/245 treatment systems to low- and moderate-income households.

Corporate Partners

American Savings Bank and Hawaii Gas have shown that companies are willing to convert penalties into community benefits while helping local homeowners.

Questions?

WAI WASTEWATER ALTERNATIVES & INNOVATIONS

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