
A BILL FOR AN ACT

RELATING TO WASTEWATER SYSTEMS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that cesspools are
2 contaminating the State's groundwater, streams, drinking water,
3 and coastal ecosystems. Maintaining the cleanliness of the
4 State's waters is a matter of statewide concern that falls under
5 the legislature's obligation to enact laws pursuant to
6 article XI, section 7, of the Hawaii State Constitution. To
7 address the State's cesspool pollution, Act 125, Session Laws of
8 Hawaii 2017, required all cesspools to be upgraded or converted
9 to a septic system or aerobic treatment unit system or connected
10 to a sewerage system before January 1, 2050, with certain
11 exemptions. Act 125 also directed the department of health to
12 investigate the number, scope, and location of cesspools that
13 required upgrade, conversion, or connection based on their
14 impact on public health. Additionally, Act 132, Session Laws of
15 Hawaii 2018, established the cesspool conversion working group
16 to develop a long-range, comprehensive plan for the conversion
17 of cesspools statewide by 2050 and commissioned a statewide



1 study of sewage contamination in nearshore marine areas to
2 further supplement studies and reports conducted by the
3 department of health on cesspools. The cesspool conversion
4 working group's 2021 Hawaii cesspool hazard assessment and
5 prioritization tool report identified three prioritization
6 categories: priority levels 1, 2, and 3. Priority level 1
7 cesspools have the greatest potential to impact human health and
8 are directly adjacent to sensitive natural resources; priority
9 level 2 cesspools pose a significant hazard to human health and
10 may be close to sensitive natural resources; and priority level
11 3 cesspools have an impact on human health but may be further
12 away from sensitive natural resources.

13 The 2021 Hawaii cesspool hazard assessment and
14 prioritization tool report also noted that the geographic
15 coverage of their evaluation only extended across the four main
16 Hawaiian islands. It further noted that even though the islands
17 of Molokai, Lanai, and Niihau were also impacted by cesspools,
18 these islands were not included in several key datasets
19 necessary for its analysis. Thus, the authors of the 2021
20 Hawai'i Cesspool Hazard Assessment Prioritization Tool Report,



1 2021 Report & Technical Appendices, recommended that a ranking
2 system for these islands also be established.

3 The legislature further finds that the following
4 communities were labeled as priority level 1 areas by the 2021
5 Hawaii cesspool hazard assessment and prioritization tool
6 report: Haleiwa, Waimanalo Beach-Homesteads, Hauula-Kaaawa,
7 Makua Valley, Judd Hillside-Lowery Avenue, Waimea-Kahuku, Laie,
8 Kawaiiloa, Campbell High School, Kaena Point, Kalaheo Avenue,
9 Waianae Kai, and Nanakuli on Oahu; Halama, Kamaole, Kahoma,
10 Keawakapu, Kapalua, Launiupoko, and Spreckelsville on Maui;
11 Holualoa, Kailua, and Kawaihae-Waikoloa on Hawaii island; and
12 Haena-Hanalei, Kekaha-Waimea, and Wailua Homesteads on Kauai.
13 In these areas where homes are not connected to wastewater
14 systems or are too remote to be connected to existing
15 infrastructure, new wastewater technologies and solutions are
16 necessary to transition away from environmentally hazardous
17 cesspools.

18 The legislature additionally finds that, according to
19 recent shoreline erosion management plans, south Molokai has the
20 highest concentration of Hawaiian homestead residential lots
21 located directly on the coast, having approximately fifty lots



1 within two and a half miles of noncontiguous shoreline. For
2 Molokai as a whole, the Molokai Health Center reports that forty
3 per cent of the population relies on subsistence farming,
4 hunting, and fishing, which means that having a clean and
5 healthy reef and nearshore environment is crucial for the health
6 of the community, especially the Native Hawaiian community. The
7 coastal plain of south Molokai is underlain by underground
8 rivers of fresh water flowing mauka to makai that affect the
9 fringing reef, an important food source for Native Hawaiians
10 residing on Molokai. A United States Geological Survey report
11 concluded that further inquiry into the range of nutrient
12 sources to groundwater and nutrient concentrations reaching the
13 coast in groundwater discharge will aid in future planning and
14 resource management. Molokai coastal homesteaders will be
15 financially challenged to convert cesspools to more modern
16 individual wastewater systems, as the median annual household
17 income averaged over the three department of Hawaiian home lands
18 coastal communities was \$42,396 in 2019, according to the
19 American Community Survey of 2019.

20 The legislature additionally finds that new wastewater
21 management solutions could greatly improve public health.



1 Technologies that are reaching a commercial scale for the first
2 time include solutions for individual homes, as well as multi-
3 unit dwellings, apartment buildings, and entire communities.
4 Large wastewater management systems can remove sewage from
5 multi-unit dwellings and apartment buildings. At the municipal
6 scale, these technologies can effectively treat sewage from
7 entire communities for a small fraction of the cost of existing
8 technology now employed in Hawaii. Self-contained, self-
9 powered, and self-cleaning toilets can be used in homes that do
10 not have the capacity to connect to the existing sewer
11 infrastructure. For example, the Puu Opae Kuleana Homestead
12 Settlement Plan, which will offer two hundred fifty homestead
13 lots in Waimea, Kauai, does not include a centralized wastewater
14 service or public water system, and the nearest wastewater
15 treatment plant is more than four miles away and thus could
16 benefit from new wastewater solutions. The Anahola Kuleana
17 Homestead Settlement Plan, which will offer one hundred fifteen
18 homestead lots in Kawaihau, Kauai, will similarly benefit from
19 new wastewater solutions.

20 The legislature further finds that approximately one
21 thousand individual wastewater system applications are processed



1 and reviewed each year. There are approximately eighty-two
2 thousand cesspools that will be required to be upgraded or
3 converted to an approved wastewater system or connected to a
4 sewer system by 2050 pursuant to section 342D-72, Hawaii Revised
5 Statutes. It is projected that individual wastewater system
6 applications may increase up to an additional three thousand to
7 five thousand applications per year to meet this mandate.

8 Accordingly, the purpose of this Act is to:

9 (1) Establish and appropriate funds to implement a three-
10 year new wastewater system and individual wastewater
11 system technology demonstration and implementation
12 pilot program within the university of Hawaii water
13 resources research center to review, examine, and
14 demonstrate new wastewater technology systems;
15 implement those technologies in wastewater system
16 demonstration projects; and establish prioritization
17 categories similar to those established in the Hawaii
18 cesspool hazard assessment and prioritization tool for
19 the islands of Molokai, Lanai, and Niihau; and

20 (2) Appropriate funds for positions within the department
21 of health's wastewater branch.



1 SECTION 2. (a) There is established a three-year new
2 wastewater system and individual wastewater system technology
3 demonstration and implementation pilot program within the
4 university of Hawaii water resources research center.

5 (b) The university of Hawaii water resources research
6 center, in coordination with the university of Hawaii sea grant
7 college program and in consultation with the department of
8 health, department of Hawaiian home lands, university of Hawaii
9 college of engineering, and all appropriate county agencies,
10 shall:

11 (1) Examine and demonstrate new wastewater and cesspool
12 technology systems, ranging from individual toilets to
13 significantly larger multi-unit systems and options
14 for community-scale solutions as appropriate, and
15 review and evaluate the affordability, feasibility,
16 and efficiency of the treatment technologies;

17 (2) Administer no less than four cesspool system
18 demonstration projects implementing new toilet and
19 sewage treatment technologies; provided that each
20 project shall include a cesspool in an area designated
21 as priority level 1 by the Hawai'i Cesspool Hazard



1 Assessment Prioritization Tool Report, 2021 Report &
2 Technical Appendices; provided further that there
3 shall be no less than one project in each county;
4 provided further that there shall be no less than one
5 project on the island of Molokai;

6 (3) Document, validate, and summarize the various tests,
7 research, and outcomes of each cesspool system
8 demonstration project; and

9 (4) Establish a ranking system similar to the
10 prioritization categories established in the 2021
11 Hawai'i Cesspool Hazard Assessment Prioritization Tool
12 Report, 2021 Report & Technical Appendices, for the
13 islands of Molokai, Lanai, and Niihau.

14 (c) The university of Hawaii water resources research
15 center shall submit an annual interim report to the legislature
16 no later than twenty days prior to the convening of each regular
17 session for the duration of the pilot program and a final report
18 to the legislature no later than twenty days prior to the
19 convening of the regular session of 2028. The reports shall
20 include:



- 1 (1) Information on the new wastewater and cesspool
- 2 technology systems reviewed and implemented;
- 3 (2) The number of cesspools converted pursuant to the
- 4 pilot program;
- 5 (3) The costs incurred to convert each cesspool;
- 6 (4) Recommendations on how to improve the efficiency of
- 7 the pilot program;
- 8 (5) Whether the pilot program should be made permanent;
- 9 and
- 10 (6) Any other recommendations that the university of
- 11 Hawaii water resources research center deems
- 12 appropriate.
- 13 (d) The pilot program shall cease to exist on June 30,
- 14 2027.

15 SECTION 3. In accordance with section 9 of article VII, of
16 the Constitution of the State of Hawaii and sections 37-91 and
17 37-93, Hawaii Revised Statutes, the legislature has determined
18 that the appropriations contained in this Act will cause the
19 state general fund expenditure ceiling for fiscal year 2024-2025
20 to be exceeded by \$, or per cent. The reasons
21 for exceeding the general fund expenditure ceiling are that the

1 appropriations made in this Act are necessary to serve the
2 public interest and to meet the needs provided for by this Act.

3 SECTION 4. There is appropriated out of the general
4 revenues of the State of Hawaii the sum of \$ or so much
5 thereof as may be necessary for fiscal year 2024-2025 to
6 implement the new wastewater system and individual wastewater
7 system technology demonstration and implementation pilot program
8 established pursuant to this Act.

9 The sum appropriated shall be expended by the university of
10 Hawaii for the purposes of this Act.

11 SECTION 5. There is appropriated out of the general
12 revenues of the State of Hawaii the sum of:

13 (1) \$ or so much thereof as may be necessary for
14 fiscal year 2024-2025 to fund one full-time equivalent
15 (1.0 FTE) engineer V (SR-26) position within the
16 department of health's wastewater branch; and

17 (2) \$ or so much thereof as may be necessary for
18 fiscal year 2024-2025 to establish one full-time
19 equivalent (1.0 FTE) engineer IV (SR-24) position
20 within the department of health's wastewater branch,



1 to support the approval of individual wastewater systems
2 applications and the new wastewater system and individual
3 wastewater system technology demonstration and implementation
4 pilot program established pursuant to this Act.

5 The sums appropriated shall be expended by the department
6 of health for the purposes of this Act.

7 SECTION 6. This Act shall take effect on July 1, 3000.



Report Title:

UH; Water Resources Research Center; Cesspools; New Wastewater System and Individual Wastewater System Technology Demonstration and Implementation Pilot Project; Reports; Positions; Appropriations; Expenditure Ceiling

Description:

Establishes a 3-year new wastewater system and individual wastewater system technology demonstration and implementation pilot program within the University of Hawaii water resources research center to examine and demonstrate new wastewater and cesspool technology systems; implement those technologies in demonstration projects in areas across the State that are identified as priority level 1 in the 2021 Hawai'i Cesspool Hazard Assessment Prioritization Tool Report, 2021 Report & Technical Appendices; and establish similar prioritization categories for the islands of Molokai, Lanai, and Niihau. Requires the University of Hawaii Water Resource Research Center to submit annual interim reports and a final report to the Legislature. Establishes positions. Makes appropriations. Effective 7/1/3000. (HD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

