E Komo Mai!

Integrated Solid Waste Management Plan Update 2019
Informational Meeting

- George Hayduscko, 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
ISWMP Draft available at:
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

<table>
<thead>
<tr>
<th>Year</th>
<th>East Hawai‘i (tons)</th>
<th>West Hawai‘i (tons)</th>
<th>Total (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009–10</td>
<td>172.6</td>
<td>71.5</td>
<td>244.1</td>
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<tr>
<td>2010–11</td>
<td>206.9</td>
<td>148.7</td>
<td>355.6</td>
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<td>2011–12</td>
<td>236.3</td>
<td>133.6</td>
<td>369.8</td>
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<td>2012–13</td>
<td>241.0</td>
<td>145.3</td>
<td>386.3</td>
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<td>2013–14</td>
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<td>2014–15</td>
<td>275.2</td>
<td>69.8</td>
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<td>182.2</td>
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<tr>
<td>2017–18</td>
<td>265.0</td>
<td>175.8</td>
<td>440.8</td>
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</tbody>
</table>
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.
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	ext{st} Wai'ōhinu
- 2	ext{nd} Waimea
- 3	ext{rd} Kealakehe (Kona)
- 4	ext{th} Hilo
Waimea Transfer Station
March 2019

Kealakehe High School
August 2019

PHOTOS: D.E.M. RECYCLING SPECIALISTS
Pāhoa Transfer Station
March 2019

Hilo:
Ho’olulu Complex
August 2019

PHOTOS: D.E.M. RECYCLING SPECIALISTS
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
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?

ISWMP@hawaiicounty.gov