



Kaho'olawe Island Reserve Commission

2. OLA I KE KAI O KANALOA

Ocean Resources Management Program

December 2014-January 2015

Ongoing Projects

NOAA Marine Debris Grant

● 'Oawawahie Debris Removal

On December 4th debris from 'Oawawahie which had been staged at LZ 1 was flown off of Kaho'olawe and back to Maui (to Pu'unene Race Way and then driven to the Maui County Landfill) utilizing a helicopter. The two tons of debris will be credited to the grant obligation of 10 tons.

● Puhianenu Debris Removal

With the assistance of Zapata staff and the use of the JCB (telescopic forklift boom) 20 super sacks of debris which originated from Puhianenu, were loaded onto the deck of the 'Ohua on Dec. 9th. Ideal ocean conditions and skilled staff allowed for the of this first time event. The debris was extended over the water's edge onto the deck for transport back to Maui (Kīhei boat house).



Above: By air: 'Oawawahie debris removed from LZ 1



Students from Kihei Charter school pose during the debris sorting process



Above: By sea: Lopaka poses with the Puhianenu debris

● About 50 Kihei Charter School 7th and 8th graders assisted with the unloading and sorting of the Puhianenu debris over a two day period. The students also used over 600 lbs of the debris toward their campus garden beautification project.



Above: By land: debris being moved from shore to ship



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- Aerial Survey

An aerial survey was conducted in December to monitor the three sites where the debris clean ups occurred and to document any subsequent changes. The aerial survey also provided an opportunity to circumnavigate the check for any other coastal disturbances, poaching and resource monitoring. This was the first aerial survey conducted since 2012.

HCF Grant

- Benthic/Coral Health Monitoring

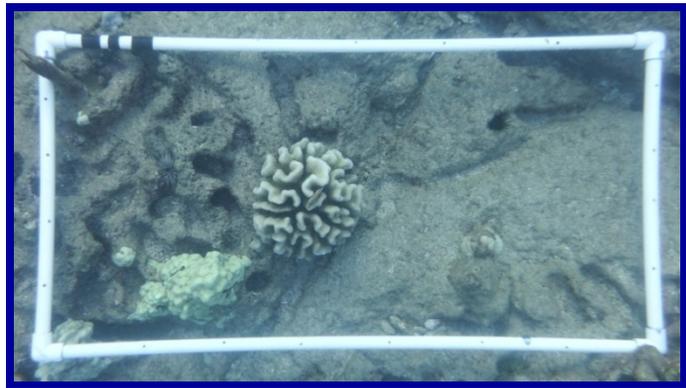
Program staff revisited 16 photo plot sights in Honokanai'a Bay in December to monitor benthic and coral health change over the last 20 months. This survey is in compliance with the HCF grant to show a possible correlation between the coastal plantings on shore and nearshore benthic health change over time. There was a 9.3% increase in coral abundance and a 12.4% decrease in turf algae in less than two years.

- Debris Sorting

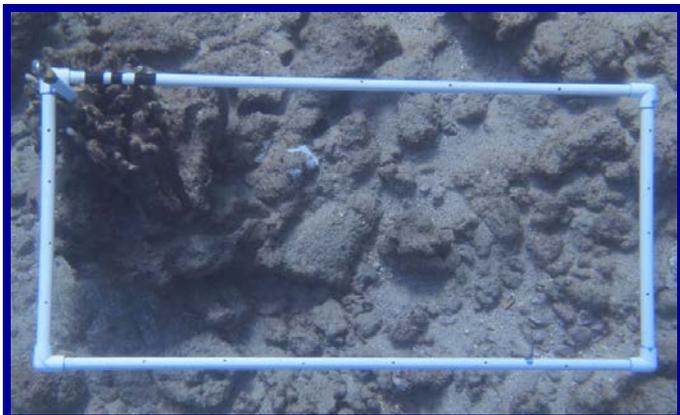
The last of the marine debris associated with the grant was sorted, sacked and removed from Kaho'olawe in January. All buoys were placed into super sacks and again back hauled again with the 'Ohua



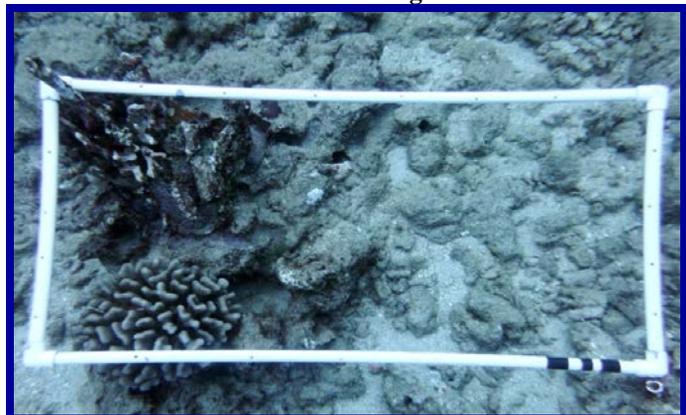
Above: photo plot 4b taken in April 2013



Above: photo plot 4b taken again in Dec. 2014, notice coral size change



Above: photo plot 4 c taken in April 2013



Above: photo plot 4c taken again in Dec. 2014, notice large coral growth in bottom left



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- Aerial Survey

Through the marine debris grant extension, aerial surveys were able to be conducted in Feb. and March. The no cost six month extension will allow staff to focus on the re-accumulation rate of debris into the three areas where clean up events have occurred in the last 18 months (Kanapou, Puhianenu and 'Oawawahie). Thus far re-accumulation has been slow in all areas.



Above: Southern Kanapou taken in Dec. 2014



Above: Southern Kanapou taken in March 2015

HCF Grant

- Non-native fish removal/community outreach

Program staff removed 88.2 lbs of Roi, To'au and Ta'ape during the March 10th-13th access. To date the staff has removed 157 lbs of the 500 lb grant obligation. Staff also worked with students from the Maui Youth Leadership Corp. doing gut analysis of the non-native fish and talking to them about the impacts these fish have on the native eco-system.



Above: Some of the native fish found during the dissection of the non-native Roi



Above: A volunteer poses with a Roi taken from Kealaikahiki



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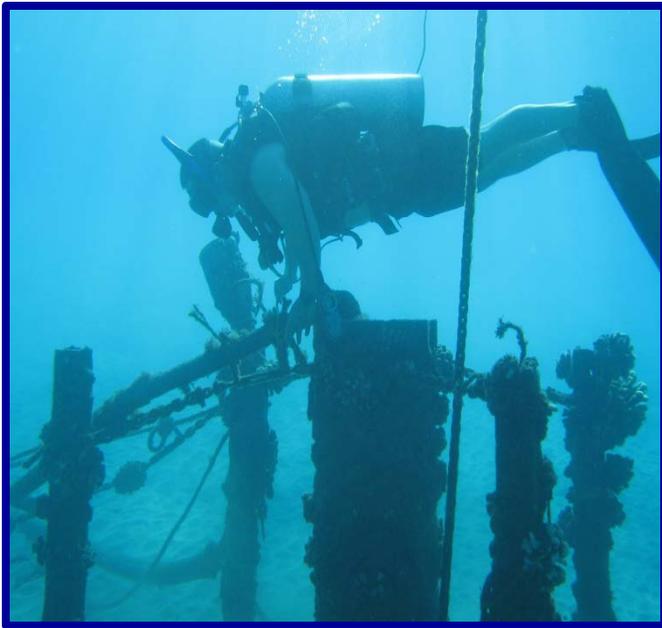
Ocean Resources Management Program

February 2015-April 2015

Ongoing Projects

Base Camp R.O. Repair

● Staff was informed in Feb. by Zapata crew that due to high surf events and shoreline changes the reverse osmosis (RO) intake (approximately 35 yards off shore) was not taking in any sea water. A reconnaissance dive showed that the whole system had been torn off and the remaining hose was buried ~2 ft. beneath the sand. In March a second dive was conducted to locate and excavate the remaining hose. The damaged hose was secured while material and parts could be ordered/fabricated. Again in March a third dive was done to repair and extend the hose, install a new check valve system and re-secure/stabilize the new intake to the underwater stabilized structure.



The RO intake system prior to '14-'15 winter



March '15, RO intake system gone, stabilizing legs only remain

● Jet Ski Delivery to Kaho'olawe
Staff from Ocean, Culture and Operations Program assisted with the delivery of the two jet skis from Kihei to Honokanai'a in March. The process served as both transport and training for staff in open ocean travel, operator changes (on water), trailer transport, trouble shooting, beach landing and. The valuable resources can now be utilized for near shore patrolling, personnel transport to or off shore and in conducting surveys.



The re-structured RO intake system