



## RESOURCE RECOVERY • KA'OHĀO 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 • DECEMBER 2017

**The 2017 totals are in:** Food waste recovery of the three Windward Zero Waste School Hui campuses topped out at 63,490 pounds, or 31.75 tons. Conservatively – since the schools in the sample are relatively small – we can extrapolate that if all of Oahu's 118 public elementary schools adopted the Ka'ohao Protocol, annual dumpster diversion would be 7,491,820 pounds – 3,746 tons. Over 8,990 cubic yards of rich compost would be produced as well as 236 green jobs created by hiring Resource Recovery Specialists/Apprentices to implement and manage the program. Couldn't this scenario be realized by reallocating existing State funds from waste disposal to resource recovery?

Each of the Windward Hui schools will submit their 2017 data to the Environmental Protection Agency to compete nationally in the U.S. EPA Food Recovery Challenge.

#### KA'OHĀO PUBLIC CHARTER SCHOOL

Start: January 2014 • Number of students: 330 • Annual food waste: 8 tons • Food waste collection: 100% cafeteria lunch and campus-wide snacks • Other: 98% HI-5 cans and bottles, green waste, paper, cardboard, mylar • Technologies: thermal composting, vermicomposting, bokashi

Food waste recovered: 1,115 pounds. The focus in December was on green waste management with the sad announcement that Ka'ohao's beautiful 54-year-old monkeypod tree shading the parking lot was coming down due to roots breaking water lines. Third graders studying the carbon cycle designed a plan for re-use of the beloved tree: the small branches and leaves would be ground for composting mulch, the woody mulch from big branches would be spread around the property for soil restoration, and the trunk made into benches and tables to enhance the campus. When the tree was torn down on Dec. 21, the tree guys told us that it was the first time ever they left with NOTHING in their trucks for disposal. Zero waste! The former monkeypod continues to bestow value to Ka'ohao School.

#### KA'ELEPULU ELEMENTARY

Start: August 2016 • Number of students: 201 • Annual food waste: 9.2 tons • Food waste collection: 100% cafeteria breakfast and lunch • Other: 100% HI-5 cans and bottles, some green waste • Technologies: thermal composting, vermicomposting

Food waste recovered: 1,192 pounds. Two visiting Kupu interns got an impressive demonstration of hot compost harvesting and true grit as all Ka'elepulu 4th and 5th graders participated in a highly orchestrated two-pile harvest, boxing up well over two cubic yards of top-quality finished compost in record time. Students have plenty for their second garden planting in January, as well as surplus to sell.

#### KAINALU ELEMENTARY

Start: January 2017 • Number of students: 463 • Annual food waste: 14 tons • Food waste collection: 100% cafeteria breakfast and lunch • Other: 100% HI-5 cans and bottles • Technologies: thermal composting, vermicomposting

Food waste recovered: 2,093 pounds. Hui trainer Jordan Nelson wowed the crowd at the AINA Open House at the MADA on Dec. 14 with a TED-Talk-level presentation detailing our hot composting operation. Additional adult educational opportunities have been requested.

#### COMBINED DECEMBER 2017 TOTALS

Three-week period from Dec. 4 – Dec. 21, 2017. Includes 14 school days Kainalu and Ka'elepulu; 13 days Ka'ohao. Total students participating daily: Approx. 1,000.

Total food waste recovered in December: 4,400 pounds.

**2017 TOTAL: 63,490 pounds (31.75 tons)**