City & County of Honolulu
The Story Behind O‘ahu’s New Landfill

The City and County of Honolulu Department of Environmental Services has identified Makaiwa Hills as the proposed location for O‘ahu’s future municipal solid waste landfill, marking a major step in securing long-term waste disposal capacity for the island as remaining capacity at the current Waimānalo Gulch Sanitary Landfill (WGSL) becomes increasingly limited.

WGSL remains a critical part of O‘ahu’s integrated waste management system but a long-term replacement site is necessary to ensure uninterrupted waste disposal services for residents and businesses in the years ahead. Without immediate action, O‘ahu risks reaching a point where existing disposal capacity could be exhausted before a replacement site is ready, creating significant operational and environmental challenges.

Why Makaiwa Hills

The decision follows a multi-year evaluation process involving technical studies, environmental review, legal changes and land-use constraints that significantly narrowed the number of viable locations available on O‘ahu

The City has been working since 2021 to identify a future landfill site through a comprehensive process that included input from technical experts, engineering consultants and community stakeholders.

In 2022, ENV launched a formal siting study that initially identified a site northwest of Wahiawā on Dole lands as a leading option. But following the passage of Act 255 during the 2025 Legislative Session, that site was removed from consideration due to new restrictions prohibiting landfills on Class A agricultural lands and above sources of drinking water.

After applying all current restrictions and technical criteria, Makaiwa Hills emerged as the only remaining feasible option for a future landfill on O‘ahu.

A Difficult but Necessary Decision

City officials acknowledged the significance of the decision and the responsibility that comes with it.

Even with continued investment in recycling, composting and waste-to-energy, a landfill remains necessary for materials that cannot be recycled or combusted, including ash and other non-recoverable materials.

Next Steps

The City is currently moving forward with the required planning, environmental review, permitting and community engagement process for Makaiwa Hills. Additional opportunities for public input will be announced as the project advances.

The City remains committed to transparency and responsible planning to fulfill its kuleana to protect public health, protect our precious environment and provide reliable waste management for O‘ahu.

ENV oversees the City's solid waste management system, which includes the Honolulu Program of Waste and Energy Recovery (H-POWER), WGSL, three transfer stations, seven collection yards that service over 200,000 residential accounts, seven residential convenience centers, and other critical waste processing operations including green waste composting, white goods processing and refrigerant recovery, bulky item appointment pickup, and household hazardous waste collection and disposal.

ENV manages approximately 1.2 million tons of recyclables and residential and commercial waste generated on O'ahu annually. Roughly 650,000 tons is sent to H-POWER for metals recovery and electricity generation. Approximately 225,000 tons of municipal solid waste (MSW), H-POWER ash and residue, and other non-combustible, non-recyclable and/or special waste materials are disposed of at WGSL each year.

Waimānalo Gulch Sanitary Landfill (WGSL)

WGSL is located at 92-460 Farrington Highway, Honouliuli, 'Ewa, O'ahu, and has been in operation since 1989. The landfill was initially designed and permitted to accept O'ahu's refuse for approximately 20 years. WGSL was expanded twice to utilize remaining landfill space. WGSL is located on agriculturally zoned land, requiring a Special Use Permit (SUP) from the State of Hawai'i Land Use Commission (LUC). A LUC SUP extension was issued in 2019.

2019 LUC: Findings of Fact, Conclusions of Law and Decision and Order (D&O)

On June 10, 2019, the Honolulu Planning Commission (PC) issued its Findings of Fact, Conclusions of Law, Decision and Order recommending the State LUC approve an extension to the SUP for WGSL. On November 1, 2019, the LUC issued its Findings of Fact, Conclusions of Law, Decision and Order Approving with Modifications the City and County of Honolulu Planning Commission's Recommendation to Approve Special Use Permit and Certificate of Service (D&O) and SUP SP09-403[1]. The D&O provided that the WGSL shall close no later than March 2, 2028, and shall not accept any form of waste after March 2, 2028. The D&O also provided that, no later than December 31, 2022[2], ENV shall identify an alternative landfill site that may be used upon closure of WGSL and give written notice to the PC and LUC, providing semi-annual reports to the PC and LUC regarding landfill siting efforts and WGSL operations. These reports presented at public hearings can be found on ENV's website at: www.honolulu.gov/env/ref/res-landfill-status/.

2020 Act 73 Landfill Siting Restrictions

In the 2020 session, the Hawai'i State Legislature passed Act 73, which became law on September 15, 2020. Act 73 added new landfill siting restrictions found in Hawai'i Revised Statutes [HRS] Sections §183C-4 and §342H-52. The restrictions are summarized as follows:

- Requires no less than a ½-mile buffer zone around residences, schools, and hospitals for the construction, modification, or expansion of a waste or disposal facility; and
- Prohibits any waste or disposal facility from being located in a conservation district, except in emergency circumstances, to mitigate risks to public safety and health.

Other Landfill Siting Restrictions and Considerations

In addition to Act 73, the following restrictions and considerations apply for siting a new landfill on O'ahu:

- **Subtitle D (Federal Subtitle D of the Resource Conservation and Recovery Act)**: Owners/Operators of a new landfill that is located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used

[1] Special Use Permit No. SP09-403. The original SUP covered 60.5 acres, but was expanded over the years.
[2] As noted on page 5, the December 31, 2022, deadline to identify a new landfill site was subsequently extended to December 31, 2024.

by only piston-type aircraft must demonstrate that the units are designed and operated so that the landfill does not pose a bird hazard to aircraft. Landfills are also restricted from wetlands, floodplains, earthquake fault areas, seismic impact zones, and unstable land areas.

- **HAR Title 11 (Hawai‘i Administrative Rules Title 11)**: New municipal solid waste landfills and lateral expansions shall not be located in possible tsunami inundation areas.
- **Developed and Undevelopable Lands**: Lands previously zoned or approved for development.
- **Federal Lands**: Lands under federal control, mostly military, requiring congressional action to allow their use by the City for a landfill.

2021-2022 Landfill Advisory Committee (LAC)

In 2012, ENV completed a landfill siting study on the belief that WGSL could not be expanded a third time due to the limited remaining developable land at the site. The *Report of the Mayor's Advisory Committee on Landfill Site Selection (MACLSS)*[3] (2012 siting study) included a committee (Mayor's Landfill Site Selection Committee) to score and rank several sites and recommended 11 final sites. In the 2017 *Assessment of Municipal Solid Waste Handling Requirements for the Island of O‘ahu*[4], ENV re-evaluated the landfill sites recommended in the 2012 siting study to account for updated waste generation rates on O‘ahu and added volumes processed at the expanded H-POWER facility. Neither the 2012 nor 2017 landfill siting recommendations were acted on at the time. In 2020, ENV revisited the landfill siting efforts completed in 2012 and 2017 and, considering Act 73, initiated the 2021-2022 landfill siting study.

In September 2021, Mayor Blangiardi appointed a nine-member LAC (later reduced to eight members due to one member's unavailability) to evaluate and score six potential new landfill sites. The LAC only considered sites that meet Act 73 and other siting restrictions (shown on Figure 1). Federal lands and Developed/Undevelopable lands were not considered by the LAC. Between October 2021 and June 2022, eight public LAC meetings were held, in accordance with the Sunshine Law (HRS, Part 1, Chapter 92), to learn about the solid waste programs on O‘ahu, provide input on the siting evaluation and scoring process, and complete scoring of potential landfill sites. Proceedings of the LAC are available on ENV's website at: www.honolulu.gov/env/ref/new-landfill-siting/.

[3] *Report of the Mayor's Advisory Committee on Landfill Site Selection (MACLSS)* dated September 2012
[4] *Assessment of Municipal Solid Waste Handling Requirements for the Island of O‘ahu* dated November 2017

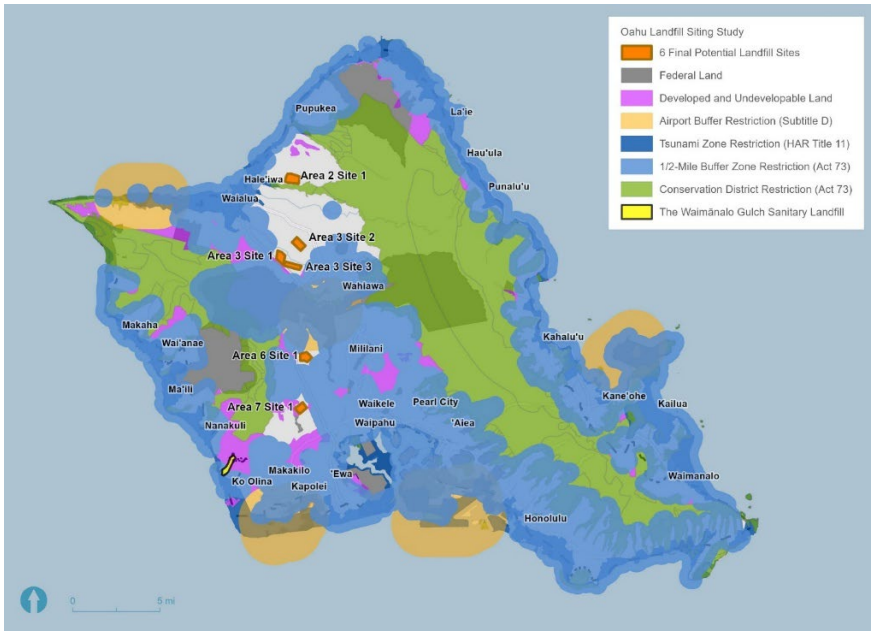

Figure 1. Sites and Restrictions Evaluated in the Landfill Siting Study

2021 – 2022 Red Hill Fuel Leak and Drinking Water Contamination

In November 2021, a fuel leak at the Red Hill Bulk Fuel Storage Facility, operated by the United States (U.S.) Navy, resulted in jet fuel entering the aquifer under the facility and entering the Navy's water supply tunnel. A lengthy and costly clean-up ensued. The safety of O'ahu's water supply was seriously eroded during this crisis and there evolved a general public awareness that O'ahu's water supply is vulnerable to contamination and needs to be protected. In response, the Honolulu Board of Water Supply (BWS) shut off several of their water supply wells, including the Halawa Shaft, to mitigate potential contamination from the fuel plume.

2021 BWS Testifies to LAC

During the LAC siting evaluation process, communication occurred between ENV and BWS regarding the LAC's ongoing landfill siting efforts. The BWS indicated that it did not support the siting of a new landfill at any site within its designated No Pass Zone (NPZ). The NPZ is a geographic area in the interior of O'ahu where the underlying groundwater aquifer is not protected from surface-level contamination by a confining geologic formation known as caprock. The BWS, including its Manager and Chief Engineer and its Head of Water Quality Division, made a presentation to the LAC at its December 14, 2021 meeting and expressed concerns about the six sites being evaluated because all were located directly over O'ahu's aquifer and that the risk may be high for landfill contaminants to be released into the aquifer[5]. Despite ENV's plans to utilize a double liner system at the new landfill and WGSL having no recordable leaks up to this point in its operation, as a result of the BWS testimony, the LAC members expressed concerns regarding all six proposed sites within the NPZ and noted that federal lands were not considered. The LAC approved a motion to not recommend any of the six landfill sites due to their location within the NPZ.

2022 LAC Final Report Ranked but Did Not Select a Landfill Site

The LAC issued its final report in June 2022[6]. While the report ranked the six evaluated potential landfill sites, it recommended none of the sites be selected due to their location in the BWS NPZ. Instead, the LAC

[5] Subsequently, in a letter dated November 16, 2022, BWS disapproved all six potential sites.
[6] *O'ahu Landfill Siting Study & Landfill Advisory Committee Recommendations* dated June 2022

recommended that ENV request the LUC extend the December 31, 2022 deadline to name a new landfill site, evaluate sites outside the NPZ, including federal lands, seek to modify or rescind Act 73, and consider using eminent domain to acquire a new landfill site.

2022 ENV Files Request for Deadline Extension to PC

On December 22, 2022, ENV submitted an application request to the PC to modify WGSL's SUP conditions setting a December 31, 2022 deadline for ENV to identify an alternative landfill site. ENV requested a two-year extension to December 31, 2024 to re-evaluate various siting options per the LAC's recommendations.

2023 City works with U.S. Navy to Identify Potential Federal Lands

In 2023, Mayor Blangiardi and Managing Director Michael Formby met with Navy leadership at the U.S. Indo-Pacific Command (USINDOPACOM) to discuss the potential use of federal lands outside the BWS NPZ, including the Waipi'o Peninsula and the Iroquois Point areas. Portions of these areas are located outside the NPZ. Waipi'o Peninsula is the present location of the City's Waipi'o Soccer Complex and the Iroquois Point area is an operational naval magazine.

2023 Mayor Blangiardi Promises No Landfill on the Wai'anae Coast

Although federal land on the Wai'anae Coast is outside the NPZ (located on a portion of the Lualualei Naval Magazine), Mayor Blangiardi publicly committed that the next City landfill would not be located on the Wai'anae Coast and the Lualualei site was removed from consideration. Mayor Blangiardi's decision was based on equity and operational impact.

2023 U.S. Navy Declines Use of Federal Lands for Operational Reasons

On April 12, 2024, the Navy informed Mayor Blangiardi that after much deliberation and considerable efforts to reconcile concerns, the military was unable to support the development of a landfill on the Waipi'o Peninsula property. The Navy cited mission critical operations and training activities in the vicinity of Waipi'o Peninsula. Both the Waipi'o Peninsula and Iroquois Point areas were removed from further consideration for this reason.

2024 May – PC Grants City a Two-Year Extension to Name New Landfill Site

The PC heard ENV's 2022 request for an extension on June 28, 2023, and held a contested case hearing to take testimony on October 18, 2023, and November 1, 2023. The PC issued its D&O on May 29, 2024, and forwarded it to the LUC for decision making.

2024 August – LUC Grants City a Two-Year Extension

On August 23, 2024, the LUC granted ENV's request to extend the December 31, 2022, deadline to name a landfill site to December 31, 2024, subject to the following conditions:

- By no later than December 31, 2024, ENV shall identify an alternative landfill site and provide written notice to the PC and LUC; and
- ENV shall report quarterly to the PC, in-person, the efforts it has taken and plans to take to identify an alternative landfill site by December 31, 2024, and answer questions from the Commission and community.

2023-2024 Evaluation of Modifications to Act 73 on Availability of Lands

Per the LAC's recommendations and commitment from Mayor Blangiardi, between 2023 and 2024, in addition to federal lands under consideration by the Navy, the City re-evaluated potential lands outside of the BWS NPZ that might be available if Act 73 were amended. Based on this evaluation, 11 sites were identified as potential areas to site a landfill (see Figure 2).

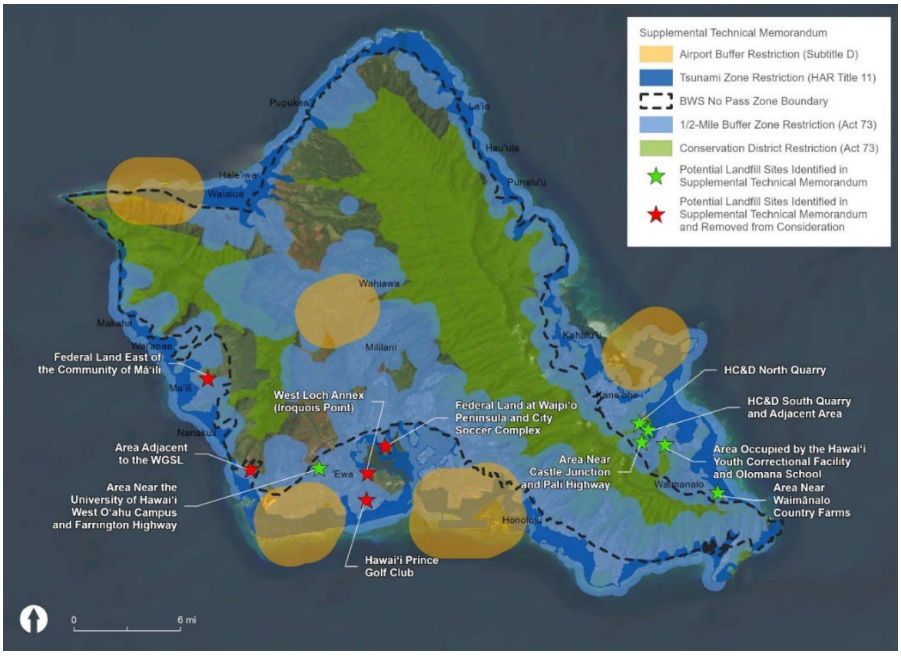

Figure 1. Sites Identified in the Supplemental Technical Memorandum

The results of this evaluation were documented in the October 2024 supplemental technical memorandum[7]. Some sites were removed from consideration due to being too small (Pali Golf Course, Waiāhole Forest Preserve and Farmland [Waiāhole Homestead Road], and Royal Hawaiian Golf Club), being in proximity to airport flight paths (Hawai‘i Prince Golf Club), or having limited land developability. This memorandum was provided to State Legislators, who were unable to apply changes to Act 73 to make the affected identified sites available.

2024 Wahiawā Site Named the Next Landfill Site

In the second half of 2024, ENV decided to pursue one of the sites identified in the landfill siting study, which is located in Wahiawā, Hawai‘i and owned by Dole Food Company Inc. This site is located within the BWS NPZ; however, it lies outside of the groundwater well capture zone. Based upon the studies, evaluations, consultations, and recommendations of the LAC, on December 11, 2024, at a press conference entitled, “The Path Forward”, the City announced this site as the next new landfill location, while acknowledging the only two other options were to amend Act 73 to reduce the buffer zone or extend operations at WGSL.

2025 Legislature Enacts Act 255 and Wahiawā Site Removed from Consideration

The Hawai‘i State Legislature passed Act 255, which became law on July 1, 2025, prohibiting the construction of landfills on Class A agricultural land (per the Land Study Bureau) and inland of the UIC line. The UIC program serves to protect the quality of Hawai‘i’s underground sources of drinking water from contamination that could result from injection well activity. Due to the passing of Act 255, the Wahiawā site was no longer eligible for further consideration.

2025 Makaiwa Hills Site Under Consideration

Following the implementation of Act 255, ENV has identified the land area known as Makaiwa Hills, owned by the James Campbell Company, as the only remaining potential landfill site on O‘ahu that is not restricted. Restrictions considered are shown in this interactive map, in Figure 3, and, in more detail specific to Makaiwa Hills, in Figure 4.

[7] *O‘ahu Landfill Siting Study Supplemental Technical Memorandum* dated October 15, 2024

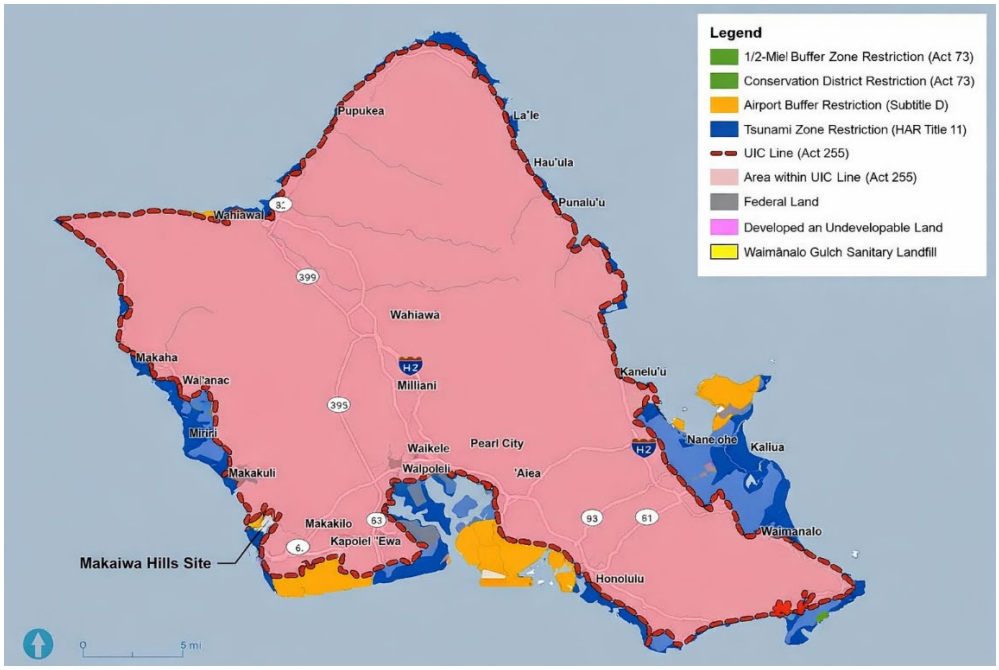

Figure 3. Makaiwa Hills Site

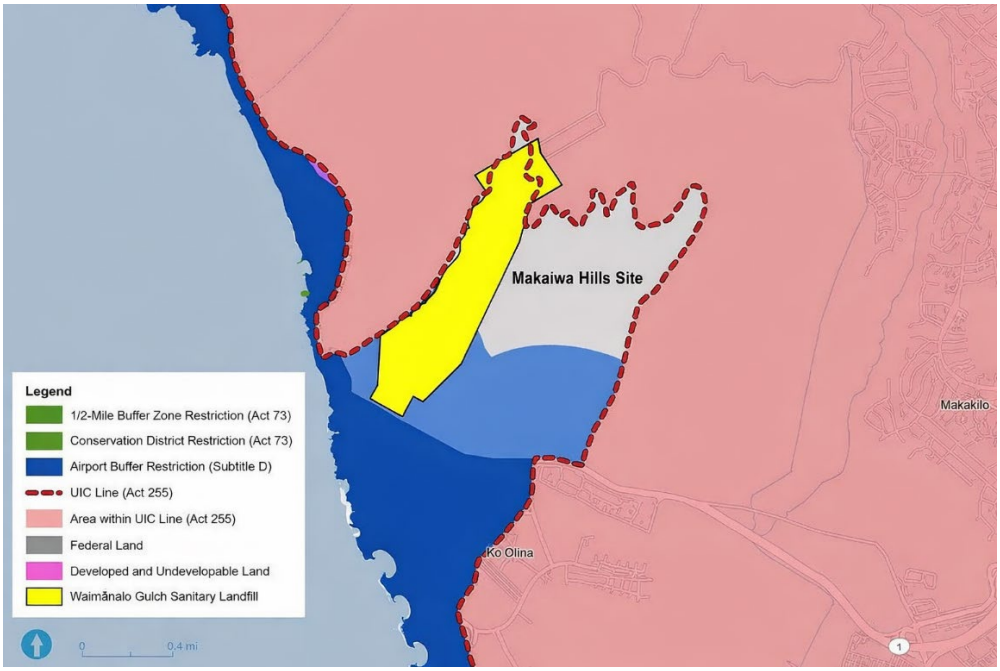

Figure 4. Makaiwa Hills Site (Zoomed Extent)

Frequently Asked Questions

1. **Does the current landfill at Waimānalo Gulch have capacity beyond 2028?**

   Potentially, to 2031. The 2019 LUC order requires WGSL to close by March 2028.

2. **Is it possible to ship O‘ahu’s waste to another location?**

   Potentially, yes, subject to environmental, permitting, port availability, cost, and policy concerns.

3. **Will there ever be a time when O‘ahu does not need a landfill?**

   O’ahu will continue to need a landfill for the foreseeable future. Even with advances in waste conversion technologies, improved waste separation and processing, and increased source reduction efforts, there will still be residual materials that require disposal. Landfills also serve as critical infrastructure, especially in an emergency, for disaster debris management. Landfills are also a requirement of State of Hawai‘i Department of Health solid waste permits for the continued operation of H-POWER, wastewater treatment plants, and recycling facilities. Landfills are also important backup sites for when these facilities are closed for repair and maintenance.

Glossary of Acronyms

BWS	Honolulu Board of Water Supply
City	City and County of Honolulu
D&O	Decision & Order
EIS	Environmental Impact Statement
ENV	Department of Environmental Services
HAR	Hawai‘i Administrative Rules
H-POWER	Honolulu Program of Waste and Energy Recovery
HRS	Hawai‘i Revised Statutes
LAC	Landfill Advisory Committee
LUC	Land Use Commission
MSW	Municipal Solid Waste
NPZ	No Pass Zone
PC	Planning Commission
SUP	Special Use Permit
UIC	Underground Injection Control
U.S.	United States
USINDOPACOM	United States Indo-Pacific Command
WGSL	Waimānalo Gulch Sanitary Landfill