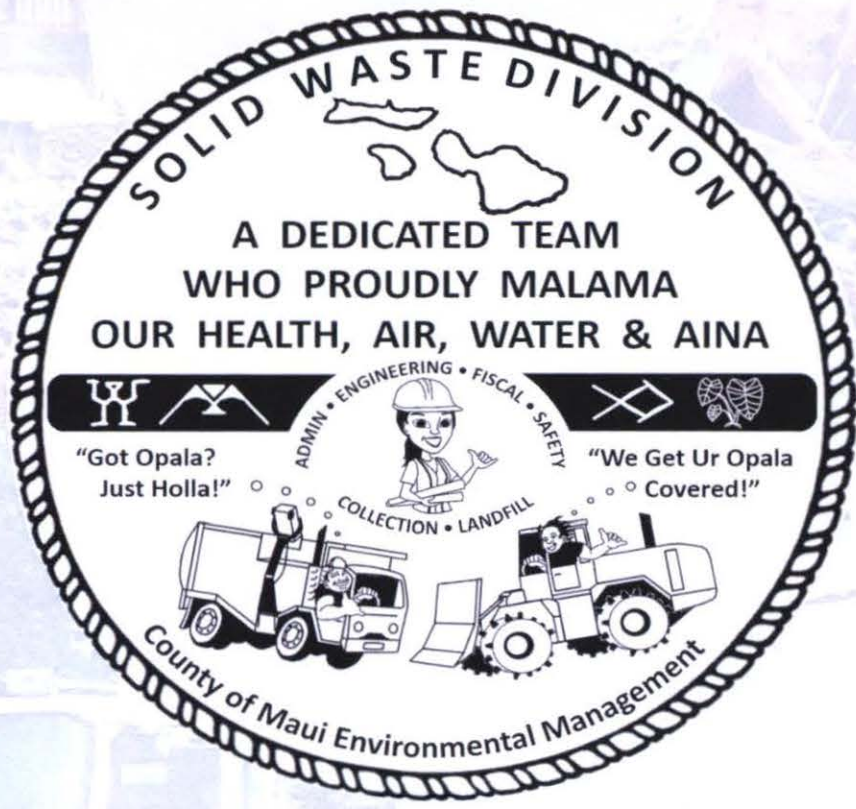


**WATER, INFRASTRUCTURE & TRANSPORTATION COMMITTEE
SOLID WASTE DIVISION
MARCH 9, 2020 PRESENTATION**



RECEIVED AT WIT MEETING ON 3/9/20

*Solid Waste
Michael Ratte*

MISSION STATEMENT

“To provide Public Health, Safety and Environmental Protection of Maui County’s Air, Land and Water, Through Effective and Sustainable Solid Waste Management Practices, Resources and a Dedicated Team”

PRIORITIES

<p>1) SAFETY Employee safety Public and Environmental safety Facility, Equipment & Infrastructure safety</p> <p>2) REGULATORY COMPLIANCE ENVIRONMENTAL PROTECTION Meet all State, Federal & County regulatory requirements, permits, mandates, & procedures to maintain compliance</p>	<p>3) RESOURCE MANAGEMENT Meet resource management needs for personnel, budget, equipment & Infrastructure to build & maintain: Reliability, Sustainability & Efficiency</p> <p>4) NON-SAFETY, NON-COMPLIANCE RELATED SERVICES / PROGRAMS Expansion of community services, refuse collections on non-County roads, beautification, grounds keeping, non-critical programs</p>
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SWD RESPONSIBILITIES & SERVICES

RESPONSIBILITIES

- Engineering (planning, design, construction and asset management)
- Fiscal management (Budgeting, accounting & customer service)
- Landfill operation and Refuse collection
- Regulatory compliance and safety

COMMUNITY SERVICES

- Serve 27,000 refuse clients & haul over 2,600 refuse routes/yr
- Manage 4 landfills, 5 closed landfills & 1 transfer station on 3 islands
- Maintain residential self haul services at 5 locations
- Receive and process >220,000 tons/yr of MSW
- Construction & Demolition material processing: >27,000 tons/yr

LANDFILL OPERATIONS OVERVIEW

	Central Maui	Molokai	Lanai	Hana	Olowalu Transfer Station	County Total Tons/yr
Annual Tons Processed	209,000	5,800	4,300	1,100	2,700	223,000
Current Landfill Capacity	2 years	3.5 years	17 years	20 years	NA	
Future Capacity	Ph IIIA + 3 yrs Ph IIIB + 7 yrs	Ph V + 5 yrs Ph VI + 10 yrs	NA	NA	NA	

Landfill Partial Closures	FY 2016	FY 2017	FY 2018	FY 2019
Closures/Year	176	24	25	7*
Full Open Rate	83.9%	97.8%	97.7%	99.4%

*not counting 14 forced closures due to tropical storms Lane and Olivia

CENTRAL MAUI LANDFILL



REFUSE COLLECTIONS OVERVIEW

Weekly Service	Wailuku	Makawao	Lahaina	Molokai	Hana	Lanai	Total
Automated Accounts	13,000	6,600	1,900	0	0	700	22,200
Manual Accounts	1,000	2,200	800	500	200	0	4,700
Total Accounts	14,000	8,800	2,700	500	200	700	26,900



	FY 2016	FY 2017	FY 2018	FY 2019
Delayed Routes/Year	29	44	40	14*
On-Time Pickup Rate	98.9%	98.3%	98.5%	99.5%
Annual Statistics				
2.5 Million Pickups				
2,600 Routes				
45,000 Tons Collected (90,000,000 Pounds)				



*not counting delayed routes due to tropical storms Lane and Olivia

HISTORICAL CHALLENGES & CURRENT EFFORTS

- Unmonitored waste disposal allowed prior to 1993 caused costly inherited conditions for current Division
- History of public perception regarding our free for all open “Dumps” in the past, vs. our engineered, environmentally protected & regulated landfills of the present
- We continue empowerment of employees, training and building achievable career paths
- Have outdated Integrated Solid Waste Management Plan (ISWMP) Updating in FY 2020/2021
 - Improve plan for overall management of solid waste for Maui County
 - Evaluate options for waste reduction, recycling waste conversion and alternative energy production
 - Strategize implementation of a supported, feasible and cost effective plan
- Meeting revenue projections due to estimated billable tonnages received
 - The SWD currently processes >5,500 tons of unbilled, zero revenue waste at our landfills due to waivers given to County, State, non-profits, community events, and free residential drop off at 4 locations = loss of revenue/yr of \$500,000.

SWD FY 20 BUDGET STATUS

FY20 BUDGET TO ACTUAL THROUGH 1/31/20			
APPROVED BUDGET	EXPENSES	ANTICIPATED EXPENSES	PROJECTED END OF YEAR BALANCE *
\$31,877,011	(\$18,380,171)	(\$11,210,245)	\$2,286,595

* Majority of EOY balance savings is due to Fringe & Overhead and A budget vacancies

FY20 REVENUE ESTIMATE THROUGH 1/31/20		
REVENUE BUDGET	PROJECTED END OF YEAR REVENUE	% OF BUDGET
27,698,017	26,602,028	-3.96%

Revenue varies year to year due to estimated incoming tonnage forecasts

FY 2020 BUDGET AMENDMENT SUBMITTED TO COUNCIL:

- Supplemental Budget submitted, to acquire 63 acres adjacent to Central Maui Landfill for a FEMA approved emergency debris handling area, greenwaste and sludge handling, waste reduction, conversion and waste to energy projects, storm water retainage basins and related infrastructure.

FY 20 CAPITAL IMPROVEMENT PROJECT STATUS

	TITLE	PHASE	ENCUMBERED IN FY2020/ % COMPLETE	\$	DESCRIPTION
Protection of Human Health and the Environment	Central Maui Landfill (CML) Expansion	Construction	Yes / Design Complete <i>Awaiting Bond Funding *</i>	12.5M	Phase III expansion at CML to increase capacity for additional 9 years.
	MLF Landfill Scalehouse Replacement and Traffic Optimization	Design	Yes / 10%	200k	Provide a new scalehouse office and scale, and improve site access and exiting reducing traffic conflict points and address safety concerns.
Regulatory Compliance	CML Customer Drop-Off Area Improvements	Design	Yes / 25%	100k	Expansion of drop-off area to reduce customer wait times and reduce vehicle back-up onto Pulehu Road.
	CML Entrance Facility and Traffic Improvements	Design	Yes / 25%	50k	Dedicated lanes for residential, commercial, and greenwaste customer drop-offs to alleviate traffic back-up and reduce customer confusion.
	CML Extension of Primary Litter Screen and Drainage Improvements	Design & Construction	Yes / 10% <i>Awaiting Bond Funding *</i>	500k	Horizontal extension of the existing tall litter screen along Pulehu Road to service the recently built Phase V-B Extension disposal cell.
	Hana Landfill Office Trailer and PV Expansion	Design	Yes / 50%	25k	Modular office/bathroom/breakroom for a landfill staff of four to provide a minimum sanitary and functional environment for staff.
	CML Ph VB Ext Leachate Recirculation System	Design & Construction	Yes / 25% <i>Awaiting Bond Funding *</i>	650k	Expansion of the leachate recirculation system into the newly constructed Phase VB Extension disposal cell waste mass.
	Environmental Compliance System Design and Construction	Design & Construction	Yes / 20%	500k	Addresses emergency design, construction, construction management, unplanned regulatory compliance improvements at all county landfills.
	Integrated Solid Waste Management Plan Update	Planning	Yes / 20%	200k	With the update of the ISWMP, the department will be able to support investments and strategies to operational requirements for both financial and long-term goals of the County.
Resource Management	CML Land Purchase	Acquisition	Yes / Appraisal Complete <i>Awaiting Bond Funding *</i>	200k	Originally CIP was for 17 acres. Due to additional land needs and subdivision restrictions, new plan is for 63 acres. Awaiting for Council to hear amendment for this property acquisition
	CML Storage Facility/Infrastructure	Design	Yes / 10%	300k	This project will provide critical parts storage and much needed onsite maintenance work area for heavy equipment.
	CML Operations Facilities	Design	Yes / 10%	250k	Infrastructure for solid waste management facilities, including, materials reclamation area, abandoned vehicle yard, electronic waste and household hazardous waste collection area.

COUNCIL INITIATED AMENDMENTS TO FY 20

- 3 expansion positions added to Molokai LF staff to take over refuse collection (from Public Works Dept) and green waste receiving & processing (from EP&S Division).
- Estimated start date June 2020

POSITIONS:

Equipment Operator (1)
Laborer II
Laborer II

Est. April start date
Est. April start date
Awaiting pre-employment screening

VACANT POSITIONS STATUS REPORT

TOTAL DIVISION EMPLOYEES: 107

VACANCIES: 7

FY 20 EXPANSION POSITION VACANCIES: 4

All positions posted and awaiting approved applicant lists and/or under interview process
 Reasons for vacancies include transfers, employee promotions, retirements and expansion positions

SECTION	POSITION TITLE	STATUS
ADMINISTRATION	Safety Specialist I	Recruitment period completed. Awaiting applicant list
	SWD Operations Program Superintendent	Recruitment period completed. Awaiting applicant list
	CEI	Recruitment period completed. Awaiting applicant list
	CEIV	Currently interviewing
CENTRAL MAUI LANDFILL	Laborer II (2)	Currently interviewing
	Landfill Equipment Operator	Recruitment period completed. Awaiting applicant list
MOLOKAI LANDFILL	Laborer II	Employee selected. Awaiting physical
LANAI LANDFILL	Landfill Equipment Operator	Recruitment period ongoing. Awaiting applicant list
WAILUKU REFUSE	Crew Leader II	Recruitment period completed. Awaiting applicant list
	Refuse Collector	Currently interviewing

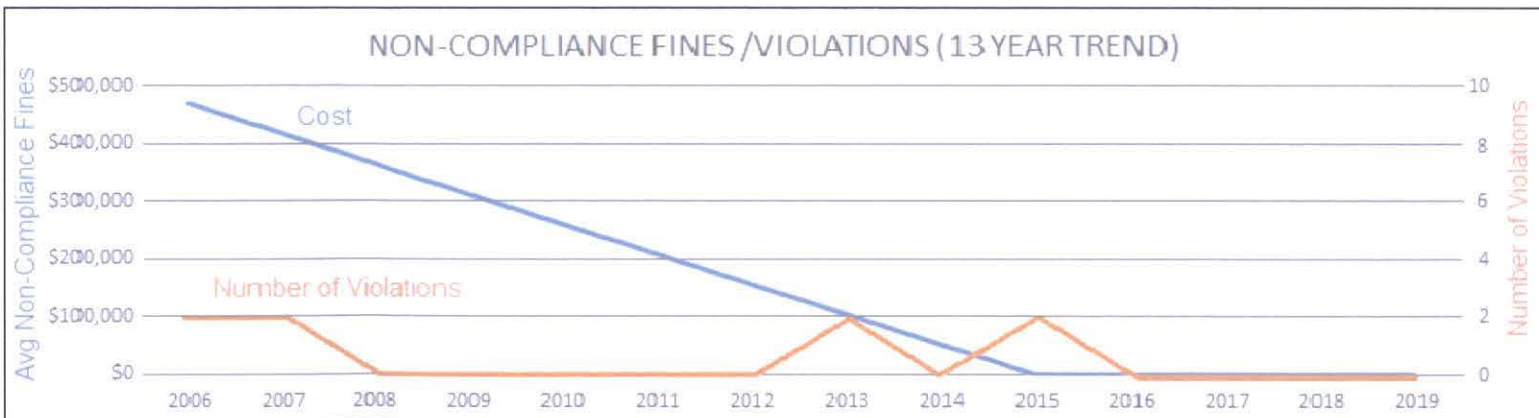
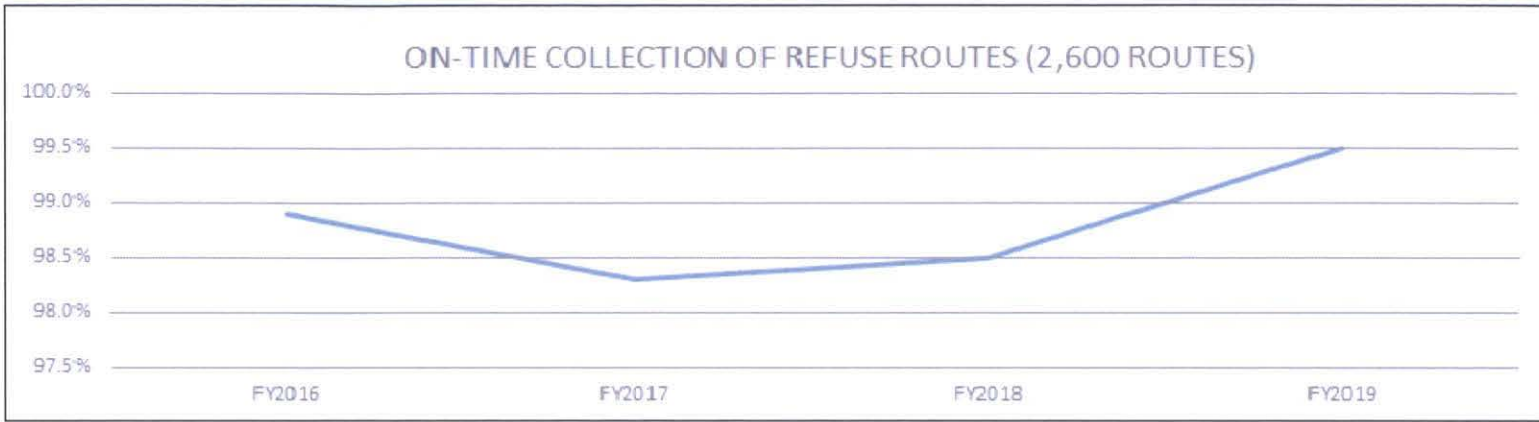
COUNCIL SUPPORT MOVING FORWARD

- FY20 Supplemental Budget Amendment in process
Awaiting Council review to acquire 63 acres adjacent to Central Maui Landfill for needed FEMA emergency debris handling area, greenwaste and sludge handling, waste reduction, conversion and waste to energy projects, storm water retainage basins and related infrastructure.
- Continue to work together with the Division to support our yearly budget requests to maintain environmental protection, community needs, continuation of services, landfill capacity, staffing, equipment and CIP to meet our growing population, increasing regulations and expectations.
- Continue to support the Division rates and fees to allow for a self-funded Solid Waste Division without the need for General Fund subsidy.

A photograph of a landfill site. In the foreground, a yellow bulldozer is pushing a large pile of dark waste. To the left, a white front loader is parked. The background shows a long, low ridge of waste under a clear sky.

SOLID WASTE DIVISION REFERENCE INFORMATION

HISTORICAL PERFORMANCE MEASURES



ADMINISTRATION, COMPLIANCE, PLANNING & ENGINEERING

Capital Projects

- Landfill Construction / Expansions
- Infrastructure & Regulatory Projects
- Safety Improvements
- Environmental Assessment
- Environmental Impact Statements

Technical Documentation

- Permitting
- Operations Plan
- Equipment Maintenance & Replace Plan
- Surface Water Management Plan

Management of ~ 20 Permits

- Solid Waste Mgmt. Operating Permits
- Stormwater (NPDES) Permits
- Air Quality (NSPS / Title V) Permits
- Special Land Use Permits

Reporting Requirements

- Solid Waste Operating Reports
- Discharge Monitoring Reports
- Land Use Commission Reports
- Air Permit Compliance Reports
- Landfill Gas Monitoring Reports
- Groundwater Monitoring Reports
- Surface Emissions Monitoring Reports

Safety and Training

(5th most dangerous job in the US)

- 50+ Job specific training programs for landfill and refuse collections

Collection and Billing

- Account Management
- Bill payment
- Appliance/White Goods Pickup



Safety matters

REFUSE COLLECTION

Safety is Priority #1

WHY?

- Unknown hazardous materials
- Street access constraints
- Low light conditions
- Overhead obstacles
- Other vehicles and traffic
- Pedestrians and animals

General Refuse Collection Rules

- All containers need to be out at curb by 5:00 AM on day of pick up
- No collection of liquids, animal carcasses, commercial construction debris, refuse in excess of collection unit

Manual Routes

- Collected 1x/week on Maui & Molokai
- Collection unit, max of six (6), self provided, 32 gallon containers, bags or bundles, weighing no more than 50 lbs. each
- Account holder is responsible for spillage and/or breakage of containers

Automated Routes

- Collected 2x/week on Maui and 1x/week on Lanai
- Collection unit, one (1) County issued 96 gallon cart with lid closed
- Cart must be accessible within sidewalk area, handle away from street, with 5 feet of clearance all around

Annual Statistics

2,500,000 pickups per year
90,000,000 lbs of trash
picked up and hauled per year



LANDFILL SECTION

FOUR LANDFILLS

Central Maui Landfill

- Processes 210,000 tons per year
- 80 acres
- In service since 1987
- Largest municipal landfill in the State
- Waste intake rate, 1,200 tons max/day

Molokai Landfill

- Processes 5,800 tons per year
- 12 acres
- In service since 1974
- Waste intake rate, < 20 tons/day

Lanai Landfill

- Processes 4,300 tons per year
- 17 acres
- In service since 1968
- Waste intake rate, < 20 tons/day

Hana Landfill

- Processes 1,300 tons per year
- 12 acres
- In service since 1984
- Waste intake rate, < 20 tons/day

Prohibited Items

- Liquids
- Fuel tanks
- Automobiles
- Regulated hazardous
- PCB materials
- Radioactive waste
- White goods
- Untreated medical / infectious waste
- Commercial green waste

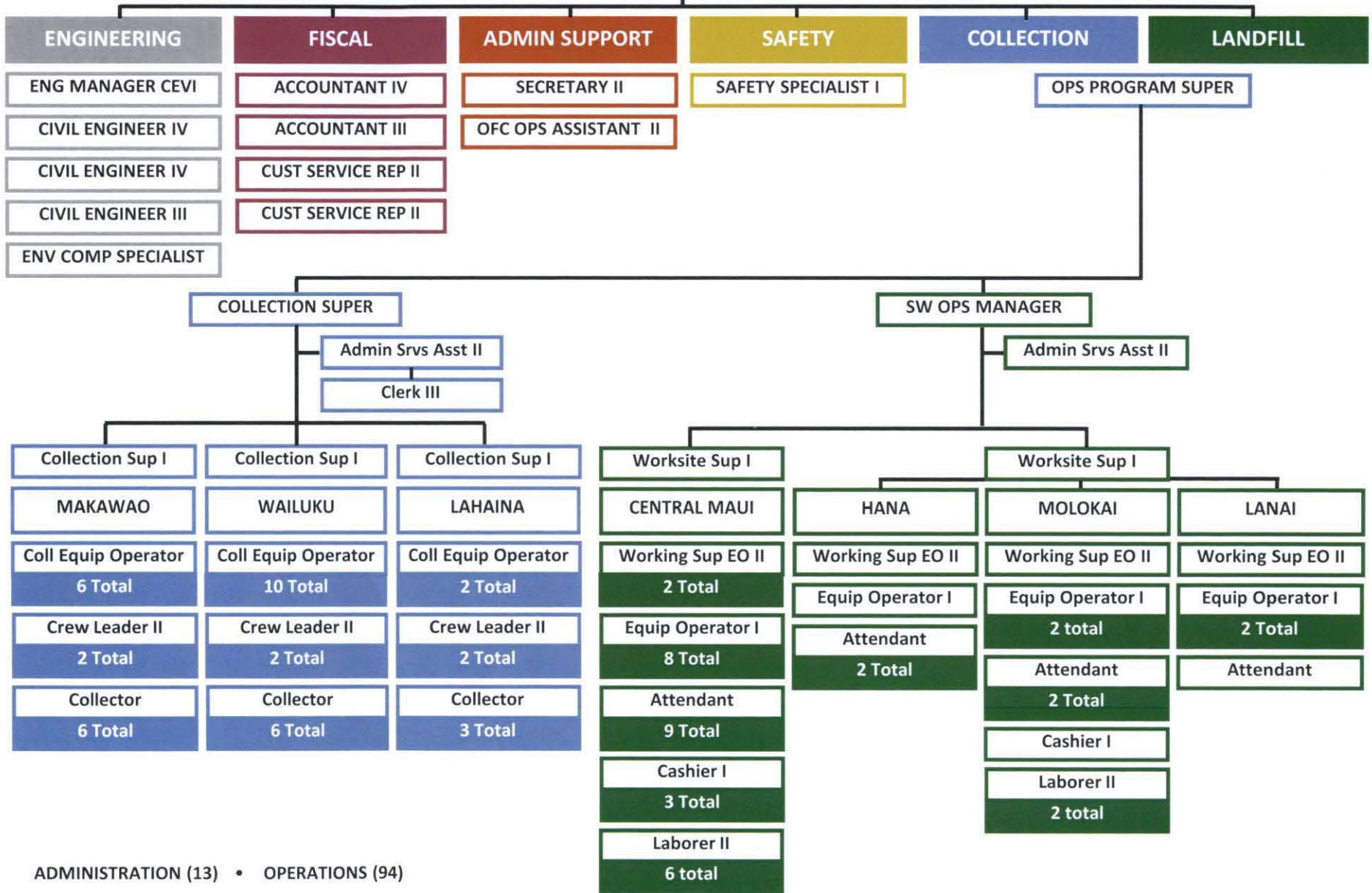
30 Years of Post-Closure

Monitoring of Closed Landfills

- CML phases 1&2
- Makani
- Kalamaula (on Molokai)
- Waikapu
- Olowalu

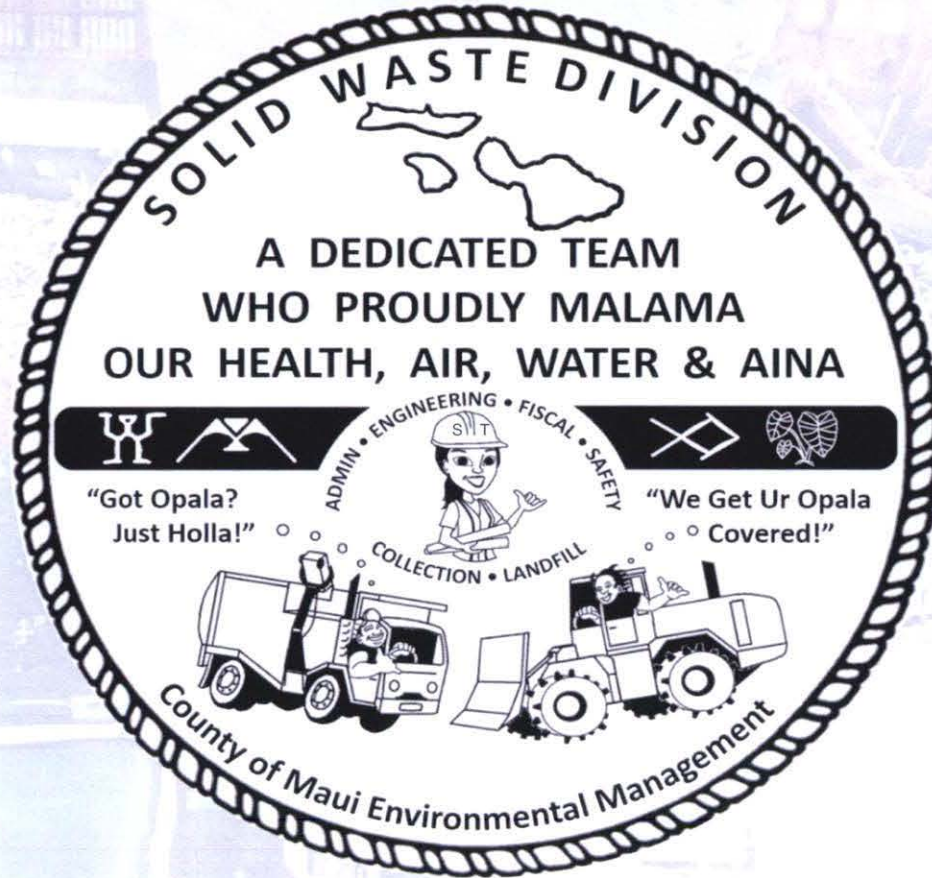
ORGANIZATION CHART

DIVISION CHIEF



ADMINISTRATION (13) • OPERATIONS (94)

Continued success is ensured through the sustained commitment from all stake holders, including our County Council, the Community, Administration, Department and Division.



MAHALO FOR YOUR SUPPORT