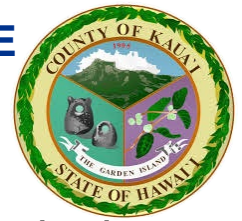
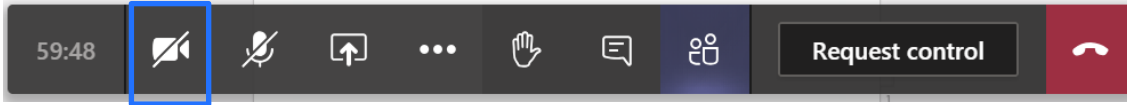


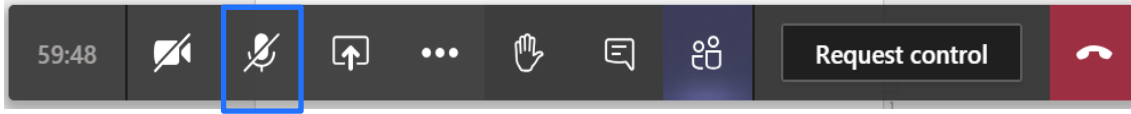
WELCOME TO THE COUNTY OF KAUAI DRAFT INTEGRATED SOLID WASTE MANAGEMENT PLAN, PUBLIC HEARING – JUNE 17, 2021



- Thank you for joining us. We will be beginning shortly.
- We encourage attendees to **turn off their video**. Video is permitted later in the meeting (if you like) during the Question-and-Answer Session or the Public Comment period.



- Please keep your **microphone on mute** unless you are speaking.



For Phone Attendees:
Dial *6 to mute/unmute

- **All attendees** should remain on mute until the Question-and-Answer Session or the Public Comment period when we look forward to your feedback. Thank you! We will explain the process for engaging in questions or oral testimony at that time. You can also read about this in the instructions that were included in your meeting invite.



COUNTY OF KAUA'I DRAFT INTEGRATED SOLID WASTE MANAGEMENT PLAN

Public Hearing Presentation

June 17, 2021



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Agenda

- | | | |
|------|-------------------------------|--|
| I. | 3:30-3:40 PM (10 min): | WELCOME & INTRODUCTION |
| II. | 3:40-4:15 PM (35 min): | POWERPOINT PRESENTATION OF THE ISWMP |
| III. | 4:15-4:45 PM (30 min): | QUESTION/ANSWER SESSION ON ISWMP |
| IV. | 4:45-5:00 PM: (15 min) | BREAK |
| V. | 5:00-6:25 PM (1 hr & 25 min): | PUBLIC COMMENT PERIOD FOR ORAL TESTIMONY |
| VI. | 6:25-6:30 PM (5 min): | NEXT STEPS/ADJOURN |





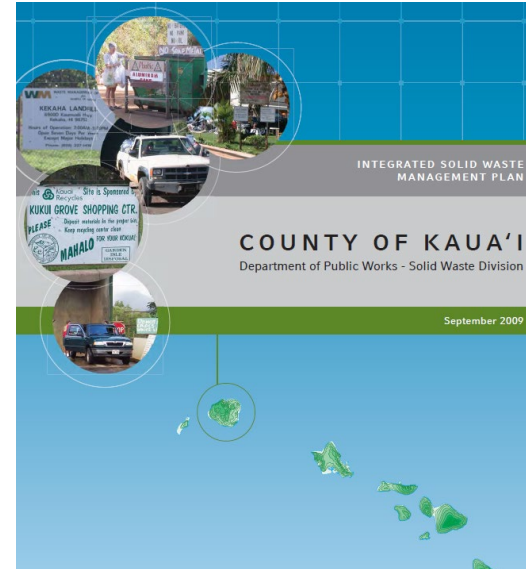
Presentation - Draft ISWMP

ISWMP Background

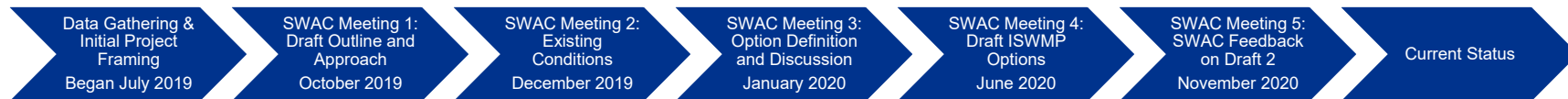
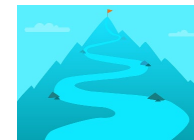
- **What it is:** a comprehensive waste prevention, recycling, composting, and disposal plan
- **What it includes:**
 - An evaluation of local needs and conditions to determine the most effective combined strategy for managing solid waste while protecting human health and the environment
 - Outlines the components of an effective solid waste management strategy, identifies short- and long-term goals, and provides a framework for implementation
- **Hawaii Revised Statutes (HRS), Section 342G Requirements:**
 - State law requires an ISWMP update every ten years
 - Interim status reports every five years
 - Mandates the creation of an advisory committee to provide input during plan development
 - Establishes the structure of the ISWMP and outlines the State review process

History of the County of Kaua'i ISWMP

- Last ISWMP was adopted in 2010.
- Funding was an issue for implementation.
- Implemented : Automated refuse collection, Flat fee for refuse service, Pay As You Throw (PAYT), Commercial landfill restrictions, Plastic Bag Law
- Not Implemented: Centralized compost facility, Material Recovery Facility (MRF), Curbside green waste and recycling, Waste to Energy, Household Hazardous Waste (HHW) program increase, Market Development Grants



ISWMP Plan Development



- SWAC Meeting 1-5: October 2019 – November 2020
- Issue ISWMP to County for staff/admin review (**Draft 1**) – *June 23, 2020*
- Issue ISWMP for SWAC review (**Draft 2**) – *July 14, 2020*
- Mayor/Administration Meeting – *November 5, 2020*
- Issue DOH Draft ISWMP (**Draft 3**) – *December 22, 2020*
- Issue ISWMP for Public Review (**Draft 4**) – *May 19, 2021*
- Conduct Public Hearing – *June 17, 2021*
- Issue **Final Plan**, Council Adoption & Presentation to Council – *September 2021*

Thanks to the following for their involvement in the development of this ISWMP

- Hawai'i Department of Health, Solid and Hazardous Waste Branch, Lane Otsu
- Mayor Derek S. K. Kawakami
- Managing Director Michael A. Dahillig
- Acting County Engineer Troy K. Tanigawa
- Kaua'i County Department of Public Works – Solid Waste Division
 - Solid Waste Programs Coordinator Allison Fraley
 - Recycling Program Coordinator Keola Aki
 - Superintendent Rick Renaud
 - Programs Technician Jeanine Okuhara
- Kaua'i County Solid Waste Advisory Committee
- Zero Waste Kaua'i
- Other contributors: Lyle Tabata, former Deputy County Engineer & Zahid Khan, former Environmental Services Management Engineer

Solid Waste Advisory Committee (SWAC)

Members

Allen Evans, Resource Recovery Solutions (Puhi Metals)
Allison Fraley, SW Program Coordinator County of Kaua'i
Ben Sullivan, Energy & Sustainability Coord. County of Kaua'i
Brad Rockwell, Power Supply Manager KIUC
Conrad Murashige, Chairman of the Board, Shioi Construction
Eli Brainerd, Owner, Pacific Concrete Cutting and Coring
Fred Cowell, Kaua'i Coffee Company
George Costa, Hawai'i Lodging and Tourism to Assoc.
Howard Greene, Gay and Robinson
Jesse Brown-Clay, Zero Waste Kaua'i
Keola Aki, County Representative, Recycling Coordinator County of Kaua'i
Lane Otsu, State Department of Health SW Branch
Scott Kouchi, President, Garden Isle Disposal

ISWMP Contents & Focus

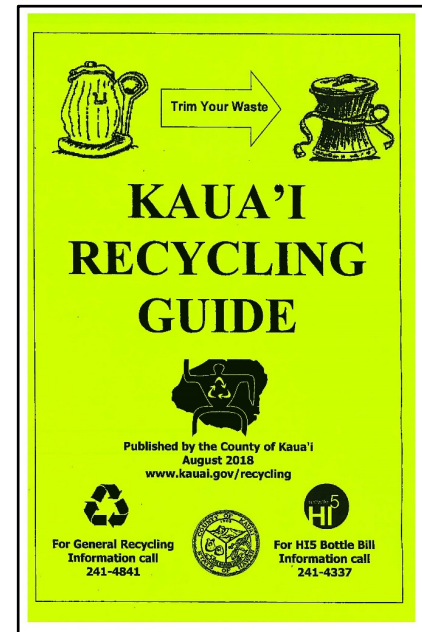
- Existing Conditions for each topic area are included in Section 1 and waste generation and projection information is in Section 2
- Topic Area sections include Background and Enhancement opportunities



Topic Areas	ISWMP Section	Need/Opportunity Focus
Source Reduction & Reuse	3	<ul style="list-style-type: none"> Focus on problematic materials and/or materials found in excess in the waste characterization study Build off success from existing programs and working groups Expand or modify existing programs to gain additional success Consider new enhancements that would be needed to take diversion to the next level Prioritize enhancements that are feasible for the County based on current staffing levels
Recycling and Bioconversion	4	
Special Wastes	5	
HHW	6	
Electronic Waste	6	
Public Education	7	
Materials Marketing	8	
Transfer Stations & Landfills	9	
Long-term Disposal and Alternative Technologies	10	

Overview and Discussion of Existing Solid Waste Management System

- Solid Waste Collection
- Facilities
- Source Reduction & Reuse
- Recycling and Bioconversion (green waste)
- Special Waste Management
- HHW and Electronic Waste (eWaste)
- Public Education
- Processing and Markets



Solid Waste Collection

- The County is responsible for weekly curbside collection of municipal solid waste (MSW) from all residences
- Most refuse collection is automated, with modified manual refuse collection crews servicing a small number of customers
- Residents pay a variable rate for refuse collection through the County's Residential Refuse Collection Assessment, a PAYT program
- Commercial refuse collection is available through the County and through private haulers

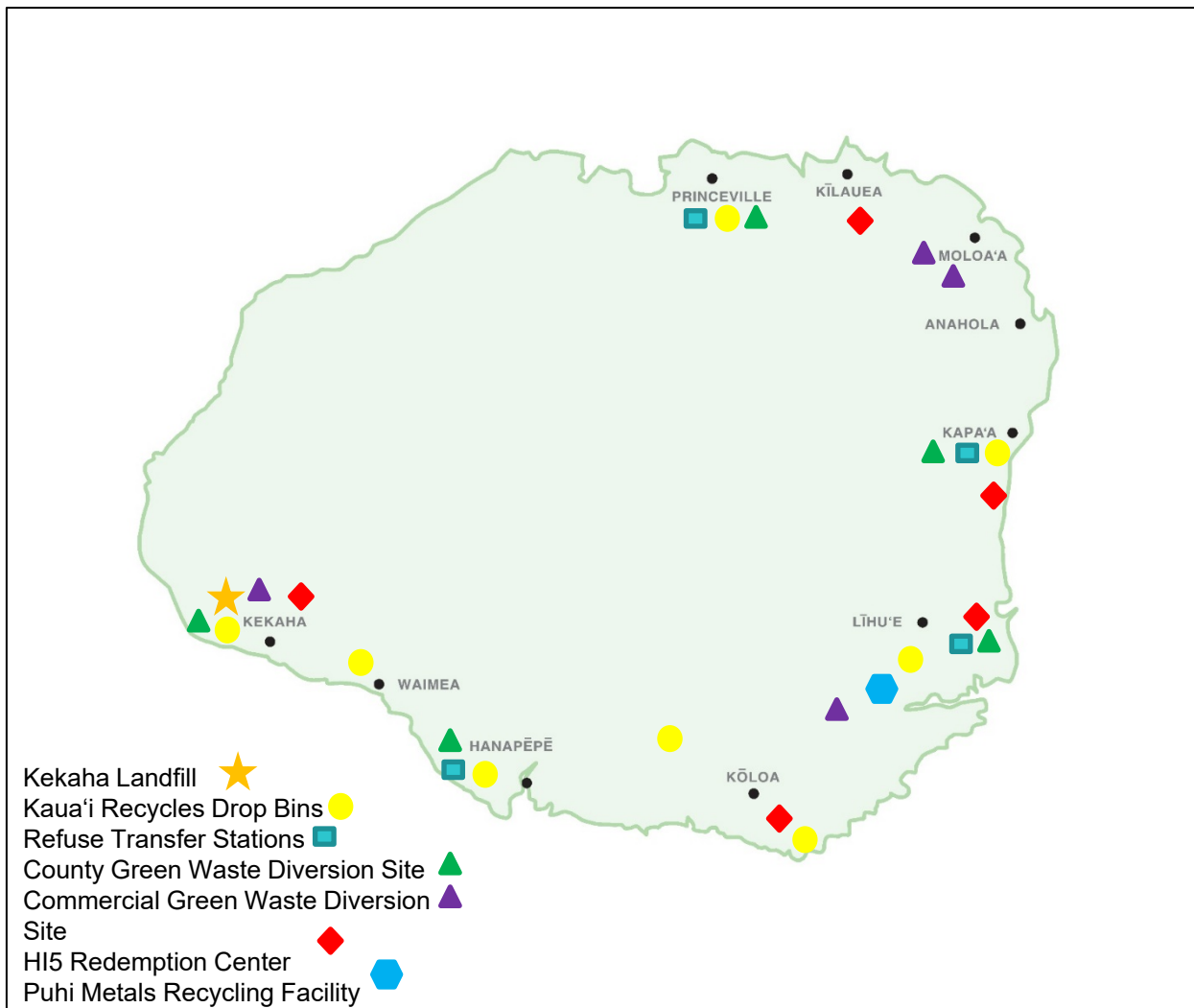


96 Gallon = \$18 / month (Equivalent to three 32 gallon trash cans)	64 Gallon = \$10 / month (Equivalent to two 32 gallon trash cans)
	
CART OPTIONS	
Introducing the new Pay As You Throw (PAYT) variable rate program. The County will be issuing refuse carts to all homes on Kauai!	

Source: County of Kaua'i Division of Solid Waste.
<https://www.kauai.gov/PublicWorks/SolidWaste>

Facilities

- Many different solid waste facilities distributed throughout the county
- The 4 RTSs accept MSW, green waste, and specified recyclable materials from residents at the four RTSs free of charge. Commercial businesses and other non-residential entities are required to pay a fee.



De Facto Population Projections for Kaua'i County

- De Facto Population = the combined resident and daily visitor populations
- Population estimates will be used to project both residential and visitor waste generation, recycling, and disposal quantities for planning purposes
- During the 2021 to 2030 planning period, forecast average annual growth rates are 1.6 percent for the resident population, 2.7 percent for daily visitors, and 1.9 percent for the de facto population.

Table 2-1. De Facto Population Projections for Kaua'i County			
Year	Resident Population	Average Daily Visitors	Total Daily De Facto Population
2010	67,091	19,548	86,639
2015	70,717	24,533	95,250
2019	73,588	29,033	102,621
2020*	74,693	29,614	104,307
2021	75,440	30,206	105,646
2022	76,194	30,810	107,004
2023	76,956	31,426	108,382
2024	77,726	32,055	109,780
2025	78,503	32,696	111,199
2026	79,288	33,350	112,638
2027	80,081	34,017	114,098
2028	80,882	34,697	115,579
2029	81,691	35,391	117,082
2030	83,328	36,099	119,427
2035	88,013	39,480	127,493
Source: 2018 General Plan			

*2020 numbers do not account for pandemic anomalies but expect that the numbers will return to more normal levels as represented in the 2018 General Plan.

Projected MSW and Diverted Material

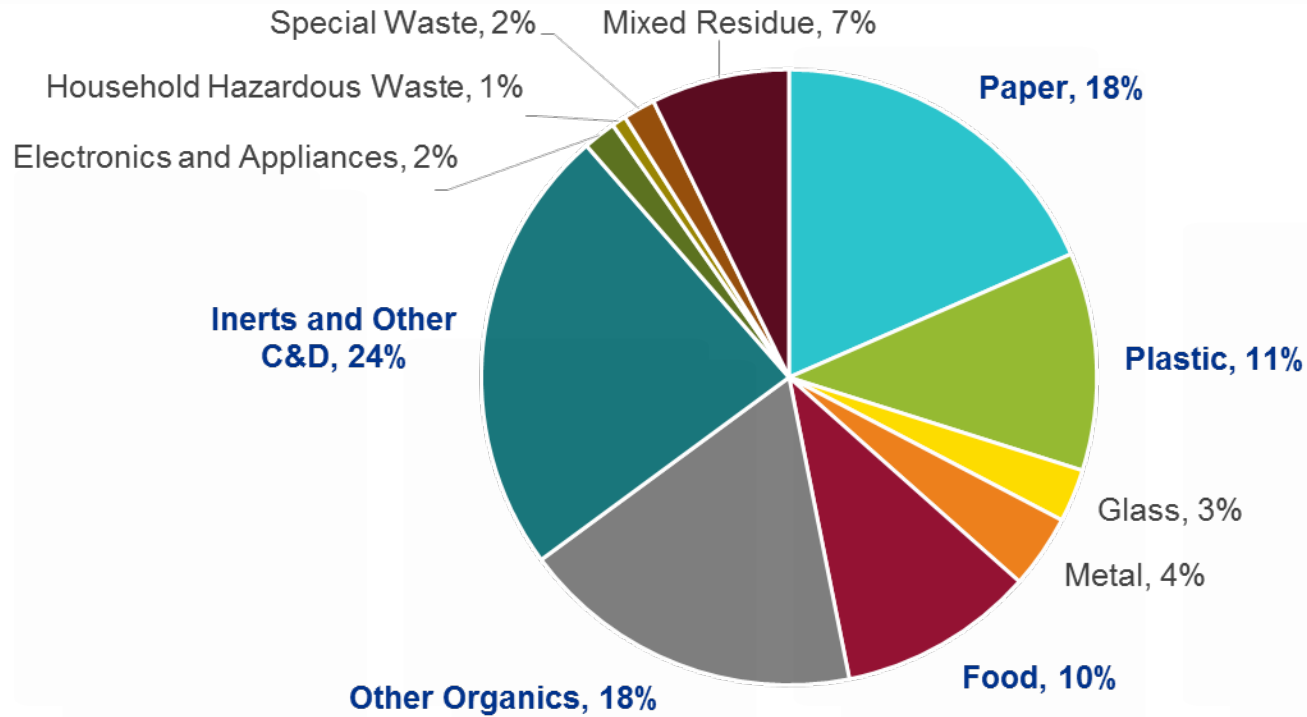
Year	Total MSW Generated (tons) ^a	Total Diverted Material (tons) ^b	Total MSW Disposed (tons)
2019	158,659	67,593	91,066
2020	161,265	68,703	92,562
2021	163,335	69,586	93,750
2022	165,436	70,480	94,955
2023	167,566	71,388	96,178
2024	169,728	72,309	97,419
2025	171,921	73,243	98,678
2026	174,146	74,191	99,955
2027	176,403	75,153	101,250
2028	178,693	76,128	102,564
2029	181,016	77,118	103,898
2030	184,642	78,663	105,979
2035	197,113	83,976	113,137

^a Based on a generation rate of 8.47 pounds per capita per day, 365 days per year, and the de facto population estimate provided in Table 2-1.

^b Based on the FY 2019 baseline diversion rate of 43% (tons recycled [67,593]/tons generated [158,659]).

- Aloha+ Challenge includes a 2030 goal to reduce the solid waste stream before disposal by 70 percent in the state
- In FY 2019, the County diverted approximately 43 percent of the solid waste stream through source reduction, recycling, and bioconversion.

Overall Kaua'i Countywide Disposed Waste Composition, 2016



Source: Cascadia. 2017. *Kaua'i County Waste Characterization Study Report 2017*. May.

Waste Characterization Summary

- The disposed Waste Composition Data indicates there are opportunities for further diversion in construction and demolition (C&D), other organics, paper, plastic, and food
- Of these material classes, plastics have lowest diversion rate (13%)
- C&D waste may offer the greatest potential for increasing diversion locally



External Factors Impacting Recycling Markets

1. The County's recycling and waste diversion programs are affected by fluctuations in the global recycling industry.
 - a. The Chinese ban on recyclables (effective 2018) has had a devastating impact on recycled commodities throughout the U.S. and locally on Kaua'i. Things are improving.
2. New Basel Convention requirements that cover the international shipment of plastic scrap went into effect on January 1, 2021 and could potentially affect Kaua'i's future recycling program as existing contracts expire and/or as new recycling programs are implemented.
3. Given the volatility in the recyclable commodities market and the economic and environmental impact of processing and shipping recyclables to overseas markets, it is important for the County to continue to advocate for reuse, source reduction, Extended Producer Responsibility (EPR), and cost-effective on-island processing and recycling.

Implementation Plan –

3. Source Reduction & Reuse

- Build Off and Expand Policies for Plastic and Polystyrene Reduction and Compostable Use
- Advocate for EPR for Potential Candidate Materials
- Offer Grant-in-Aid Funding to Support Food Waste to Animal Feed Projects
- Recognize and Promote the Lodging Industry's Source Reduction Efforts
- Support State Plastics Source Reduction Working Group Findings Related to Use of Reusable Containers at Restaurants
- Consider Fee Increase for PAYT Program



JANUARY 1, 2021
DISPOSABLE PLASTIC USE WILL BE PROHIBITED FOR
PURCHASE BY COUNTY AGENCIES AND USE AT ALL COUNTY
FACILITIES.



Source Reduction & Reuse Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
3. Source Reduction										
1	Build off and expand policies for plastic and polystyrene reduction and compostable use. ^a	Short-term	Low							
2	Advocate for EPR for potential candidate materials such as fluorescent tubes, paper, packaging, mattresses, and paint. ^a	Medium-term	Easy to Advocate Difficult to Implement							
3	Offer Grant-in-Aid to support "Food Waste to Animal Feed" projects.	Short-term	Low			\$15,000	\$15,000	\$15,000		
4	Recognize and promote the Lodging Industry's source reduction efforts. ^a	Short-term	Low							
5	Support State Plastics Source Reduction Working Group findings related to the use of reusable containers at restaurants. ^a	Medium-term	Medium							
6	Consider a fee increase for PAYT program. ^{a,b}	Long-term	High							

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information)

Table 3-1. Potential Modified Residential Refuse Collection Assessment Options			
Program Component	Existing	Increased Fees (Existing System)	2 to 3-Stream (Trash and Recycling, with a potential future addition of Green Waste) with Enhanced PAYT
Description of Service	2 MSW cart sizes (64 -, 96-gallon carts)	2 MSW cart sizes with fee increase (64, 96-gallon carts)	3 MSW cart sizes with fee increase (32-, 64-, 96-gallon carts)
Base Monthly Assessment per Benefited Property ^{a, b}	\$6.00	\$10.00	\$10.00
Curbside Refuse Collection: Cart fees by size			
One 32-gallon cart	n/a	n/a	\$7.00 ^c
One 64-gallon cart	\$4.00	\$8.00	\$19.00 ^c
One 96-gallon cart	\$12.00	\$20.00	\$40.00 ^c
Curbside Refuse Collection: Total fee charged to resident by cart size (base fee + cart fee)			
One 32-gallon cart	n/a	n/a	\$17.00
One 64-gallon cart	\$10.00	\$18.00	\$29.00
One 96-gallon cart	\$18.00	\$30.00	\$50.00
Assessment for each additional cart ^d			
Each additional 32-gallon cart	n/a	n/a	\$17.00
Each additional 64-gallon cart	\$10.00	\$18.00	\$29.00
Each additional 96-gallon cart	\$18.00	\$30.00	\$50.00
^a The Base Assessment covers the use of the RTSs and is charged regardless of whether the dwelling unit is occupied or the resident opts out of collection. ^b Per County Ordinance 21-1.3, "Benefited property" means real property on which there is a dwelling unit or units. Multiple units on a single piece of property are each considered to be a separate benefited property. ^c Fees are based on the Econservation Institute Pay-As-You-Throw/Variable Rates for Trash Collection in Kaua'i, HI report Phase 2 proposed rates. ^d Program rules would be implemented to tier purchase of add-on carts so that the sum of multiple smaller cart sizes is not less than singular purchase of a larger cart size. Note: n/a = not applicable			

Implementation Plan –

4. Recycling and Bioconversion

- Evaluate Implementation of a New Curbside Collection for Recycling with a Potential Future Addition of Green Waste and Food Waste or Enhance Drop-off Recycling
- Complete a Feasibility Study and Siting Study of a New MRF
- Support Deposit Beverage Container (HI5) Deposit Increase
- Evaluate Additional Commercial Disposal Restrictions and Identify Recycling Opportunities for Businesses
- Support Expansion of Tiered Composting Regulations to Encourage Smaller Composting Operations



Implementation Plan –

4. Recycling and Bioconversion

- Design and Implement Compost Demonstration Project, Then Evaluate Food Waste Composting Program
- Support Permit Modifications for Food Waste Composting at Private Facilities and/or Issue Requests For Proposals (RFPs)
- Offer Grant-in-Aid Funding for Recycling and Organics Projects
- Issue RFP for Pallet Processing Facility to Process Pallets
- Allocate Appropriate Resources for Recycling Programs
- Co-Locate New Recycling Drop-Off Sites and HI5 Certified Redemption Centers with Existing Solid Waste Facilities When Possible



Recycling & Bioconversion Implementation Table

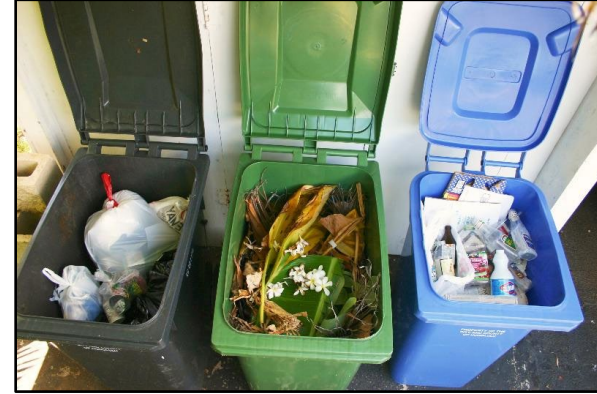
Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
4. Recycling and Bioconversion										
7	Evaluate implementation of a new curbside collection for recycling with a potential future addition of green waste and food waste or enhance drop-off recycling. ^b	Long-term	High					\$75,000		
8	Complete a feasibility study and siting study of a new MRF. ^b	Short-term	High				\$200,000			
9	Support DBC (HI5) deposit increase. ^a	Short-term	Easy to Support Difficult to Implement							
10	Evaluate additional commercial disposal restrictions (modeled after the existing green waste, metals, and cardboard restrictions) and identify recycling opportunities for businesses. ^a	Medium-term	High							
11	Support expansion of tiered composting regulations to encourage smaller composting operations. ^a	Short-term	Medium							
12	Design and implement compost demonstration project, then evaluate food waste composting program. ^b	Medium-term	High					\$60,000	\$10,000	
13	Support permit modifications for food waste composting at private facilities and/or issue RFP(s).	Medium-term	Medium			\$25,000	\$25,000			
14	Offer Grant-in-Aid funding for priority recycling and organics projects on-island.	Short-term	Low		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
15	Issue RFP for pallet processing facility to chip/mulch/market pallets.	Medium-term	Medium					\$15,000	\$15,000	
16	Allocate appropriate resources for recycling programs.	Short-term	Medium				\$110,000	\$110,000	\$110,000	\$110,000
17	Co-locate new recycling drop-off sites and HI5 Certified Redemption Centers with existing solid waste facilities when possible. ^a	Short-term	Medium							

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

Curbside Recycling and New MRF

- If implemented by 2024, this program could extend the life of the Kekaha Landfill by 9 months to a year
- The popularity of the pilot program that was done in Līhu'e and the numerous recent news articles and letters to the editor suggest this would be popular with residents



Cost of Curbside Recycling and MRF Program

Estimated Added Annual Costs (\$2021)

Residential Curbside Recycling Collection	\$1,794,600
MRF Debt service and operations*	\$1,559,000
Reduced Recycling Drop Box program costs	<u>-\$440,000</u>
Total Annual Cost Increase	\$2,914,000

*Accounts for savings resulting from material revenues

Paying for Curbside Recycling and MRF Program

Total

Annual net cost, residential collection and MRF (net of anticipated revenues from sale of recyclables)	\$2,914,000
--	-------------

Residential Portion of Total

Residential collection and MRF costs, paid by users	\$2,096,000
---	-------------

Monthly average cost per household covered through PAYT	\$7.50
---	--------

Non-residential Portion of Total (Total minus Residential Portion of Total)

Annual net cost for commercial and HI5 recycling collection and processing (net of revenues) paid through County budget	\$818,000
---	-----------

County budget impact, % of total (assumes PAYT increase)	3.7%
--	------

Implementation Plan –

5. Special Waste

- Increase Public Education Regarding Proper Disposal of Acetylene Tanks
- Expand Disposal Bans to Include C&D Materials
- Prepare County Videos to Address Public Educations Needs for Special Wastes
- Evaluate Opportunities for Sewage Sludge Diversion and Act on Opportunities if Cost-Effective and Overall Beneficial
- Implement Collection of Used Cooking Oil at the Kauaʻi Resource Center (KRC)



Special Waste Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
5. Special Wastes										
18	Increase public education regarding proper disposal of acetylene tanks. ^a	Short-term	Low							
19	Expand disposal ban to include C&D materials. ^a	Medium-term	Medium							
20	Prepare County videos to address public education needs for special wastes.	Short-term	Low	Costs included in Section 7						
21	Evaluate opportunities for sewage sludge diversion and act on opportunities if cost-effective and overall beneficial. ^b	Medium-term	High					\$80,000		
22	Implement collection of used cooking oil at Kaua'i Resource Center.	Medium-term	Medium				\$20,000	\$20,000	\$20,000	\$20,000

Public Education

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

6. Household Hazardous Waste and eWaste

- Evaluate a Drop-and-Swap Program at the KRC
- Network with Automotive Stores and Repair Shops Regarding Automotive Fluids and Materials
- Advocate for EPR for Select Materials



Source: County of Kaua'i Division of Solid Waste.

<https://www.kauai.gov/PublicWorks/SolidWaste>

Implementation Plan –

6. Household Hazardous Waste and eWaste

- Assess Feasibility of Accepting eWaste at Refuse Transfer Stations (RTSs) After Completion of RTS Upgrades
- Evaluate Residential Disposal Bans on eWaste if it is Feasible to Accept at RTSs



 **Kaua'i recycle your Electronic Waste (eWaste) in an earth-friendly way!**



Open to Businesses and Residents for FREE!
All brands of eWaste are accepted with no quantity limits

eWaste is accepted for recycling at the Puhi Metals Recycling Center operated by Resource Recovery Solutions
 Puhi Metals is located at: 3951 Puhi Road, Lihue, (at the end of Puhi Road on right side)

eWaste is accepted Monday through Saturday 7:30 am - 3:30 pm
 Mobile Events on the last Saturday of the month at the Hanalei Base yard
 and the last Sunday at the Anahulu Community Park from 8:00 AM to 3:00 PM.

Acceptable eWaste Items	Acceptable eWaste Items	Materials Not Accepted
Computers System & Accessories All-in-Ones CPUs CRT Monitors CD-Rom & Hard Drives Hubs Keyboard(s) & Mouse(s) Laptops LCD Displays Optical Drives Servers Switches USB Speakers Wires & Cables Handheld & Household Devices Appliances - Blenders, Coffee Makers Hair Dryers, Vacuums, etc. Cell Phones & Chargers Cordless Phones Hands-free Headsets Faxers Modems	Office Equipment Adding Machines Fax Machines Laminating Machines Photo Copiers Plotters Scanners Surge Protectors Telephones Typewriters Audio & Video Equipment Camcorders CD's, DVD's & MP3 Players Handheld Game Systems LCD Projectors & Screens Overhead Projectors Radios Stereo & Stereo Components (No Speakers) Televisions and VCR's Video Game Consoles & Accessories	High-voltage Batteries Car Batteries Contaminated Equipment Cracked or Broken CRT Stove/Household Appliances Stoves Microwaves Paper Smoke Detectors Styrofoam X-ray equipment



All eWaste will be shipped and processed at FRI Center in Fremont, California
 For more info, call the Recycling Office at (808) 241-4841 or see website at www.kauai.gov/ewaste

Source: County of Kaua'i Division of Solid Waste.
<https://www.kauai.gov/PublicWorks/SolidWaste>

Household Hazardous Waste and eWaste Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
6. Household Hazardous Waste and Electronic Waste										
23	Evaluate a Drop-and-Swap program at the KRC. ^a	Short-term	Medium							
24	Network with automotive stores and repair shops to see how they may be able to directly service the public for managing of automotive fluids/materials. ^a	Short-term	Low							
25	Advocate for EPR for select materials (for example, fluorescent tubes). ^a	Medium-term	Easy to Advocate Difficult to Implement							
26	Assess feasibility of accepting eWaste at RTSs after completion of RTS improvement projects. ^b	Long-term	Medium						\$50,000	
27	Evaluate residential disposal bans on eWaste if it is feasible to accept eWaste at RTSs (see Item #10 for additional bans). ^a	Long-term	Medium to Evaluate Difficult to Implement							See Item #10

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

10

Evaluate additional commercial disposal restrictions (modeled after the existing green waste, metals, and cardboard restrictions) and identify recycling opportunities for businesses. ^a

Implementation Plan – 7. Public Education

- Promote True Cost of Solid Waste Programs
- Enhance the School Reduce, Reuse, and Recycle (3R) Program
- Evaluate a Food Waste Comprehensive Program and Use Compost and Food Waste Survey to Help Guide Needs
- Update County Website with an Increased Number of Image-Based Posters and Videos
- Promote State Green Recognition Program
- Develop and Support a Recycling Block Leader Program
- Allocate Appropriate Resources or Public Outreach and Education
- Use Business Survey Process to Advertise Education Needs and Focus Areas and then Target Businesses that may Require Technical Assistance



Public Education Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
7. Public Education										
28	Promote the true cost of solid waste programs. ^a	Short-term	Low							
29	Enhance the school Reduce, Reuse, and Recycle (3R) program. ^a	Medium-term	Low							
30	Evaluate a food waste comprehensive program and use compost and food waste survey results to help guide needs. ^a	Medium-term	Medium							
31	Update the County website with an increased number of image-based posters and videos.	Short-term	Low	\$10,000	\$10,000	\$10,000				
32	Promote the State Green Recognition Program. ^a	Short-term	Low							
33	Develop and Support a Recycling Block Leader Program. ^a	Short-term	Medium							
34	Allocate appropriate resources and funding for public outreach and education (\$20,000/year for expenses and \$110,000/year for resources).	Short-term	Medium			\$130,000	\$130,000	\$130,000	\$130,000	\$130,000
35	Use a business survey process to advertise education needs and focus areas and then target businesses that may require technical assistance. ^a	Short-term	Medium							

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

Implementation Plan –

8. Materials Marketing and Procurement

- Explore Potential for Plastic Processing Innovations
- Advance County Recycled Product Purchasing Policy
- Evaluate On-island Recycling Opportunities and Issue RFPs for Select Materials
- Promote State Compost Standards
- Improve County Use of Recycled Glass, Organics and Other Recycled Products
- Promote Enhanced State and Federal Market Development Efforts and Funding



Materials Marketing and Procurement Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
8. Materials Marketing										
36	Explore potential for plastic processing innovations. ^b	Medium-term	High				\$60,000			
37	Advance the County recycled product purchasing policy. ^a	Medium-term	Medium							
38	Evaluate on-island recycling opportunities and issue RFPs for select materials, such as dry materials and organics. ^{a,b}	Medium-term	Medium					\$25,000	\$25,000	
39	Promote state compost standards. ^a	Short-term	Medium							
40	Improve County use of recycled glass, organics, and other recycled products. ^a	Medium-term	Medium							
41	Promote enhanced state and federal market development efforts and funding. ^a	Short-term	Low							

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

Implementation Plan –

9. Refuse Transfer Stations and Landfills

- Assess closing landfill and RTSs on Sundays to improve efficiency.
- Continue and enhance RTS staff training program to improve compliance with drop-off restrictions (for example, commercial use, pressurized tanks, and used-oil collection).
- Propose an Increase to Commercial RTS tipping coupon fees.



Table 9-2. Capacity Analysis for RTSs

Facility	Annual Permitted Capacity (tons) ^a	2019 Receipts (tons) ^b	2030 Projected Receipts (tons) ^c	Projected Receipt Exceeds Permitted Capacity
Hanapēpē	12,320	7,956	9,259	No
Līhu'e	14,080	15,572	18,122	Yes
Kapa'a	14,080	9,158	10,658	No
Hanalei	10,560	6,561	7,635	No

^a Annual permitted capacity is based on the permitted capacity of 35 tons per day (Hanapēpē), 40 tons per day (Līhu'e and Kapa'a), and 30 tons per day (Hanalei) set forth in the current RTS solid waste management permits, multiplied by 352 operating days per year. Note that the RTSs close for 13 public holidays.

^b 2019 Receipt encompasses quantities collected in FY 2019, presented in Table 1-7.

^c 2030 Projected Receipt tonnages are based on a total growth percentage of 16.38 percent, derived from projected 2019 and 2030 tonnages presented in Table 2-4, applied to tonnages in the 2019 Receipt column. To be conservative, the projected receipts do not include any effects from additional source reduction and recycling efforts.

Implementation Plan –

9. Refuse Transfer Stations and Landfills

- Improve emergency operating procedures at the Kekaha Landfill
- Allocate appropriate resources for landfill operations (County to determine best way to staff and phase in over a few years)
- Proceed with permitting and design for vertical expansion of Kekaha



Refuse Transfer Stations and Landfills Implementation Table

Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year	1	2	3	4	5	6-10
				FY	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Annual, FY 2026-30
9. Facilities										
42	Assess closing landfill and RTSs on Sundays to improve efficiency. ^b	Short-term	Easy to Evaluate Moderate to Difficult to Implement			\$15,000				
43	Continue and enhance RTS staff training program to improve compliance with drop-off restrictions (for example, commercial use, pressurized tanks, and used-oil collection). ^a	Medium-term	Medium							
44	Propose an Increase to Commercial RTS tipping coupon fees. ^a	Short-term	Medium							
45	Improve emergency operating procedures at the Kekaha Landfill. ^a	Short-term	Low							
46	Allocate appropriate resources for landfill operations (County to determine best way to staff and phase in over a few years).	Short-term	Medium			\$120,000	\$120,000	\$120,000	\$230,000	\$290,000
47	Proceed with permitting and design for vertical expansion of Kekaha	Short-term	Low			\$335,000				

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

Implementation Plan –

10. Evaluation of Long-Term Disposal Options (30-year Time Horizon)

- ISWMP covers the **next 10 years**
 - Existing landfill expected to **reach capacity within the 10-year planning window**
- Longer-term (30-year) high-level disposal strategy is covered for planning purposes
- Proposed disposal strategy:
 - Use existing landfill (anticipated to reach capacity in June 2027)
 - Vertical expansion to extend existing landfill life by 3 years and 5 months, or until November 2030
 - Identify, select and initiate disposal options to replace existing landfill – start now, takes time
 - Evaluation of future longer-term options
 - Develop the Ma‘alo Road site
 - Develop new landfill on Kaua‘i at location other than Ma‘alo Road
 - Landfill mining
 - Waste-to-Energy (WTE)
 - Off-Island Disposal to H-Power, statewide discussion

Implementation Plan –

10. Evaluation of Long-Term Disposal Strategies

- Conduct a siting study for a new landfill
- Waste-to-energy/alternative technologies feasibility study
- Continue assessing disposal capacity



Evaluation of Long-Term Disposal Options (30-year Time Horizon) Implementation Table

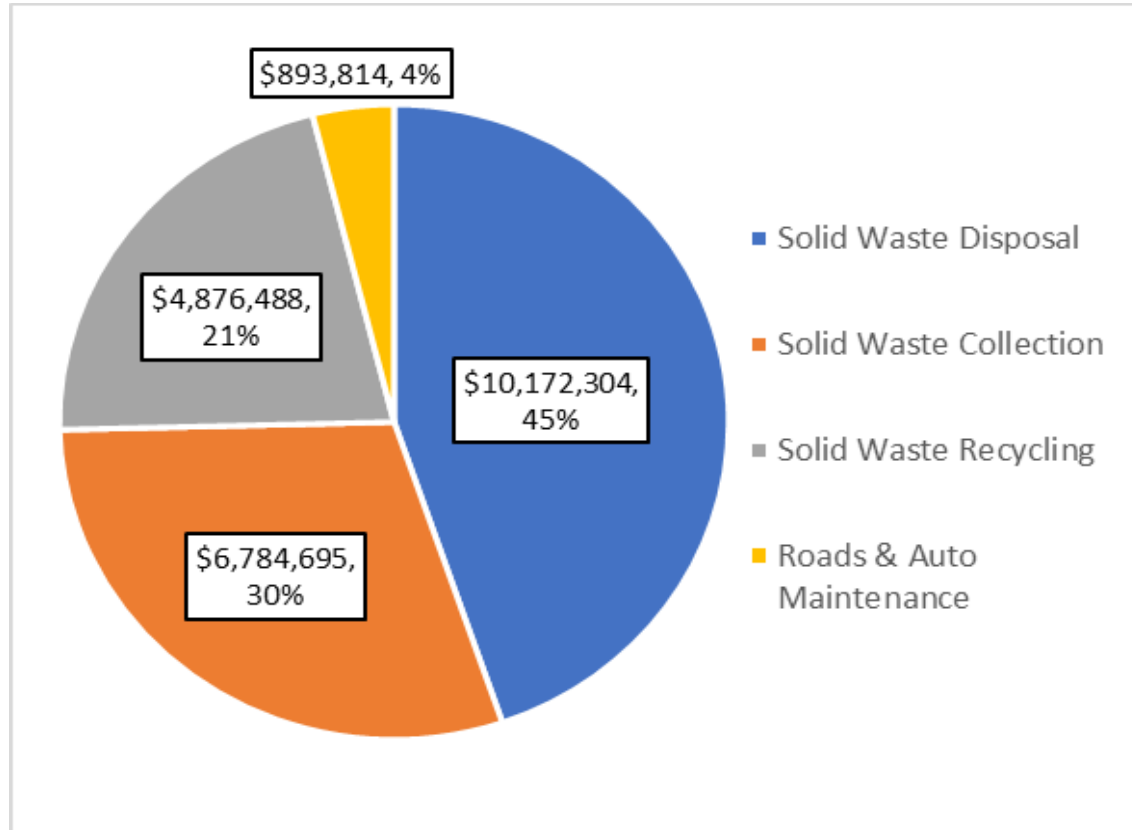
Item	Enhancement Opportunity/Strategy	Planning Horizon	Implementation Difficulty	Year FY	1 FY 2021	2 FY 2022	3 FY 2023	4 FY 2024	5 FY 2025	6-10 Annual, FY 2026-30
10. Evaluation of Long-Term Disposal Strategies										
48	Conduct a siting study for a new landfill	Short-term	Medium			\$75,000				
49	Waste-to-energy/alternative technologies feasibility study	Short-term	Medium		\$300,000					
50	Continue assessing disposal capacity	Short to long-term	Medium							

^a Assume no cost for program but requires some staff time. Factor into the additional resources.

^b If implemented, Kaua'i County costs would change (increase or decrease) and those potential cost changes are not shown in this table (see the relevant section for additional information).

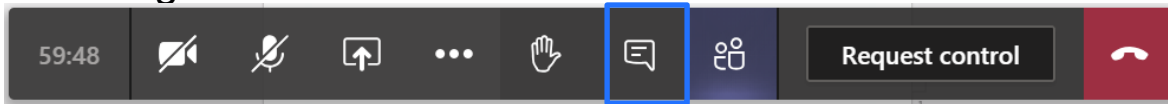
Operating Expenditures by Division

Mayor's Budget Request Fiscal Year 2021



Question and Answer Session – Draft ISWMP

- For questions on the Draft ISWMP, we will start with participants that are attending online first.
- For online participants that would like to ask questions, please click the chat feature, type your name and the following: “I have a question”. We will call out each person in the order that they type in a message via the chat feature.



For Phone Attendees:
Dial *6 to mute/unmute

- Once we are done with those online, we will open questions to those on the phone. We will call out phone numbers in the order listed on the moderator's screen. When you hear your phone number, please unmute your line and answer if you want to ask questions.
- Please ask 1 question at a time. If you have more than one question, you will need to indicate that in your chat and will circle back to you after others have asked their first question, if time allows.



A photograph of a tree with dense green foliage and clusters of small, five-petaled flowers in shades of yellow and pink. The word "BREAK" is overlaid in white, bold, sans-serif capital letters in the upper center of the image.

BREAK

Public Comments – Oral Testimony

- For oral testimony on the Draft ISWMP, we will start with participants that are attending online first.
- For online participants that would like to provide oral testimony, please click the chat feature, type your name and the following: “I have a comment”.



- We will call out each person in the order that they type in a message via the chat feature.
- Once we are done with those online, we will open testimony to those on the phone. We will call out phone numbers in the order listed on the moderator’s screen. When you hear your phone number, please unmute your line and answer if you want to provide oral testimony.
- Each person will have 2 minutes of oral testimony. We will announce when your times begins and ends.



Next Steps

- Consider comments from Public Hearing and Public Comment period and revise ISWMP as appropriate (a summary of comments received on Draft 4 of the ISWMP will be included in the Final ISWMP)
- Prepare Final Plan
- Present to Council
- Adopt Plan



Public Hearing, Draft 4 ISWMP	Start	End
Submit Draft ISWMP Update 4 to SWAC and Public (60 days review)	Wed 5/19/21	Wed 5/19/21
Conduct Public Hearing	Thu 6/17/21	Thu 6/17/21
Public Review Period (60 days review)	Wed 5/19/21	Sun 7/18/21
Final Plan		
Respond to SWAC/Public Comments and Prepare Final ISWMP	Wed 7/21/21	Fri 9/3/21
Submit Final ISWMP to Council and DOH	Fri 9/3/21	Fri 9/3/21
Presentation to Council during Adoption process	Wed 9/15/21	Wed 9/15/21



Mahalo

