County:	Honolulu	**Solid Waste Issue:**	Organics – food waste, green waste, and untreated wood
Population (2020 Census):	1.02 million		
Last Update to SWMP:	2019		
Waste Characterization Data:	According to the 2017 Waste Composition Study, the overall tonnages of waste disposed included:[1] • **Food Waste** – 159,883 tons (20.1 percent of total waste composition) • **Green Waste** – 47,880 tons (6 percent of total waste composition) • **Untreated Wood** – 12,634 tons (1.6 percent of total waste composition) • **Total** – 220,347 tons (27.7 percent of total waste composition)		
Waste Diversion Data:	In 2021, approximately 153,085 tons of green waste and 25,047 tons of food waste were recycled (178,132 total tons).[2] It was also estimated that approximately 7,112 tons of wood waste/pallets were diverted, a fraction of which is assumed to be untreated wood waste.		
County Ordinances:	**City and County of Honolulu Ordinance, Chapter 9, Section 9-1.12** establishes an island-wide program for the curbside collection of a minimum of two types of recyclable materials, including options for green waste and/or food waste.[3] **City and County of Honolulu Ordinance, Chapter 9 Section 9-1.7** restricts the landfill disposal of commercial green waste. **City and County of Honolulu Ordinance, Chapter 9, Section 9-3.5** requires the owners of food establishments located within the City and County of Honolulu (City) to: 1) arrange and provide for the separate collection of food waste and for its recycling by a recycling facility on O'ahu or 2) separate food waste from all other solid waste generated by the food establishment and deliver the food waste to a recycling facility. **Ordinance 22-10** adds food waste to the City's island-wide curbside collection.[4]		
Overview:	Approximately 160,000 households in O'ahu can recycle certain organic materials into the green cart for biweekly collection by the City and transportation to Hawaiian Earth Products (HER) for composting. Acceptable items include grass clippings, leaves, branches, hedge trimmings, fruits and vegetables, palm fronds, and natural Christmas trees.[5] **Source: Hawaiian Earth Products** Approximately 20,000 households are situated in manual collection areas that do not receive curbside recycling services. Alternatively, these residents are encouraged to self-haul their green waste. The City and County of Honolulu is evaluating options to expand the curbside recycling program to include households in manual collection areas. Green waste can also be dropped off at five of six convenience centers, the Kapaa Transfer Station, or taken directly to the composting facility, Hawaiian Earth Products.[6] Green waste is restricted at City disposal sites to no more than 10 percent per truckload. On O'ahu, it is estimated that approximately 237,000 tons of food waste is wasted each year. Non-recycled food waste is incinerated for energy and buried in landfills.		

	In 1997, the city passed a mandatory recycling ordinance for large commercial food waste generators. HER accepts a limited amount of pre-consumer food waste for composting. Some food waste is donated to food banks and similar establishments, but most food waste is delivered to or collected by pig farms. The University of Hawai'i connects interested businesses in Honolulu with pig farmers.[7] EcoFeed Inc. Picks up and delivers food scraps to local pig farmers for a fee. Mountain View Farms also accepts produce from lcoal businesses. In 2017, it was estimated that approximately 28 pig farms existed within the County.[8] There are a number of local composting operations on O'ahu that provide an alternative to sending green waste to the landfill. Currently, HER is the largest composting operation in the state and is processing approximately 99,000 tons of green waste, wood, and a limited amount of food waste and coffee husk each year. The feedstock is turned into soil amendments, blends, mulching materials, and erosion control products for use throughout the state. As of November 2017, HER receives 70 percent of their material from City programs and 30 percent from other sources. The O'ahu Compost Project (OCP) is a two-year pilot project that is funded through a grant awarded to the City and County by the U.S. Department of Agriculture Natural Resource Conservation Service as well as through supplemental funds provided by the Department of Environmental Services, Aloha Harvest, Sustainable Coastlines Hawai'i, and Zero Waste O'ahu. The OCP aims to collect food waste from local food service businesses in Chinatown and turn it into compost for local farms. Currently, there are six participating restaurants. The collected food waste is sent to Full Circle Farms in Waimānalo for decomposition through aerobic digestion. Presently, the farm has the capacity to process 1,000 lbs. of food scraps and create 500 lbs. of compost daily. Prior to the project, about 94,000 tons of commercial food waste were transported to O'ahu's H-POWER facility each year for incineration and conversion into electricity.[9] Depending on the results of the pilot project, the City plans to expand the program island-wide. The success of the pilot project will be measured by the amount of compost produced, reduction of trash pickups needed in the community, and the demand and sale of the compost product. Untreated wood can be classified as C&D debris, or can be treated as green waste and processed into mulch. The City has a disposal ban on C&D debris and green waste at the Waimanalo Gulch Sanitary Landfill and H-POWER. C&D debris is accepted at the PVT Landfill or can be donated or re-sold to the community. Additionally, the PVT Landfill is planning a new gasification facility that would burn feedstock, including wood waste, for energy production. There are also several organizations and businesses that reuse or recycle C&D debris on-island. Untreated wood can also be treated as green waste and is accepted at composting facilities for processing into mulch and soil amendment products and for distribution and sale throughout Hawai'i.
County Programs & Funding:	• Curbside Green Bin Collection Program[10] • O'ahu Compost Project • The City of Honolulu provides up to $2,000 in program start-up reimbursement costs for multi-unit properties looking to establish a recycling program for the collection of recyclables, including green waste[10]
Estimated Annual Material Type Generation:	Based on generation projections, green waste is anticipated to reach approximately 77,000 tons annually in the next few years.[10] There is no Countywide information available pertaining to food waste and untreated wood.
Permitted Collectors and Recyclers/Processors:	**Green Waste Composting Facilities(commercial and residential):[11, 12]** • Auwae's Farm, LLC • Ahupuaa Green Waste Recycle • Hawaiian Earth Recycling – Wahiawa & Campbell Facilities

	• Island Topsoil, LLC • Leeward Wholesale Nursery **Green Waste Receiving Facilities (commercial and residential):** • Kapa'a Transfer Station • Kawailoa Transfer Station (not separated for composting) • Keehi Transfer Station • Hawaiian Earth Recycling Transfer Station – Waimanalo Facility • Island Demo, Inc. – Their permit expired but we are working on renewing it. • Tajiri Demolition and Disposal **Food Scrap Recycling Facilities (commercial and residential):**[11, 13] • Full Circle Farm
News Articles:	*Spectrum News*: "What happens to Oahu's trash and recyclables?" *Spectrum News*: "Oahu launches pilot program to divert food waste" *Honolulu Civil Beat*: "'It's All Connected': Hawaii's First Large-Scale Food Waste Composter Touts A Host Of Benefits"
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** – N/A **Potential Solutions** – N/A

[1] 2017 Waste Composition Study(honolulu.gov)
[2] Rates and Data (honolulu.gov)
[3] ROH Chapter 9 Collection and Disposal of Refuse (honolulu.gov)
[4] Ordinance 22-10 (ehawaii.gov)
[5] About Your Carts (honolulu.gov)
[6] Recycling and Disposal Guide for Oahu - Opala.org (yumpu.com)
[7] Links and Resources About Food Recovery in Honolulu (epa.gov)
[8] Resources for Renewable Natural Gas Production in Hawai'i (hawaii.edu)
[9] Composting pilot hopes to reduce Oahu food waste (wastetodaymagazine.com)
[10] 2018 Integrated Solid Waste Management Plan Update (honolulu.gov)
[11] Recycling Drop Off Locations (honolulu.gov)
[12] Recycling and Disposal Guide for Oahu (honolulu.gov)
[13] Links and Resources About Food Recovery in Honolulu (epa.gov)