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# 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  
10    connected to a sewerage system before January 1, 2050, and  
11    directed the department of health to investigate the number,  
12    scope, and location of cesspools that required upgrade,  
13    conversion, or connection based on their impact on public  
14    health. Additionally, Act 132, Session Laws of Hawaii 2018,  
15    established the cesspool conversion working group to develop a  
16    long-range, comprehensive plan for the conversion of cesspools  
17    statewide by 2050 and commissioned a statewide study of sewage



1 contamination in nearshore marine areas to further supplement  
2 studies and reports conducted by the department of health on  
3 cesspools. The cesspool conversion working group's 2021 Hawaii  
4 cesspool hazard assessment and prioritization tool report  
5 identified three prioritization categories: priority levels 1,  
6 2, and 3. Priority level 1 includes areas in the State where  
7 cesspools pose the greatest contamination hazard; priority level  
8 2 includes areas where cesspools pose a significant  
9 contamination hazard; and priority level 3 includes areas where  
10 cesspools have a pronounced contamination hazard.

11 The 2021 Hawaii cesspool hazard assessment and  
12 prioritization tool report also noted that the geographic  
13 coverage of their evaluation only extended across the four main  
14 Hawaiian Islands. It further noted that even though the islands  
15 of Molokai, Lanai, and Niihau were also impacted by cesspool  
16 concerns, these islands were not included in several key  
17 datasets necessary for its analysis. Thus, the authors of the  
18 2021 Hawaii cesspool hazard assessment and prioritization tool  
19 report recommended that a ranking system for these islands also  
20 be established.



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

16           The legislature additionally finds that, according to  
17 recent shoreline erosion management plans, south Molokai has the  
18 highest concentration of Hawaiian homestead residential lots  
19 located directly on the coast, having approximately fifty lots  
20 within two and a half miles of noncontiguous shoreline. For  
21 Molokai as a whole, the Molokai Health Center reports that forty



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

18 The legislature additionally finds that new wastewater  
19 management solutions could greatly improve public health.  
20 Technologies that are reaching a commercial scale for the first  
21 time include solutions for individual homes, as well as



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

18       The legislature further finds that approximately one  
19 thousand individual wastewater system applications are processed  
20 and reviewed each year. There are approximately eighty-two  
21 thousand cesspools that will be required to be upgraded or



1 converted to an approved wastewater system or connected to a  
2 sewer system by 2050 pursuant to section 342D-72, Hawaii Revised  
3 Statutes. It is projected that individual wastewater system  
4 applications may increase up to an additional three thousand to  
5 five thousand applications per year to meet this mandate.

6 Accordingly, the purpose of this Act is to:

- 7 (1) Establish and appropriate funds to implement a  
8 three-year new wastewater system demonstration pilot  
9 program within the university of Hawaii sea grant  
10 program to review, examine, and demonstrate new  
11 wastewater technology systems; implement those  
12 technologies in wastewater system demonstration  
13 projects; and establish prioritization categories  
14 similar to those established in the Hawaii cesspool  
15 hazard assessment and prioritization tool for the  
16 islands of Molokai, Lanai, and Niihau; and
- 17 (2) Appropriate moneys for two full-time equivalent  
18 (2.0 FTE) positions within the department of health's  
19 wastewater branch.

20 SECTION 2. (a) There is established a three-year new  
21 wastewater system demonstration pilot program within the



1 university of Hawaii sea grant college program in coordination  
2 with the university of Hawaii water resources research center.

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

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

15 (2) Administer no less than four cesspool system  
16 demonstration projects implementing new toilet and  
17 sewage treatment technologies; provided that each  
18 project shall include a cesspool in an area designated  
19 as a priority level 1 by the cesspool conversion  
20 working group's 2021 Hawaii cesspool hazard assessment  
21 and prioritization tool report; provided further that



1           there shall be no less than one project in each  
2           county; provided further that there shall be no less  
3           than one project on the island of Molokai;

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

7           (4) Establish a ranking system similar to the  
8           prioritization categories established in the 2021  
9           Hawaii cesspool hazard assessment and prioritization  
10          tool report for the islands of Molokai, Lanai, and  
11          Niihau.

12          (c) The university of Hawaii sea grant college program  
13 shall submit an annual interim report to the legislature no  
14 later than twenty days prior to the convening of each regular  
15 session for the duration of the pilot program and a final report  
16 to the legislature no later than twenty days prior to the  
17 convening of the regular session of 2028. The reports shall  
18 include:

19          (1) Information on the new wastewater and cesspool  
20          technology systems reviewed and implemented;





- 1 (2) The number of cesspools converted pursuant to the
- 2 pilot program;
- 3 (3) The costs incurred to convert each cesspool;
- 4 (4) Recommendations on how to improve the efficiency of
- 5 the pilot program;
- 6 (5) Whether the pilot program should be made permanent;
- 7 and
- 8 (6) Any other recommendations that the university of
- 9 Hawaii sea grant program deems appropriate.

10 (d) The pilot program shall cease to exist on June 30,  
11 2027.

12 SECTION 3. In accordance with section 9 of article VII, of  
13 the Constitution of the State of Hawaii and sections 37-91 and  
14 37-93, Hawaii Revised Statutes, the legislature has determined  
15 that the appropriations contained in this Act will cause the  
16 state general fund expenditure ceiling for fiscal year 2024-2025  
17 to be exceeded by \$ , or per cent. The reasons  
18 for exceeding the general fund expenditure ceiling are that the  
19 appropriations made in this Act are necessary to serve the  
20 public interest and to meet the needs provided for by this Act.



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

6 The sum appropriated shall be expended by the university of  
7 Hawaii sea grant college program.

8 SECTION 5. There is appropriated out of the general  
9 revenues of the State of Hawaii the sum of:

10 (1) \$ or so much thereof as may be necessary for  
11 fiscal year 2023-2024 and the same sum or so much  
12 thereof as may be necessary for fiscal year 2024-2025  
13 to fund one full-time equivalent (1.0 FTE) engineer V  
14 position within the department of health's wastewater  
15 branch; and

16 (2) \$ or so much thereof as may be necessary for  
17 fiscal year 2023-2024 and the same sum or so much  
18 thereof as may be necessary for fiscal year 2024-2025  
19 to establish one full-time equivalent (1.0 FTE)  
20 engineer IV position within the department of health's  
21 wastewater branch,



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

4 The sums appropriated shall be expended by the department  
5 of health.

6 SECTION 6. This Act shall take effect on July 1, 2050.



**Report Title:**

UH; Sea Grant College Program; Cesspools; New Wastewater System Demonstration Pilot Project; Reports; Positions; General Fund Expenditure Ceiling Exceeded; Appropriations

**Description:**

Establishes a 3-year new wastewater system demonstration pilot program within the University of Hawaii Sea Grant College Program 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 Hawaii Cesspool Hazard Assessment and Prioritization Tool Report; and establish similar prioritization categories for the islands of Molokai, Lanai, and Niihau. Requires the University of Hawaii Sea Grant College Program to submit annual interim reports and a final report to the Legislature. Establishes positions. Declares that the appropriations exceed the state general fund expenditure ceiling for 2024-2025. Makes appropriations. Effective 7/1/2050. (SD2)

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

