County:	Kaua‘i	**Solid Waste Issue:**	Organics – food waste, green waste, and untreated wood
Population (2020 Census):	73,300		
Last Update to SWMP:	2021		

Waste Characterization Data:

According to the 2017 Waste Composition Study, the overall tonnages of waste disposed in FY 2016 included:[1]
Food Waste: 8,635 tons (10.3 percent of total waste composition)
Green Waste and Home Composting: 5,228 tons (6.3 percent of total waste composition)
Untreated Wood Waste: There is no county-wide specific waste characterization information available on treated wood.
Clean Lumber: 4,167 tons (5 percent of total waste composition)[2]
Other Wood Waste: 5,157 (6.2 percent of total waste composition)[3]

Waste Diversion Data:

- In FY 2020, an estimated 32,923 tons of **green waste** were diverted through County Programs (refuse transfer stations and landfill).[4]
- In FY 2020, it was estimated that approximately 11,794 tons of **food waste** were diverted through private sector programs.[5]
- In FY 2019, approximately 20,049 tons of inerts and other construction and demolition (C&D) were diverted—a small fraction of which was **untreated wood** (48 percent diversion rate). There is no County-wide waste diversion data available specific to **untreated wood**.

County Ordinances:

County Ordinance 902 (2010) prohibits the landfill disposal of commercially generated loads exceeding ten percent green waste by volume.[6]

Overview:

In FY 2020, it was estimated that approximately 22,643 tons of green waste were diverted through County programs, and an additional 10,280 tons of green waste were diverted through private sector programs.[7] Kaua‘i residents can take their green waste to any of the County’s four refuse transfer stations for free. Commercial companies are required to pay a drop-off fee. The collected green waste is taken to County-contracted and State-certified composting facilities where it is shredded and composted in windrows.

Presently, there is no curbside collection of organic waste on the island of Kaua‘i. The County is considering fee increases to the existing refuse collection service rate (Pay as You Throw program), which may be coupled with expanded services such as green waste and food waste curbside collection. According to the County ISWMP, the County has plans to coordinate a study to assess the implemenation of a new curbside collection program for recycling, green waste, and potentially food waste or to enhance drop-off recycling.[8]

The existing infrastructure is not equipped to support the increased diversion of material that would result from curbside collection of recycling, green waste, and food waste. As such, the enhancement of the curbside collection program would be dependent on the development of a MRF (for recyclables) and/or a composting facility (for green waste and food waste) to process the additional collected material.

There are two food banks located in the County: The Kaua‘i Independent Food Bank (KIFB) and the Hawai‘i Food Bank – Kaua‘i Branch. KIFB is a non-profit organization that partners with several businesses, grocery stores, schools, and farmers to reduce edible food waste. Each year, KIFB distributes nearly 200,000 lbs. of food, equaling over 435,000 meals. The

	Hawai‘i Food Bank – Kaua‘i Branch collects, stores, and distributes perishable and nonperishable food through approximately 200 charitable agencies on Oahu and Kaua‘i. In FY 2018, they provided 1.4 million pounds of food to over 13,000 Kaua‘i residents. Both food banks also work with pig farmers to divert food waste from the landfill. In 2016, It was estimated that approximately 1,806 tons of food waste was being collected from certain local hotels, restaurants, and County jail to use as feedstock at local pig farms. In 2017, it was estimated that approximately 25 pig farms existed within the County.[9] The County also offers residents free backyard composting bins. Over the past two decades, the County has distributed over 8,000 composting bins. Residents can schedule an appointment to pick up a bin at the Kaua‘i Resource Center, Hanalei Initiative Creative Center, or at the Kīlauea Community Agricultural Center. Residents are required to watch an 8-minute educational video prior to pick up. The County offers additional educational resources on home composting and food waste reduction on their website. The County is considering a disposal ban on select C&D materials that could include untreated wood among other materials. Implementation of a C&D materials disposal ban would promote alternate sustainable solutions to disposal.
County Programs & Funding:	• Emergency Food Assistance Program[10] • Green Waste Diversion Program[11] • Home Composting Program[12] • Grant-in-Aid Funding (Non-profit grant from County)
Estimated Annual Material Type Generation:	In FY 2019, it was estimated that approximately 12,671 tons of food waste were generated County-wide (26 percent diversion rate for FY 2019).[13] In FY 2019, it was estimated that approximately 28,784 tons of “green waste and other organics” were diverted from the Kekaha Landfill.[14] According to the 2017 waste characterization study report, approximately 4,717 tons of “clean lumber, including pallets” and 5,157 tons of “other wood waste” were diverted.[15] There is no data available specific to the amount of untreated wood waste generated County-wide.
Permitted Collectors and Recyclers/Processors:	**Green Waste Composting Facilities (commercial and residential)[16]:** • Green Earth Matters • Heart and Soul Organics • Kaua‘i Nursery and Landscaping • ShredCo LLC **Green Waste Receiving Facilities (residential)[17]:** • Hanalei Transfer Station • Hanapēpē Transfer Station • Kapa‘a Transfer Station • Kekaha Landfill • Līhu‘e Transfer Station
News Articles:	*Spectrum News*: “What happens to [Kaua‘i's] trash and recyclables?” *Spectrum News*: “Kaua‘i County offers free composting bins at 2 new locations” *Kaua‘i Now*: “Kaua‘i refuse stations’ chronic closures due to “antiquated” equipment; upgrades coming” *KHON2*: “[Līhu‘e] green waste closed after discovery of invasive pest” *Kaua‘i Now*: “Kaua‘i Solid Waste offering $80k through competitive grant program”

Solid Waste Management Issue Statement: (County to provide statement regarding the management of this material category.)	Organics (i.e., food waste, green waste, and untreated wood) comprise a significant portion of Hawai'i's waste stream. When disposed of in landfills organics generate methane as they decompose. This is problematic as methane is up to 36 percent more effective than carbon dioxide at trapping heat in the atmosphere making it a large contributor to global warming. While mulching and composting exist for untreated wood and green waste, outlets to manage food waste are limited. In addition, while Americans dispose of millions of tons of food, the U.S. Department of Agriculture estimates that about 13.7 million households are food insecure as of 2018. Concurrently, millions of tons of food are being discarded, including food that could be donated to foodbanks.
County Solid Waste Stream Issue Statement and Potential Solutions: (County to provide issue statement and potential solutions regarding the management of this material category.)	**Issue Statement** – Much of the organic components of Kaua'i's solid waste stream that are currently not be diverted from the landfill have the potential to be redirected to other uses. With the current capacity issues surrounding Kaua'i's landfill, it is imperative that alternative solutions to landfilling organics are implemented. **Potential Solutions** – There are several potential solutions to increase diversion of organics from entering Kaua'i's Landfill. • Enact landfill bans on organics and organic components of C&D waste. • To the extent possible, expand existing programs that recover and distribute perishable and non-perishable foods from grocery stores, convenience stores, hotels, restaurants, etc. to food insecure populations. • Although the pig farming community is not well documented, diverting food to these programs is preferable to composting or landfilling. It is unclear whether this end destination for food waste has been exhausted but further examination could lead to more food waste being diverted to this use. • Composting of food waste and possibly clean wood waste has the potential to divert the largest amounts of organics from the landfill. Cost for infrastructure and permitting are the largest hurdles. There is interest on island to initiate community-based composting for residential collection of food waste. There is also the potential to work with one of our existing large scale composting facilities to accept food waste and clean wood waste for composting. • Currently, one of our composting facilities accepts clean pallets. These are ground up and used in stormwater socks. This program has potential for expansion. • Enacting a deconstruction ordinance would allow for the recovery of dimensional lumber for potential reuse, composting, stormwater socks, or potential energy production.

[1] County of Kaua'i Waste Characterization Study (kauai.gov)

[2] **Clean Lumber** means unpainted new or demolition dimensional lumber, engineered wood, or pallets/crates. This includes materials such as 2 x 4s, 2 x 6s, 2 x 12s, plywood, particleboard, wafer board, oriented strand board, wood pallets, crates, and packaging made of lumber/engineered wood, and residual materials from framing and related construction activities. May contain nails or other trace contaminants.

[3] **Other wood waste** means wood waste that cannot be put into any other material type. This type may include untreated/unpainted scrap from production of prefabricated wood products such as wood furniture or cabinets, and untreated or unpainted wood roofing and siding.

[4] Waste Diversion Rate and Waste Characterization (kauai.gov)

[5] Kauai County Diversion Rate – FY 2020 (kauai.gov)

[6] Public Notice – Bill No. 2365 (kauai.gov)

[7] Kauai County Diversion Rate – FY 2020 (kauai.gov)

[8] Kaua'i Integrated Solid Waste Management Plan (kauai.gov)

[9] Resources for Renewable Natural Gas Production in Hawai'i (hawaii.edu)

[10] Office of Community Services (OCS) | The Emergency Food Assistance Program (TEFAP) (hawaii.gov)
[11] Solid Waste Division (kauai.gov)
[12] Home Composting (kauai.gov)
[13] Kaua‘i Integrated Solid Waste Management Plan (kauai.gov)
[14] Kaua‘i Integrated Solid Waste Management Plan (kauai.gov)
[15] County of Kaua‘i Waste Characterization Study 2017 Final Report (kauai.gov)
[16] Green Waste Recycling (kauai.gov)
[17] Green Waste Recycling (kauai.gov)