



## RESOURCE RECOVERY • KA'ŌHAO PROTOCOL

A partnership of Windward schools working cooperatively in the pursuit of waste reduction, soil restoration, and applied environmental education. All members participate annually in the U.S. EPA's Food Recovery Challenge and adhere to strict, safe, standardized operational procedures.

### SUMMARY • JANUARY 2017

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#### LANIKAI ELEMENTARY PUBLIC CHARTER SCHOOL

Start: January 2014 • Number of students: 330 • Annual food waste: 8.5 tons • Food waste collection: 100% cafeteria lunch, campus-wide snacks • Other: 98% HI-5 cans and bottles, green waste, paper, cardboard, mylar • Technologies: thermal composting, vermicomposting, bokashi

Food waste recovered: 1,936 pounds. Organized by KUPU intern Jordan Nelson, Ag teachers and students from Castle High School spent two productive days at Lanikai and Kainalu helping with food catch and compost pile building. Castle Ag students will be conducting their own food waste audit in February.

Sixth grade science students designed an ingenious apparatus that captures the heat generated by compost piles to heat water to 130° to create a bucket-washing station right on site! When fully developed, this will be a very useful addition to operations at all ZWS campuses.

#### KA'ELEPULU ELEMENTARY

Start: August 2016 • Number of students: 200 • Annual food waste: 8.5 tons • Food waste collection: 100% cafeteria breakfast and lunch • Other: 100% HI-5 cans and bottles, green waste • Technologies: thermal composting

Food waste recovered: 1,548 pounds. Ka'elepulu's resource recovery program is under the leadership of parent volunteer Lindsey Whitcomb. With both KUPU interns Samantha Luhn and Tawni Kerr on hand in January, we were able to offer two-day-a-week support, bringing Ka'elepulu's all six active compost piles up to speed.

Jayne Grzebik, Director of the UH Master Gardener program in Waimanalo, met with principal Jaime Dela Cruz to discuss a formalized relationship with Ka'elepulu to assist with garden restoration and composting.

#### KAINALU ELEMENTARY

Start: January 2017 • Number of students: 460 • Annual food waste: 18 tons • Food waste collection: 100% cafeteria breakfast and lunch • Other: 100% HI-5 cans and bottles • Technologies: thermal composting, vermicomposting

Food waste recovered: 3,189 pounds. The newest – and biggest – school to join the Windward ZWS Hui, Kainalu's first month of resource recovery was a huge success. Their vermicomposting system, started a year ago, is now operating at full capacity of 30 pounds per week; four hot compost piles were built to accommodate over 1.5 tons of food waste. A program for sharing finished compost from the estimated annual 36 piles has been proposed.

Administration and custodial support was unequivocally enthusiastic and helpful. Children quickly picked up the sort-and-separate procedure. The cafeteria rubbish bag count decreased from 12 bags to 4 bags starting on Day One.

#### COMBINED JANUARY 2017 TOTALS

Period from January 9 through February 3. Includes 19 days at Lanikai, 18 days at Ka'elepulu and Kainalu

Total students participating daily: **975**

Total food waste recovered in January: **6,673 pounds**

**2017 total to date: 6,673 pounds**

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