



County of Hawai'i Cesspool Conversion Task Force Report and Recommendations Executive Summary

Protecting Our Health and Waters

Cesspools are a substandard wastewater management system in which raw, untreated sewage leaches into the subsoil, containing harmful bacteria and pathogens that can spread serious disease. They endanger our health, ecosystems, economy, and way of life.

- Cesspools **damage reefs leaving coastal communities vulnerable** to increased storm surges and flooding caused by climate change.
- Cesspool discharge contains pathogens, viruses and bacteria that can **spread disease** both through consumption and contact with sewage-contaminated water.
- Cesspool contamination can cause beach closures and coral reef die-off that would **damage Hawai'i's tourism and fishing industries**.

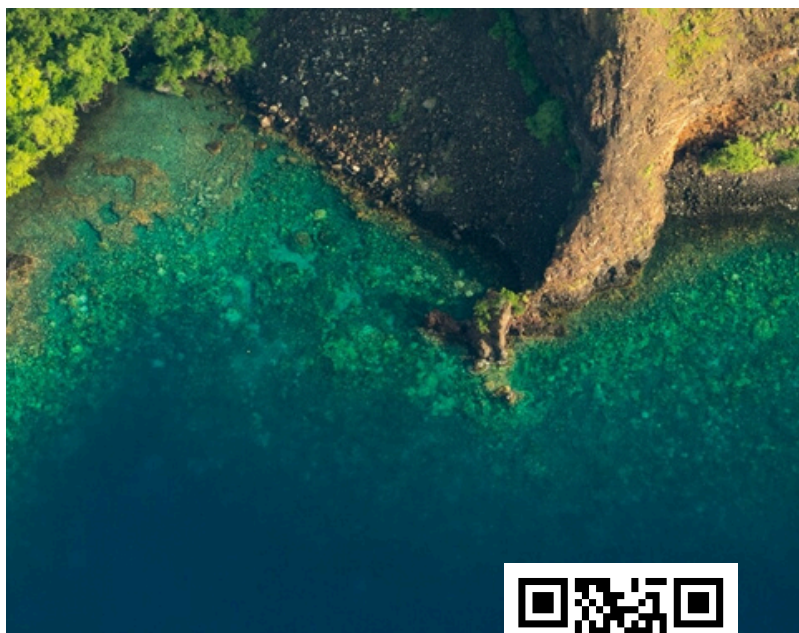
With 49,000 of the state's 83,000 cesspools, 52-55 million gallons of raw sewage are released from cesspools on Hawai'i Island every day. In some areas, this raw sewage from cesspools can reach the beach in a matter of hours - completely untreated, and going directly into the waters where we fish, swim, and play.

In 2017, the Hawai'i State Legislature passed Act 125, requiring conversion of all existing cesspools by 2050. But converting all cesspools presents financial and logistical challenges, and requires strong collaboration to move towards solutions that work for Hawai'i. In an effort to find real solutions, Hawai'i County Mayor Kimo Alameda convened a group of community advocates, policymakers and environmental scientists to form the Hawai'i County Cesspool Conversion Task Force (CCTF), a body created to develop a cesspool conversion action plan that addresses the unique cultural, ecological and geographic needs of Hawai'i Island.

What Are the Alternatives?

There are several options for cesspool conversion, but not every option is viable or desirable for every community. Factors including proximity to existing sewer lines, neighborhood layout, geology, and cost must all be considered in determining what solution is appropriate in each community.

- **Public sewer extension:** connect houses to existing County sewer lines and wastewater treatment plants.
- **Private sewer connection:** appropriate for areas where a private treatment plant is in near proximity to allow connection.
- **Decentralized or cluster community systems:** potential solution for areas where there is no nearby public or private sewer system.
- **Individual household conversion:** homeowner conversion to septic tanks or advanced onsite treatment units.



For more information, please visit the County of Hawai'i Department of Environmental Management website at

<https://www.dem.hawaiicounty.gov/home-em>





Cost is by Far the Biggest Challenge

Integrated sewer costs are in the hundreds of millions to service some communities. Individual septic conversion estimates carry a median price of \$40,000 but can cost as much as \$70,000.

The high cost of conversion places a significant financial burden on many families without robust grant and cost-offsetting programs. A significant funding gap needs to be addressed for less affluent communities. Additionally, planning for widespread workforce development to enact these cesspool conversions is crucial.

There are a wide range of funding options that can and should be combined whenever possible to ease the financial burden of converting. These include grants and loans, tax credits and rebates, and other options like private loans, monthly on-bill fees, or potentially Green Fee funds. In addition to cost, other challenges include:



Uniquely rapid transport of cesspool runoff due to **permeable volcanic soils and increased coastal development**



Lack of accurate and up-to-date **measuring of water quality**



Coordinating and collaborating between various stakeholders (homeowners, business owners, financial institutions, County, State) so **voices are heard and responsibility is shared equitably**



Prioritizing, executing, and managing upgrades of thousands of cesspools within a **short time period**



Next Steps and Recommendations

There are precedents across Hawai'i and the nation that can be drawn upon to design cesspool solutions that work for the unique needs of Hawai'i Island. Everyone deserves healthy drinking water, safe beaches to swim and fish, protected marine life, and a strong local economy - all of which require sustainable wastewater solutions. We are determined to work together with Hawai'i Island communities to map a path forward out of cesspool dependence that addresses cost, efficiency, feasibility, and community desires, moving our island towards a healthier, safer future.

This report examined four case study locations on Hawai'i Island, each of which are at different stages of conversion and require different solutions based on geography, geology, community priorities, and pre-existing infrastructure. Puakō, Keaukaha, Miloli'i and Kahalu'u can serve as examples for engaging community, coordinating with public and private entities, and developing technical solutions that can then inform conversions across Hawai'i County.

Task Force Recommendations

1. Continue to pursue conversions in the four case study communities.
2. Identify creative financing that works for Hawai'i County's unique needs.
3. Work with priority communities to evaluate solutions and demonstrate success.
4. Sustain a long-term campaign for community involvement and information sharing.
5. Consider policy interventions at the County and State levels.
6. Develop a Phase 2 of the task force for implementation that includes partnership, workforce development, operations and maintenance, and further research.