

*Kaho'olawe Island Reserve Commission*  
*Kūkulu ke ea a Kanaloa - The life and spirit of Kanaloa*



*State of Hawai'i*



# KAHO'OLAWE ISLAND RESERVE FY17 YEAR-IN-REVIEW

*July 2016 — June 2017*

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The successful projects undertaken by the Kaho'olawe Island Reserve Commission are the result of an extraordinary formula: a state agency with a strikingly unique mission, innovative grant programs that provide funding for natural and cultural resource management and education, incredible volunteers who donate thousands of hours and immeasurable energy, exceptional financial and administrative support from the State Legislature and Administration and an outstanding staff of dedicated and hard working men and women who can put all of these pieces together.

For several years, the Hawaii Community Foundation has supported a coastal restoration project that combines the efforts of KIRC's Ocean, Culture, Operations, Administrative and Restoration programs. This project has seen the planting of climate-adaptive plants in coastal areas to stabilize the shoreline and protect significant coastal sites, as well as the removal of invasive marine species that prey on native species in Kaho'olawe's near shore waters.

Other team-centered projects include the Seabird Restoration Project, aiming to restore native habitats for endangered species with funding by the National Fish and Wildlife Foundation in collaboration with Island Conservation, and the Alu Like-funded Hui Kāpehe project, in which interns have learned restoration techniques and worked to restore 'uala patches at Luamakika, helped to research and implement biosecurity measures at the Kīhei boat house, and trained and served as crew on the 'Ōhua, among numerous other endeavors.

Through direct funding from the State, the KIRC is moving toward energy and financial self-sustainability with the installation of a 100-kilowatt solar array at Honokanai'a with 80-kilowatt hours of battery storage. Additionally, Capital Improvement Project funds were approved for the planning and design of the future Kaho'olawe Operations and Education Center at the Kīhei boat house site. Both of these projects have benefitted from administrative support from the Department of Land and Natural Resources (DLNR), Engineering Division, who assisted with procurement and contracting.

It is a complex recipe that has brought together our staff, our State representatives and officials, various local and national funding sources, and our volunteers; it has produced great results for Kaho'olawe, and will see KIRC continue to succeed in future years.

— Michele McLean, KIRC Chair



“This is a place to help put you back in sync with yourself while being of service to a greater good.” — Lila Jones, Volunteer.  
Pictured: ‘Ōhua unloading volunteers and restoration supplies



In our 2014 planning document **I Ola Kanaloa!** (Life to Kanaloa), a Kanaloa 2026 Working Group consisting of KIRC (Kaho‘olawe Island Reserve Commission), PKO (Protect Kaho‘olawe ‘Ohana) and OHA (Office of Hawaiian Affairs) representatives established a shared vision for the near and long-term future of Kaho‘olawe. This year, we have been working steadily to bring life to this document by focusing our limited resources on the efforts contributing to this future.

For the KIRC, the most effective way of achieving this vision is to focus on our strengths in continuing to develop and work on projects that heal the physical body of Kanaloa; the natural resources of the island and surrounding waters.

Planting the hardpan with native dryland species, creating mechanisms to slow the effects of surface water erosion and eradicating invasive species to restore native habitats are key projects listed in **I Ola Kanaloa!** which promote the goal of “Pilina ‘Āina: Renewing Connections; honoring the natural environment and revitalizing cultural relationships through Kanaloa Kaho‘olawe,” (I Ola Kanaloa! Program I; [download plan at www.kahoolawe.hawaii.gov/plans-policies-reports.shtml](http://www.kahoolawe.hawaii.gov/plans-policies-reports.shtml)). Our oral history, digital library and mobile app projects aim to “preserve the history of Kaho‘olawe,” (I Ola Kanaloa! Program III). We are also working towards the goal of “creating sustainable shelters, facilities and habitation sites,” (I Ola Kanaloa! Program IV), as we begin construction on our solar array for our Honokanai‘a base camp and regain on-island agriculture projects to help feed its volunteers and workers.

In the coming year, we look forward to expanding our projects as we begin new coastal and dryland forest planting efforts, develop Kaho‘olawe-based curricula in partnership with Maui schools, facilitate Hawaiian science and research opportunities through the University of Hawai‘i and begin to build our Kaho‘olawe Operations and Education Center at Kīhei. With initial design funding from the State, this new facility will not only allow us to operate more efficiently and better serve the public, but also serve as a means to help sustain the KIRC’s on-island efforts while also sustaining **I Ola Kanaloa!** into the future as a model of sustainable, indigenous resource management.

— Michael K. Nāho‘opi‘i, KIRC Executive Director

# ABOUT

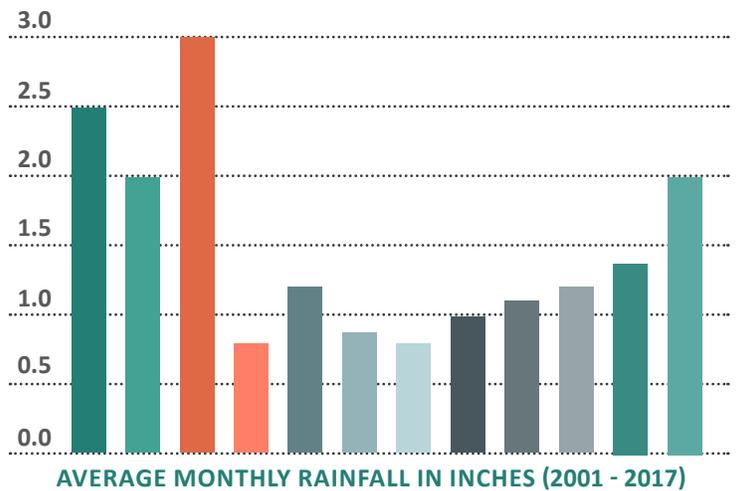


Kaho'olawe is the smallest of the eight main islands in the Hawaiian Archipelago. Eleven miles long, seven miles wide and comprised of 28,800 acres, the island is of volcanic origin with the highest elevation at 1,477 feet. Its slopes are fissured with gulches 50 to 200 feet deep. Approximately 30% of the island is barren due to severe erosion. Formidable cliffs dominate the east and south coast.

Following 200 years of uncontrolled grazing, Kaho'olawe and its surrounding waters were under the control of the U.S. Navy from 1941 to 1994; used with allies as a live-fire training area. Despite clearance efforts, unexploded ordnance (UXO) is still present and continues to pose a threat to the safety of anyone accessing the island or its waters.

A decades-long struggle by the people of Hawai'i, particularly the Protect Kaho'olawe 'Ohana (PKO), succeeded in stopping the bombing of Kaho'olawe and helped to spark the rebirth and spread of Native Hawaiian culture and values. A 1993 act of Congress conveyed the island back to the State of Hawai'i, although the Navy was held responsible for a 10-year cleanup of UXO and retained control over access to the island until 2003.

A treasured resource for all of Hawai'i's people, Kaho'olawe is of tremendous significance to the Native Hawaiian people. In recognition of the special cultural and historic status of



Kaho'olawe, the island and the waters within 2 nautical miles of its shores were designated by the State of Hawai'i as the Kaho'olawe Island Reserve in 1993.

In 1994, the Kaho'olawe Island Reserve Commission (KIRC) was established by the State of Hawai'i, under the Hawai'i Revised Statutes, Chapter 6K, to manage Kaho'olawe, its surrounding waters, and its resources, in trust for the general public and for a future Native Hawaiian sovereign entity.





**VISION**

The kino of Kanaloa is restored. Forests and shrublands of native plants and other biota clothe its slopes and valleys. Pristine ocean waters and healthy reef ecosystems are the foundation that supports and surrounds the island.

Nā po‘e o Hawai‘i care for the land in a manner which recognizes the island and ocean of Kanaloa as a living spiritual entity. Kanaloa is a pu‘uhonua and wahi pana where native Hawaiian cultural practices flourish.

The piko of Kanaloa is the crossroads of past and future generations from which the native Hawaiian lifestyle is spread throughout the islands.

*Tapono Cordero-Hoopai, 2011 intern, started this ‘uala patch at Pu‘u ‘O Moa‘ula Nui. Today, it is a thriving food source for volunteers.*

# ORGANIZATIONAL STRUCTURE

**Commissioners (7)**  
appointed by the Governor

**Executive Director**

**Programs & Operations Staff (8)**

**Executive & Administrative Staff (6)**

**Volunteer Workforce (660)**

**14**

years managing Kaho'olawe restoration

**417,834**

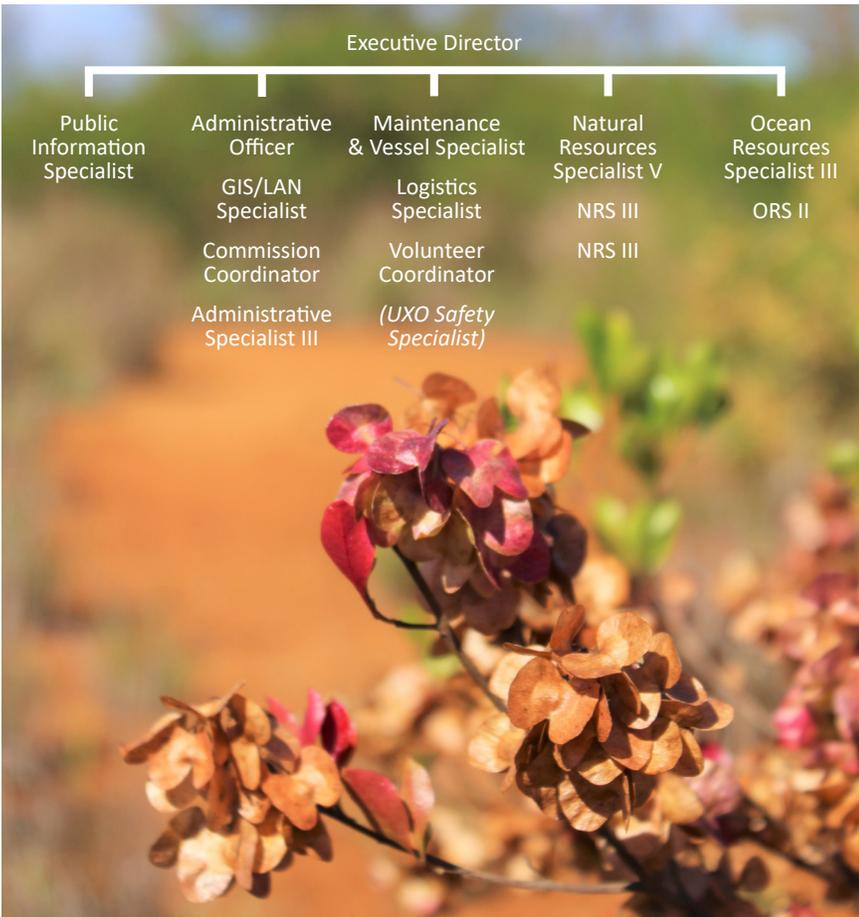
native plants (re) introduced

**12,486**

volunteers escorted & trained on-island

**53**

tons of marine debris removed



**STAFF:** 15 full-time positions (See page 20)

**MANAGEMENT:** By statute, the Commission consists of 7 members appointed by the Governor provided that 1 is a member of the Protect Kaho'olawe 'Ohana (PKO); 2 are appointed from a list provided by the PKO; 1 is a trustee or representative of the Office of Hawaiian Affairs; 1 is a county official appointed from a list provided by the Mayor of the County of Maui; 1 is the Chairperson of the Board of Land and Natural Resources; and 1 is appointed from a list provided by Native Hawaiian Organizations. (See page 22)

**AREAS OF OPERATION:** Offices rented in Wailuku (Maui), 8-acre Boat House site in Kihei (Maui), Kaho'olawe Island (45 sq miles or 28,000 acres) and Reserve waters extending 2 miles from shore (80 sq. miles or 51,200 acres).

**BUDGET:** \$1.5M

**FUNDING:** State, charitable grants, access permits, individual donations & membership fees.

**TAX EXEMPT:** The KIRC is a 170(c)(1) government nonprofit authorized per IRS Publication 557 to receive tax-deductible contributions to programs that serve a public purpose.

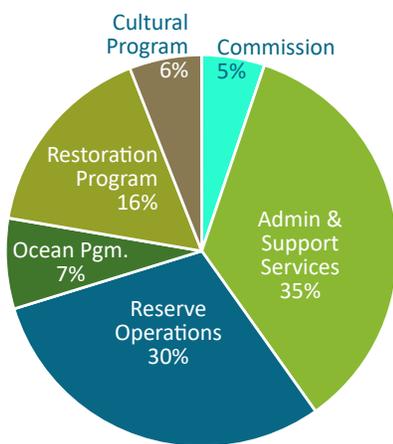
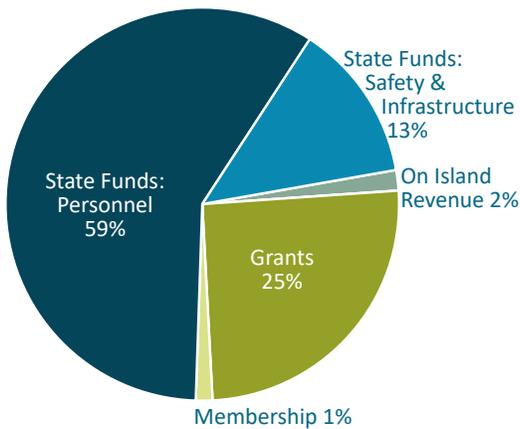
**FY17 UPDATE:** Commissioners met during four public meetings in FY17 to review and approve the *KIRC Financial Self-Sufficiency and Sustainability Plan* draft and to form a Kihei Operation/Education Center Planning Working Group (December 1, 2016); to review and approve proposed CY17 access dates and activities for the Protect Kaho'olawe 'Ohana and to review and approve legislative positions for the 2017 session (February 16, 2017); to approve Honokanai'a Base Camp photovoltaic and alternative energy conceptual designs and discuss the progress of KIRC-related legislative bills (April 4, 2017); and to review and approve the FY18 budget (June 26, 2017).

## FY17 GRANTS

- *The National Fish and Wildlife Foundation Keystone Initiative: \$150,000 (24 months) Page 9*
- *Hawai'i Invasive Species Council: \$49,066 (12 months) Page 10*
- *Native Hawaiian Museum Services, Institute of Museum and Library Services: \$49,935 (24 months) Page 11*
- *Hawai'i Tourism Authority: \$45,200 (12 months) Page 12*
- *Alu Like, Inc. Native Hawaiian Career and Technical Education Program \$269,113 (12 months) Page 13*
- *Office of Economic Development, County of Maui: \$20,000 (12 months) Page 14 + \$25,000 (12 months) Page 15*
- *Hawai'i Community Foundation's Community Restoration Partnership: \$50,000 (12 months) Page 17*



Ryan Chang



SUPPORT & REVENUE	FY15	FY16	FY17
General Fund Appropriations	N/A	\$799,575	\$1,006,109
Program Grants	\$366,698	\$739,244	\$354,698
Charitable Contributions	\$10,689	\$42,825	\$18,952
Other Income	\$84,840	\$31,595	\$23,480
Interest on Trust Fund	\$60,365	\$1,149	\$2
<b>Total Support &amp; Revenue</b>	<b>\$522,592</b>	<b>\$1,614,388</b>	<b>\$1,403,242</b>

OPERATING EXPENSES	FY15	FY16	FY17
Commission	\$63,993	\$53,209	\$78,011
Admin & Support Services	\$801,720	\$498,950	\$528,876
Reserve Operations	\$1,429,470	\$657,115	\$454,313
Ocean Program	\$212,709	\$61,521	\$112,576
Restoration Program	\$399,807	\$198,244	\$247,032
Cultural Program	\$215,681	\$145,125	\$89,974
<b>Total Operating Expenses</b>	<b>\$3,123,380</b>	<b>\$1,614,164</b>	<b>\$1,510,781</b>

TRUST FUND BALANCE	FY15	FY16	FY17
Beginning Balance	\$3,123,151	\$522,362	\$522,587
Support & Revenue	\$522,592	\$1,614,388	\$1,403,242
Operating Expenses	\$3,123,380	\$1,614,164	\$1,510,781
<b>Ending Balance</b>	<b>\$522,362</b>	<b>\$522,586</b>	<b>\$415,048</b>

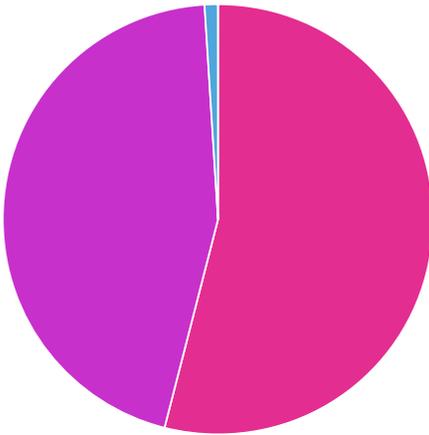
“From the moment we landed on Maui until the time we were dropped off, the entire KIRC ‘ohana was incredibly professional, excellent educators and communicators, passionate about their work, informative all the while putting safety first. We all felt so welcomed, safe and want to help as much as possible.” — Jaime Oliveira, Volunteer

# VOLUNTEER WORKFORCE



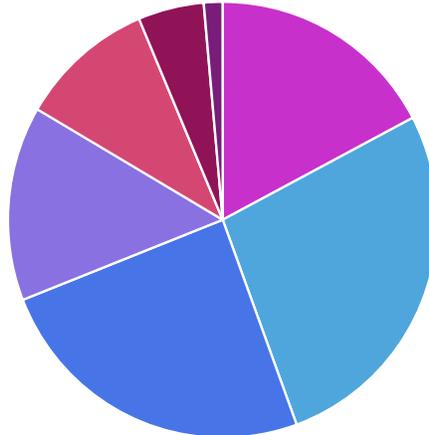
“The KIRC staff are extremely competent and passionate, which is great to be around. Having culturally relevant information/ talk story during the day and after dinners was welcome. Mahalo nui for the great and often unnoticed work that KIRC does to malama Kaho’olawe.”  
 — Momi Awo, Queen Lili’uokalani Children’s Center, Maui Unit. *Pictured: Volunteers with Pueo Working Group*

## BY GEOGRAPHIC



■ Maui (54%)  
 ■ O’ahu (45%)  
 ■ Other (1%)

## BY AGE



■ Under 20 (17%)  
 ■ 20's (27%)  
 ■ 30's (25%)  
 ■ 40's (14%)  
 ■ 50's (10%)  
 ■ 60's (5%)  
 ■ 70's (1%)  
 Average age = 35

## MĀLAMA

The KIRC has been tasked with a monumental endeavor that has and will continue to require thousands of hands over several generations to accomplish. By partnering with communities, school groups, professional organizations, conservation agencies, foundations and public outlets, the KIRC works to foster a culture of stewardship and conservation for Kaho’olawe and for all of Hawai’i’s cultural and natural resources.

*During FY16, 660 volunteers accessed Kaho’olawe through 28 individual service trips.*

“Being on Kanaloa has been a dream of mine for so many years, I never thought it would be a reality. Words cannot even explain the mana we felt on Island. For me it was [an experience] that could not be bought, I needed to earn it by honoring the presence I was in. The staff made us feel right at home and for us it was about the ‘ike and kokua that was felt. I leave a different haumana of Kanaloa and hopefully will not forget the ‘ike that comes with, so I will be able to share all about my experience on Island that cannot be given, only earned. This is just the beginning and I know many lessons will follow.”

— Tina Kawai, University of Hawai’i Maui College

HAWAI'I NATURE CENTER

Janice Brown  
Michelle Harman  
Pauline Kawamata  
Kelson Lee  
Laura Mizumoto  
Darryl Nishimoto  
Amber O'Reilly  
Jeremy Percich  
Nylen Takahashi  
Jamie Tanino  
Amy Tsuneyoshi

HAWAIIAN CANOE CLUB KANE

Jonas Arcikaukas  
Jordon Black  
Marcio E Silva  
Matt Earls  
Jason Elizares  
Ronald Erb  
Joe Foster  
Ronald Johnston  
Brian Market  
Andy McComb  
Florent Michelier  
Sean Pierce

HÖKŪLE'A

Abraham Ah Hee  
Roman Corpuz  
Kawai Hoe  
Kaulani Murphy  
Jason Sanada  
Kalā Tanaka

UH MĀNOA COLLEGE OF ENGINEERING

John Ewalt  
Patricia Fifita  
Josh Irvine  
Jimmy Kahele  
Jordon Melcher

HAWAIIAN PADDLE SPORTS

Maikai Cadman  
Gillian Carey  
Chris Feleppa  
Nicholas Garvin  
Curtis Geary  
Lila Jones  
Timothy Lara  
Rowdy Lindsey  
Matt Robson  
Emily Stout

HUI KĀPEHE PARTICIPANTS

Myrna Ah Hee  
Michael Asami  
Malia Barros  
Brandon Benz-Mar  
Eric Burgess  
Kayla Chang  
Kenny Dudirot-Enos  
Iwalani Fonoimoana  
Jason Gante  
Shannon Ii  
Alicia Kalepa  
Archie Kalepa  
Koty Kalili  
Hope K-Aloha  
Roger Kaluna Jr.

Maikai Kama  
Shalia Kamakaokalani  
Florentina Kawai  
Lia Libonati  
Ainsley Lopez  
Mika Madali  
Savanah Marfil  
Amy Markel  
Daniel Miranda  
Camille Montero  
Melissa Montilliano  
Chris Oka  
Lucus Park  
Aukai Rieman  
Nalu Robinson  
Joshlyn Rodrigues  
Joshlynn Rodrigues  
Jasselyn Sedeno  
Tazman Shim  
Melissah Shishido  
Brianna Tagonan  
Johnboy Tagonan  
Micah Torres

INDIVIDUAL VOLUNTEERS

Christopher Alt  
Mike Asami  
Sylva Cechova  
Ana Ching  
Lyndsey Devine  
Darin Fujimori  
Kukui Gavagan  
Anela Greig  
Mia Hall  
Brandon Hand  
David Kauha'aha'a  
MiQe Klemme  
Loy Kuo  
Jenny Learned  
Tony Livic  
Jake Luckman  
Burt Lum

Flo Mitchler  
Mel Montilliano  
Poema Pescia  
Brian Sato  
Leslie Scamacca  
Boz Schurr  
Daniel Southmayd  
Martin Stepanek  
Weston Sumner  
Sarah Thompson  
Amy Vander Veur  
Bonnie Vander Veur  
Sarah Vander Veur  
Garrett Ward  
Milton Yamashita  
Sadie Youngstorm

ISLAND CONSERVATION & PROJECT PARTNERS

Emily Bjerre  
Javier Contin Martinez  
Lynx Gallagher  
Scot Godwin  
Mele Khasla  
Peter McClelland  
Chiemi Nagle  
Rebecca Pederson  
Jay Penniman  
Forest Starr  
Kim Starr  
David Will

KA PĀ HULA O KA LEI LEHUA

Anoilani Aga  
Tori Ann Bento-Souza  
Mara Bacon-Chang  
Kaliko Baker  
Tammy Baker  
Theo Baker  
Snowbird Bento  
Kalei Bento  
Kawahine Bento  
Kawi Bento  
Leo Bitte  
John Borden Jr.  
Frank Damas  
Tommie Davidson Jr.  
Kameron Freitas  
Kuuipo Freitas  
Kamalani Johnson  
Domonic Jones  
Kapana Kaeo  
Kaipulaumakaniolono  
Pili Kamakea-Young  
Makana Kane Kuahiwi  
Rylen Kaniaupio  
Shawna Kapana  
Kellen Kelson

Kilinoe Kimura  
Gary Krug  
Kaulakauikeaokea Krug  
Leleapao Krug  
Merriemle Krug  
Jax Laakea Awong  
Ian Maioho  
Katina Marx  
Kupaianaha Marx  
Uilalani Marx  
Makana Melchor  
Kawaiianuhea Moss  
Jesse Neuman  
Wainohia Pelosa  
Billie-Jo Peloso  
Hiapokeikikane  
Perreira  
Cyrus Seto  
Amber Souza  
Pua Souza  
Malaea Spencer  
Kaleihalia Tolentino-Perry  
Bruce Watson  
Spencer Yim

KEKAULIKE HIGH SCHOOL: KULA KAIAPUNI 'O

KEKAULIKE  
Adriana Araneta  
Mahonri Atkinson  
Ka'eleke Bulusan  
Kili'ohu Bulusan  
Samantha Emmsley  
Hoomana K. Colleado  
Luke K. McLean  
Aulii Kamalii  
Aheone Kanamu  
Rebecca Kapolei Kaiili  
Cynthia Lehua Jiminez  
Leigha Makanaokalani  
Zayden Mokiao  
Skyler Nelson  
Aina Sato  
Wailupe Subega

LAHAINALUNA HIGH SCHOOL

M'Chelle Aguinaldo  
Michael Aquinaldo  
Ivory Awai-Pascual  
Marissa Ayonayon  
Nate Beard  
Alysha Brown  
Kieran Groh  
Briana Hurley  
Keith Ideoka  
Kahealani Mano-Kapu  
Lexa Oraa

Jake Rodrigue  
Mark Watasaki  
Nancy Young

NOAA  
Grace Chon  
Carmen Defazio  
Ted Grupenhoff  
Ed Lyman  
Tracy Mercer

NĀ KAI 'EWALU CANOE CLUB

Brooke Anderson  
Stephanie Franklin  
Mike Lambert  
Aliyah Palad  
Louisa Palad  
Jason Stein  
Noa Wainui  
Shahlia Wainui

PACIFIC CENTURY FELLOWS

Lisa Ayabe  
Doris Bitonio  
Ryan Char  
Michelle Kurihara-Klein  
Mathew Lamon  
Christopher Lovvoran  
Jesse Markham  
Scot Matayoshi  
Jaime Oliveira  
Trevor Ozawa  
Tiffany Tanaka  
Kimi Yuen

PROTECT KAHŌ'OLAWĒ 'OHANA

QUEENS MEDICAL CENTER

Walden Au  
Matt Dekneef  
Daniel Goya  
Lea Kaawaloa  
Ryan Kanakaole  
Jaclyn Kim  
Michael Kim Seu  
Jason Kimura  
Makana McClellan  
Vincent Monaco  
Kimo Todd  
Noelani Yamashita  
Ivy Yeung

# KAHO‘OLAWE ISLAND SEABIRD RESTORATION PROJECT



Pu‘ukoa‘e (hill of the tropic bird)

Through a collaboration with Island Conservation funded by the National Fish and Wildlife Foundation, a long-range faunal restoration plan is now being implemented to restore the Kaho‘olawe Island Reserve as a sanctuary for rare and endangered wildlife species in Hawai‘i.

## RATIONALE

- The Hawaiian archipelago accounts for only 0.2% of the US land area but is home to nearly 75% of recorded extinctions in the U.S. Invasive species are the leading cause of these extinctions, and the impacts that feral cats and introduced rodents have on seabirds, land birds and native plants are well documented worldwide.
- As a federally protected Reserve, Kaho‘olawe is a sanctuary for rare species where human disturbance, development, and light pollution are negligible.
- Part of the KIRC vision is that Kanaloa is a pu‘uhonua and wahi pana where native Hawaiian cultural practices flourish.
- As a top-ranked site for reintroduction and establishment of rare birds, restoring seabird populations on Kaho‘olawe can significantly advance opportunities for participation in and awareness of traditional Native Hawaiian cultural practices.

In FY17, implementation proceeded with monthly data collection and field work accesses that complemented inter-agency partnerships with United States Geological Service/ Pacific Island Ecosystem Research Center, United States Fish and Wildlife Service, the Honolulu and USFWS National Raptor Programs, and the Pacific Cooperative Studies Unit/ Maui Nui Seabird Recovery Project — established in the form of three project working groups: pueo (short-eared owl), ‘ōpe‘ape‘a (Hawaiian Hoary Bat) and Hawaiian seabird.

## DELIVERABLES



A project steering committee of statewide conservation leaders including technical and cultural experts, visionaries and Kaho‘olawe stewards met regularly over the course of two years (2013 - 2015) to chart the financial, cultural, social, regulatory and biological issues associated with the removal of invasive vertebrates from Kaho‘olawe.



A project management team synthesized all meeting details and affiliated research to produce: *A Business Plan for the Restoration of Hawaiian Bird Life & Native Ecosystems on Kaho‘olawe*, ([kahoolawe.hawaii.gov/plans-policies-reports.shtml](http://kahoolawe.hawaii.gov/plans-policies-reports.shtml)).



Non-toxic bait studies were implemented during monthly Reserve accesses by Island Conservation and the KIRC’s Ocean and Restoration teams in 2016 and 2017.



In partnership with the Hawaiian Islands Species Committee, a *Biosecurity Implementation Plan for the Island of Kaho‘olawe* ([kahoolawe.hawaii.gov/biosecurity.shtml](http://kahoolawe.hawaii.gov/biosecurity.shtml)) was written by a biosecurity advisory committee. The plan is intended to identify necessary protocols, vectors and quarantine procedures to keep additional Invasive Alien Species (IAS) from entering the Reserve.



Automated acoustic monitors, also called songmeters, were positioned at strategic points throughout the Reserve. Complemented with regular surveys & monitoring, three project working groups (pueo/ short-eared owl, ‘ōpe‘ape‘a/ Hawaiian Hoary Bat and Hawaiian seabird) determined presence, population and certain behaviors of a number of endangered species.

# BIOSECURITY PLANNING



With the goal of keeping any additional Invasive Alien Species (IAS) from entering the Kaho'olawe Island Reserve, KIRC and PKO worked together in FY17 to develop a *Biosecurity Implementation Plan for the Island of Kaho'olawe* ([kahoolawe.hawaii.gov/biosecurity.shtml](http://kahoolawe.hawaii.gov/biosecurity.shtml)). Written by a biosecurity advisory committee comprised of personnel from each organization, the plan identifies necessary protocols, vectors and quarantine procedures. Using a *Prevention and Early Detection/Rapid Response* (ED/RR) approach, actions are divided into three categories: prevention & education, detection and response. This project was funded by the Hawai'i Invasive Species Council and the National Fish and Wildlife Foundation.

## TAKEAWAYS

- Land-based biosecurity: all supplies, equipment, personal gear and ceremonial offerings used for cultural practice to be carefully inspected before bringing any plant material to Island.
- Baseline botanical surveys have been established at the Kīhei, Maui boat house property as well as several main ports of entry on Kaho'olawe. Results of floral and faunal (vertebrate and arthropod) surveys on are detailed in the plan.
- Plant nursery protocols for IAS plus methods for control and eradication.
- Ocean-based biosecurity: new protocols outline responsibilities of captains and boaters entering Reserve waters and list invasive seaweed species to the Reserve.



"I now have a more realistic perspective and have gained an increased enormous amount of respect for everyone within the KIRC organizational structure, staff and volunteers each one committed to the long term success of the integrate nature of the KIRC programs and operations, each one vital and key in obtaining financial sustainability to establish permanent funding for their beloved Kaho'olawe within the Hawaiian State budget." — Rebecca Joy Zalke, Donor (Pictured: students learn about Biosecurity)

**DELIVERABLES:** 8 of the biosecurity signs pictured above were installed on Island as part of this project. Additionally, all related standard operating procedures were revised online; 200 acres were surveyed for fountain grass, khaki weed and other IAS on Kaho'olawe; fire ant surveys and bait stations were implemented at our Kīhei site and career development training in invasive species management was carried out for the KIRC's Hui Kāpehe program.

# THE KAHO‘OLAWE LIVING LIBRARY

## PROJECT BACKGROUND & PROGRESS

In 2014, the KIRC received a 2-year grant through the *Native Hawaiian Museum Services Program* of the Institute of Museum and Library Services to develop a virtual museum pilot project. Designed in collaboration with cultural and library science consultants, the online database, entitled the **Kaho‘olawe Living Library**, presents a community-curated collection of archived photos for educational use. By creating access to these resources, we further our mission of providing access to Kaho‘olawe.

In FY17 an additional grant was made to expand the database and to create a mobile "app". This project supports virtual exploration of the Reserve as users discover the archived collection piece by piece and story by story. Expansion and design will continue through June 2018 with plans to apply for additional funding for collections collaborations.

## DELIVERABLES

- ☑ A searchable, publicly accessible database
- ☑ Mobile phone applications for iOS and Android users
- ☑ 300 properly preserved and logged/ archived photos
- ☑ 3 oral history films
- ☑ Outreach including presentations at the 2017 International Conference of Indigenous Archives, Libraries and Museums (ATALM) at Santa Ana Pueblo in New Mexico; Nā Waihona Waiwai: Strengthening Native Hawaiian Students' Access to Archival Collections in Hawai'i; 4 newspaper articles and a 40% increase in web engagement.

[livinglibrary.kahoolawe.hawaii.gov](http://livinglibrary.kahoolawe.hawaii.gov)

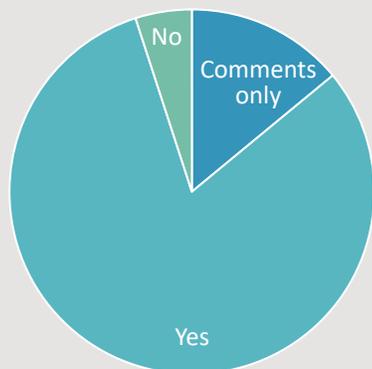
## PROCESS

I	Assess Community Need
II	Collaborate with Museum Studies Consultant/s to Determine Sample Collection
III	Process Sample Resources for Museum Archive Software
IV	Establish Database Content Management System + User Interface
V	Engage, Educate and Evaluate

## CATEGORIES *Based on I & II Above*



**Question: "During our initial survey process, we heard that you wanted access to Kaho‘olawe resources as a way to feel more in touch with Kaho‘olawe itself. Is this an effective starting point?"**



### Selected Feedback:

- Yes, the library consists of many photos and documents relating to its history. Those unable to go to Kaho‘olawe can now have a good resource to view its photos and a general review of its documents.
- Way too much metadata provided.
- I have wanted to go there my entire life. I can't think of a better way to get in touch with the land.
- No - money should be used to clean up the island.
- Yes, it is because it accesses the reasons to preserve the island as a cultural resource.
- This is definitely a great starting point. It reveals environment and work being done which is very tangible and personal for the viewer. It is good to see what more needs to be done and how much has been done over the years. Kudos to the leadership and all the hard work they have put in.
- Making people aware is half the battle.

*Archive item photos: Terri Gavagan*

"These are treasure finds for the researcher, the advocate and the student who continue to present the need for restoration." — Eva Hubbard, survey respondent



"Awesome! Born and raised on Maui, I remember hearing the bombing. So great to learn more historical and cultural information about the island." — Kevin Gavagan survey respondent



# KAHO'OLAWE ISLAND GUIDE MOBILE APP

FY17 saw the launch of the Kaho'olawe Island Guide mobile "app" (available under "Quick Links" at [kahoolawe.hawaii.gov](http://kahoolawe.hawaii.gov)). Developed through the *Kūkulu Ola Living Hawaiian Culture Program* of the Hawai'i Tourism Authority and IMLS (page 11), the app provides a map of the Reserve divided by 'ili (smaller sections of an ahupua'a) with clickable images, oral histories and artifacts selected through public demand.

A work-in-progress by design, this project acts as a new level of engagement for those interested in accessing Kaho'olawe. Much like its predecessor, the Kaho'olawe Living Library, the app will evolve as the KIRC's collection grows. Our current Living Library grant project will support further development of the app, and we plan to continue fundraising into FY18.

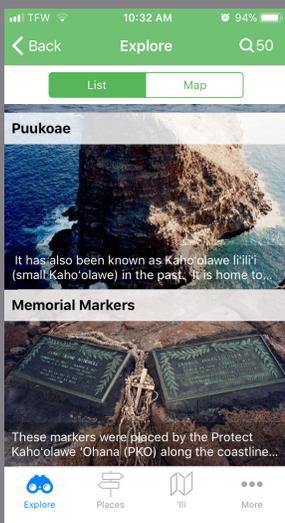


App created by Koa IT



"The traditions and history of Kaho'olawe have time-depth and connect all to Hawai'i. With the passing of time, and as a result of the restrictions placed on the island, people have been detached from opportunities to live and experience the history of Kaho'olawe. The new Kaho'olawe app is a way for our island communities to reconnect with the legacy landscape— to keep knowledge of place real in our lives. Apps like this one, and the one that we developed for the island of Lāna'i, are important because they bring traditional knowledge, from diverse and difficult to locate repositories, to the people. People who are informed become aware of the value of place, and can help build sound stewardship actions." — **Kepe Maly, project consultant + director of the Lāna'i Culture and Heritage Center**

## SCREEN SHOTS



Three ways to explore the Kaho'olawe Island Guide app: by list, by map or by photo — plus — three vital oral history perspectives are available: **Cultural** (by Hōkūlani Holt, former KIRC cultural manager and implementer of the Kaho'olawe rain ceremony); **Archaeological** (by Tanya Lee-Greig, Maui Office Director, Cultural Surveys Hawaii); and **Federal/ Navy** (by Becky Hommon, environmental counsel for the Navy during the turnover of Kaho'olawe from Federal to State hands).

# HUI KĀPEHE



Erosion control workshop at Pokaneloa



Group shot



Waihe'e Refuge workshop



'Opihi & fish ID class, Maui Ocean Center



Mālama 'āina work day, Kihei Boat House



S.C.U.B.A. certification training, Makena



Oli, pule and mana'o, Kapono'ai Molitau



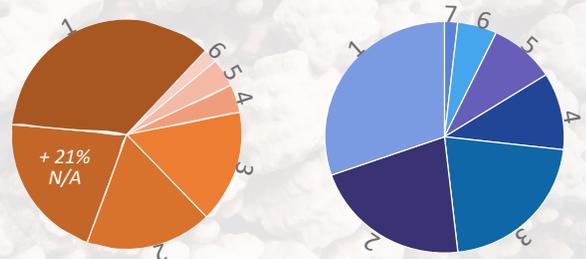
'Uala food source at Pu'u 'O Moa'ula Nui

Now completing its third cycle of grant sponsorship, Hui Kāpehe offers Native Hawaiian students intensive training in **information management, health & safety, marine resource management, land resource management and cultural education.** Through sponsored certifications, guidance by UH Maui College partners, regular mālama 'āina events and work trips to Kaho'olawe, kāpehe complete a rigorous curriculum with the ultimate goal of preparing Native Hawaiians to become a more competitive force in the workplace.

## DELIVERABLES

In FY17, 50 total college students participated in Hui Kāpehe representing 6 colleges:

1. University of Hawai'i Maui College ..... 36%
2. Honolulu Community College ..... 18%
3. Leeward Community College ..... 16%
4. UH West O'ahu ..... 4%
5. University of Hawai'i at Hilo ..... 4%
6. Kapi'olani Community College ..... 2%



Top major areas of study for participants include:

1. Hawaiian Studies..... 30%
2. Undecided..... 21%
3. Science..... 21%
4. Liberal Arts..... 11%
5. Business..... 9%
6. Technology..... 5%
7. Safety..... 2%

The KIRC has been awarded \$269,113 to continue this program for the term September 2017 through August 2018. FY18 goal: 50 additional Native Hawaiian students complete the program.

## FY17 OFFERINGS

- Biosecurity education
- Boater education and ocean safety
- Coastal habitat assessment
- First aid + CPR certification
- Hawaiian natural dye workshop
- History of Moku'ula & Waiola
- Kaho'olawe history & culture
- Kalo and Lauhala workshops

- Landscape Industry Certified Technician training
- Mālama 'āina work days
- Native Hawaiian plantings
- 'Opihi surveying and assessment
- OSHA training
- PADI open diver certification
- Unmanned Aircraft Systems (UAS) certification and best practices
- Waihe'e coastal hike with Hawaiian Islands Land Trust

"The sheer volume of knowledge of the staff, from the significance of specific areas of the island, to the recent history and current status of invasives, to the dedication to the work and guidance of the volunteers towards restoring the land, all added up to a very educational and meaningful experience. I can only hope the small amounts of (work) we supplied will help continue the mission of restoration of Kanaloa. Thank you to the staff for keeping us safe, and for guiding us towards a successful access experience." — Melissa Rietfors, ALU LIKE Program Monitor and Evaluation Specialist

# SUSTAINING COMMUNITY ACCESS



*“After all that it has been through, we can’t abandon Kaho’olawe. (The KIRC) manages and are steadily restoring an entire island reserve – a former bombing range with 45 square miles of land and 90 square miles of ocean – for less than \$3 million per year. This has to be one of the most efficient government agencies in the state. This would all be for nothing if the KIRC cannot continue its work. We as a county and state have a responsibility to help restore it.” —Maui Mayor Alan Arakawa*

The KIRC’s ‘Ōhua landing craft became its primary means of cargo, personnel and volunteer transport in 2007 — significantly reducing overhead costs and improving logistics efficiency compared to previously utilized helicopter transport. Due to age, frequency of use and extreme weather conditions, our team applies much time and energy towards maintaining the vessel.



Connecting Kaho’olawe to facilities on Maui is the most important aspect of the KIRC’s logistics system. Transporting critical materials, supplies, equipment and personnel needed to accomplish the work on Kaho’olawe requires a dedicated and highly trained crew.

In FY17, the Office of Economic Development, County of Maui (OED) granted funds to replace a 45-foot galvanized steel trailer. The *Sustaining Community Access to Kaho’olawe: The ‘Ōhua* project allows the KIRC to load more equipment and

supplies while at our Kīhei Boat House facility while the KIRC landing craft is still on the trailer instead of having to launch the landing craft and loading from the pier. This reduces the amount of time spent on the Kīhei Small Boat Harbor piers and improves our community relationship with the diving and fishing boats that struggling to launch boats at the heavily used pier. The new trailer has also reduced our downtime due to trailering ‘Ōhua and allows us to better serve the community by providing regular educational and service trips to Kaho’olawe.

# SELF SUFFICIENCY

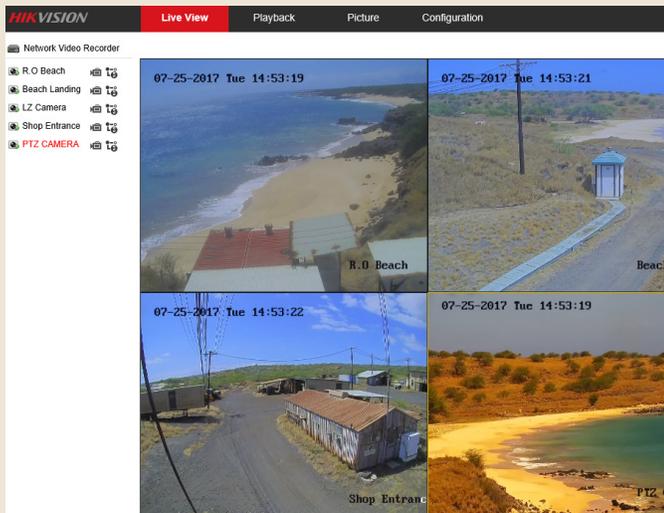
*Alternative Energy: Energy generated in ways that do not deplete natural resources or harm the environment, especially by avoiding the use of fossil fuels and nuclear power.*

## UPDATE

The KIRC received an FY17 grant through the County of Maui Office of Economic Development supporting its longstanding alternative energy and economic self-sufficiency efforts.

The *Sustainable Security and Program Management for Kaho'olawe Base Camp* project added a new component to our goal of creating a completely renewable energy power grid on Kaho'olawe; by integrating a photovoltaic/power inverter system into KIRC's existing communications system, we can now monitor on-island operations via fixed and movable web-based cameras. This project improves safety and security while extending educational programming.

Today, the KIRC is highly dependent upon diesel for energy production in Base Camp. Due to the high amounts of solar radiation that Base Camp in Honokanai'a receives, PV energy has the potential to eventually replace fossil fuel as the primary source of power generation making Kaho'olawe the first island in the State to be completely energy independent.



Screenshots from PV security cameras

## OUTCOMES



Fixed and movable cameras now allow KIRC staff to monitor beach and surf conditions, improving preparations for ocean transport or weather-induced cancellations and preserving the condition of the 'Ōhūa landing craft and repair costs.



Honokanai'a Base Camp is monitored closely for safety and operations recording as well as potential violation of the Reserve's boundaries.



Screenshots from the remote camera are now posted to the KIRC's Ocean Program Update webpage, documenting marine mammal sightings and ocean conditions.

## PAST PERFORMANCE

**FY10:** In partnership with Maui Community College, the first solar panels were installed on Kaho'olawe (powering Honokanai'a's hot-water system), thereby launching the KIRC's long-term plan for Kaho'olawe to become the first energy self-sustaining island in Hawai'i.

**FY14:** Funding from the County of Maui enabled the KIRC to pilot a stand-alone, battery backup photovoltaic system to provide sufficient electricity to volunteer berthing areas with light, fans and power to recharge electronic devices off of the Base Camp's electrical grid.

**FY15:** County of Maui grant funds subsidize a solar cooling system project that directly converts solar energy from photovoltaic panels to power air condition systems within two Base Camp buildings; a necessity for preserving food and materials for workers and volunteers.

**FY16:** State CIP funds support design of the *Honokanai'a Renewable Energy and Energy Conservation* project. After a year-long contracting process, the KIRC and DLNR Engineering Division selected Dawson Technical, LLC as the design-build firm, stating "the primary goal of this project is to establish the building blocks for energy independence and sustainability with reduced reliance on fossil fuels for the future of Kaho'olawe." The team's designs (see page 16) include installing 88 kilowatts of photovoltaic panels, 60 kilowatts of battery backup, a redesign of the existing reverse osmosis desalinization plant and renovations to the dining hall and kitchen to increase natural ventilation and create a new, open-air dining lanai. Construction is projected to be complete by the end of FY18.

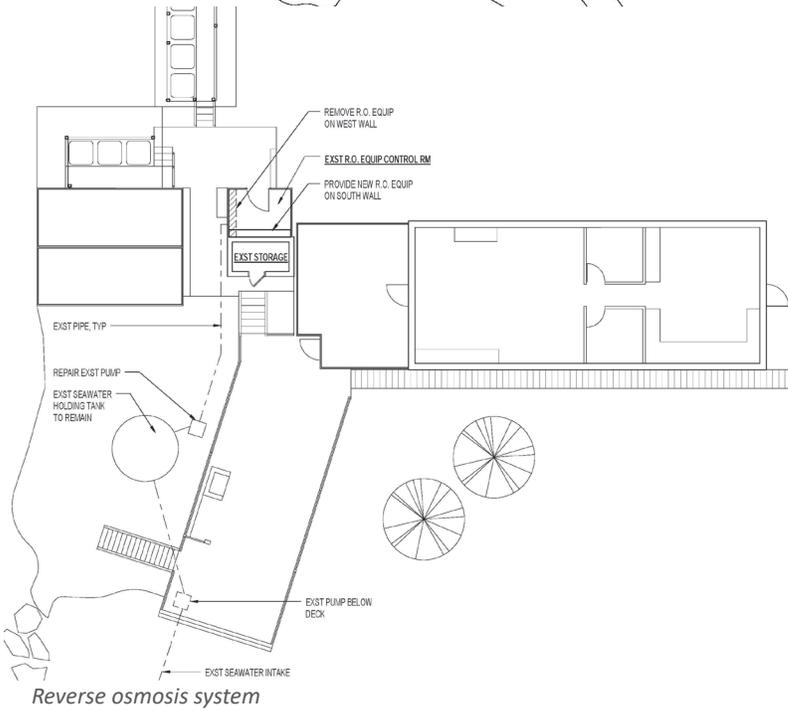
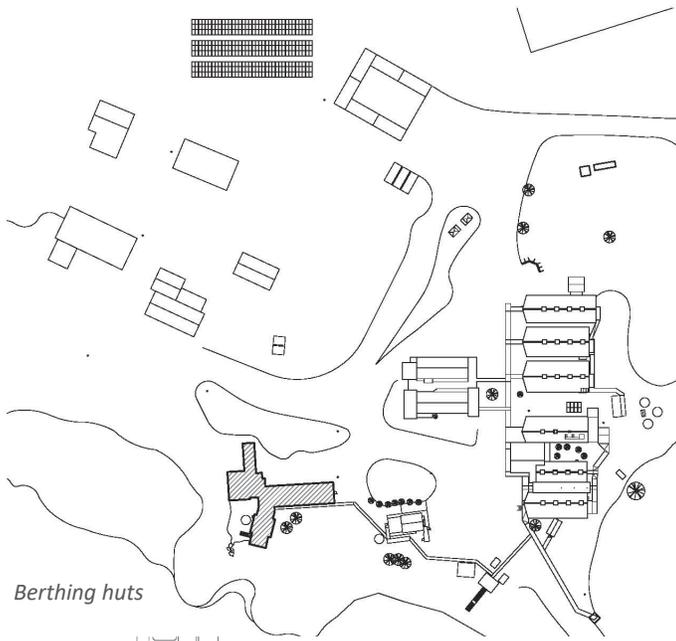
## WARNING!

### UNEXPLODED ORDNANCE DANGER

Entrance into Kaho'olawe Island Reserve can cause **SERIOUS INJURY** or **DEATH**.

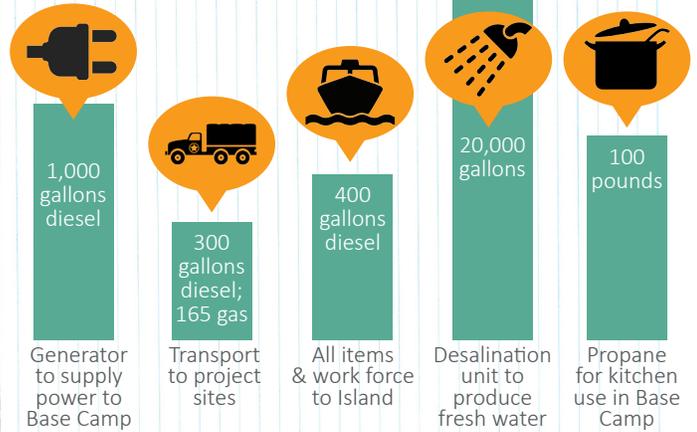
Unauthorized entrance into Kaho'olawe and into the water within two miles of Kaho'olawe is prohibited

# HONOKANAI'A RENEWABLE ENERGY & ENERGY CONSERVATION



**OUR BASE CAMP:** The Honokanai'a base camp was built in the mid-1980's by the U.S. Navy to support military live fire weapons training on Kaho'olawe. Later modified to support their unexploded ordnance (UXO) cleanup project, it sustained a workforce of 400+ and was designed to be resupplied via heavy lift helicopters and large ocean barges. When the KIRC was assigned management of Kaho'olawe, the remnant base proved to be disproportionate to its more basic needs - thus requiring continuous repurposing. Today, the 22-building camp includes facilities to house and feed our volunteer work crews; generate and distribute electrical power; repair equipment and vehicles used to actively manage and restore Kaho'olawe, (including former military trucks, all-terrain vehicles and heavy-equipment used to build and repair 20+ miles of improved roads); store fuel for on-island vehicles and a generator; and maintain a potable water system that uses a reverse osmosis plant to generate fresh water from the ocean. As a complete standalone facility, the camp must produce its own electricity and water and handle its own waste disposal.

## ANNUAL ENERGY & FOSSIL FUEL USE



Plans for a more sustainable base camp

# COMMUNITY RESTORATION PARTNERSHIPS



## BACKGROUND

A project initiated in 2012 through the Hawai'i Community Foundation, our team of community volunteers — representing schools, cultural centers, conservation organizations and others — have planted 17,834 drought resistant, salt tolerant natives at Honokanai'a. Landscapes have been stabilized around significant cultural sites and the Ocean team continually removes invasive roi, to'au and ta'ape; all fish that prey on native species.

## DELIVERABLES

FY17 saw the closing of our third consecutive Community Restoration Partnership project with **Hawai'i Community Foundation**; also our sole planting project for the year. 2,792 volunteer hours contributed to the outplanting of 7,834 native plants and removal of 213.5 lbs of non-native/ invasive fish. HCF has granted us additional funds for the *Malama Kaho'olawe* project into FY18.

Engaging community members in our restoration efforts is both an economic necessity and a community responsibility; our limited staff are experts at training, designing and leading programs on-island geared to fulfill our mission, but an exponentially higher level of manpower is needed in order to carry out this work. By sharing this work with the people of Hawai'i, we actualize an important aspect of the vision for Kaho'olawe. The following volunteer groups participated in the FY17 Community Restoration Partnership project:

- Hawai'i Nature Center
- Hawaiian Canoe Club kane
- Hawaiian Paddle Sports (Kanu Wa'a)
- Hōkūle'a & UH Mānoa College of Engineering
- Hui Kāpehe (Honolulu Community College & University of Hawai'i Maui College)
- Ka Pā Hula O Ka Lei Lehua
- Kekaulike High School: Kula Kaiapuni 'o Kekaulike
- Lahainaluna High School
- Nā Kai 'Ewalu (Kanu Wa'a)
- Pacific Century Fellows



Cassie Pali

"These are memories that last a lifetime. The cultural and educational impacts cannot be reproduced any other way and any paddler will be honored to have this experience."

— Stephanie Franklin, Nā Kai 'Ewalu



Kanu Wa'a

# OTHER FY17 NEWS

“Thank you all so much again for allowing us and Mo’okiha to touch the sands and our voyaging kupuna of Kaho’olawe. This experience was so fulfilling to our na’au and to honor and to be in the presence of the places and kupuna used heavily in our voyaging history is beyond words, and I am so deeply filled with gratitude towards the KIRC ‘ohana. I hope that we can continue this experience in the future. Me ke aloha piha!!!!” — Kalā Baybayan, Voyager



Kelly McHugh

**HŌKŪLE’A HOMECOMING:** In June 2017, Mālama Honua Worldwide Voyage sailing canoes Hōkūle’a (Hawai’i), Hikianalia (Aotearoa) and Fa’afaite (Tahiti) arrived on Kaho’olawe as part of the final leg of a three-year voyage around Island Earth. The return to Kaho’olawe marked the intersection of three distinct lines of the Hawaiian Cultural Renaissance: mind (traditional knowledge of our technical capabilities; voyaging), body (protection and preservation of the land) and spirit (hula). This bond was strengthened with the recognition of the next level of revival: the restoration of Kaho’olawe.



**OCEAN PROJECTS:** Important FY17 Ocean Program collaborations included the distribution of water temperature monitoring stations with the State Division of Aquatic Resources in order to draw correlations between coral reef health and water temperature and NOAA Pacific Islands Fisheries Science Center's Coral Reef Ecosystem Program to conduct benthic surveys at Kaho'olawe's northeast reef area. Coral Ecologist & Benthic Team Lead Bernardo Vargas-Ángel, PhD noted the Reserve's "vibrant and prolific coral development really overshadows other well developed reefs state-wide. In contrast, only coral carpets and smaller build-ups associated with rocky boulders and in protected covers were observed along the southern habitats of the island. These are the preliminary observations of our benthic surveys today; certainly there is still extensive exploration and reconnaissance to be conducted."

## KANU WA’A

The KIRC launched a new canoe club partnership program this fiscal year in response to the logistically and financially unreachable demand for Kaho’olawe Island Reserve access represented by our volunteer waitlist. *Kanu Wa’a* (kanu: to plant; wa’a: canoe) offers an access guide to provide supervision, safety and guidance in undertaking work projects within the Reserve for one day and one night while canoe clubs provide one canoe and one escort boat to support the canoe, (which must be able

to absorb all six paddlers along with extra crew members — and be able to tow the canoe in the event of an emergency); a detailed float and safety plan; all required Reserve access forms; a \$25 access fee per person; and a minimum of 500 beach plants to plant at Honokanai’a. Three canoe clubs participated in the program in FY17. Visit <https://hawaiianpaddlesports.com/malama-maui/kahoolawe/> for a brief documentary of Hawaiian Paddle Sports' *Kanu Wa’a* experience, (pictured on p. 17).

# 2017 LEGISLATIVE SESSION

At the start of the 2017 legislative session, the Kaho'olawe Island Reserve Commission submitted its **KIRC Financial Self-Sufficiency and Sustainability Plan** as a guideline to help us gain long-term financial security. After meeting with many of our legislative leaders this session, we were successful in convincing them of the need to make an investment to Kaho'olawe's future as an investment for all of Hawai'i.

In the Plan, we sought an initial investment by the State to establish a baseline requirement for KIRC staffing and a commitment to build our future KIRC Operations and Education Center at Kihei. With this investment, we are able to secure a permanent workforce to restore and actively manage the Kaho'olawe Island Reserve, as well as build the key infrastructure that will generate sustainable funding for the Island's long-term restoration— thereby establishing the permanent, public gateway to Kaho'olawe.

We are grateful for the constant support and efforts made by Representative Ryan Yamane, Chairperson of the House Committee on Water and Land, for introducing and supporting numerous bills and legislation that sought to fund the KIRC's future restoration of Kaho'olawe. We send our most heartfelt appreciation to Representative Sylvia Luke and Senator Jill Tokuda for believing in the restoration of Kaho'olawe by securing funds for the KIRC in the Hawai'i State budget. Lastly, we want to acknowledge the continuing support of our district representatives, Senator J. Kalani English (Kaho'olawe), Representatives Lynn DeCoite (Kaho'olawe) and Representative Kaniela Ing (Kihei).



Rep. Sylvia Luke



Rep. Ryan Yamane



Sen. Jill Tokuda



Honokanai'a

## KAHO'OLAWE BILLS



**HB620:** Introduced by Representative Yamane, Direct appropriation General Fund request for FY2018 to support operations and personnel.

*RESULT:* Heard by the House Committee on Ocean, Marine and Hawaiian Affairs, Committee on Water and Land and the Committee on Finance > passed with amendments > forwarded to the Senate > heard by the Committee on Hawaiian Affairs and the Committee on Ways and Means > passed with amendments. During the conference committee hearings, House Bill 100 (State Budget) passed including general funds for the KIRC, therefore HB620 did not move out of the conference committee.

**HB621:** Introduced by Representative Yamane, Establish a pilot photovoltaic desalinization project to demonstrate the feasibility of using solar power to convert seawater into fresh drinking water for staff and volunteers as well as for sustainable food crop and coastal restoration irrigation.

*RESULT:* Was not heard; pending next session.

**HB100:** State Budget bill, which, for the first time in history, included funding for KIRC personnel to continue their restoration work on Kaho'olawe.

*RESULT:* The House heard this measure and added funds to the State Budget Capital Improvement Project (CIP) for a **Kaho'olawe Native Dryland Forest Project** and design funds for the **Kaho'olawe Operations and Education Center at Kihei**. During the Senate hearing, the Committee on Ways and Means added 15 permanent positions for KIRC staff and supported the CIP funds for Kaho'olawe. When the measure finally passed out of the conference committee, voted on by the House and Senate and signed into law by the Governor, the bill included general operating funds, 15 permanent KIRC positions and CIP funding for a **Kaho'olawe Native Dryland Forest Project**.

# NEXT STEPS



Pending the release of CIP funds for the Kaho'olawe Native Dryland Forest Project, we will significantly expand our current irrigation system to reach new hardpan areas on Kaho'olawe and establish new dryland forest planting areas. This project is a large step forward in planting the hardpan and re-greening Kaho'olawe through dedicated funding, manpower and supplies to create new planting areas in the upland and coastal areas on the island.



Drone images of re-greening process

With the passage of Act 49 in 2017, for the first time the State Administration's Budget included permanent staff funding for the KIRC. The 15 authorized positions represented currently filled positions, but left out funding for a vacant Culture Project Coordinator (CPC) position. With both a mandate that sets the Reserve aside for traditional Native Hawaiian cultural practices and placement of the entire island on the National Register of Historic Places, this position is critical to review and coordinate public use of the Reserve and to oversee the protection of its rich, cultural and historic resources. In the next legislative session we will be seeking the addition of this previously filled position to help support this function.



Staff from left: Ka'ōnohi Lee (Administrative Officer), Grant Thompson (Logistics Specialist), Lyman Abbott (NRS III), Carmela Noneza (GIS/LAN Specialist), Cassie Smith (Volunteer Coordinator), Paul Higashino (NRS V), Dean Tokishi (ORS III), Lopaka White (Maintenance & Vessel Operator), Jennifer Vander Veur (ORS II), Terri Gavagan (Commission Coordinator), James Bruch (NRS III), Kelly McHugh (Public Information Specialist), Michael Nāho'opi'i (Executive Director).

# FREQUENTLY ASKED QUESTIONS

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## "What happened to the money?"

Until Fiscal Year 2016, KIRC funding came largely from a limited trust fund established in 1994 during the federal unexploded ordnance cleanup of Kaho'olawe. This federal appropriation totaling \$44 million, (AVG: \$2M per year), though considerable, was not substantial enough to establish an endowment for the long-term restoration of Kaho'olawe. Today, the KIRC appeals to grant makers for specific project support; to the State of Hawai'i for support through legislative bills; and to individuals through donations, memberships and permit fees. (*See page 24 to help*)

## "Did you clean up all of the bombs?"

The United States Navy is forever responsible for removing all unexploded ordnance (bombs) from the land and waters of Kaho'olawe — and the liability associated with its presence. The KIRC remains committed to that position and relies on the Federal Government to fulfil their obligation. Upon the 2004 completion of the Navy's cleanup, approximately 75% of the surface of the island was swept of ordnance with only 10% cleared down to the depth of four feet (*see page 3*). Areas that have not been cleared remain "DANGEROUS TO THE PUBLIC AND ARE NOT SAFE." As formally agreed by the Navy and State, the Navy will return to dispose of any new unexploded ordnance (UXO) found in cleared areas. The KIRC has made regular requests to our congressional delegation for federal funds for the Navy to complete their obligation.

## "What do you do out there?"

In addition to a variety of projects to restore Kaho'olawe's devastated landscape; protect its critical natural and cultural resources; and make vital improvements to the island's infrastructure, we are developing an integrated *mauka to makai* resource management system that balances the technical aspects of modern conservation principles with a traditional cultural perspective.

## "Can I fish over there?"

Trolling is permitted on two scheduled weekends each month in waters deeper than 30 fathoms (180 feet). No other fishing, ocean recreation or activities are allowed within the Reserve. (Visit [kahoolawe.hawaii.gov/announce](http://kahoolawe.hawaii.gov/announce) to download a Trolling Right of Entry Registration Packet). The rules governing Reserve waters are enforced by the State of Hawai'i, Department of Land and Natural Resources, Division of Conservation and Resources Enforcement (DOCARE), the KIRC and the U.S. Coast Guard. Any person violating these rules is guilty of a petty misdemeanor and shall be fined up to \$1,000 or imprisoned for up to 30 days. The KIRC may also assess administrative fines of up to \$10,000 per offense.

## "Why don't you take more people?"

The KIRC's work on Kaho'olawe is critically dependent upon its volunteers. We strive to make the most of our limited volunteer opportunities, but we are primarily restricted by available funding, safety and weather conditions. The number of requests we receive to go to Kaho'olawe far exceeds our ability to take everyone, therefore we ask for your patience and understanding.

## "How can I help?"

Pick your favorite way/s to connect with us (social media, newsletter, email list) to learn about work days and community events at our Kīhei Boat House site; join the Kaho'olawe volunteer waitlist; invite the KIRC to your space as a (free) speaker; read/learn about/ share our online library and learning materials; testify at one or more legislative hearings; create a Kaho'olawe-inspired work of art to be shared; become a member; enroll as an intern; or let us know your own idea. (*Links on back cover*)



# MAHALO: FY17 COMMISSIONERS



County of Maui: Michele Chouteau McLean, Chairperson (Deputy Director of Planning, County of Maui)

Department of Land & Natural Resources: Suzanne Case (Chairperson, Department of Land & Natural Resources)

Protect Kaho'olawe 'Ohana: C. Kaliko Baker (Instructor, Kawaihuelani Center for Hawaiian Language, UH Mānoa)

Protect Kaho'olawe 'Ohana: Jonathan Ching (Land and Property Manager, Office of Hawaiian Affairs)

Protect Kaho'olawe 'Ohana: Joshua Kaakua (UH, College of Engineering)

Native Hawaiian Organization: Hōkūlani Holt (Director, Ka Hikina O Ka La & Coordinator, Hawai'i Papa O Ke Ao, UHMC)

Office of Hawaiian Affairs (OHA): Carmen Hulu Lindsey (Trustee, OHA)



# KAHO‘OLAWE TIMELINE



*‘Ulu māika*



*Pu‘umōiwi*



*Adze*



*Sailor’s Hat*



*Unexploded ordnance*

## ORIGINS & EARLY CONTACT

**1027:** Earliest existing radiocarbon date for Hawaiians on Kaho‘olawe (from petroglyph sites)

**1150-1400:** Chants tell of Kaho‘olawe serving as a place for voyaging canoes traveling between Hawai‘i and the islands of southern Polynesia

**1600:** A thriving Hawaiian community exists on Kaho‘olawe, fishing the island’s waters and farming its upland slopes.

**1778:** British ships under the command of Captain Cook arrive in Hawaiian waters. After raiding Kaupō, Maui, a war party under Hawaiian Chief Kalani‘ōpu‘u lands on Kaho‘olawe, but finding little to plunder they move on to Lāna‘i.

**1793:** Goats are introduced to Kaho‘olawe, a gift from Captain Vancouver to Chief Kahekili of Maui.

## MISSIONARY PERIOD

**1824:** Ka‘ahumanu proclaims a new code of laws including the threat of “banishment to the island of Tahoarawe [Kaho‘olawe]” for lawbreakers.

**1826:** First criminals – a woman charged with adultery and a man convicted of theft – are exiled to Kaho‘olawe.

**1828:** Lahaina mission station reports Kaho‘olawe possesses one school with 28 pupils (adults as well as children).

**1848:** Kamehameha III institutes the Great Mahele, replacing traditional land stewardship with the western concept of land ownership; Kaho‘olawe is among former “crown lands” transferred to the Hawaiian government.

**1850:** Adventurer Edward Perkins visits island; notes large herds of goats damaging native vegetation.

**1852:** Last prisoner on island removed due to illness.

## RANCHING PERIOD

**1857:** Government inspectors report “some fishermen living on Kaho‘olawe, maybe not over fifteen, if the men, women and children are combined.”

**1858:** Government leases Kaho‘olawe to R.C. Wyllie, Chancellor of the Kingdom, and Elisha H. Allen, Minister of the Interior, for 20 years at \$505 per year; survey finds 50 Hawaiians in part-time residence.

**1859:** Approximately 2,000 sheep are released on island.

**1866:** Government census records 11 males and 7 females living on island; all appear to be employed by sheep ranch.

**1875:** King Kalakaua and his entourage visit the island, noting presence of “20,000 sheep, 10 horses, 6 native men, 2 white men, 2 full-Hawaiian women, 2 small children, 4 houses, 2 dogs and a few hundred goats.”

**1879:** Reports of severe overgrazing, with “the upper plains entirely denuded of top soil...the whole interior plain has been so swept by wind and floods, that nothing but a very hard red grit is left.”

**1893:** With support of U.S. Marines, a Committee of Safety consisting of white businessmen overthrows the government of Queen Lili‘uokalani.

**1898:** Smugglers found stashing opium on Kaho‘olawe.

**1898:** Hawaii becomes a territory of the United States.

**1910:** To prevent further environmental degradation, Gov. Walter Frear makes island a forest reserve under the control of the Board of Agriculture and Forestry.

**1913:** Bishop Museum sends scientific expedition to island to collect biological specimens and locate archaeological sites.

**1918:** Kaho‘olawe withdrawn from forest reserve and leased to rancher Angus MacPhee for 21 years at \$600 per year.

**1920:** H.A. Baldwin joins MacPhee to form Kaho‘olawe Ranch Company.

**1931:** Bishop Museum sends scientific expedition to island, leading to publication of Archaeology of Kaho‘olawe, describing 50 early Hawaiian sites.

**1933:** Baldwin and MacAfee obtain second 21-year lease at a rent of \$100 per year.

**1941:** Honolulu Advertiser reports that due to efforts of Kaho‘olawe Ranch Company, the number of goats on the island has been reduced to 25.

## MILITARY, PROTEST AND JOINT-USE PERIOD

**1941:** U.S. Army signs \$1/ year sublease with Kaho‘olawe Ranch Co. for bombing rights; upon Pearl Harbor attack (December), martial law is declared in HI and Kaho‘olawe is seized by military for training and use as bombing target.

**1942-45:** During World War II, Kaho‘olawe serves as target for testing torpedo bombs, beaches used as staging grounds to prepare for landings at Tarawa, Okinawa and Iwo Lima.

**1953:** President Eisenhower signs executive order reserving Kaho‘olawe for use by Navy, with stipulation that when no longer needed it will be returned in a condition “reasonably safe for human habitation.”

**1959:** HI obtains U.S. Statehood.

**1965:** Navy detonates 500 tons of TNT near Honokanai‘a to simulate an atomic explosion (“Sailor’s Hat”).

**1969:** Discovery of an unexploded 500-lb. bomb on Maui prompts U.S. Rep. Patsy Mink to call for Navy to halt bombing on Kaho‘olawe.

**1976:** Protestors make first, unauthorized landing on island; PKO files lawsuit against Navy to stop bombing.

**1977:** Kimo Mitchell and George Helm lost at sea off Kaho‘olawe during protest effort.

**1980:** Navy and PKO sign Consent Decree allowing them regular access to island for religious, cultural, educational and restoration activities.

**1981:** Kaho‘olawe placed on National Register of Historic Places.

**1990:** President Bush halts bombing; U.S. Congress establishes a commission (KICC) to study and recommend terms for returning Kaho‘olawe to the State of Hawai‘i.

**1993:** Congress votes to end military use of Kaho‘olawe; State creates Kaho‘olawe Island Reserve Commission (KIRC) to plan the island’s future. Navy removes the last goat.

### IOLA KANALOA!

**1995:** Palapala Ho‘onohono Moku‘āina O Kaho‘olawe (Kaho‘olawe Use Plan) completed.

**1996:** *Kaho‘olawe: Rebirth of a Sacred Hawaiian* Island exhibit at Bishop Museum.

**1997:** The first of three rain ko‘a are built on island to honor Kane and to call for rain. Also, Navy awards contracts for the removal of UXO and commences the *Kaho‘olawe UXO Clearance Project*. 10% of the \$400M budget becomes the Kaho‘olawe Rehabilitation Trust Fund to launch restoration projects.

**2001:** First gathering of traditional sailing canoes at Honokanai‘a.

**2002:** 500,000 gallon rain catchment system and Lehua rain ko‘a built. An executive order designates eight acres of Kīhei property for the KIRC’s future use as an operations, education and cultural center. “Ke Aloha Kupa‘a I Ka ‘Aina” - *Steadfast Love for the Land* exhibit at the Smithsonian Institution in Washington, D.C.

**2003:** Transfer of access control is returned from the U.S. Navy

to the State of Hawai‘i in a ceremony at ‘Iolani Palace on Nov. 13. Access Guide Training Pgm. is developed with Access and Risk Management Plan.

**2004:** U.S. Navy ends UXO Clearance Project. Gathering of canoes to honor participants of the early protest movements. Large-scale planting projects begin, initiated by Clean Water Act funding. The KIRC’s Kīhei Boat House is built and used as the Maui operations center.

**2005:** KIRC starts large-scale marine debris removal, initiated by NOAA funding.

**2006:** First stewardship agreement (Palapala ‘Aelike Kahu‘aina) created to cooperate on island projects. Kaho‘olawe exhibit at Ritz Carlton-Kapalua’s annual Celebration of the Arts. *Malama Kaho‘olawe* curriculum is completed.

**2008:** Boat operations replace helicopter use. Conversion of ex-Navy facility to on-island culture/education center.

**2009:** *Kūkulu Ke Ea a Kanaloa*, the Culture Plan for Kaho‘olawe is completed. The first solar panels are installed on island.

**2011:** First food crops are harvested on-island (‘uala).

**2013:** KIRC builds structure in the remote valley of Hakioawa to house and support stewardship volunteers. Legislature-mandated audit concludes Trust Fund will be depleted by 2016. *Aloha Kaho‘olawe* campaign raises \$40K in donations in 30-days.

**2014:** *He Moku Poina ‘Ole* (The Island Does Not Forget /An Island Not Forgotten), exhibit at Maui Historical Society. *I Ola Kanaloa* plan completed by the KIRC, PKO and OHA. Kīhei Boat House property begins community-use programming.

**2015:** The KIRC is appropriated \$1M in General Funds; its first State funding since 1994.

**2017:** *Mālama Honua Worldwide Voyage* comes to Kaho‘olawe; the return of the canoes.



Kealaikahiki



Mitchell and Helm memorial markers



Planting new life



Educating work volunteers



Removing marine debris

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 Ulupalakua Ranch  
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**“This kuleana belongs to all who live and care about Hawai'i and all that it means to malama e aloha 'aina.”**

— Kam Louanne, Kamehameha Schools

# GET INVOLVED!

All clickable from [www.kahoolawe.hawaii.gov](http://www.kahoolawe.hawaii.gov) or from contact info on back cover.



Access our FREE online ***Malama Kaho'olawe*** curricula (grades 7-12) and teaching materials, chants, historic documents, ***Living Library*** and ***Kaho'olawe Island Guide*** mobile app.



Schedule an appointment in our office library or visit our e-news, blog, Facebook, Twitter or Instagram outlets.



Make a tax-deductible donation to the Kaho'olawe Rehabilitation Trust Fund or make a contribution of new or used equipment to support the KIRC mission.

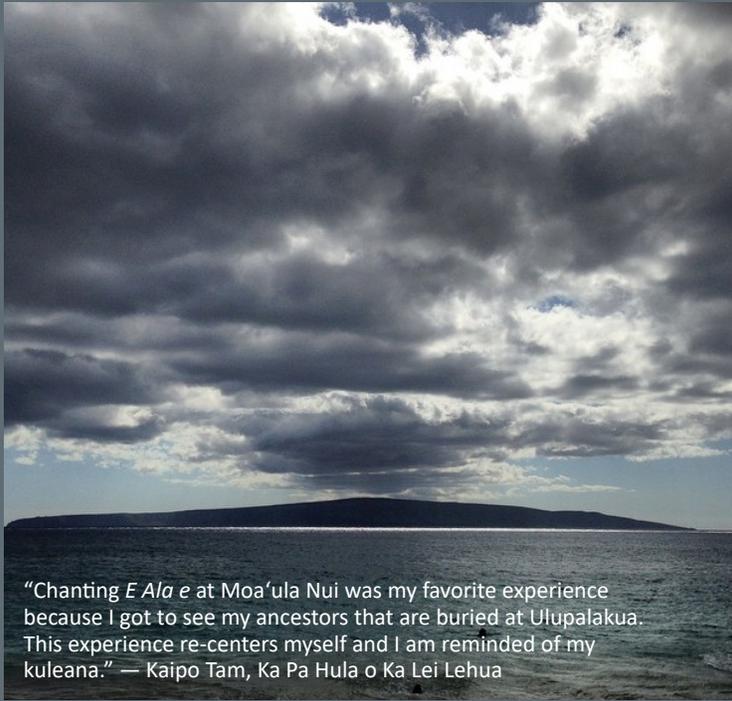


Apply for a Hui Kāpehe paid internship or schedule a group work day at our Kīhei site, where Kaho'olawe experts are developing a community learning space.



Request a guest speaker for your office, classroom or other gathering, (all islands), then testify! The Legislative Session lasts from Jan - May; register at [capitol.hawaii.gov](http://capitol.hawaii.gov) for hearing notices.

# ALOHA KAHO‘OLAWE



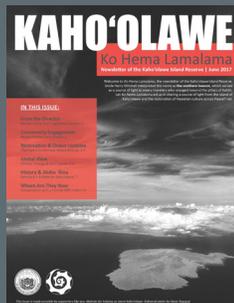
“Chanting *E Ala e* at Moa‘ula Nui was my favorite experience because I got to see my ancestors that are buried at Ulupalakua. This experience re-centers myself and I am reminded of my kuleana.” — Kaipo Tam, Ka Pa Hula o Ka Lei Lehua

Individual donations are critical to our efforts to protect restore and preserve the ocean and land of this important cultural reserve.

If you have been impacted by Kaho‘olawe — as a volunteer, friend, teacher, student, researcher or other community or family member, we invite you to renew today (or to join a friend!) in order to help make a difference for this special place.

## GIVING LEVELS & BENEFITS:

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Send this completed form with your donation to:  
811 Kolu Street, Suite 201 | Wailuku, HI 96793.

Checks may be made payable to Kaho‘olawe Rehabilitation Trust Fund. You can also give online at [kahoolawe.hawaii.gov/donations.shtml](http://kahoolawe.hawaii.gov/donations.shtml).

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I am not interested in becoming a Member at this time and have included a donation in the amount of \$ \_\_\_\_\_

### Comments

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 **MAHALO**

*Kūkulu ke ea a kanaloa* - The life and spirit of Kanaloa

*Logo and motto of the KIRC, symbolizing the he'e, or octopus form of the god Kanaloa and the kupu o ka 'aina, or re-greening of the island.*

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811 Kolu Street Suite 201 | Wailuku, HI 96793

Tel: (808) 243-5020 | Fax: (808) 243-5885

Email: [administrator@kirc.hawaii.gov](mailto:administrator@kirc.hawaii.gov)

Web: [kahoolawe.hawaii.gov](http://kahoolawe.hawaii.gov)

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