

ALAN M. ARAKAWA
Mayor
STEWART STANT
Director
MICHAEL M. MIYAMOTO
Deputy Director



MICHAEL P. RATTE
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

April 27, 2017

Ms. Lynn A.S. Araki-Regan
Budget Director, County of Maui
200 South High Street
Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL
Alan Arakawa 4/27/17

Mayor Date

Honorable Alan M. Arakawa
Mayor, County of Maui
200 South High Street
Wailuku, Hawaii 96793

For Transmittal to:

Honorable Riki Hokama
Chair, Budget and Finance Committee
Maui County Council
200 South High Street
Wailuku, Hawaii 96793

Dear Chair Hokama:

SUBJECT: FISCAL YEAR ("FY") 2018 BUDGET (EM-9) (BF-1)

The County is in receipt of the above Budget and Finance (BF) Committee requested information dated April 27, 2017. Your request and the corresponding answer is provided below by the Department of Environmental Management (DEM).

1. *Provide updated costs including labor, fringe, overhead charges, and other related costs to run the 3-Can Plan program. (RH)*

Please see attachments and reference DEM response EM-5 BF-1 dated 4/21/17. Cost on attached updated 4/27/17, reflecting tonnage data received from the EP&S Division.

2. *As it relates to the Hana Landfill Makai Berm Waste Removal (CBS-1908, page 638 of the Program Book):*
 - a. *What is the total contract amount and duration of the contract to haul green waste out of Hana? (MW)*

As it relates to the Hana Landfill Makai Berm Project, there is no specific contract amount for hauling greenwaste out of Hana. The contract does

RECEIVED
2017 APR 27 PM 4:17
OFFICE OF THE
COUNTY COUNCIL

include clearing and grubbing of vegetation. As a clarification to the April 26, 2017 Council meeting discussion, we are in fact currently stockpiling the material at the Hana Landfill to dry out and reduce volume for project re-use. The contract scope has been developed with cost effectiveness in mind to not include any unnecessary work items.

- b. *Inquire with the State Department of Health to see how green waste can be used in Hana or at the Hana Landfill, other than for cover material, that will help with remediation and curb the County's expense of hauling it out. (MW)***

The Hana Landfill Makai Berm Project greenwaste excavated will be re-used in the landfill area.

- c. *What is the Department's policy of monitoring truckloads to prevent the spread of invasive species when hauling green waste? Further, inquire with the State Department of Agriculture, State Department of Land and Natural Resources, and State Department of Health on the monitoring of truckloads. (AA)***

The greenwaste excavated from the Hana Landfill Makai Berm Project will be re-used in the landfill area so the concern about invasive species should be eliminated.

Sincerely,



STEWART STANT, Director
Department of Environmental Management

Attachments

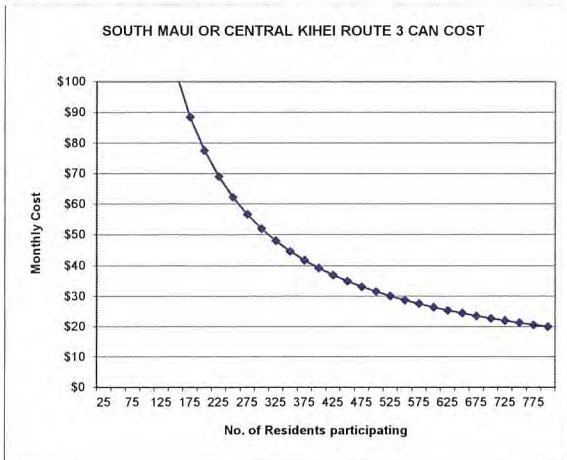
cc: Solid Waste Division

4/27/17 UPDATE TO FY15 COST ESTIMATE TO ADD ON 3 CAN PLAN (IF ADDED TO CURRENT REFUSE COST) ALL KIHEI PILOT ROUTES

Number of Refuse Accounts On A Route (max. 1,000)	765
Number of Tons of Mixed Recyclables Annually	165.86
Number of Tons of Green Waste Annually	323.60
Number of Tons of Contamination	20.82
Cost per Ton of Processing Mixed Recyclables	\$130.00
Cost per Ton of Processing Green Waste	\$20.00
Estimated Depreciated Cost of the Dedicated Refuse Truck	\$70,000.00
Estimated Maintenance cost for Refuse Truck	\$17,819.37
Annual Cost of Carts/Delivery/Mailers	\$20.14
Cart maintenance and repair / storage	\$10,000.00
Cost per Ton of Landfilling Contamination	\$76.00
Annual Cost of County Staff to Maintain Program	\$50,188.90
Annual Cost of County Staff to Manage Program	\$12,352.66
Annual Total Cost to Process Mixed Recyclables	\$21,562.27
Annual Total Cost to Process Green Waste	\$6,471.93
Annual Total Cost to Process Contamination	\$1,582.20
Annual Total Cost for Carts/Delivery/Mailers	\$15,407.10
Annual Cost of the Dedicated Refuse Truck	\$70,000.00
Annual Cost of maintenance/repair/storage	\$10,000.00
Estimated Annual Maintenance Costs	\$17,819.37
Annual County Staff Cost	\$62,541.56
Annual Savings for Landfilling	-\$37,198.97
Total Annual Program Costs	\$168,185.45
Inflationary cost increase over 10 year period (2% increase/yr)	\$184,158.38

Annual Program Costs per Account	\$240.73
MONTHLY ADDED COSTS PER ACCOUNT *	\$20.06

* This cost is in addition to their existing monthly refuse costs.



Input the total estimated accounts on route (765 Maui Meadows accounts and 766 Central Kihei accounts - 4/27-17)
 414.93 tons - Jan. 2016 to Mar. 2017 for M. M. and Central Kihei(1.25 yrs) 0.2168
 809.52 tons - Jan. 2016 to Mar. 2017 for M. M. and Central Kihei(1.25 yrs) 0.4230
 Approx. 52.08 tons of contamination Jan. 2016 to Mar. 2017 0.0272
 Current cost/ton to process recyclables

No cost based upon current agreement with EKO for the 3-Can Plan Pilot. A permanent 3-Can Plan may have increased cost for compost, assume \$20/ton
 Based on \$420,000 Cost and replacement after 6 years for additional truck
 Maintenance, parts, and tires (See costs below)
 per refuse account

Cost of landfilling per CML Cost of Landfilling SWD Report

Refuse Driver costs \$54k/yr + OH & Fringe of 93.63% (CY2017); County subsidizes refuse hauling costs by 48% in FY 17. Hence, unsubsidized cost is added as it is not mandatory for the County to provide curbside recycling.

Approx. \$58k/yr; + OH&F (84.58%) 20 hours per month; recycling staff

REFUSE DATA TABLE

Estimated O&M	FY17 (Proj)
\$141,911 Gasoline	141,911
\$145,875 R&M parts	145,875
\$90,887 Tires and tubes	90,887
\$378,673 per year for 23 vehicles in Wailuku Refuse, includes refuse collection vehicles, pickups and flat beds.	

\$65,056 \$220k per year Interfund maintenance (Flat rate for all Refuse vehicles in Wai, Mak, Lah. Also includes Hana & Molokai Refuse truck and service) Molokai Refuse p/u \$1,984.98/wk; Hana Refuse p/u \$994.72/wk

GRADUATED COST DATA TABLE FOR GRAPH

Residents Participating:	25	50	75	100	125	150	175	200	225	250	275
Monthly cost/resident:	\$613.76	\$307.37	\$205.24	\$154.17	\$123.53	\$103.11	\$88.52	\$77.58	\$69.06	\$62.26	\$56.68
Residents Participating:	300	325	350	375	400	425	450	475	500	525	550
Monthly cost/resident:	\$52.04	\$48.11	\$44.75	\$41.83	\$39.28	\$37.02	\$35.02	\$33.23	\$31.62	\$30.16	\$28.83
Residents Participating:	575	600	625	650	675	700	725	750	775	800	
Monthly cost/resident:	\$27.62	\$26.51	\$25.49	\$24.55	\$23.67	\$22.86	\$22.11	\$21.40	\$20.74	\$20.13	

LEGEND / INFO:

Above numbers are based upon current participation rates, tonnages, contamination rates, etc.

South Maui # of accounts: 766 # of Central Kihei route: 765

COM would require all accounts or none on a route to be on the 3 can.

Participation by choice requires one additional pick up/week per route, is not operationally feasible and would require computerizing our trucks.

3-CAN PILOT PLAN RATE CALCULATION
UPDATED FROM DEM CHART 4/16

		MONTHLY
ACTUAL COST BASE (PREVIOUSLY CALCULATED) ¹		\$20.06
AVG TONS PRODUCED PER HOUSEHOLD-ANNUALLY	1.80	
AVG TONS PRODUCED PER HOUSEHOLD-MONTHLY	0.15	
AVG PERCENTAGE OF HOUSEHOLD TRASH IS GW	23%	
RESIDENTIAL GW TIPPING FEE IS ESTIMATED AT \$20/TON + \$10 PER TON RECYCLING FEE) ²	\$30.00	1.04
CALCULATED TRUE COST OF COLLECTION & DISPOSAL OF RESIDENTIAL SUBSCRIBERS- PER MONTH (NOT INCLUDING COLLECTION PAYS A TIPPING FEE)	\$47.00	
FY18 PROPOSED COLLECTION RATE- PER MONTH	\$27.00	
COM SUBSIDY- PER MONTH PER ACCOUNT	\$20.00	
50% OF SUBSIDY TO CREDIT 3-CAN PLAN		(\$10.00)

3-CAN PILOT PLAN ADDITIONAL COST PER MONTH

\$11.10

¹ PLEASE REFER TO COST OF TABLE FOR 3-CAN PLAN

² EKO MAY BEGIN CHARGING COM FOR 3-CAN PLAN GREENWASTE