

E Komo Mai!

Integrated Solid Waste Management Plan Update 2019 Informational Meeting

- George Hayducsko, Recycling Coordinator
- Sanne Berrig, Recycling Specialist
- Dwight Miller, Parametrix Senior Consultant



December 9, 2019
December 11, 2019

Friends of NELHA Gateway Visitor Center
Aupuni Center Conference Room

2019 Integrated Solid Waste Management Plan Update

County of Hawai'i



County of Hawai'i
Department of Environmental Management
Solid Waste Division
345 Kekaula Street, Suite 41
Hilo, HI 96720

Prepared by:

Parametrix

In association with:




ISWMP Draft
available at:

www.HawaiiZeroWaste.org/info/regulations-publications/solid-waste/



OVERVIEW

- Integrated Solid Waste Management Plan Update Process
- ISWMP Where We Are Now
- Questions



Per HRS §342G, every 10 years,
County of Hawai'i must update its
Integrated Solid Waste
Management Plan,
hereafter referred to as the Plan

- 
- Mayor appointed stakeholders to create Solid Waste Advisory Committee (SWAC)
 - Meetings began March 2018
 - Submitted draft Plan to Hawai'i Dept of Health Aug 2019



Public Comment Period of 60 days:
December 6, 2019 – February 4, 2020

Written testimony accepted during this time:
ISWMP@hawaiicounty.gov

Public Hearings to take oral testimony

Hilo – Tuesday, January 21, 2020
Kona – Thursday, January 23, 2020

SWAC Members

Georgejean Adams

Steven Araujo


Barbara Bell

Paul Buklarewicz

George Hayducsko – chairperson

Alan Okinaka – vice chairperson

Adam Scharf

- 
- Reviewed and updated the Plan
 - Options
 - Recommendations
 - Graded – low, medium, high
 - Ranked top six

Contents of the Plan

> Executive Summary

1. Introduction
2. Waste Stream Assessment
3. Source Reduction
4. Recycling Bioconversion, and Markets
5. Public Education and Information
6. Household Hazardous Waste and Electronic Waste
7. Special Waste
8. Collection and Transfer
9. Residuals Management
10. Administration, Funding, and Implementation

Chapter 1: Introduction

Description of process, goals, implementation,
and organization of Plan

Goals used to guide the development of options and recommendations

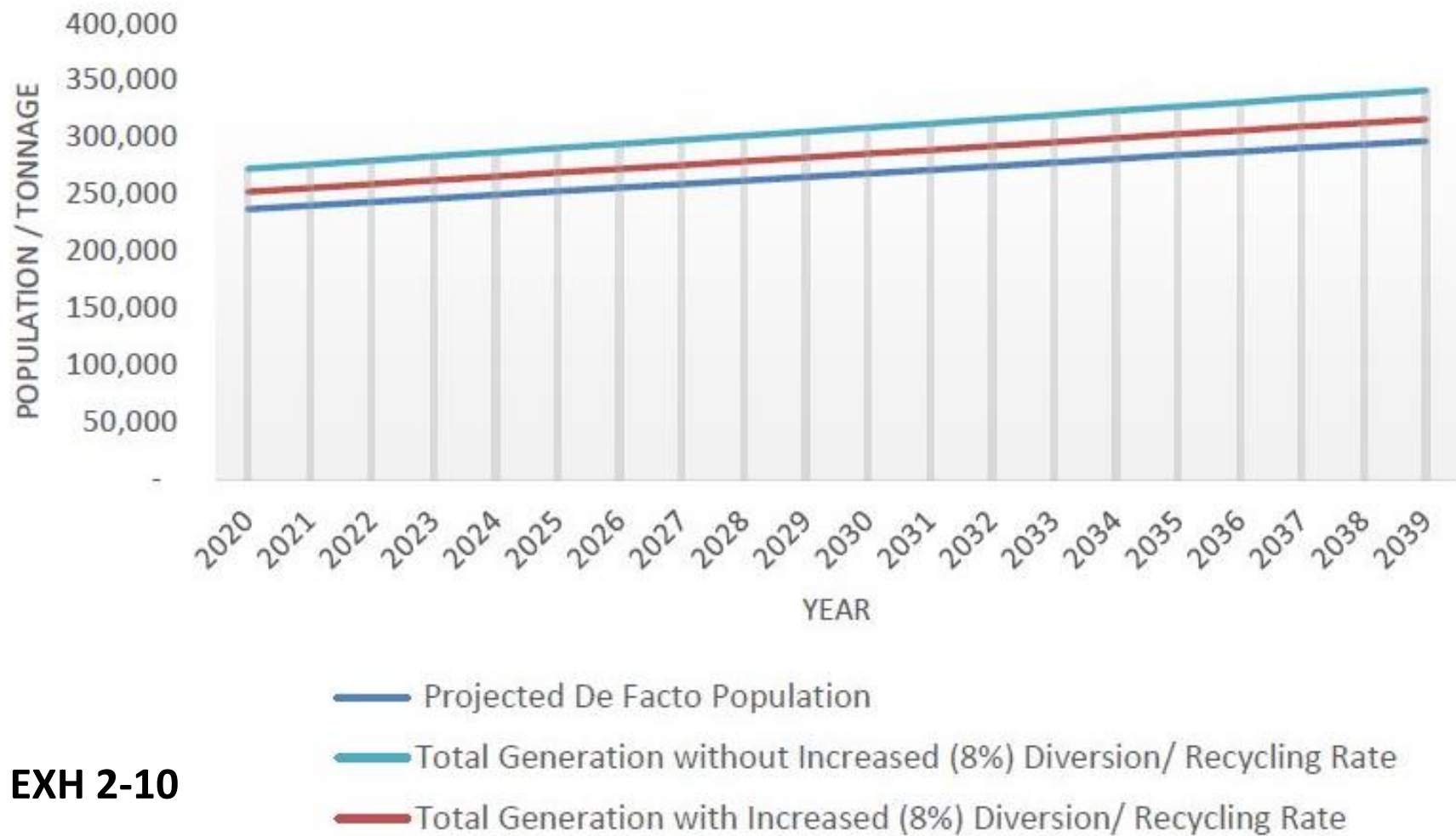
- Sustainability
- Increase Landfill Diversion
- Efficient and Affordable
- Minimize Environmental Impacts
- Litter-free
- Sound Finances with Appropriate Incentives
- Customer Service



Chapter 2 – Waste Stream Assessment

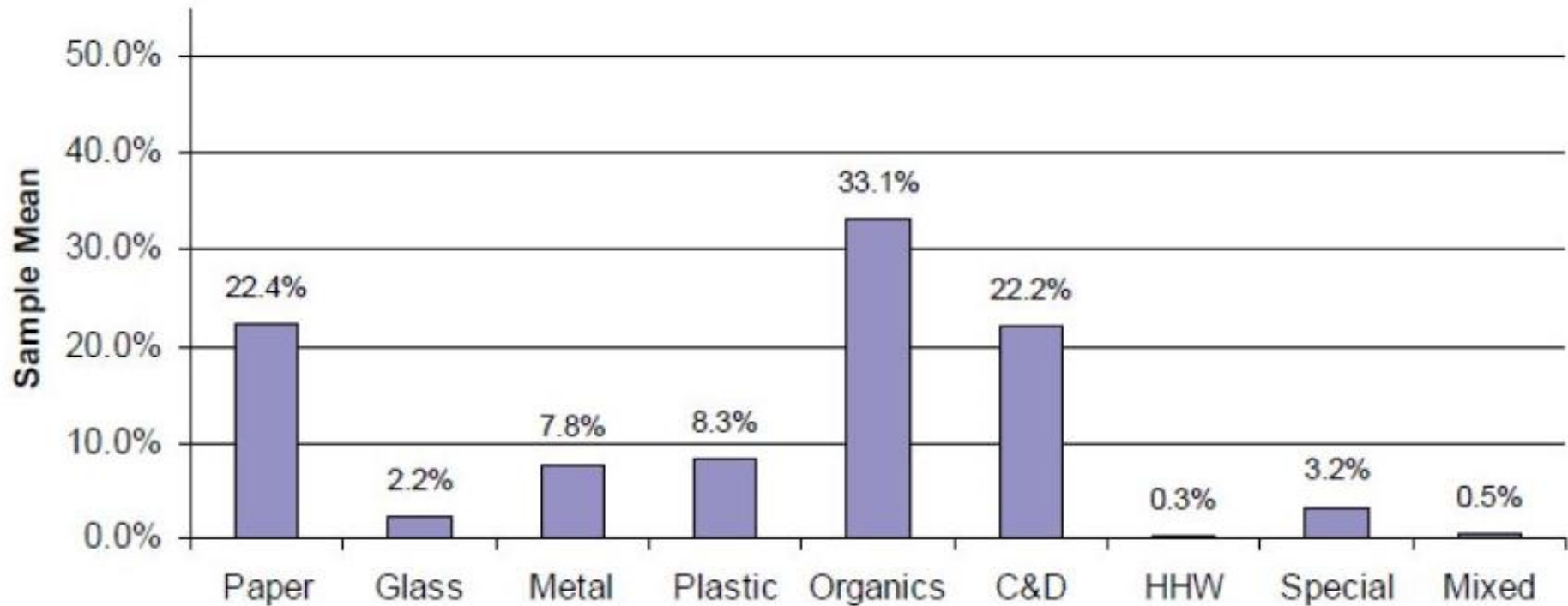
- Forecast waste generations
- Waste composition
- Population and employment

Projected Disposal with 8% Increase in Recycling / Diversion 2020 - 2039



EXH 2-10

Disposed Composition Estimates by Waste Category for the Total County



Chapters 3 - 10:

- Examine existing conditions, activities, status, etc. – depending on subject matter.
- Identify current issues, conditions, concerns
- Present options and recommendations.

Chapter 3 – Source Reduction

- Provide more covered space at reuse centers
- Expand and improve public education and awareness programs.
- Develop a visitor industry waste reduction education program



Tonnages Diverted from Landfill at Reuse Centers FY 2009-10 to FY 2017-18

Year	East Hawai'i (tons)	West Hawai'i (tons)	Total (tons)
2009-10	172.6	71.5	244.1
2010-11	206.9	148.7	355.6
2011-12	236.3	133.6	369.8
2012-13	241.0	145.3	386.3
2013-14	245.0	120.9	365.8
2014-15	275.2	69.8	345.0
2015-16	185.1	59.8	245.0
2016-17	182.2	58.6	240.8
2017-18	265.0	175.8	440.8

EXH 3-2

Chapter 4 – Recycling, Bioconversion, and Markets



County of Hawai'i Program Diversion Rate

(FY 2018)

Total Landfill + Recycling/Diversion	283,021 tons
Total Recycling/Diversion	58,825 tons
Greenwaste accounted for	(37,915 tons)
County Diversion rate:	20.8%

This diversion rate does NOT take into consideration what is recycled privately. That is, by businesses as well as private recyclers.



Chapter 5 – Public Education and Information

- Implement a 3-year education and social marketing program to educate the public and business community about landfill diversion initiatives and opportunities.
- Ensure County has staffing levels commensurate with the needs of the public outreach program.

TAKE Used Motor Oil to Collection Sites
(It's free!)

Used motor oil contains toxic substances that can contaminate our land, ground water and ocean!

Residential Used Motor Oil Collection Program

This program is made possible by the generous support of the businesses listed. They voluntarily collect used motor oil from do-it-yourselfers.

IMPORTANT:

- * DO NOT store used motor oil in bleach, antifreeze or pesticide containers.
- * DO NOT mix oil with any other substances.
- * DO NOT use "oil change bowls"
- * Always handle carefully and thoroughly wash skin afterwards.

RESIDENTIAL ONLY-NO BUSINESSES OR FARMS*

For more information on recycling visit the County of Hawai'i Department of Environmental Management, Solid Waste Division www.HawaiiZeroWaste.org

For more information on the Used Motor Oil Program email dyumono@hawaiicounty.gov or call 808-323-4412.

Information at www.HawaiiZeroWaste.org

CarTow Kohala
55-510 Hwy Rd., Hwy
Mon - Fri, 10 am - 6 pm
Sat, 10 am - 2 pm
Call to confirm! 889-1061

CarTow Waimea
64-1055 Māmalahoa Hwy
Mon - Fri, 9 am - 5 pm
CALL to confirm! 869-1061 ext. 2

Pa'aulo Village Service
43-1494 Hauula Rd., Pa'aulo
Mon - Fri, 8 am - 2 pm
Call to confirm! 776-1542

Lex Brodie's Tire and Service (Hilo)
170 Wivoolie St., Hilo
Mon - Fri, 8 am - 5 pm
Call to confirm! 961-6001

South Point U-Cart
Prince Kuhio St., Queen View
Mon - Fri, 7:30 am - 5 pm, Sat, 7:30 am - 12 pm
Closed for lunch noon - 1:00 pm
Call to confirm! 929-9666

Kealahou High School, Bldg. 8
74-5000 Puohaihihi St., Kailua-Kona
School days only 8 am - 3 pm
Call for appt. 895-6969, Ext. 206

O'Reilly Auto Parts (Kailua-Kona)
74-5586 Palani Rd.
Mon - Sat, 8 am - 9 pm, Sun, 8 am - 8 pm
Call to confirm! 329-2211

* Businesses, farms, non-profits & agencies should contact:
AKW Environmental 430-2339
Hawaii Petrolum 961-2661
Unitek Solvent Services 935-8180

Educational handouts, ads in theaters, educational booths at community events



Chapter 6 – Household Hazardous Waste and Electronic Waste

Six 6 HHW Collection Events a year:

February	1 & 8	Hilo & Kona
March	7 & 8	Waimea & Pāhoa
August		Hilo & Kona

E-Waste – rotating schedule Saturdays:

1 st	Wai'ōhinu
2 nd	Waimea
3 rd	Kealakehe (Kona)
4 th	Hilo

Waimea Transfer Station March 2019



Kealahou High School August 2019

PHOTOS: D.E.M. RECYCLING SPECIALISTS

Pāhoa Transfer Station

March 2019



Hilo:
Ho'olulu
Complex
August 2019

Chapter 7 – Special Waste

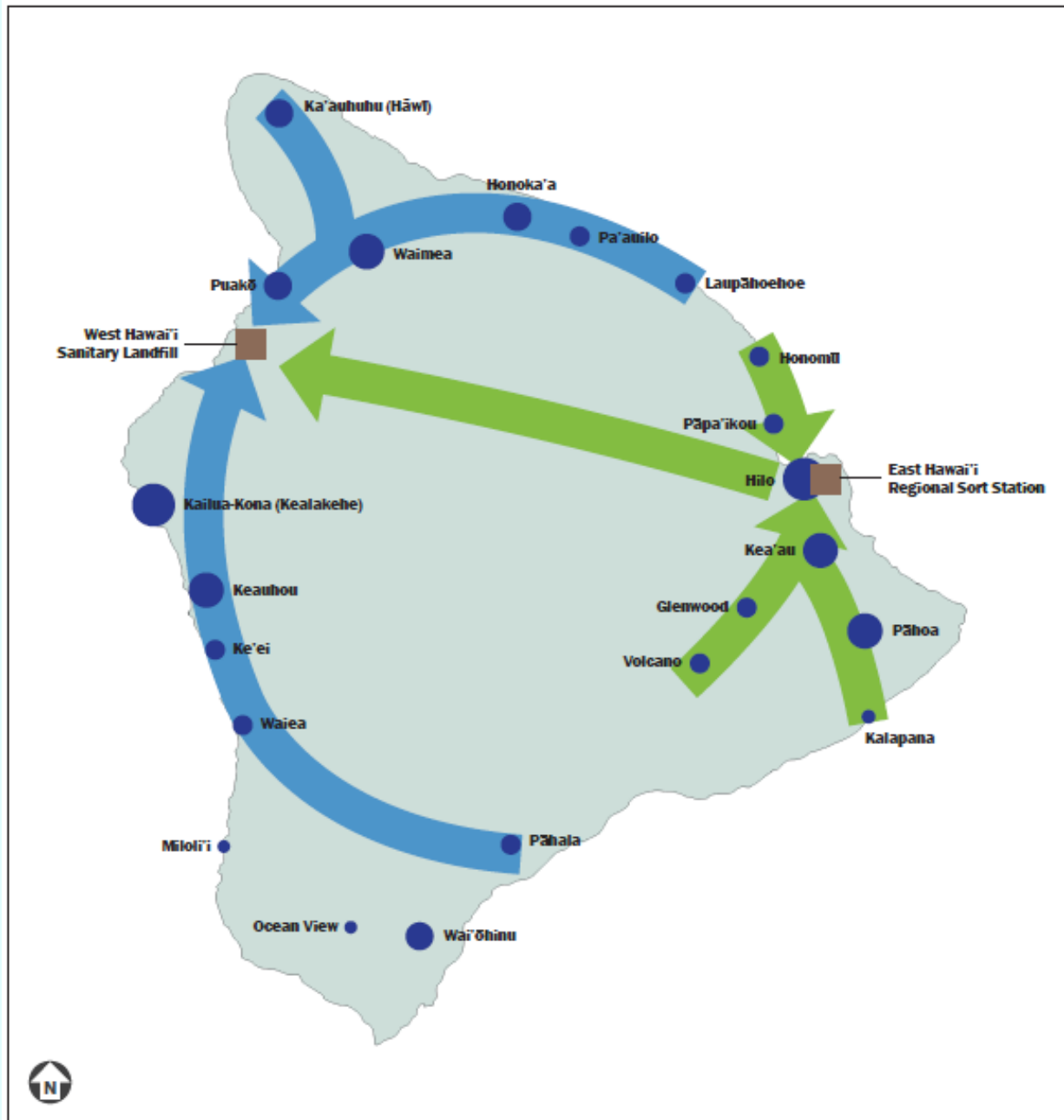
- Asbestos
- Petroleum-contaminated soil
- Used batteries
- Medical waste
- Agricultural / farm-generated waste
- Sewage sludge
- Used Oil
- Derelict Vehicles
- White goods
- Used tires

Education

- Continue promoting County's DIY Used Motor Oil programs
- Continue to promote tire recycling



Chapter 8 – Collection and Transfer



EXH 9-2

Generalized Haul Route From East Hawai'i Regional Sort Station

Chapter 8 – Collection and Transfer

- Retain the County's system of recycling and transfer stations
- Change County code to allow small businesses to drop off recyclables at recycling and transfer stations
- Conduct an operational efficiency analysis to lower costs.

- Consider 'Satellite' compaction units for recyclables at select stations



Image from ISWMP, p 8-26

Chapter 9 – Residuals Management

Materials remaining after source reduction, reuse, and recycling.

- Investigate the feasibility of a landfill with a sorting and reuse area for construction and demolition materials.
- Engage in dialog with the State/Counties about joint solutions

Chapter 10 – Administration, Funding, and Implementation

- Regularly review, and when appropriate, renegotiate West Hawai'i Sanitary Landfill contract.



Recommendations

After 13 meetings, 82 recommendations were identified by the SWAC

Please see Executive Summary handout.

Six Top Ranked Recommendations

1. Education and Outreach
2. Renegotiate Contract with Waste Management HI
3. Additional HHW Collection Events
4. Change County Code to Allow Small Businesses to Drop Off Recyclables at Recycling and Transfer Stations

Six Top Ranked Recommendations

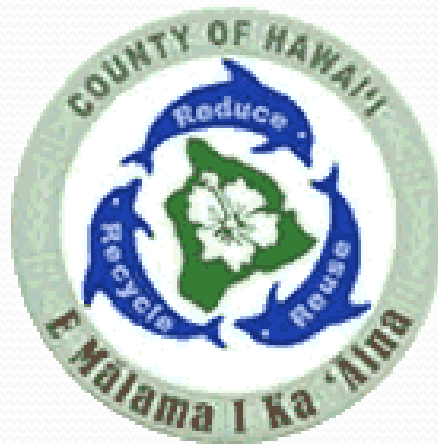
5. Establish goals that are expressed and measured in terms of environmental impacts (e.g., greenhouse gas emissions, toxicity, energy use) and consider full life cycle impacts, in addition to tonnage-based landfill diversion or waste recovery goals.



Six Top Ranked Recommendations

6. Develop County Policy and Ordinances Related to Source Reduction and Recycling

Questions?



www.HawaiiZeroWaste.org
ISWMP@hawaiicounty.gov