THE SENATE
THIRTY-SECOND LEGISLATURE, 2024
STATE OF HAWAII

JAN 19 2024

S.B. NO. 2513

A BILL FOR AN ACT

RELATING TO WASTEWATER SYSTEMS.

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

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

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

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

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

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

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

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

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

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

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

Accordingly, the purpose of this Act is to:

(1) Establish and appropriate funds to implement a three-year new wastewater system demonstration pilot program within the university of Hawaii water resources research center to review, examine, and demonstrate new wastewater technology systems; implement those technologies in wastewater system demonstration projects; and establish a ranking system similar to the Hawaii cesspool prioritization tool for the islands of Molokai, Lanai, and Niihau; and

(2) Appropriate moneys for two full-time equivalent (2.0 FTE) positions within the department of health's wastewater branch.

SECTION 2. (a) There is established a three-year new waste management solution and cesspool system demonstration

pilot program within the university of Hawaii water resources research center.

(b) The university of Hawaii water resources research center, in consultation with the department of health, department of Hawaiian home lands, and the university of Hawaii college of engineering, shall:

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

(2) Administer not less than four cesspool system demonstration projects implementing new toilet and sewage treatment technologies; provided that each project shall include a cesspool in an area designated as a priority level 1 by the cesspool conversion working group's prioritization tool report; provided further that there shall be no less than one project in each county; provided further that there shall be no less than one project on the island of Molokai;

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

(4) Establish a ranking system similar to the Hawaii cesspool prioritization tool for the islands of Molokai, Lanai, and Niihau.

(c) The university of Hawaii water resources research center shall submit an annual report to the legislature no later than twenty days prior to the convening of each regular session for the duration of the pilot program. The reports shall include:

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

(2) Cesspools converted pursuant to the pilot program;

(3) The costs incurred to convert each cesspool;

(4) Recommendations on how to improve the efficiency of the pilot program;

(5) Whether the pilot program should be made permanent; and

(6) Any other recommendations that the university of Hawaii water resources research center deems appropriate.

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

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

SECTION 4. There is appropriated out of the general revenues of the State of Hawaii the sum of $3,025,468 or so much thereof as may be necessary for fiscal year 2024-2025 to implement the new waste management solution and cesspool system demonstration pilot program established pursuant to this Act.

The sum appropriated shall be expended by the university of Hawaii water resources research center for the purposes of this Act.

SECTION 5. There is appropriated out of the water pollution control revolving fund the sum of:

(1) $56,304 or so much thereof as may be necessary for fiscal year 2023-2024 and the same sum or so much thereof as may be necessary for fiscal year 2024-2025 to fund one full-time equivalent (1.0 FTE) engineer position within the department of health's wastewater branch; and

(2) $52,044 or so much thereof as may be necessary for fiscal year 2023-2024 and the same sum or so much thereof as may be necessary for fiscal year 2024-2025 to establish one full-time equivalent (1.0 FTE) planner position within the department of health's wastewater branch.

The sums appropriated shall be expended by the department of health to support the approval of individual wastewater systems applications.

SECTION 6. This Act shall take effect on July 1, 2024.

INTRODUCED BY: _____

S.B. NO. 2513

Report Title:
UH; Cesspools; New Waste Management Solution and Cesspool System Demonstration Pilot Project; Report; Appropriations; General Fund Expenditure Ceiling Exceeded

Description:
Establishes a 3-year new waste management solution and cesspool system demonstration 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 Hawaii Cesspool Hazard Assessment and Prioritization Tool Report; and establish a similar ranking system for prioritization levels for the islands of Molokai, Lanai, and Niihau. Requires the University of Hawaii Water Resources Research Center to submit reports to the Legislature. Appropriates moneys for the pilot program. Appropriates moneys for 1 full-time equivalent (1.0 FTE) engineer position and 1 full-time equivalent (1.0 FTE) planner position within the Department of Health's Wastewater Branch. Declares that the general fund appropriation exceeds the state general fund expenditure ceiling for 2024-2025.

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