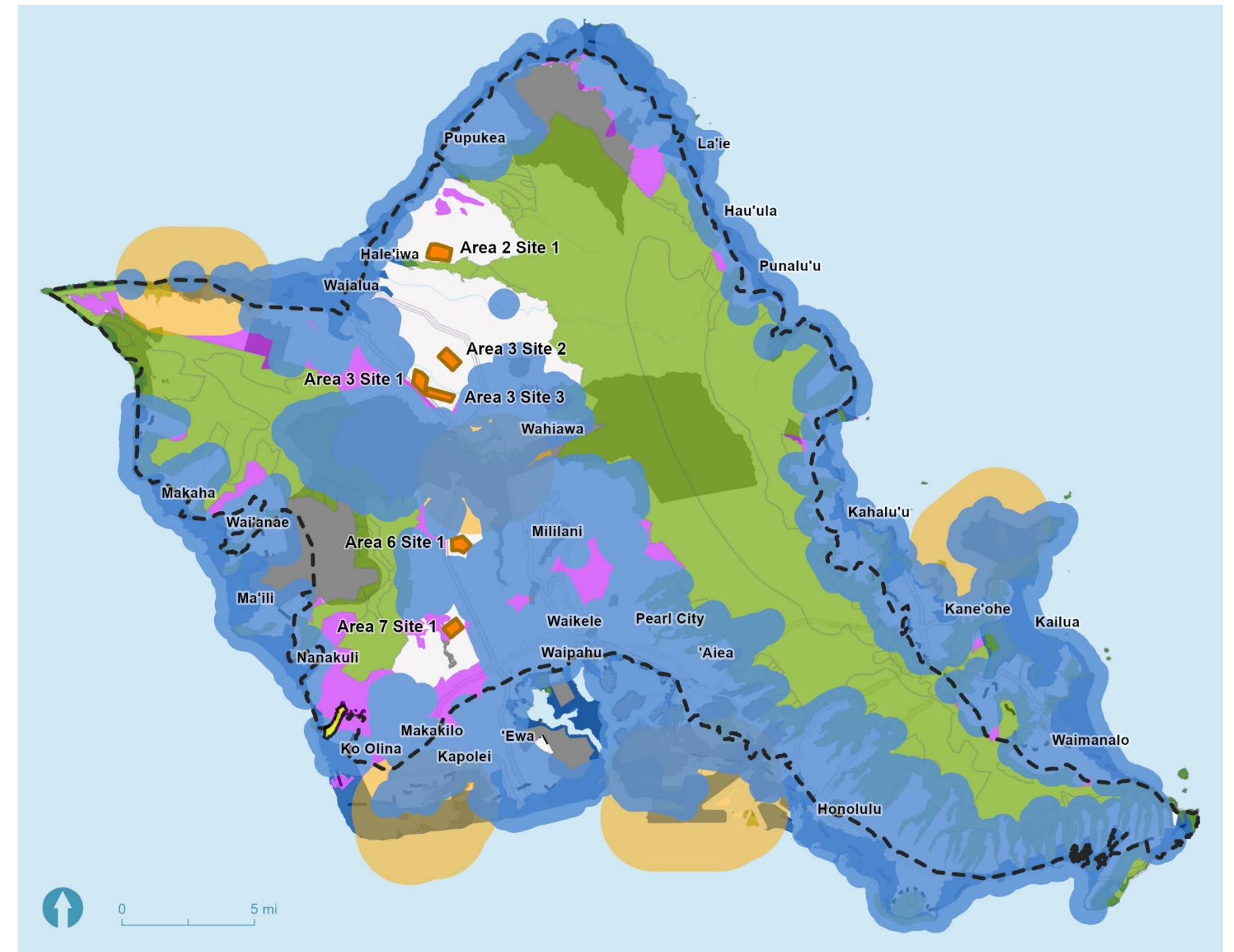


City and County of Honolulu

**Department of Environmental
Services**

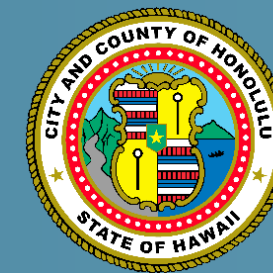
Public Infrastructure and Technology Committee Meeting

Roger Babcock Jr., Ph.D., P.E.
Director, Po 'o



October 24, 2024

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Milestone Overview

- 
- November 2019 LUC Decision and Order: WGS� required to close by no later than March 2, 2028; ENV must identify alternative landfill site by December 31, 2022
 - 2021-2022 Mayor's Landfill Advisory Committee established
 - *O'ahu Landfill Siting Study & Landfill Advisory Committee Recommendations, Final Report* published June 2022
 - December 2022 ENV submits request to Land Use Commission (LUC) to modify December 31, 2022 deadline to identify alternative landfill site
 - August 2024 LUC extends deadline to identify alternative landfill to December 31, 2024
 - November 2024 Announcement of alternative landfill site

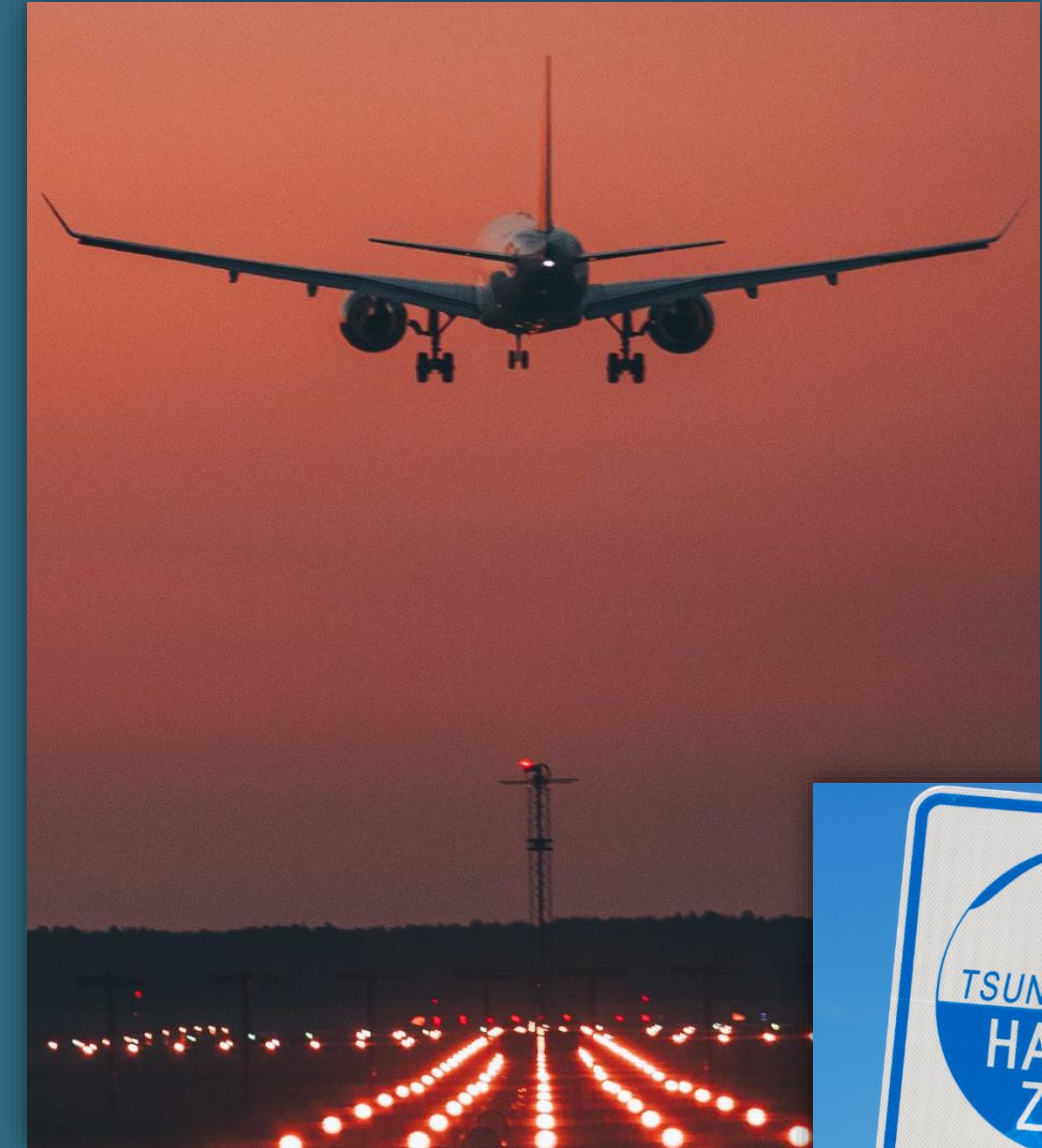
History of the Waimānalo Gulch Sanitary Landfill (WGSL)

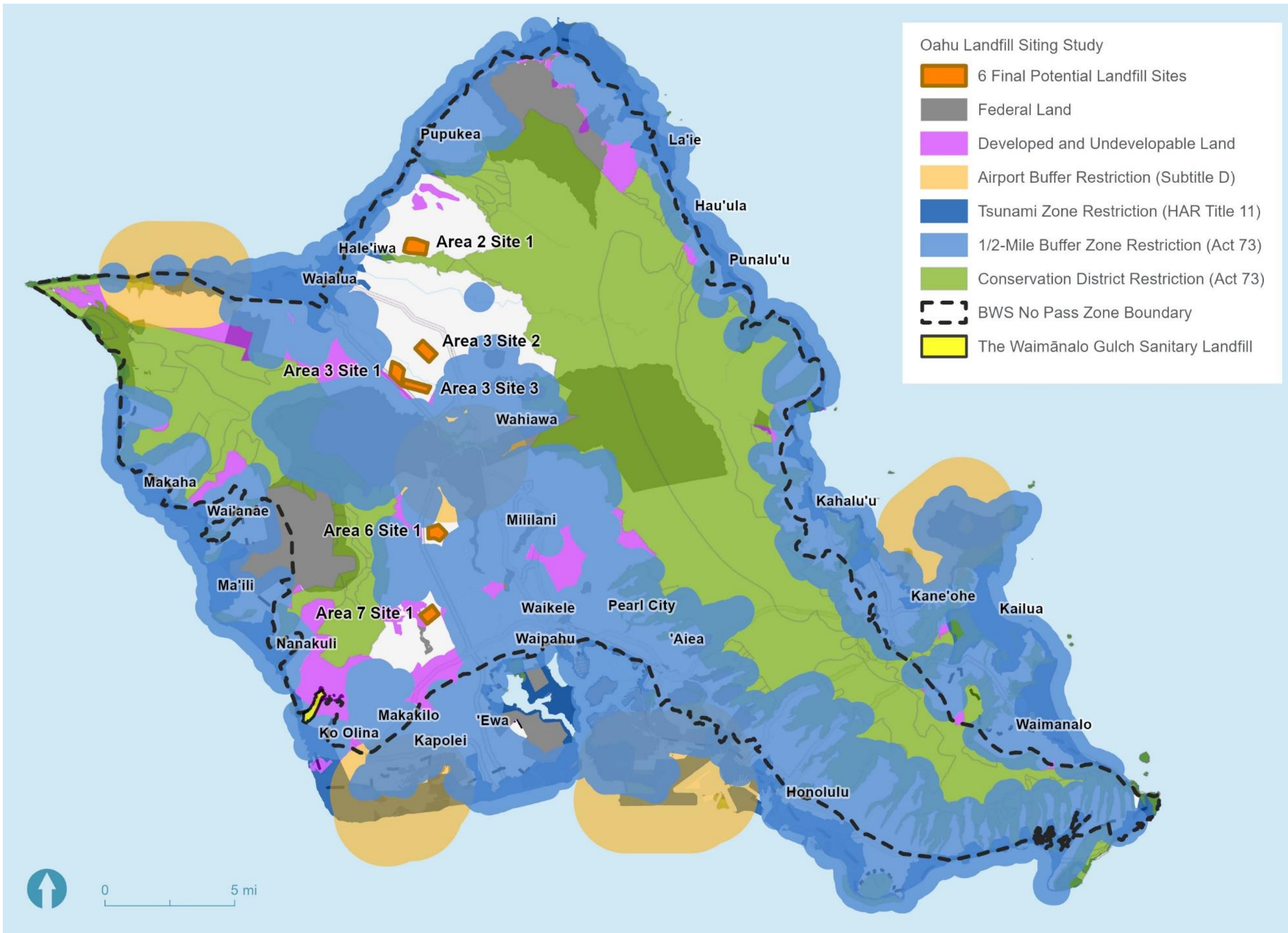
- Located at 92-460 Farrington Highway, Kapolei
- Operating since 1989
- Initially designed and permitted to accept waste for approximately 20 years
- WGSL expanded two times since it began operation to utilize remaining landfill space
- 2019 Land Use Commission (LUC) decision - WGSL must close no later than March 2, 2028, and ENV must identify an alternative landfill site by December 31, 2022



Landfill Siting Restrictions

- Act 73 (HRS Sections §183C-4 and §342H-52)
 - Enacted September, 2020
 - One-half-mile buffer zone for residences, schools, hospitals
 - Conservation district
- Federal Subtitle D Regulations
 - Airport runway buffer zone
 - Wetlands
 - Floodplains
 - Fault areas
 - Seismic impact zone
 - Unstable areas
- Tsunami Zones (State HAR Title 11)
- Federal lands
- Developed & Undevelopable
- No Pass Zone





Landfill Advisory Committee (2021-2022)

- September 2021 – Mayor Blangiardi appoints Landfill Advisory Committee (LAC)
- LAC members were asked to:
 - Provide input on landfill site evaluation and scoring criteria
 - Complete scoring of landfill sites
- Eight public (Sunshine Law-compliant) LAC meetings between October 2021 and June 2022
- June 2022 – Six potential landfill sites were scored and ranked, but none selected because they are located within the No Pass Zone

Board of Water Supply and LAC Recommendations

- The “No Pass Zone” is a Honolulu Board of Water Supply (BWS) designated geographical area of the island where groundwater resources are not protected by a geologic formation known as a caprock layer.
- BWS opposes locating the new landfill at any of the six potential sites within the No Pass Zone (NPZ).
- The LAC, citing BWS’ position, recommends the next landfill be located outside of the NPZ.
- Environmental and public health concerns related to the 2021 Red Hill fuel leak weigh heavily on LAC decision making.



Extension Request To Planning Commission

- LAC recommendations (July 2023):
 - Request extension from LUC to explore landfill options
 - Explore federal lands
 - Explore amending Act 73
 - Explore eminent domain
- In December 2022, ENV submitted a request to the PC/LUC for a 2-yr extension to the deadline for ENV to identify an alternative landfill site.
- From 2023-24, ENV conducts extensive site search and evaluation, publishes results in *O'ahu Landfill Siting Study Supplemental Technical Memorandum*, October, 2024



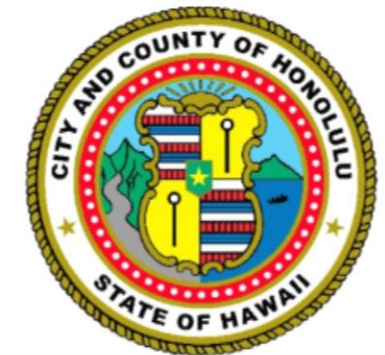
O'ahu Landfill Siting
Study
Supplemental Technical
Memorandum

Final

City and County of Honolulu, Hawai'i

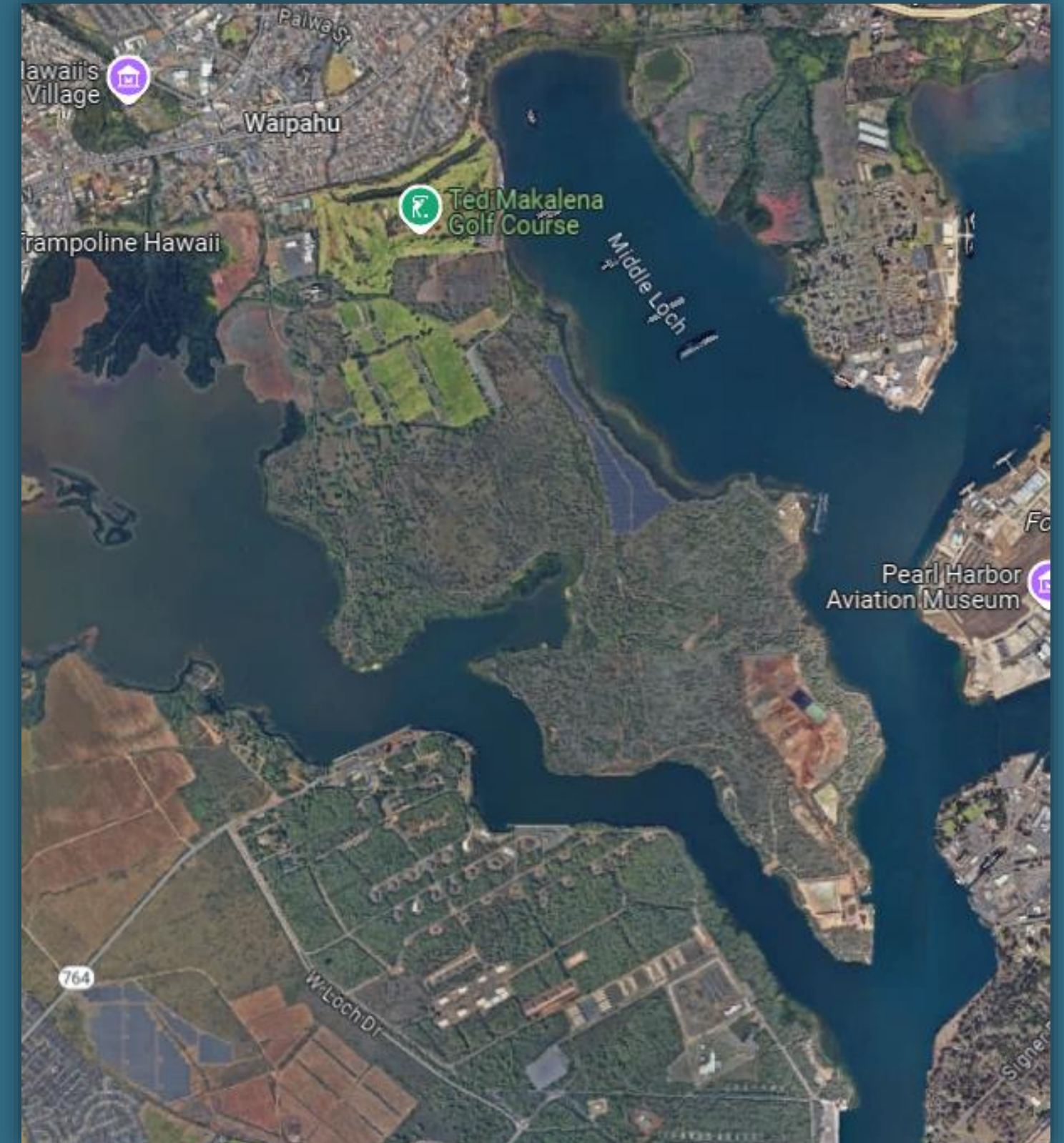
October 15, 2024

Department of Environmental Services
Refuse Division
City and County of Honolulu



Potential Landfill Sites on Federal Land

- 2022 – City worked with U.S. Navy to identify federal lands outside NPZ and compliant with Act 73
 - 2024 – U.S. Navy declines to offer use of Waipi ‘o Peninsula for next landfill
- In his March 2023 State of the City address, Mayor Blangiardi promised no new landfill would be located on the Wai ‘anae Coast.



Extension Granted

- August 23, 2024 - Planning Commission grants City's request to identify alternative landfill site by December 31, 2024
 - ENV must report quarterly to the Planning Commission on the efforts it has taken and plans to take to identify an alternative landfill site
 - ENV must respond to questions from the Commission and community
 - 3rd Quarter 2024 presentation/report to PC completed on September 18, 2024 and submitted to LUC

Potential Sites Under Consideration

Potential Sites Under Consideration

O‘ahu Landfill Siting Study by Landfill Advisory Committee (June 2022),
all sites located in BWS No Pass Zone

Site	Restrictions/Obstacles	Ownership
Area 6, Site 1 – Wahiawā near Kunia Road	No Pass Zone; Well capture zone	Island Palm Communities LLC; Robinson Kunia Land LLC
Area 7, Site 1 – Kapolei/Waipahu near Kunia Road	No Pass Zone; Well capture zone	Monsanto Company
Area 3, Site 1 – Wahiawā	No Pass Zone; Prime agricultural land	SOH, Agribusiness Development Corporation
Area 3, Site 2 – Wahiawā	No Pass Zone; Prime agricultural land	Dole Food Co Inc
Area 3, Site 3 – Wahiawā	No Pass Zone; Prime agricultural land	State of Hawai‘i
Area 2, Site 1 – Hale‘iwa near Kawaihoa Road	No Pass Zone; Prime agricultural land; Remote location	BP Bishop Trust Estate; Dole Food Co Inc; Waialua Hongwanji Mission



Other Potential Sites – Outside NPZ

O‘ahu Landfill Siting Study Supplemental TM (October 15, 2024)

- Subtitle D Restrictions and HAR Title 11 Restrictions Applied
- Outside BWS No Pass Zone
- Modification of Act 73 restrictions
 - ½ mile buffer zone reduced to ¼ mile
 - Limited, resource, and general subzones of conservation districts removed

Sites	Restrictions/Obstacles	Ownership
Area near Waimānalo Country Farms	Act 73 – Conservation & ¼ mile buffer	State of Hawai‘i
HC&D South Quarry and Adjacent Area	Act 73 – Conservation & ¼ mile buffer	Baldwin, Michael C TR; Baldwin, John C TR; Castle, James C Jr Trust; McIntosh, James C TR; Kapaa II LC



Other Potential Sites – Outside NPZ

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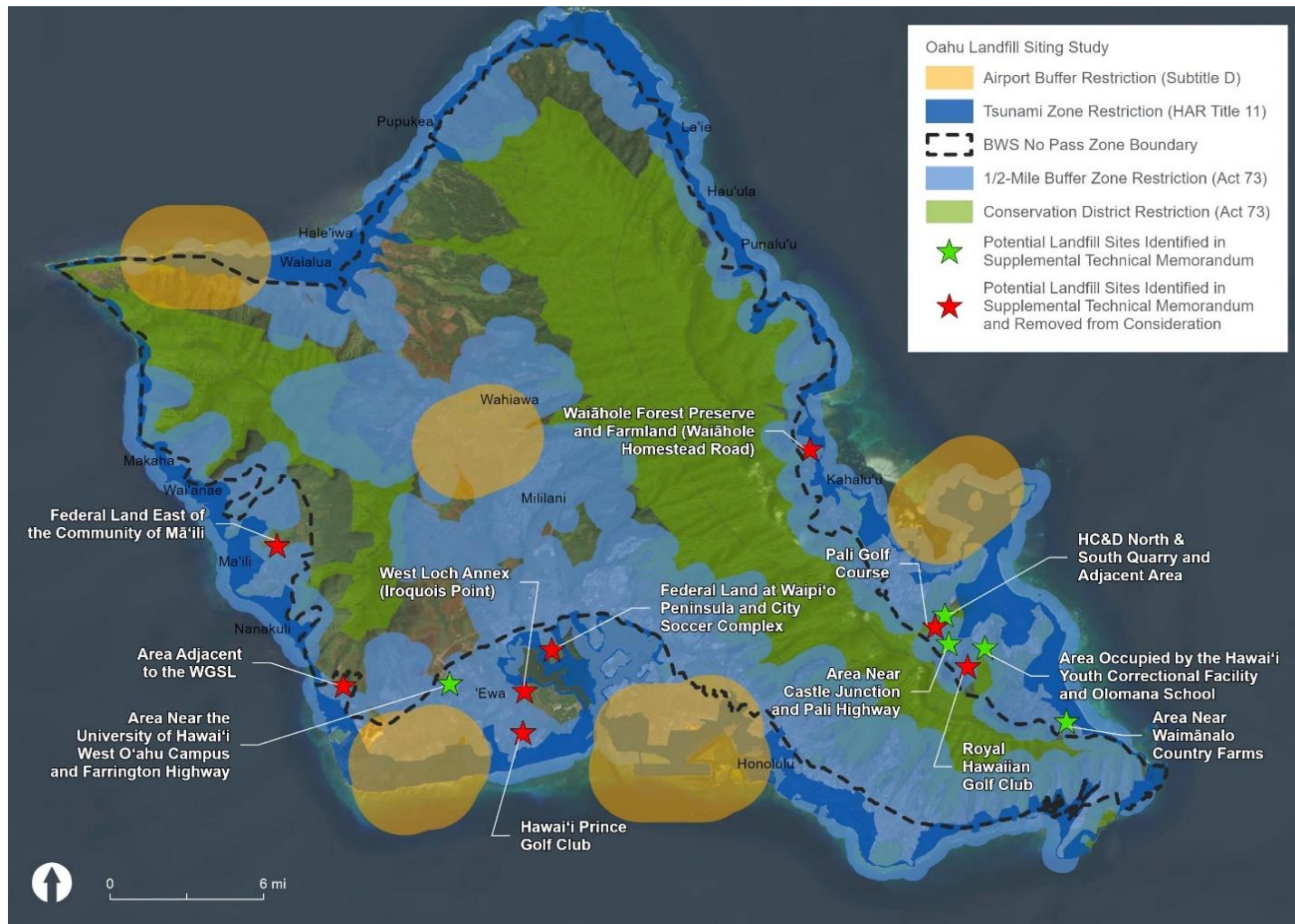
Sites	Restrictions/Obstacles	Ownership
HC&D North Quarry	Act 73 – Conservation & no buffer	Baldwin, Michael C TR; Baldwin, John C TR; Castle, James C Jr Trust; McIntosh, James C TR
Area occupied by the Hawai ‘i Youth Correctional Facility and Olomana School	Act 73 – Conservation & no buffer	State of Hawai ‘i
Area near Castle Junction and Pali Highway	Act 73 – Conservation & no buffer	Castle, James C Jr TR
Area near University of Hawaii West O ‘ahu campus and Farrington Highway	Act 73 – Conservation & no buffer	University of Hawai ‘i



Sites Removed from Consideration

O ‘ahu Landfill Siting Study Supplemental TM (October 15, 2024)

Site	Restrictions/Obstacles	Ownership
Area adjacent to the Waimānalo Gulch Sanitary Landfill	West side location; Eliminated from consideration	Makaiwa Hills LLC
Federal land east of the Community of Mā ‘ili (Lualualei)	Federal land; West side location, Eliminated from consideration	U.S.A. (Federal)
Federal land at Waipi ‘o Peninsula and City Soccer Complex	Federal land; Rejected; Eliminated from consideration	U.S.A. (Federal)
Federal land at West Loch Annex (Iroquois Point)	Federal land; Rejected; Eliminated from consideration	U.S. Naval Reservation (Federal)
Hawai ‘i Prince Golf Club	Flight path of airports	Hawaii Prince Hotel Waikiki LLC
Areas Under 100 Acres	Not feasible to accommodate a landfill	Various



Improvements in Waste Diversion/Processing

- Curbside recycling (green & blue carts)
- Food waste and manufactured compostable materials included in curbside recycling (green carts)
- H-POWER ash recycling (Honolulu Advanced Resource Recovery from Ash - HARRA)
- Collection of rechargeable batteries (RFB 1876411, 10/07 – 10/25)
- Collection of electronic waste (RFB 1852911, 10/07 – 10/29)
- Collection of mixed waste paper from City agencies (RFB 1840004, 10/22 – 11/07)



Alternative Technologies



Source: www.energy.gov; Modular Gasification Test Apparatus
at the University of Alaska-Fairbanks

- Plasma arc
- Gasification
- Thermal depolymerization
- Multiphase microwave
- Microwave plasma
- Pyrolysis
- Shipping of waste off-island
(RFI 1876011, 10/07 – 12/02)

Mahalo!

Roger Babcock Jr., Ph.D., P.E.
Director
Po 'o



honolulu.gov/env/ref/new-landfill-siting



ENV@honolulu.gov



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