

## 4.3: Solid Waste Management

Solid waste management has significant effects on environmental and public health, aesthetic qualities and land valuation, and the general land use characteristics of a community. Managing waste properly is essential for creating sustainable and livable communities. The handling of solid waste on Hawai'i Island has undergone significant changes in the past few decades, and to maintain the environmental health of our island community, it is important to shift from a focus on waste management to a focus on resource management. In 2009, the County developed the [Zero Waste Implementation Plan \(view the 2021 updated Plan\)](#) and since then has implemented various programs aimed at more efficient resource management, including reducing waste, waste diversion, and product reuse. Further technical innovations, optimization of efficiencies in directing the waste stream, and effective waste programs focused on increasing rates of reducing, reusing, and recycling products will advance the County toward meeting its Zero Waste goals.

The County of Hawai'i currently manages the West Hawai'i Sanitary Landfill (WHSL) located southwest of Waikoloa at Pu'uana'hulu in the North Kona District. The WHSL is operated by Waste Management of Hawai'i under a contract with the County. The County Department of Environmental Management (DEM), The WHSL has an estimated lifespan of 100 years with current recycling rates, as determined by the County in 2019. Higher rates of waste reduction, reuse, and recycling

in the community may extend life expectancy beyond 100 years.

The County currently operates a network of recycling and transfer stations that accept household refuse. The County does not provide curbside recycling or garbage pickup. Residents take their solid waste to any one of the transfer stations around the island and in some areas, residents pay private haulers to pick up their refuse from their residences for disposal at the landfill. The County is presently expanding recycling activities at the recycling and transfer stations by creating recycling and reuse centers (RRCs).

Since 2009, the County has expanded its green waste program. The County manages two green waste facilities: the West Hawai'i Organics Facility in Pu'uana'hulu (WHOF) and the East Hawai'i Organics Facility in Hilo (EHOF). The two green waste facilities accept yard trimmings and untreated wood pallets but do not accept food waste. In April 2017, EHOF began processing and distributing enhanced mulch that has been processed through a 60-day "curing" period to kill invasive species. Green waste bins have been added to various recycling and transfer stations.

Scrap metal is often the largest and heaviest material collected at the County's recycling and transfer facilities. Recycling scrap metal will not only conserve limited landfill space but also preserves natural resources by replacing the need for raw materials with recycled scrap metal to produce new metal goods.

## Objective 28

### ***Achieve Zero Waste in Hawai'i County by 2045.***

#### **Policies**

- 28.1 Appropriately designed and cost-effective solid waste transfer station sites shall be located in areas of convenience and easy access to the public.
- 28.2 Implement waste stream technology, such as recycling and upcycling and waste-to-energy to reduce the flow of refuse deposited in landfills.
- 28.3 Proactively pursue funding that will ensure continued progression toward zero-waste goals.
- 28.4 Optimize recoverable material diversion from landfill disposal by increasing percentage rates for diversion through waste reduction, recycling, and reuse.
- 28.5 Encourage and support composting at farms.
- 28.6 Encourage salvage and reuse of building materials and elements when demolition is necessary or appropriate.
- 28.7 Continue to develop and implement a green waste recycling program.
- 28.8 Incentivize opportunities for a circular economy, primarily upcycling and waste reuse by incorporating Resource Recovery Parks.
- 28.9 Ensure that redesign plans for landfill and transfer stations provide adequate space for Resource Recovery (RR) Stations.
- 28.10 Ensure waste and resource recovery facilities and equipment do not harbor, spread, or introduce harmful or invasive species.
- 28.11 Site new solid waste/resource recovery facilities in appropriate areas that serve the needs of population centers but that do not negatively impact the environment or surrounding neighborhood.
- 28.12 Reduce illegal dumping and littering.
- 28.13 Minimize the amount of waste generated by County facilities.

#### **Priority Actions**

- 28.a Evaluate and amend the HCC to integrate strategies to maximize landfill diversion and handle materials:
  - i. Source Separation Ordinance
  - ii. Codify prohibition of organic material (green waste) disposal at the landfill
  - iii. Construction & Demolition (C & D) Recycling Ordinance
  - iv. Take-back Ordinances (for items that are difficult to recycle or compost)
  - v. Codify County facility ordinance to require recycling at all County offices, facilities, and base yards.

- vi. Continue the transition to eliminate the sale or use of polystyrene foam (Styrofoam) and single-use plastic food containers and other single-use plastics DEM Phase 1
- 28.b Develop programs to require advance disposal fees for specific products such as new electronics and new vehicles purchased in or shipped to Hawai'i. The fees from this should be used to fund resource management and disposal costs. DEM Phase 2
- 28.c Conduct pilot studies to facilitate waste recovery and increase diversion rates. The following types of pilot programs are recommended:
- 28.d Curbside waste, recycling, and resource pick-up in priority urban areas
- 28.e Partner/coordinate to facilitate the private use of large recycling roll-off bins in rural areas. DEM Phase 2
- 28.f Reevaluate and initiate code changes to the fee structure for solid waste for residential and commercial uses. DEM Phase 1
- 28.g Facilitate UH and/or Forest Service to complete necessary studies on local materials for use in construction. R&D Phase 2
- 28.h Revise enforcement protocols and revise the HCC to empower police officers to fine litterers and illegal dumpsites and junkyard owners. PD Phase 1
- 28.i Implement an education and social marketing program to educate the public and business community about landfill diversion initiatives, preventing and reporting litter and illegal dumping, and other responsible waste management opportunities. DEM Phase 1
- 28.j Develop a county clean-up program for special waste areas, such as junkyards, to ensure the proactive removal of materials that pose environmental and public health hazards. DEM Phase 2
- 28.k Develop and promote take-back programs for appliances and other difficult to dispose of materials. DEM Phase 2
- 28.l Support expansions to the organic material (green waste) recycling program to include drop-off and pick-up locations at all rural transfer stations. DEM Phase 1
- 28.m Adopt EPA's Comprehensive Procurement Guideline program as a model for purchasing products that use materials recovered through recycling. DEM Phase 2