

Cesspools on Molokaʻi

Bringing Molokaʻi into Hawaiʻi's Statewide Cesspool Prioritization

Hawaiʻi Cesspool Hazard Assessment & Prioritization Tool (HCPT)

2024 Expansion to the Island of Molokaʻi

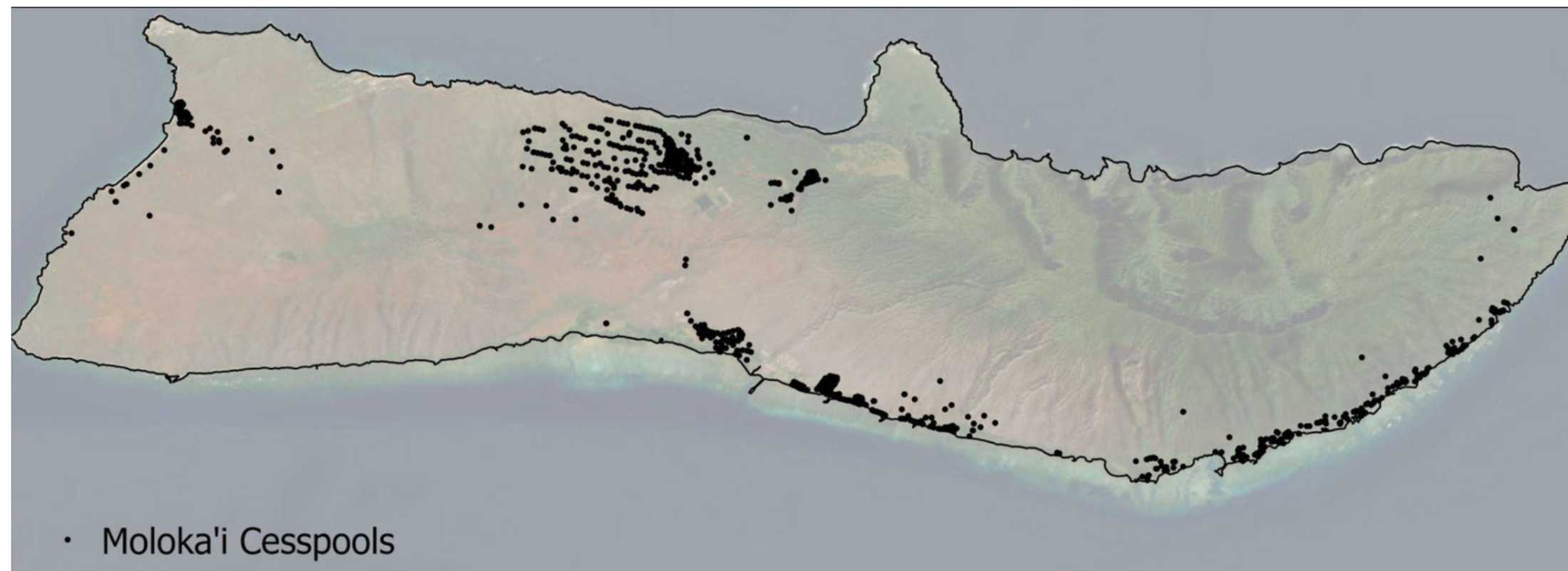
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Moloka'i is now part of the statewide picture

- Hawai'i's cesspool prioritization tool first covered O'ahu, Maui, Kaua'i, and Hawai'i Island. **Moloka'i was left out at the time because key data did not yet exist.**
- **This project fills that gap.** Moloka'i was analyzed with the exact same method, the same 15 risk factors, and the same scoring used for every other island.
- That means Moloka'i is now represented in the same statewide system the state uses
- In plain terms: **Moloka'i is counted, and it will be eligible for any programs that use the HCPT**
(*Note no currently available programs exist right now*)



The cesspool situation on Moloka'i

1,280

documented cesspools on the island

~7,400

people living on Moloka'i

60%+

of households still rely on a cesspool

- Every cesspool discharges untreated waste straight into the ground, where it can reach drinking water wells, streams, and the nearshore reef.
- Because so many homes depend on them, cesspools are one of the largest water-quality issues the island faces.

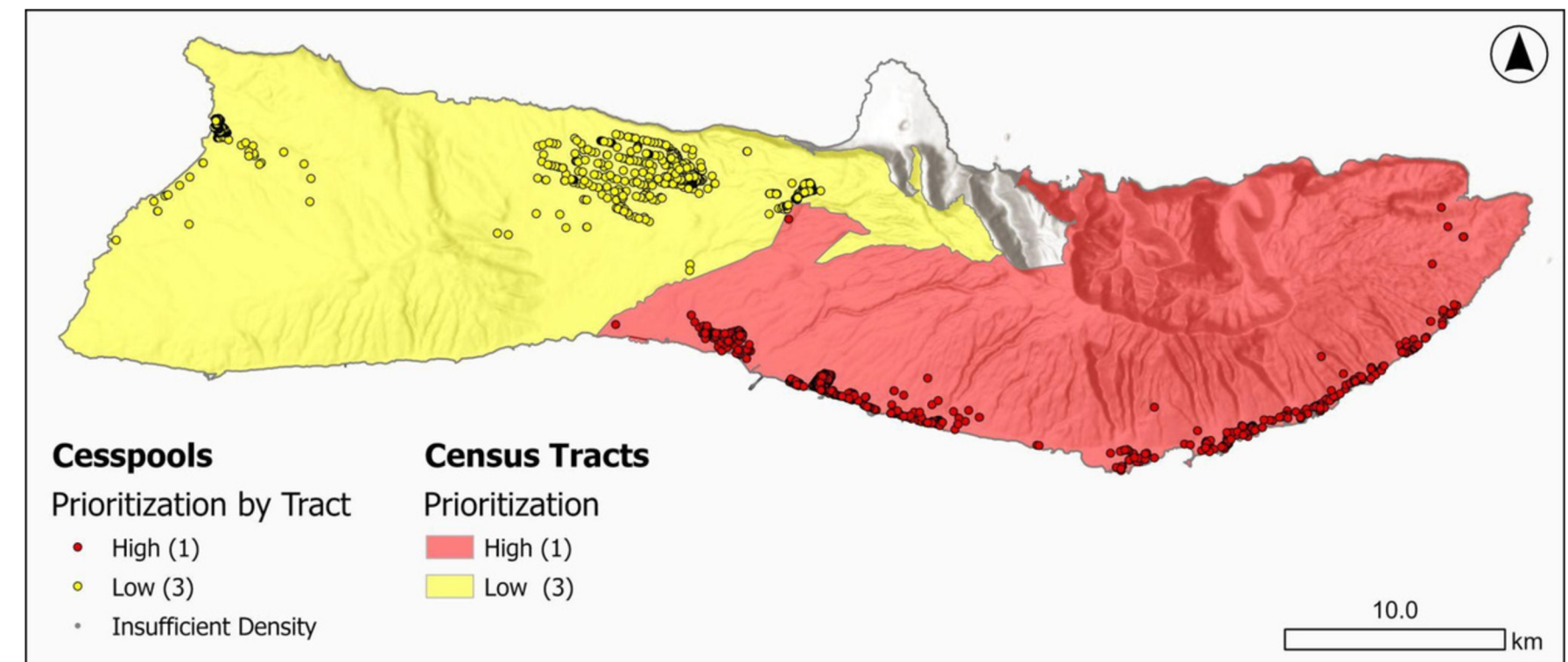
Why it matters on Moloka'i

- Reefs and fishing: Many cesspools sit right where their waste can reach highly valued reefs and fishponds. Even small amounts can harm coral and the fish people rely on.
- Drinking water: Shallow groundwater means waste can travel quickly to wells that supply drinking water.
- A rural island carries an outsized load: Moloka'i has a small population but its cesspools sit in sensitive coastal and groundwater settings, so their impact is larger than the numbers alone suggest.
- The same handful of factors drive the risk almost everywhere on the island: reef and fishery value, cesspool density, shallow groundwater, and wave energy along the shore.



The big picture: East vs. West Moloka'i

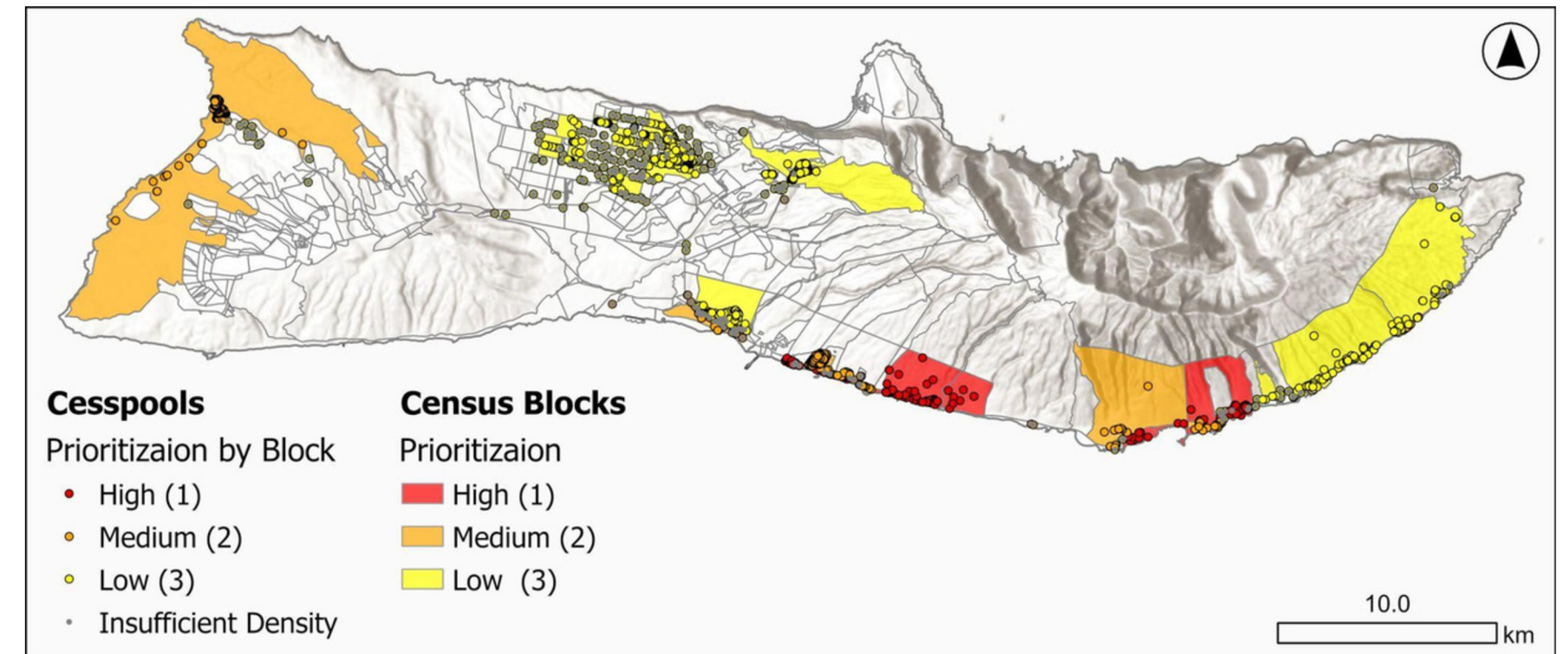
- At the broadest, island-wide level, East Moloka'i is the highest-priority area (Priority 1) — it has the most cesspools and the most sensitive surroundings.
- West Moloka'i ranks lower (Priority 3) — fewer cesspools and generally lower impact.
- This is the view the state uses for big-picture planning and funding decisions.



Map: cesspools colored by Census Tracts (red = highest). Source: HCPT Moloka'i 2024, Fig. 11.

A closer look: high-priority areas are spread out

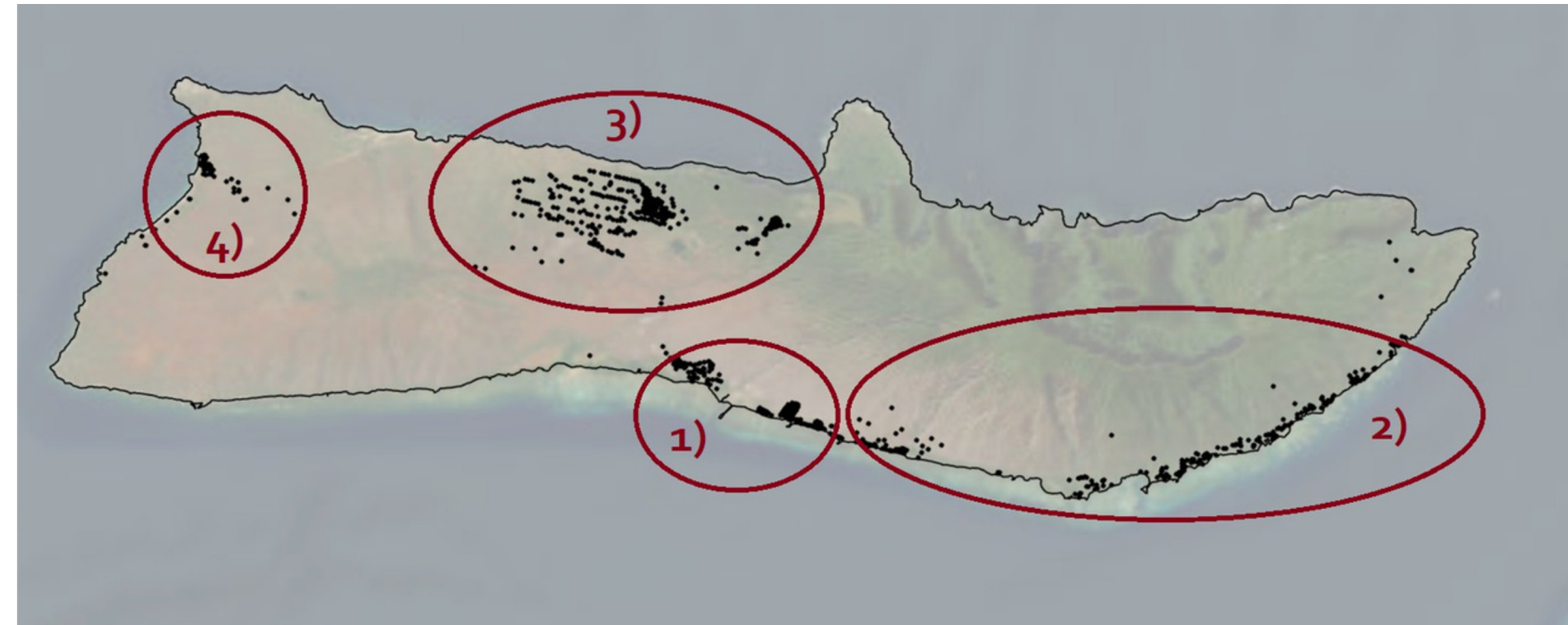
- Looking at smaller neighborhoods shows that high-priority spots are not in just one place — they show up in several distinct areas.
- The clearest hot spot is around Kaunakakai, where cesspools are dense and sit over very shallow groundwater next to the reef.
- Other areas — the south shore, the Ho‘olehua/Kualapu‘u uplands, and Kepuhi — each carry their own kind of risk.



Map: neighborhoods colored by Census Blocks. Source: HCPT Moloka'i 2024, Fig. 12.

Four kinds of places, four kinds of solutions

- Kaunakakai: dense homes near town — the best candidate for connecting to a sewer system.
- Southern shoreline: spread-out coastal homes — better suited to modern onsite systems than a sewer.
- Ho'olehua / Kualapu'u uplands: dispersed, rural, agricultural — solutions must fit the rural character and cost.
- Kepuhi Beach: resort area — could tie into upgraded private systems. (These cesspools may have already been sewerred, data is unclear)



Source: HCPT Moloka'i 2024, Fig. 17.

What this means for Moloka'i



- Moloka'i now has its own cesspool prioritization for the first time — a clear, map-based starting point for planning and for seeking funding.
- Kaunakakai stands out as the single biggest opportunity: the most cesspools in one place, next to existing county wastewater infrastructure.
- Elsewhere, the answer is not one-size-fits-all — a mix of sewer expansion and modern onsite systems fits the island better.
- Most importantly: Moloka'i is now on the same map as every other island, with the same standing to take part in state cesspool conversion programs.

Mahalo

All maps, data, and code for the Molokaʻi assessment are publicly available.

github.com/cshuler/HCPT_Molokai

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