















# Celebrating 50 years of Service in Hawai'i nei

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# **Pele visits Puna Geothermal Venture**

### by Cory Harden, Moku Loa Group Executive Committee Member

broken ground at Puna Geothermal Venture, some of our friends in Puna could have fallen victim to explosions and releases of hazardous gas.

Instead, Hawai'i Island watched breathlessly as Pele danced closer and closer to Puna Geothermal Venture (PGV). She skipped past, allowing time for emergency shutdown measures. Then she returned, slowly covering over wells that have been endangering neighbors for decades.

It just so happened that Tom Travis, a former geothermal activist from Puna, who is familiar with plant operations, PGV staff, officials, and residents, had recently been named as head of the State Emergency Management Agency. He helped direct the shutdown after Governor Ige declared a state of emergency. Under that declaration, 60,000 gallons of highly flammable pentane were trucked off the site and there was time to seal some of the wells to reduce the risk of explosions and leaks of hazardous and seal off wells to prevent them from spewing toxic hydrogen sulfide into the surrounding neighborhood.



### **High Risk Energy**

In Hawai'i, useful geothermal steam is only found in high-risk lava zones. So it's no surprise that lava has now overrun three geothermal sites: PGV, the old Hawai'i Geothermal Project, and years ago, the old True Geothermal site.

Of course, even without lava, PGV has been courting disaster for years.

Blowouts: In June 1991, a blowout released over 2,000 pounds of hydrogen sulfide, killing animals

It is sobering to realize that if the lava had first | and forcing 75 neighbors to evacuate. It took four months to control the problem well. In November 1992, fearing an imminent blowout, desperate operators parked two D-9 tractors on top of a well to hold it down.

> Hydrogen sulfide releases: There were unplanned releases in August 1992, August 2005, November 2011, and April 2013. In August 2014, during Tropical Storm Iselle, hydrogen sulfide leaked but neighbors were trapped by downed trees that blocked roads and high winds that made travel dangerous. Over one hundred people reported reactions-loss of consciousness, lethargy, nausea, or headache.

> Noise: In 2012 and 2014, PGV did noisy drilling that disturbed people and animals. At one point, 24-hour drilling went on for over a month.

### Long Term Impacts and Costs

There may be no immediate problems from lava at PGV. But over time, lava, rock, steam, and water underground may damage abandoned wells, which were drilled up to a mile and a half deep. Will PGV pay for any nasty surprises? Maybe not.

After True Geothermal closed down, the well had to be pluggedand taxpayers footed the bill. For PGV, Paul Kuykendall, who lived nearby until he recently evacuated from the lava area, did some research a few years ago. He found that: "... in the State of Hawai'i's business registration website...the stated owners for Puna Geothermal are... 'Orni8 LLC and OrPuna LLC.' It is clear they are designed to protect Ormat's assets from liability. PGV does not own the power plant that they are operating in Puna. Ormat's 2011 10K report states that, 'Pursuant to a 31-year head lease, PGV leased

its geothermal power plant to an unrelated company in return for prepaid lease payments in the total amount of \$83.0 million. The unrelated company simultaneously leased back the Puna Power Plant to PGV under a 23year lease.' This means in the event of a catastrophic accident or liability for toxic releases, PGV would have no assets to garner, and Ormat is protected by LLC's."

You can read past petition actions and more about previous geothermal battles at bit.ly/ch-pgv06

# **Geothermal Risks: Then and Now**

### by Nelson Ho, Moku Loa Group Executive Committee Member and Nathan Yuen, Chapter Conservation Chair

The Sierra Club has always advocated weaning ourselves off fossil fuels and transitioning to renewable energy. Geothermal development, however, has always presented a unique set of dangers and threats to people and the environment.

The Moku Loa Group first opposed geothermal development in 1982 and have been involved in multiple contested case hearings and lawsuits, starting with the industrial intrusions into the Kahauale'a rainforest, which is adjacent and upwind of the Hawai'i Volcanoes National Park where rare and endangered species were plentiful. The proposal, first located at Kahauale'a and then at Wao Kele O Puna, intended to ship 500MW of electricity to O'ahu via an undersea cable, was ultimately defeated.

Soon after, the Moku Loa Group opposed the PGV plant in lower Puna because of its location adjacent to a rural residential area, which posed-and still poses-the risk of spewing toxic, flammable hydrogen sulfide gas into homes. Despite strong opposition from the community, officials approved the plant, bringing us to today.

The Group strongly believes that developers regularly underestimate the risks, and overstate their ability to understand and control the processes in the geothermal wells.

Since the construction of Puna Geothermal Venture in 1989, several accidental blow-outs have occurred where toxic hydrogen sulfide gas was released into the surrounding neighborhood. Hawai'i County Civil Defense emergency response teams have measured hydrogen sulfide levels that were nearly 100 times higher than the levels reported to the public by PGV. A history lacking in transparency and warning to residents has created a climate of mistrust among the community and PGV.



If you would like to support the Puna residents and families that have been impacted by the recent eruptions, please visit Pu'uhonua o Puna's fundraising page at gofundme.com/puuhonuaopuna. You can also donate at any Bank of Hawai'i locations in person or by phone. For updates and supply needs you can also visit their Facebook page at facebook.com/puuhonuaopuna.



The early Kahauale'a lawsuits revealed that the proposed well fields were vulnerable and a bad economic risk. The area of the proposed well fields is now Pu'u 'Ō'ō, which has been erupting for over 25 years and whose edifice has sometimes reached a height of 300 feet. The proposed well fields would have been inundated under 50 to 100 feet of lava.

Now in 2018, the PGV plant will also prove the critics right. Two wells are inundated, all ground access is cut off and geologists theorized that we are only in the middle stages of this eruption. Great efforts were made to make the 12 or more geothermal wells safe but only time will tell.

# Victory Hikes: Hike with us through our accomplishments

Last quarter, our outings leaders and volunteers had a great time sharing with everyone some of Sierra Club of Hawai'i's greatest accomplishments through victory hikes statewide. We visited Wiliwilinui on O'ahu, Māhā'ulepū at sunset on Kaua'i, Wailua Iki and Hāmākua on Maui, and O'oma through the Ala Kahakai Trail on Hawai'i Island.

Each Victory Hike celebrates the Club's past, present, and future efforts in building, protecting, preserving, and/or improving a particular area. We encourage you to attend one or more of these outings and bring along friends to join in the celebration and learn about the club's efforts and successes. See each Group's outings schedule on pages 9-19 for more details on each vitory hike!

### **O'AHU GROUP**

### Sunday, August 12 - Maunawili Trail

The O'ahu Group was instrumental in the construction of some of O'ahu's most popular hiking trails in Maunawili. The Maunawili Demonstration Trail was built in 1991-1993—the Sierra Club O'ahu Group built the first 9 miles of the trail and the Boy Scouts and Marines finished the last mile into Waimanalo. The O'ahu Group also built the Maunawili Falls Trail in 1996 and spent an additional summer in 1997 improving the first 2 miles of the demonstration trail. The next year, the Group also developed an additional connector trail.

In the last quarter of 2018, stay tuned for Ka'ena **Point and more!** 

### **KAUA'I GROUP**

### Friday, August 24 - Donkey Beach (Kuna **Bay) Sunset to Full Moon Coastal Walk**

Learn how the Kaua'i Planning Commission was legally challenged in order to assure there were increased building setbacks along the ridge at Donkey Beach to preserve the views on and along the coastline.

### In the last guarter of 2018, stay tuned for Okolehao Trail!

### **MAUI GROUP**

### Friday, September 7 - Olowalu Shoreline

Olowalu's reefs and lands are legendary, and steeped in Hawaiian history. Maui Group has been a voice for the protection of Olowalu and its unique natural and cultural resources since 1999 when Pioneer Sugar Mill closed and sold the land to developers. Sierra Club and allies were among hundreds who testified at a 2015 State Land Use Commission meeting. Thankfully, the EIS for a 1,500-unit subdivision on the Olowalu lands was rejected and the project did not go forward.

### In the last quarter of 2018, stay tuned for Mākena and more!

### **MOKU LOA GROUP**

### Saturday, August 4 - Pu'u Maka'ala

Join us for an outstanding hike through an old growth native forest at Pu'u Maka'ala, protected and managed by the Natural Area Reserve System. After the Kūlani Correctional Facility closed, Moku Loa Group and partners supported the expansion of the Natural Area Reserve to include the former facility area.

### In the last quarter of 2018, stay tuned for Pohu'e Bay and more!







## Hiking through our half-century history at Wiliwilinui Ridge By Jodi Malinoski, Oʻahu Group Coordinator

One way that the Sierra Club of Hawai'i is commemorating our 50th anniversary is by hosting a series of "victory hikes" throughout the state, at least one per quarter by each group. This past second quarter, the O'ahu Group held its victory hike to Wiliwilinui Ridge Trail. The hike was led by Jean Fujikawa, an Outings leader of ten vears who also works for the O'ahu Invasive Species Committee, and guest speaker Reese Liggett, a former Outings Committee Chair and hike leader.

During our hike, Reese revealed how in 1995-98 the Sierra Club championed efforts at the 'Aina Haina Neighborhood Board, State Board of Land and Natural rules for the Wiliwilinui Ridge Trail. Reese was the Outings Chair resulted in the March 4, 1998 Bureau of Conveyances Document Harris. This document prohibits the Waialae Iki V Community Association from requesting identification of hikers who want to



Resources, and Honolulu City Council to establish public access at the time who helped coordinate this three-year effort, which No. 98-028929 issued by the City and signed by Mayor Jeremy enter the gated community to access the State's Wiliwilinui Ridge Trail. Hikers driving through the security gate can now mention the state's public access easement for the ridge trail and will be allowed to drive to the trailhead without having their ID's scanned into the Waialae Iki V system.

Since 1998, the O'ahu Group's outings committee has continued to lead hikes and service

projects that improve the safety and accessibility of this trail. Outings leader Randy Ching pointed out the sections of trail that he and Ed Mersino maintained by installing new steps and water diversions. Some of the older steps were still painted with "Sierra Club Hawai'i Chapter", demonstrating how our work has stood the testament of time and thousands of hikers on this popular East O'ahu trail.

Also joining the hike were members of the O'ahu Group's Executive Committee and several participants who were joining the Sierra Club for their very first hike. Our group of ten enjoyed a sunny day learning about this victory hike, discovering native and edible plants, and hiking into the clouds at the top of the ridge.

We encourage you to attend one or more of our victory hikes to join in our 50th anniversary celebration and learn about the Club's efforts and successes in building, protecting, preserving, and improving special areas throughout the state. Our 3rd quarter victory hikes are published on the previous and the online calendar at sierraclubhawaii.org/calendar/events – we hope to see you on the trails!

# **Blasts from the Past** Highlights from 1993-2004 that are still pertinent to our work decades later:

Sierra Club Legal Defense Fund wins suit against the City on Clean Water Act violations at Honouliuli Wastewater Treatment Plant ['93]



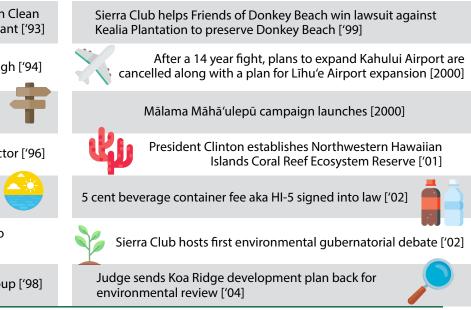
Sierra Student Coalition formed at University High ['94]

Sierra Club helps gain public access to Wiliwilinui Ridge Trail for hikers without providing identification ['96]



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David Kimo Frankel becomes first Chapter Director ['96]



Sierra Club helps obtain funding for the State's purchase of Queen's Beach along Ka Iwi Coast ['97]

> Sierra Club Legal Defense Fund changes name to Earthjustice Legal Defense Fund ['97]

> > Sierra Club joins Mauna Kea Advisory Group ['98]

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## to celebrate with us in September and October—see page 6 for details!



## SIERRA CLUB OF HAWAI'I

# **50TH ANNIVERSARY** CELEBRATIONS

# **GET YOUR TICKETS NOW!**



## **CONTINUING THE ADVENTURE: AN EVENING** TO TALK STORY WITH THE **SIERRA CLUB OF HAWAI'I**

Friday, October 5 Cafe Julia, YWCA Laniakea 5:30-8:30pm

Fabulous food and drinks, experience-based silent auction, special guests, and more

### **TICKETS AVAILABLE AT** SCHI50-TOWN.EVENTBRITE.COM

## MĀLAMA I KA HONUA: **CELEBRATING 50 YEARS OF SIERRA CLUB IN HAWAI'I**

Saturday, September 8 Moli'i Gardens, Kualoa Ranch 5:30-8:30pm

'Aina based chefs, special guest Michael Brune - Sierra Club Executive Director, silent auction, live music, and more

### **TICKETS AVAILABLE AT** SIERRACLUBHI50.EVENTBRITE.COM



# Leave a legacy for the next 50 years and beyond

It is because of the support of people like you that we have grown from a small group of committed people passionate about our environment to over 20,000 members and supporters continuing their work to protect the Hawai'i that we love. As we reflect upon the Club's first 50 years, let's look together through the next 50. The Sierra Club of Hawai'i will continue our fight against climate change, the protection of our drinking water, and the defense of our precious open spaces—but we need your continued support. Here are some of the ways you can support the Sierra Club of Hawai'i's work, now and in the future:

## **Monthly support**

We are working towards 120 monthly donors to cover the recurring expenses of our state wide operation, including rent, cable, and supplies. We are more than halfway to our goal with 80 monthly donors giving between \$10 and \$20 every month. These recurring gifts can be set up on our secure online donation platform at sierraclubhawaii.org/donate-2 or by calling our office at 808-538-6616.

### **Annual gifts**

Every year, more than 500 people make a mission-sustaining gift to the Sierra Club of Hawai'i. These gifts made directly to the Chapter support our efforts to establish laws and policies protecting our environment, including professional lobbying at the State Capitol and county councils, direct engagement with state and county agency officials, and hosting events to recruit new advocates throughout the Hawaiian Islands.

Hear stories of giving from long-time volunteers Roberta Brashear-Kaulfers, Annette Kaohelaulii, and other life members and legacy donors on our website at sierraclubhawaii.org/legacy

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### **Tax-deductible donations**

Most gifts made directly to the Sierra Club of Hawai'i are not tax-deductible because the Sierra Club is a 501(c)4 organization that engages in direct lobbying, elections, and other highly effective advocacy that the IRS does not recognize to be "charitable."

However, it is possible to make a taxdeductible gift to the Hawai'i Chapter via the Sierra Club Foundation which is a 501(c)(3). These gifts support public interest litigation and charitable outreach and education efforts. To learn more about these gifts, contact the Foundation directly at: (415)-995-1780 or foundation@sierraclubfoundation.org

### **Planned gifts**

Leave a lasting legacy by making a commitment today to contribute to the Sierra Club's work from your estate. Planned gifts can be adapted to fit your unique situation. It can be in the form of a bequest in your will, identifying us a beneficiary on your life insurance policy, a gift of property, appreciable stock, or a charitable remainder trust that gives you income now while providing financial certainty for the Chapter. The Gift Planning staff at the Sierra Club's national office are available to help you understand all the ways you can support our work in Hawai'i. Contact Lori Sullivan at giftplanning@ sierraclub.org or 800-932-4270.

# "Of all the paths in life you take, make sure a few of them are dirt" - John Muir

After 25 years as an outings leader, Randy Ching is hanging up his boots and retiring as an outings leader (gasp!). Over the years, Randy has been instrumental in building and maintaining countless trails around the state, keeping everyone smiling on the trails, planting thousands of trees at Hakalau, mentoring new outings leaders, and so much more.

But don't you worry, Randy isn't going anywhere. He is currently the Hawai'i Chapter's Outings Program Chair and is still heavily involved in Chapter leadership and advocacy.

The volunteers and staff at the Sierra Club of Hawai'i are incredibly grateful for everything that you have done and continue to do for our Chapter and most importantly for the 'āina. Mahalo mahalo mahalo.







# Kāhala Hotel's Misuse of State Lands

### by David Kimo Frankel, Hawai'i Chapter Volunteer

From Pohakuloa on the Big Island to the East Maui watershed to Kauai's Blue Hole, community members have questioned and challenged the Department of Land and Natural Resources' management of public lands. Although perhaps less glamorous, residents are now questioning the use of a strip of beachfront property the state owns makai of the Kāhala Hotel. Although public land, the Kāhala Hotel has essentially taken over this land

for weddings, a restaurant, and cabana rentals. The state allows the resort to use the land only for "recreational and maintenance purposes." Yet, the area is cordoned off in part for the exclusive use of hotel guests. During king tides, there is virtually no room for members of the general public.

The Sierra Club has raised a number of concerns with the Department of Land and Natural Resources including: the hotel's crowding out members of the general public; the discounted monthly rental fee that the hotel pays; and the hotel's apparent violation of a number of laws that allow it to maximize its profits without public accountability.







### **SEE PAGE 13** FOR GENERAL OUTINGS INFORMATION

View the latest hike listings and online registration options at bit.ly/SCH-outdoors.

Unless otherwise stated in the outing description, participants should meet at 8am at the back porch of the Church of the Crossroads, 2510 Bingham Street, Honolulu. Do not leave your car in the church parking lot.

Classification of outings: (E) Educational/ Interpretation, (C) Conservation, (F) Family/Fun, (S) Service

### Friday, July 6 - Sunday, July 8

Haleakalā National Park, Maui (S)

Our accommodation for the weekend is at Kapalaoa Cabin situated in the center of Haleakalā Crater. The work will be eradicating California telegraph plant and plantago. This service trip is for hikers in good physical condition and for those who don't mind "roughing it". We have a 7-mile hike in via the Sliding Sands Trail | Saturday July 28 the first day and will exit via the Halemau'u trail. Participants will have to deal with the elevation. The cabin was built in the 1930's by CCC workers and is rustic. There are no washroom or shower facilities, but there is an outhouse. We do have a 2-burner gas stovetop and a wood burning stove to cook and keep warm. The reward is spending the weekend in a beautiful National Park. Leader: Clyde Kobashigawa, clydekobashigawa@ hawaii.rr.com

### Saturday, July 14

Pālehua 'Elepaio Enclosure "Akupu" Service Project (S) Reservations required at least one week prior. Contact Clyde for reservations. Space is limited as we will be working in a sensitive area where the endangered native 'elepaio is nesting and there are some native plants already growing which we do not want to disturb or damage. We will probably hear and see some native 'elepaio as we work in the area, so bring a camera as well. Pack a lunch and/or snack and definitely mosquito repellent. Bring gloves and hand tools for weeding alien plants in the enclosure. Leaders: Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com; John Shimogawa, 227-9925; Susan Tom; Curtis Kawamoto

### Saturday, July 21

Reservations required. Car shuttle hike starts on the *Photography Hike: Lyon Arboretum* (E/F) Pali Highway and goes to Waimanalo, with views of Reservations required at least one week prior. Contact amazing cliffs and beautiful forest. Leader: Gwen Curtis for reservations. The pace of photography hikes | Sinclair, gsinclai@gmail.com or 753-0528

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July-September 2018

# **O'ahu** Group Outings

is extremely slow. Meeting time is 8:30am. \$5 suggested donation to Lyon Arboretum. Learn about native and tropical plants. Bring raingear and insect repellent. Leaders: Curtis Kawamoto, curtis96815@gmail.com; Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com

### Saturday, July 28

Waimano Ridge Trail Service Project (S)

Waimano, strenuous/8 miles, 500 ft elevation gain Help keep one of the best trails on O'ahu safe and fun to hike. We will hike 4 miles up the ridge trail to an area where over the years dirt and debris have covered a good part of the trail's tread. We will carry digging tools to dig out and restore the tread to a much wider, safer width. After working for a few hours and lunch in a beautiful spot we'll return down the trail and stop at a small pool to cool off. Participants will receive a valuable useful gift for their efforts. Limited to 10 participants. Reservations required. Meet at the mauka end of Waimano Home Road at 8am. We will finish around 5pm. Leader: Ed Mersino, mersino@hawaii.edu

Urban Hike: Diamond Head (E)

Diamond Head, easy/5 miles

Reservations required at least one week prior. Contact Susan for reservations, meeting place, and time. During a brisk and energetic walk around Kapi'olani Community College, participants will learn to identify native Hawaiian plants by playing an interactive game. Leaders: Susan Tom, 753-0351; Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com; John Shimogawa, 227-9925; Curtis Kawamoto

### Saturday, August 11

### MCBH Kāne'ohe Bay Service Project (S)

Reservations required. Contact Dan Anderson at 489-1695 or danderhi@gmail.com by August 10. We will be working with the Environmental Division helping clear wetlands of mangrove plants to create habitat for Hawai'i's endangered waterbirds. Because MCBH is a secured military facility, we must provide your name to the base in advance. We will send you a waiver that you must bring with you. Leader: Deborah Blair, 392-0481

### Sunday, August 12

### Victory Hike: Maunawili Trail

Maunawili, moderate/9 miles, contour

# **O'ahu** Group Outings

### Saturday, August 18

*'Ō*pae'ula (F)

Hale'iwa, moderate/3 miles, 250 ft elevation gain This is a great little hike above Hale'iwa. We will hike birds above in the native 'ohi'a lehua forest trees. Our from a scenic ridge down to 'Opae'ula Stream. After following along an irrigation ditch, the trail comes to the catchment dam and later a pool where we can cool off. Besides the views from the ridge, there are hawaii.rr.com thimble berries, lilikoi, and strawberry guavas. Along the way, we'll see a number of native plants and trees. Reservations required. Limited to 20 participants. Meet at 8:30am at the corner of the cane haul road and the North Shore Marketplace; it is by the only traffic light in Hale'iwa town. Leader: Ed Mersino, mersino@ hawaii.edu

### Sunday, August 26

Sandy Beach Cleanup (S)

We will clean up along highway and coastal areas until 10am. Bags and gloves provided. All participants under 18 must have a waiver signed by their legal guardian. No one under 18 will be allowed to clean on the highway and will spend their time cleaning the beach and park area. Closed-toe shoes only. No slippers or sandals of any sort. Meet at 8am at the Sandy Beach bathroom at eastern side of the beach park; the bathroom closer to Makapu'u. Call Tred 394-2898 for information. Leader: Deborah Blair 955-4168

### Sunday, August 26

Photography Hike: Pālehua-Palikea (E)

Makakilo, moderate/2 miles, ridge

Reservations required at least one week prior. Contact Clyde for reservations. Space is limited, so make your reservations early. The pace of photography hikes is extremely slow. Pack a camera, lunch and/or snacks, and water. Not for those uneasy about heights. Due to safety concerns, only adults will be accepted. Native plants, native happy face spiders, scenic panoramas and native tree snails are the attraction in this preserve. Leaders: Clyde Kobashigawa, clydekobashigawa@ hawaii.rr.com; John Shimogawa, 227-9925; Curtis Kawamoto

### Friday, August 31 - Monday, September 3

Kahauale'a Natural Area Reserve Sustem (NARS) Service Project, Hawai'i Island (S)

We will be working with NARS clearing mainly kahili ginger. We will access the area via Volcanoes National Park where it is an easy 1/2 mile hike from Thurston Lava tube to the work site. This a relatively new NARS

site that is dominated with the alien kahili ginger and a great way to see how it evolves into a truly native Hawaiian Natural Area Reserve. There are native accommodation will be at a house in Hilo at the NARS base yard. This trip requires a Friday evening departure. Leader: Clvde Kobashigawa, clvdekobashigawa@

### Saturday, September 1

### Late Hike: Pu'u Pia

Mānoa, moderate/2 miles, 500 ft elevation gain This short hike in the back of Mānoa Valley takes us to the top of a short hill (pu'u) and a surprisingly good view. Meet at 1pm. Reservations required one week prior. Leader: Jean Fujikawa, jean.fujikawa@gmail.com

### Saturday, September 15

Urban Hike: UH Mānoa Campus Arboretum (E) Mānoa, easy/5 miles

Reservations required. Contact Susan for reservations. Meet at Church of the Crossroads then walk to University of Hawai'i at Mānoa. Enjoy more than 50 native Hawaiian plants, many of which are endangered, in addition to some unique and interesting non-native plants during our brisk walk throughout the campus. Leaders: Susan Tom, 753-0351; Clyde Kobashigawa; John Shimogawa

### Sunday, September 23

Kaunala-Paumalū

Pūpūkea, moderate/7 miles, contour

Reservations required. Hike the familiar Kaunala Trail to the Pūpūkea-Paumalū Forest Reserve, where we will see some pillboxes and lovely views of Sunset Beach. Leader: Gwen Sinclair, gsinclai@gmail.com, 753-0528

### Saturday, September 29

Pālehua Service Project-Trail Clearing (S)

Reservations required at least one week prior. Contact John for reservations. Space is limited due to parking and also as we will be working along an existing trail that is not used very much to also develop it as a fire break. Pack a lunch and/or snack and lots of water. Bring gloves, pruning saws, pruning shears, loppers, mosquito repellent, and lots of enthusiasm! The area is known for beautiful scenic panoramas from the ridge overlooking Nānākuli Valley. You may also hear and see some native birds, so bring a camera too. Leaders: John Shimogawa, 227-9925; Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com; Susan Tom; Curtis Kawamoto



### **Kealia Mauka Homesites Proposed**

proposed for a 235-lot residential subdivision. The because it was not built to county specifications. developer, Kealia Properties LLC was required to

The State Department of Education prepare a Draft Environmental Impact Statement to provided comments on the plan and noted that seek State Land Use Commission approval to amend the Kapa'a Elementary School has classroom capacity for district boundary from agricultural to urban district. 29 additional students over the next 5 years, Kapa'a The site is located off Kealia Road, adjacent to Middle School has capacity for 125 additional students 36 homesteads built in the 1920's through 1960's for during that time, and Kapaa High School is currently plantation worker housing known as "Kealia Town | over capacity by 100 students.

Tract". The proposed density is too high and will burden this rural neighborhood. The subdivision calls for small 5,600 to 7,300 sq. ft. lots that are not keeping with the existing neighborhood lavout whose lots currently range in size from 7,000 to 14,000 sq. ft. and larger. The proposed R-6 residential zoning could



easily accommodate 8,700 sq. ft. lots and remain below

the 10,000 sq. ft. threshold. Impacts on the existing community will be significant. The high density conceptual plan includes no parks. The rural character will be diminished. Tradewinds and view planes will be blocked. The project will also adversely impact public safety due to increased demands on fire, police, and paramedic personnel.

The State Commission of Water Resource Access to the proposed subdivision will be from Management has the responsibility of establishing Instream Flow Standards (IFS) on a stream-by-stream basis to protect the public interest in the waters of the state. Rules governing this were adopted in 1988-1989, yet the task was so complex that only interim IFS were adopted-at "status quo" levels. In the Waiāhole Ditch Contested Case, the Hawai'i Supreme Court held that such "status quo" interim IFS were not adequate to protect streams. They required the Commission to take immediate steps "to protect and promote the entire range of public trust purposes dependent upon instream Lot buyers will need to construct their homes. flows." Setting measurable instream flow standards will include a wide range of considerationssuch as ecosystems, recreational, fish/wildlife habitat, scenic views and tourism, boating, water quality, agriculture, hydropower needs, and Hawaiian rights.

the intersection of Kuhio Highway and Kealia Road, which is a narrow roadway constrained by slopes on both sides, with no room for sidewalks. The 235 households with 500-700 cars, must all use Kealia Road, the only ingress/egress. Unfairly, the adjacent Kealia Kai subdivision has 3 entrances off Kuhio Highway for just 36 lots. In addition, Kealia Kai was required to maintain a 100-300 foot setback from Kuhio Highway, however a similar green area and noise setback is not proposed for the new development. The infrastructure provided will include sewer, electrical power, drainage, and telecommunications systems. Potable water will require a water serviceagreement with Kealia Water Company Holdings, LLC which currently serves Kealia Town Tract. However,

# Kaua'i Group Report

the Draft EIS failed to disclose that residents already Once covered in sugar cane, 53 acres of prime | experience poor water pressure, and that after the water agricultural land within a 1,000-acre parcel are being | system was installed, the county declined to acquire it

> Considering the General Plan recent update, the project demonstrates a lack of transparency as it was not listed in the plan, despite communications with the Mayor and Planning Director dating back to 2016.

> While we support opportunities for new housing, this subdivision exemplifies sprawl-its rural location will require

235 new households to drive into traffic-congested Kapa'a for all shopping and business needs.

Read the Draft EIS at: http://luc.hawaii. gov/pending-petitions-2/a17-803-kealiaproperties-llc/

### Public Fact-Finding for Wailua Watershed Stream Flow Standards

# Kaua'i Group Report & Outings

meeting, the Commission will accept written testimony via email until July 13, 2018 at dlnr.cwrm@hawaii.gov. Read the helpful 98-page "Instream Flow Standard Assessment Report, Wailua, January 2018 Draft" at: https://dlnr.hawaii.gov/cwrm/surfacewater/ ifs/wailua ifs/



The Ili'ili'ula-North Wailua Ditch begins at the West Branch of the North Fork Wailua River (Wai'ale'ale Stream). This diversion is called the Blue Hole Intake as it captures water from the "Blue Hole" area of Mt. Waialeale.

### Statewide Transportation Improvement Program

The latest version of proposed Kaua'i projects for 2019-2022 was released and the agency asked the public to submit their priority rankings of roadway and bridge projects to the State Department of Transportation by June 18. Due to limited state and federal funding, prioritizing is important. However, as a result of recent flood and landslides, the agency is focusing on system preservation and safety improvement projects. But, if public input significantly advocates for congestion mitigation, perhaps those needs can be addressed tool Visit: http://hidot.hawaii.gov/highways/other/ other-related-links/stip/stip-2019-2022-2/

# **UPCOMING OUTINGS:**

### **SEE PAGE 13 FOR GENERAL OUTINGS INFORMATION**

Join us on one of these great outings to discover the natural treasures of our island. Mileage is total miles.

Outings focus on: (C) Conservation/Interpretative, (E) Educational, (F) Family/Fun, and/or (S) Service.

Requested donation for members and participants | Library and shuttle our cars to start our walk along the

In addition to the June 21 public fact gathering | under 18 is \$1. For all others: \$5. Note: Women are advised not to hike remote trails or camp alone on Kaua'i.

### Thursday, July 12

*Mo*<sup>•</sup>*alepe Trail to Kuilau Ridge Picnic Area* (C/F) Kapa'a, moderate/5.5 mile round trip

A beautiful hike through farmland and forest, with glorious views and ever-present birdsongs. This trail offers great rewards without a lot of effort. Leader: Lee Gately, 661-373-4834

### Saturday, July 21

Waimea River Walk and Float (C/F) Strenuous/10 miles

Start at Kukui Trailhead and hike down into Waimea Canyon and along the old Waimea River jeep road. Bring floatable tubes to inflate and float down the river for over a mile, passing through a tunnel. End at outskirts of Waimea town and shuttle back to Kukui Trailhead. Leader: Ken Fasig, 808-346-1229

### Thursday, August 2

Nu'alolo Trail (C/F)

Koke'e State Park, very strenuous/7.5 miles A rewarding hike reaching a spectacular view at the Lolo Vista overlooking the Nāpali Coast. Leader: Lee Gately, 661-373-4834

### Sunday, August 5

Māhā'ulepū and Makauwahi Cave Reserve (C/E/F) South Shore, moderate/3 miles

Enjoy the majestic coastline. Visit the world class archaeological site. Leader: Allan Rachap, 808-212-3108

### Saturday, August 11

Kauhoa Ridge Road (C/F) Koke'e, strenuous/10 miles round trip. Hike along this Koke'e jeep road that slopes fairly gently for easy walking. Leader: Ken Fasig, 808-346-1229

### Thursday, August 16

Māhā'ulepū Coastal Hike (C/E/F) Po'ipū area, moderate/4 miles Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

### Friday, August 24

Victory Hike: Donkey Beach (Kuna Bay) Sunset to Full Moon Coastal Walk (C/E/F) East Shore, moderate/4.5 miles Check bit.ly/SCH-kauai for updates to the schedule. | We start off in the late afternoon meeting at Kapa'a



coastal path from Donkey Beach ending back at the | the full moon glistening on the ocean with a sky full of library as we watch the moon rise over the ocean. This stars. Leader: Judy Dalton, 808-482-1129 is a "Victory Hike" to celebrate one of Kaua'i's victories Sunday, September 23 over Sierra Club's past 50 years in Hawai'i. Leader: Māhā'ulepū and Makauwahi Cave Reserve (C/E/F) Judy Dalton, 808-482-1129

### Thursday, August 30

Kuilau Ridge Trail (C/F)

East side, easy to moderate/3.5miles A gentle steady walk on a wide path with sweeping view of lush valleys and Mt. Wai'ale'ale and Makaleha Mountain Ranges. This trail offers great rewards without a lot of effort. Glorious views and ever-present bird songs reward you along this trail. Hike to bridge and picnic tables for lunch. Leader: Lee Gately, 661-373-4834

### Thursday, September 13

Māhā'ulepū Coastal Hike (C/E/F) Po'ipū area, moderate/4 miles Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

### Saturday, September 22

Wailua Beach To Nukoli'i Beach Sunset to Full Moon Walk (C/E/F)

East Shore, easy/3 miles

Meet at Lydgate Beach Park for a picnic dinner. Learnabout Sierra Club's role in stopping construction of a seawall along this pristine coastline. Enjoy

# SIERRA CLUB OUTINGS POLICY

The Sierra Club outings are conducted according to Club policy and under the direction of certified Outings Leaders. Our outings are group activities, and all participants are expected to follow leaders' instructions and to remain with the group for the entire outing. We welcome all the Sierra Club members, non-members, and visitors on most of our outings; however, certain outings may be restricted to members. Firearms, pets (unless specifically allowed), and audio devices with or without headsets are prohibited. Smoking is permitted only at breaks and then only if the smell of smoke cannot be detected by other hikers. Outing Leaders may prohibit smoking if, in their judgment, a fire hazard exists. Bring with you: a liter of water (2 liters for strenuous hikes), lunch, sunscreen, insect repellent, raingear/jacket,

and daypack. Boots, shoes with traction grooves (no loafers) or tabis are required. Unless otherwise noted, no bare feet or sandals of any type will be allowed.

You will also need to sign a liability waiver. If you would like to read a copy of the waiver prior to the outing please see content.sierraclub.org/outings/local-outdoors/resources or call 415-977-5630.

In the interest of facilitating the logistics of some outings, sometimes participants make carpooling arrangements. The Sierra Club does not have insurance for carpooling arrangements and assumes no liability for them. Carpooling, ride sharing, or anything similar is strictly a private arrangement among participants. Participants assume the risks associated with this travel.

For specific islands, each group may have its own outing policy. Please look at each group's page or website for more specific information on where to meet or what to bring with you.

# Kaua'i Group Outings

South Shore, moderate/3 miles Enjoy the majestic coastline. Visit the world-class archaeological site. Leader: Allan Rachap, 808-212-3108

Thursday, September 27

*Canyon Trail to Waipo'o Falls* (E/F) Waimea Canyon, moderately strenuous/4 miles Unparalleled views of the canyon from the other side. Visit two waterfalls and dip your toes into a cool pool. Leader: Lee Gately, 661-373-4834



Recent hike to Māhā'ulepū. Join us on one of our hikes there this quarter!

# Maui Group Report

Look for our most recent updates and calls to | New Lawsuit: Anaergia Waste-to-Energy Project in action at Facebook.com/SierraClubMaui and Kahului MauiSierraClub.org/latest-news

### **Mahalo to Our Donors!**

individuals and businesses who contributed to three project in the coastal tsunami zone at the Wailukusuccessful fundraisers from April to June. Mahalo to Flatbread Pizza in Pā'ia and our many auction claimed no impacts from bringing all of Maui's sewage donors for sponsoring a great Earth Month benefit night; our many volunteers and plant donors for an amazing annual Sierra Club Plant Sale in Ha'ikū; and **Sand Mining** Westin Nanea Ocean Villas and Trilogy sailing ship for sponsoring a Sierra Club Maui benefit snorkel cruise and reef clean up in June. We are honored to have their support.

### Lāhainā Wastewater Facility Clean Water Act Legal Action

The Ninth Circuit Federal Court of Appeals declined to reconsider its decision holding Maui County's Lāhainā Wastewater facility in violation of the federal Clean Water Act. This is the fourth time the | Campaign to Ban Chemical Sunscreens court has agreed with the complaint filed by the Maui Group and allies, but Maui County is now asking the octinoxate-based sunscreens was passed by the State US Supreme Court to hear the case. The Maui Group and allies are asking the county to secure a National Pollution Discharge Elimination System permit, which would require a reduction in ocean water quality impacts from the plant.

### **West Maui Stream Restoration**

Water Commission in support of return of flows to several legendary West Maui streams after a century of plantation diversions. Scores attended the hearing, and the Commission voted to return substantial flows to three of the four petition streams.

### Wailea 670/"Honua'ula" Development

The Wailea 670/"Honua'ula" housing project developers asked the Maui Planning Commission to "adopt" a partially reviewed Habitat Conservation Plan (HCP) for 134-acres to fulfill a condition of zoning. The Maui Group wants any HCP that is "adopted" to provide a larger voice for the cultural users and lineal cultural sites and native flora and fauna habitat as well descendants of the land who currently access the area. The Maui Group, who is party to a settlement agreement with the development, persuaded the developers to hold off on any Planning Commission presentation until these HCP issues are better resolved.

The Maui Group and Maui Tomorrow have co-filed a lawsuit challenging the approval of an Environmental Impact Statement for a one-bid contract The Maui Group is grateful to the many awarded to Anaergia LLC to build a sludge processing Kahului Wastewater Reclamation Facility. The project sludge to the vulnerable location.

The Maui Group donated funds to help support legal efforts of local group, Mālama Kakanilua, who are holding developers accountable to follow court orders protecting the 'iwi kūpuna (ancestral bones) that lie in the natural sand dune formations of Central Maui. On July 2nd, the Maui County Council will discuss renewing the 6-month moratorium against sand mining in Central Maui. The Maui Group strongly supports the continuation of the sand mining moratorium.

Victory!! A ban on the sale of oxybenzone-and legislature and will go into effect in 2021. The Maui Group's advocacy for a similar County bill in 2017 helped galvanize momentum for the statewide victory.

### Mākena Development

As part of a 2017 legal settlement agreement between ATC Mākena and the Sierra Club Maui Group In April, the Maui Group testified to the State & co-plaintiffs, a new archaeological report outlining 35 additional archaeological features has been drafted for the 47-acres of ATC Makena Resort lands above Mākena Landing. The Maui Group and co-plaintiffs will review the report and work with allies to incorporate additional preservation areas into the project's master plan.

### Kīhei Wetlands/ Kulanihakoʻi Gulch Bridge

The Maui Group urged Maui Council to listen to the local community and come up with a better plan for new culverts proposed for this Kihei flooding hotspot. The proposed culvert project impacted wetlands, as water quality. Maui County Public Works Department announced recently that the plan could not obtain a key permit and needed to be redesigned.

### **SEE PAGE 13** FOR GENERAL OUTINGS INFORMATION

Please register for all hikes with the leader listed Coastal hike through historically rich area with in the description. Bring lunch, water, rain gear, spectacular views. Bring water, lunch/snack, sun and sunscreen, and appropriate footwear. Hiking boots are rain protection. Hiking down a steep slope to the fish recommended for longer hikes. A donation of \$5 (\$3 ponds is optional and includes plastic cleanup on the for Sierra Club members) is requested of hikers over beach. Meet 9am at Ha'ikū Community Center. Limit age 14 except where otherwise indicated. 20. Leader: Rob Weltman, robw@worldspot.com or 354-0490

Hike description key: (C) conservation focus, such as discussing how to conserve this land for future Saturday, July 28 generations to enjoy; (E) educational, such as visiting Hāmākua Mālama Day (C/E/S) and learning about archeological sites and naming the Ha'ikū, 4 miles plants and flowers; (S) service outing (no donation

Monthly community service outing to remove trash and keep coastal trails open on 267 acres of Hāmākua lands purchased by Maui County. Bring gloves, hand tools, water, hat, lunch, and sturdy shoes. Meet 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

requested), (D) round trip hike distance. We always welcome more hike leaders! Contact sierraclubmauigroup@gmail.com if you are interested. Check bit.ly/SCH-Maui-Outdoors for updates to the schedule.

Sunday, July 29 If hike description states EMI waiver is required: Makawao Forest Reserve, Lower Forest Ramble (C/E) East Maui Irrigation Company (EMI) allows access Makawao, 4-5 miles to their trails as long as each hiker has a waiver. An Moderate hike hike through big tree forest, shaded all EMI waiver is absolutely required for EMI hikes. Call the way and mostly level. Meet in the parking lot across in your waiver request at 579-9515 well in advance from St. Joseph's Church on Makawao Ave at 9:30am. to make an appointment to sign it. Then go to EMI's Leader Kalei Johnson, kalei1908@gmail.com or 344-Pā'ia office at 497 Baldwin Avenue to sign the waiver. 0006; leave your phone number It is open Monday 11am-3pm and Friday 8am-1pm. Waivers cannot be mailed, faxed, or emailed. Please be Friday, August 3 considerate of EMI staff time and pick up the waiver 5 Waikapū Stream Trail Work, Hike, and Swim (S/C/E) days in advance whenever possible. The waiver must be Central Maui, 3 miles brought on the hike and shown to the hike leader. Easy trail clearing along trail to Waikapū stream,

### Friday, July 6

Palauea Mauka (Wailea 670) Hike (C/E) South Maui, 2-3 miles

Help discover rare native plant clusters in the Wailea Limit 18. Leader: Lucienne de Naie, laluzmaui@gmail. 670 Preserve and enjoy stunning mountain and ocean com or 214-0147; assistant leader Robin West views. Meet at 3pm at top of Kaukahi Road in Wailea. Long pants recommended, sturdy closed shoes a must. Saturday, August 4 Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail. Nā Hōkū – Star Watch at Waikapū Tropical Plantation com or 214-0147 Slopes (C/E)

### Saturday, July 14

Chapter Retreat at Hale Akua Farm

# **Maui** Group Outings

Come spend an evening with astronomer Harriet Witt and learn about the lore of our Hawaiian night sky. Bring a beach chair, blanket, and flashlight. Meet at 6:45pm at the entrance to the parking lot. Light pupus will be served. Special Event: \$5 for members, \$10 non-members. Register with Rob Weltman, robw@ worldspot.com or 354-0490

Saturday, July 21

Pauwalu Bird Sanctuary and Fishponds (C/E) Ke'anae, 2.5 miles

followed by a short hike to a "secret valley" and swim. Water-friendly footwear required. Bring loppers, small saws, cane knives, gloves, water, lunch/snack. Meet 9am at Maui Tropical Plantation parking lot south end.

# **Maui** Group Outings

### Saturday, August 11

Honolua Snorkel, Līpoa Point Hike (C/E) Honolua, 3 miles

Explore Honolua Valley and Līpoa Point with Hawaiian cultural sites, amazing views, and a chance to swim in the bay. Bring hat, sunscreen, water, lunch/snacks, and swimwear. Meet 8am Maui Ocean Center parking lot across from Carl's Jr. to carpool. Limit 12. Leader: Miranda Camp, mauimiranda@hotmail.com

### Saturday, August 18

Wailea 670 Hike, Western Section Native Plant Preserve South Maui. 2 miles

Visit magnificent stone walls and prominent cultural complexes in Wailea 670 Preserve and help take pix of rare native plants. Rugged terrain. Closed shoes/boots, long pants, and good balance a must. Bring water, hiking stick, and cameras. Meet 3pm at top of Kaukahi Rd in Wailea. Limit 18. Leader: Lucienne de Naie and cultural guide. Register: laluzmaui@gmail.com or 214-0147

### Saturday, August 25

Hāmākua Mālama Day (C/E/S)

Ha'ikū, 4 miles

Monthly community service outing to remove trash and keep coastal trails open on 267 acres of Hāmākua lands purchased by Maui County. Bring gloves, hand | Thursday, September 27 tools, water, hat, lunch, and sturdy shoes. Meet 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

### Sunday, August 26

Hanawī Stream Hike (C/E)

Nāhiku area, strenuous/4 miles

Pools with waterfalls and native stream life. Numerous stream crossings and hiking on slippery rocks in the stream. Good water footwear a must. Meet 8:30am at Ha'ikū Community Center. EMI waiver required (see above). Limit 15. Leader: Miranda Camp, mauimiranda@hotmail.com

### Sunday, September 2

Haleakalā Supply Trail (C/E)

Haleakalā, intermediate/3.5 miles, 8,000' elevation Beautiful views along trail. Leave cars at Hosmer's Grove campground and shuttle up to hike down from Halemau'u at the crater rim. Prepare for wet/windy conditions. Meet 8am at Pukalani Terrace Shopping Center near Ace Hardware. Wear footwear for rocky

conditions. Bring hat, jacket, lunch, plenty of water, and a park pass (if you have). A hiking stick may be useful. Leader: Kalei Johnson, kalei1908@gmail.com or 344-0006; leave your phone number

### Friday, September 7

Victory Hike: Olowalu Shoreline (C/E)

Olowalu, 2.5 miles

Celebrate the natural Olowalu coastline, once proposed for hundreds of condos and commercial development. Learn about Olowalu's rich history and enjoy a swim or snorkel. Meet 8:30am at 14 mile marker, on the ocean side of Honoapi'ilani Hwy. Limit 20. Leader: Miranda Camp, mauimiranda@hotmail.com

### Sunday, September 9

Wailea 670 Historic Kanaio-Kalama Trail Hike (C/E) South Maui, 3 miles

Explore ancient shelters along this historic road in Wailea 670 preserve. Rugged terrain. Closed toe shoes or boots, long pants, and good balance a must. Bring water, hiking stick, and cameras. Meet 3pm at top of Kaukahi Rd in Wailea. Limit 18. Leader: Lucienne de Naie with guidance by Hawaiian cultural practitioners. Register: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

Keālia Pond National Wildlife Refuge Keālia. 1 mile

Come and see a variety of waterfowl and shorebirds and hear an overview about the refuge. Meet 9am at the refuge office (turn into driveway at mile post 6 on Mokulele/Maui Veterans Highway and follow the road for 1/2 mile to the office). Bring binoculars, suitable closed toe shoes for mud and water, sun protection, water. Limit 20. Leader: Rob Weltman, robw@ worldspot.com or 354-0490

### Saturday, September 29

Hāmākua Mālama Day (C/E/S)

### Ha'ikū, 2 miles

Monthly community service outing to remove trash and keep coastal trails open on 267 acres of Hāmākua lands purchased by Maui County. Bring gloves, hand tools, water, hat, lunch, sturdy shoes. Meet 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

### PGV Demise An Opportunity by Steve Holmes

Hawai'i Electric Light Company (HELCO) shouldn't be allowed to return to old fossil fuel generators under the guise of an energy emergency caused by the recent shutdown of the geothermal plant in Puna. Hawaiian Electric Industries has already taken a step backwards by acquiring a naphtha fired power plant in Honoka'a from a former independent power producer with the intent of burning this bottom of the barrel fuel till 2030. Naphtha is an oil fuel "alternative" that is a by-product from petroleum refining—neither clean nor renewable. It was what you would expect from a monopoly utility but something that should not have been approved.

The Hawai'i State Legislature has mandated 100% renewable energy by 2045 with Hawaiian Electric promising to get there even sooner. The move to invest in naphtha puts into question that promise.

HELCO could and should follow the lead of Kaua'i Island Utility Cooperative, the energy cooperative on Kaua'i, by installing grid scale solar farms with battery storage. Resort areas like Mauna Lani and Waikoloa are likely candidates for microgrids that would take large loads completely off the main grid. There are lots of actions that could be taken to advance renewables and the loss of geothermal should be a cause for affirmative

action on the part of state energy planners rather than let HELCO fossil fool us again. Kaua'i has shown that renewables can be implemented sooner than later and that consumers will win with reduced energy costs. Billions of dollars get sucked out of our local economy for imported fuels while renewables bring in big capital investments and create local jobs. door-prize giveaways. "Never waste a good crisis" is an old but true

phrase. The declaration of an emergency gives Governor Ige and the state special powers—which they should seize on as an opportunity.

### Hu Honua by Cory Harden

With Puna Geothermal Venture knocked out by lava, watch for a push to approve Hu Honua, also called Honua Ola.

 $Also at the event, Diane {\it Kimball played Celticharp}$ Hu Honua is a "renewable" energy facility and Carter Romero played the concertina. Ryan Perroy being built on a scenic oceanside site, in the middle of spoke about coastal vulnerabilities to Hawai'i Island a neighborhood, a few miles down the Hāmākua coast from Hilo. Calling it "renewable", the facility proposes and adaptive coastal zone planning. Perroy is associate burning trees and other fuel sources to produce professor of Geography and Environmental Science at electricity. University of Hawai'i at Hilo (UHH). Katie Strong, a Hu Honua is now asking the State Department UHH Tropical Conservation Biology and Environmental of Health for a permit to inject used cooling water into | Studies graduate student, spoke about plastic pollution.

# Moku Loa Group Report

the ground-up to about 20 million gallons a day. The water would be tainted with chemicals whose warning labels cite risks of cancer, tissue damage, allergic reactions, impaired fertility, harm to unborn children, and hazards to aquatic ecosystems. This water would enter the aquifer and might migrate to the nearby ocean.

On land, many acres of trees would be cut, but plans to prevent erosion and keep out invasive species may be inadequate. Huge logging trucks would run from Ka'u through Puna, Hilo, and the Hāmākua coast over the 30-year life of Hu Honua. The trucks would impede traffic, annoy locals and visitors, and wear out roads. Hu Honua would bring noise and other industrial impacts to the surrounding residential community. And plans for ash residue–possibly hazardous–are unclear.

Approval of Hu Honua may set a precedent for environmentally unfriendly projects and prevent building of more cost-effective renewable energy projects.

The Moku Loa group has urged Department of Health to require a Supplemental Environmental Impact Statement, and continues to track the issue.

### 50th Anniversary Party: Educational and Entertaining **Success** by Emily Garland and Gary Harrold

The Sierra Club Moku Loa Group recently held a successful 50th anniversary party at Mokupāpapa Discovery Center in Hilo, which was attended by more than 100 people. Half of the fundraising party's proceeds will go to the Hawai'i Food Basket's lava relief efforts. The event featured a screening of the film Reefs at Risk, a silent auction, eco speakers, pupus, live music, a trivia guiz and reef-safe sunscreen and other

Set in Hawai'i, Reefs at Risk is a short documentary about the detrimental impacts that the common sunscreen ingredient oxybenzone has on coral reefs, marine life, and humans. Reefs at Risk was directed and produced by Malina Fagan and Lynn Pelletier, a Hawai'i Island mother-daughter team. You can watch Reefs at Risk and get information on reefsafe sunscreen at reefsatrisk.org.

# Moku Loa Group Report & Outings



Pablo Beimler spoke about North Hawai'i Action | UPCOMING OUTINGS: Network, a community activist group he helped found. The network is committed to protecting human rights, civil liberties, equality, and our planet. Beimler also performed his original slam poem about how we're all connected.

A true community affair, the gathering featured oodles of generous donations of food and drink and silent auction items from community members and local businesses. Mahalo nui loa to Clayton Watkins of the Mokupāpapa Discovery Center and to all our donors: KTA, Sweet Cane Cafe, The Locavore Store, Island Naturals, Abundant Life Natural Foods, Safeway, Plant It! Hawai'i, Tina's Garden Cafe, Big Island Booch, Basically Books, Christine Ahia, Diane Ware, Debbie



Ward, and Sherry Arndt. Mahalo nui loa to Coral Isles, Raw Elements, and MyChelle Dermaceuticals their for donations of reef-safe *Leaders Training* (E) sunscreen samples. Mahalo guests from O'ahu, Kimiko Lahaela-Walter and Randy

Roberts and Mary Marvin Porter, whose energetic | the course online. The Laplante's have an extra wifi unit efforts helped the event sparkle. Gary Harrold and Emily Garland organized the event. The party is part of | iPhone and lunch. Prospective leaders should sign up a series of events commemorating the 50th anniversary of the Sierra Club in Hawai'i. Stay tuned for the Moku Loa Group's 50th anniversary party, in 2025!

### **Exploring for Gold** by Rob Culbertson

...on the "Gold Coast" of Hawai'i Island. The purpose of a planned series of snorkel outings this summer and fall is to re-acquaint reef lovers with the inspirational marine environment that attracts so many visitors and traditionally sustained the entire biotic web of life here in the islands. More specifically, the goal is to | Saturday, July 28 recruit avid and knowledgeable water persons to assess key sections of the coast that may be impacted by the commercial harvesting of marine organisms. We want to validate the often anecdotal evidence of our kupuna and resident fishers about the health of these critical marine environments. Some formal research has been used to defend the continuation of 'self regulated' commercial aquarium harvests. Come and judge for yourself if the claims for successful management are being met. Become an expert witness based on your own direct experience!

### **SEE PAGE 13** FOR GENERAL OUTINGS INFORMATION

Requested donation for members and participants under 18 is \$1. Donation for others: \$5. For most hikes, bring 2 quarts of water, rain gear, sturdy hiking shoes, hiking stick, hat/visor, and lunch. For full descriptions and updates go to: bit.lv/SCMLG-outings

Classification of outings: (E) Education/Interpretation, (C) Conservation, (F) Family/Fun, (S) Service

Due to recent and ongoing volcanic activity, outings are subject to rescheduling or cancellation. If vog, ashfall, or other eruption effects are severe, an outing may be cancelled. If in doubt, please contact leaders prior to outing.

### generous | Saturday July 14

North Hilo, easy

nui loa to our Sierra Club | All current and prospective leaders will meet to fulfill leader training requirement to complete Outings Leader 101 course online. We will meet at the Laplante house Ching, and to Moku Loa Group members, Nadine in Pepe'ekeo with our wifi units to review and complete for anyone lacking access. Bring your laptop, tablet, or with Diane Ware, 967-8642

### Saturday, July 21

Pepe'ekeo Cliffs Day Hike (E/C)

North Hilo District shoreline, moderate/4 miles Scenic vistas, sea birds, and some historic sites depending on which part of the trail we go on atop the cliffs. Not for those afraid of heights. Leaders: Michael and Sunny LaPlante, 964-5017

Mauna Kea Service Outing (S)

Hāmākua District near Saddle Road, easy/1 mile

Please join Mark Hanson and the Hawaiian Reforestation Program planting sandalwood and other native seedlings in areas around 7000 feet on Mauna Kea. Hiking boots, sunscreen, and raingear are suggested for this rain or shine project. We should be done by about 3 pm, so please bring lunch, snacks, and water. Bird watching in this palila critical habitat is an option afterward. Leader: Rob Culbertson, 805-316-1380

### Saturday, August 4

### Victory Hike: Pu'u Maka'ala (E/C)

Puna District, moderate/4 to 6 miles

Join us for an enchanting, interpretive hike through very old growth native forest that is protected and fenced by Natural Area Reserve System and enlarged with support the 'ōhi'a in this forest form mini ecosystems with 4-6 ferns, and if lucky a few 'i'iwi. Bring lunch, water, sturdy boots, and rain gear for this rainforest hike. Limited to 8 participants. Leader: Diane Ware, 967-8642

### Friday, August 17

Kaloli to Hā'ena (Shipman Beach) (E) Puna District, easy/6 miles at sea level Hike on a historic trail in Puna from Paradise Park to the beach at Hā'ena. The trail used to be an inland carriage road. At Hā'ena Beach, we will see nēnē at the Shipman estate and swim with the turtles. Bring water, rain poncho, swimsuit, and lunch. Leader: Linda Larish, 966-6337.

### Saturday, August 18

Wailuku River Day Hike (E/C)

South Hilo District, moderate/6 miles

This hike is along a jeep trail that goes to the Wailuku River. If the weather has been rainy the road is dotted with small ponds that need to be passed through or around. There may be the option for swimming at the river, but at your own risk. Wear hiking boots and bring sun protection, water, and lunch. Leaders: Sunny and Michael LaPlante, 964-5017

### Saturday, August 25

Mauna Kea Service (S)

Hāmākua District near Saddle Road, easy/1 mile Please join Mark Hanson and the Hawaiian Reforestation Program planting sandalwood and other native seedlings in areas around 7,000 feet on Mauna Kea. Hiking boots, sunscreen, and raingear are suggested for this rain or shine project. We should be done by about 3 pm, so please bring lunch, snacks, and water. Bird watching in this palila critical habitat is an option afterward. Leader: Rob Culbertson, 805-316-1380

### Saturday and Sunday, September 1 and 2

Hakalau Forest National Wildlife Refuge Service Trip (S) North Hilo District, moderate/4 miles

You have read about it, now is your chance to do it! The service projects at the Hakalau Forest National Wildlife

# Moku Loa Group Outings

Refuge usually involve planting native species such as koa or working in the greenhouse. Accommodations are at a well-equipped cabin at 6,200 feet elevation with electricity, running water, flush toilet, hot shower, kitchen, and bunk beds with mattresses. Participants will need to bring their own sleeping bags. At this high elevation, cold wet weather of Moku Loa Group after the prison was closed. Some of is always possible, so warm clothing and footwear and good quality raingear are necessary. Raingear can also be species connected. Some rare and endangered plants | borrowed from the refuge. Free time activity may include are found here and we will see lobelias, rare mints, meu | a hike in the koa/'ōhi'a forest to observe endangered native forest birds. There is a fee for central commissary. Leaders: Sunny and Michael LaPlante, 964-5017

### Saturday, September 15

Snorkel Lapakahi (C/E)

North Kohala District, easy/sea level

This designated marine reserve also sits adjacent to a rich Hawaiian archaeological/historical site in Kohala. We especially want to invite participation of any experienced watermen and women with knowledge and memories of this special place. Together we will investigate and assess the richness of the reef and its marine ecology. Bring standard outings needs such as water, sun protection, and snacks as well as personal snorkel gear, fish ID cards, and underwater camera. Leader: Rob Culbertson, 805-316-1380

### Saturday, September 22

Pu'u O'o Trail Day Hike (E)

South Hilo District, moderate/7 miles

Pu'u O'o trail starts from Saddle Road between the 22 and 23 mile marker and meanders through kipukas of native plants and birds surrounded by old lava flows. We will hike the trail to where it intersects Powerline Road and visit the Emisine lava tube. Bring rain gear, hat, 1 quart of water, and plenty of snacks and lunch, binoculars, headlamp, and wear sturdy shoes. Leader: Linda Larish, 966-6337

### Saturday, September 29

- Mauna Kea Service Outing (S)
- Hāmākua District near Saddle Road, easy/1 mile
- Please join Mark Hanson and the Hawaiian Reforestation Program planting sandalwood and other native seedlings in areas around 7,000 feet on Mauna Kea. Hiking boots, sunscreen, and raingear are suggested for this rain or shine project. We should be done by about 3 pm, so please bring lunch, snacks, and water. Bird watching in this palila critical habitat is an option afterward. Leader: Rob
- Culbertson, 805-316-1380

# The New Normal of a Changing Climate

### by Marti Townsend, Chapter Director

On April 14, Kaua'i's north shore experienced the first-ever "rain bomb," that dropped 50 inches of rain in 24 hours on this small community. The flood destroyed homes, farms, and businesses. The massive flow of water triggered at least eight landslides that completely covered the only road connecting the north side of Kaua'i to the rest of the island.

Residents banned together to help each other in an amazing display of community. They used personal boats and vehicles to evacuate neighbors in need. In total, more than 300 residents were immediately rescued and evacuated.

At its heart, this region of Kaua'i is a farming community. A significant portion of Hawai'i's taro supply is grown here. Damage to these historic lo'i is expected to create a poi shortage across the islands. There are also several successful ranches in this area. Kaua'i's cowboys made national news rescuing bison from the bay with jet skis and lasos.

From Wainiha to Hā'ena, 760 structures were damaged by the flood. The issue now is whether to rebuild in place or relocate. Much of this area is now considered a flood zone, and critical infrastructure like roads and sewers are quite limited. Cesspools can no longer be used to store human wastewater.

The Ige Administration immediately released \$32 million in emergency funding for residents affected by the flood. The Legislature followed up with an additional \$125 million in emergency funding. The Ige Administration is also currently appealing the Federal Emergency Management Administration's decision to not fund relief efforts on Kaua'i.

As local residents, and state and local officials work together to clean up, re-build, and where necessary, relocate homes, businesses, and public services affected by the historic flood, all of us can pitch in to help by donating time, supplies, and monetary support at malamakauai.org/mk/kauai-flood-relief

All of us can also internalize the lessons learned from this event: be prepared, heed warnings, and most importantly recognize that nature cannot be controlled. We must change the way we live to ensure we respect and adapt to nature. This means doing all we can to immediately end the use of fossil fuels in every aspect of our lives—electricity, transportation, packaging,... everything.

This also means accepting and adapting to the changes we can no longer prevent. Scientists expect the type of extreme rain event that hit Kaua'i and parts of O'ahu to become more common as the immediate effects of a climate-changed world set in. This is our new reality. The sooner we can adapt, and the more we can plan for a future flexible to nature's changes, the better for us all.

## **A TREASURER FOR TREE HUGGERS**

Here's your chance to join the oldest, largest, and most influential grassroots environmental organization in the country as the Volunteer Assistant Treasurer!

- Gain valuable experience and training
- Develop financial skills
- Work with "green" (\$) for a "green" organization

The Sierra Club of Hawai'i's Chapter ExCom needs your part-time financial and bookkeeping skills on the chapter level.

### **Summary of Responsibilities:**

- Help process financial transactions
- Help prepare financial statements, ExCom reports, and budgets
- Help ensure financial stability and solvency of chapter (sub-entities)
- Monitor, question, and evaluate club activities requiring expenditures
- Assist in administration of fundraising activities, as needed
- Understand and promote the mission of the Sierra Club
- Attend meetings with Treasurer as requested
- Contribute to a sense of camaraderie and teamwork
- Assume treasury duties, if necessary

Please contact Nara Takakawa, Chapter treasurer, if you have the interest and skills for the position at: hawaii.chapter@sierraclub.org

# **Advancing Energy Equity** for Hawaiian Homelands

### by Jodi Malinoski, Oʻahu Group Coordinator

As we see increased impacts on our islands from the effects of climate change, such as more frequent and extreme weather events, I am reminded of how necessary it is to center the Sierra Club's work on climate change through values of justice and equity. While Honolulu is leading the nation for installed rooftop solar per capita and Hawai'i ranks second in electric vehicle registrations, these clean energy luxuries are usually accessible to affluent homeowners. We know that we must stop burning fossil fuels and transition to a clean energy future rapidly, but we also need to make certain that entire communities are not left behind in an unjust transition. In light of the Sierra Club advocating for energy

equity, I am pleased to introduce Scott Cooney, the CEO and founder of Pono Home to showcase a free energy and water efficiency program that is being offered to residents living in Department of Hawaiian Homelands (DHHL) housing. Pono Home, a local company specializing in energy efficiency, in partnership with Hawai'i Energy, a customer-funded conservation and efficiency program, is working to install LED lighting and other water and energy saving fixtures for DHHL residents throughout Hawai'i.

DHHL residents sign up by completing a home around us to the greatest extent of our abilities. Here efficiency survey and scheduling an appointment for are a few suggestions and I encourage everyone to come Pono Home to visit their residence to install the energy up with other ideas that work best for you. and water efficiency retrofits. This is a customer-funded program that is first come, first served and efficiency 1. Expand your political comfort zone by doing services take about an hour to complete. Pono Home has something to support climate-friendly candidates that upgraded over 500 homes across O'ahu, Maui, Moloka'i, you've never done before (i.e. sign-wave, give money, and the Big Island so far. There are about 8,303 DHHL write a letter to the editor, etc...) homes in Hawai'i and the goal is to eventually retrofit 2. Talk to and/or petition your bank, employer, or all of them. Our members can help by promoting this educational institution about divestment from fossil free efficiency program, encouraging DHHL residents fuel development and instead support industries and to sign up, and sending referrals to Pono Home. DHHL technologies that reduce climate change. The University residents can sign up online at **ponohome.com**/ of Hawai'i at Manoa divested, thanks to encouragement DHHL, by email (info@ponohome.com), or by phone from Sierra Club members. (808) 364-9715.

The Sierra Club believes everyone has a right to clean air and water, as well as safe and affordable energy. It is no secret that climate change will disproportionately affect minority and low-income communities, who are already struggling to make ends meet with Hawai'i's high cost of living. The O'ahu Group is happy to support this free program that advances our goals of energy equity and can cut utility bills 20-30% for those living in the Department of Hawaiian Homelands. Sustainable living must become accessible and affordable for everyone – to ensure we can all move forward together.

## **Letter from the Chair:** The Urgent And Very Personal Battle **Against Climate Change**

### by Colin Yost, Chapter Executive Committee Chair

Several decades ago, every green-blooded environmentalist swore by "Reduce, Reuse, Recycle" as the best way to address his/her negative impact on the planet. While the essential wisdom of the iconic phrase still resonates, something more radical is needed in this age of frightening and rapidly progressing climate change.

The State of Hawai'i (thank you Rep. Chris Lee, Governor Ige, and many others) recently enacted a law to become carbon neutral by the year 2045; so one answer is to achieve a personal carbon neutral life much, much earlier than that. Sierra Club will soon provide a guide with the best and most practical steps to zero out our individual carbon impacts.

Another revolutionary change could be a new job or career. Most of our time and energy is devoted to our work, and if you are able to find a position that allows you fight climate change AND make a living, so much the better.

Given the global scale of the climate challenge and the failure of national and international leaders to take aggressive, mitigating action, we must also look beyond personal behavior and seek to change the world

3. Use social media to educate others about climate news/scientific research and all the latest ways to reduce the possibility of our descendants finding themselves stuck on a raft with Kevin Costner or in a dusty Thunderdome with Mel Gibson.

4. Volunteer with the Sierra Club! We can use all the help we can get. You can find information on how to get involved at sierraclubhawaii.org/join-volunteer.

Individually and collectively we can make an enormous and positive difference. And there's no time to waste.

# **Stay Engaged to Protect Water** from Red Hill Fuel Tanks

### by Kimiko Lahaela Walter, Chapter **Conservation Program Coordinator**

More than twenty-five years ago, the State Legislature ordered the Health Department to enact rules that would require underground fuel storage tanks to be upgraded. This means all storage tanks, from your neighborhood gas station to the 70-year-old, 12.5 million gallon bulk capacity field constructed fuel storage tanks that lie beneath Red Hill. All tanks were supposed to be upgraded by 1999.

Instead of doing so, the Health Department exempted the U.S. Navy's antiquated and leaky tanks at Red Hill from any operating or upgrading requirements. Unlike the owners of underground storage tanks found beneath gas stations, the Navy does not need to comply with requirements related to permitting, training, or secondary containment. This has been the case for more than two decades. Meanwhile, since construction, hundreds of thousands of gallons of jet fuel has leaked into the environment, threatening the ground and containment was critical. drinking water that serves 200,000 residents along the south shore of O'ahu-most notably the 27,000 gallon | Navy is exploring alternate locations for the bulk fuel leak in January 2014. None of the fuel spilled at Red Hill has been cleaned up—it can't be. Now monitoring wells near the tanks are showing elevated levels of underground. Should relocation just upslope be the contamination in the groundwater.

Court ruled in Sierra Club's favor that the Health | the road? With underground fuel storage tanks tending Department's special exemption for the Navy is to be inherently leaky, it is illogical to simply build unwarranted. The court's ruling means that the Navy's | another set of tanks that continue to sit immediately tanks violate the Health Department's underground storage tank rules and state law. This is a huge win for environmental and clean water advocates, but the fight to get the tanks fixed up—or shut down—as fast as possible continues to be an uphill battle.

As a direct result of the Club's suit, the Health | stringent operations and maintenance routines. Department is currently amending its rules. The proposed rules, which are required to be adopted by July 15, 2018, include some good elements. The Navy will have to comply with permitting, training, and operating standards. However, the department is also proposing to give the Navy twenty years from the enactment of the **is life.** rules to implement secondary containment-a timeline which proves unacceptable for many in the community. After all, all other underground storage tanks have had to update their tanks while the Navy's facility has been violating state law for twenty years.

Currently, there are six "Tank Upgrade Alternatives" that have been proposed by Navy. The Environmental Protection Agency (EPA), is poised to select their top alternative by year's end. The public will have the opportunity to provide comments in the

the coming months as the EPA navigates through the decision-making process. The options are:

- 1. Maintain the current tank system existing steel liner remains with a recoat of tank's lower dome:
- 2. Existing steel liner remains with full internal coating of the tank vessel's steel liner;
- Replace existing liner with new coated steel liner of the same 1/4 inch thickness;
- Coat existing liner and add new carbon steel liner with new 3-inch composite filler in between existing and new liners:
- Coat existing liner and add new stainless steel liner with new 3-inch composite filler in between existing and new liners; and
- Secondary containment with 5-foot accessible interstitial space. A new storage vessel constructed within each existing tank.

The Honolulu Board of Water Supply has emphasized that secondary containment (i.e., Option 6) is a critical component of protecting O'ahu's solesource aquifer. In fact, the Health Department itself told the legislature in 2015 that upgrading to secondary

In addition to the aforementioned options, the storage facility, with their preferred location being just upslope of where the tanks are currently-and still option of choice, how can the Navy ensure the public that In February of this year, the Environmental | we will not be in the same situation a few decades down above the aquifer. It is good that all of the owner and regulatory agencies (the Navy, the Defense Logistics Agency, the Health Department, and the EPA) share a goal of a zero-fuel-spill future. But it is impossible to ensure future leaks will not happen, even with the most

It is crucial for the public to stay engaged and hold the Health Department and the EPA accountable for the protection of our water. If there is no guarantee against future leaks then the fuel needs to be stored away from our groundwater. E ola i ka wai. Water

There will be plenty of chances to take action to protect O'ahu's water through the rest of the year. Stay tuned for updates and subscribe to our email list at bit.ly/SCH-redhill

# Meet our summer interns - Robinah and Brayden

Robinah joins us as a Global Leadership and Brayden is currently a junior undergraduate Sustainable Development graduate student at Hawai'i student at Santa Clara University, studying Environmental Pacific University. She is from Kitgum, a small town Studies and Political located in northern Uganda that is still in recovery after a Science. Born and war that lasted over 25 years. In Uganda, she volunteered raised on O'ahu, his in programs focused on empowering women and admiration for the youth and creating a platform for men to understand islands, their pristine the roles they play in ensuring beauty, and luscious gender equality and equity. greenery motivates When she graduates, she plans to Brayden to preserve coordinate with organizations on what he cares for in climate change and environmental order to share it with education and engage in research others. In his free with communities on issues time, Brayden enjoys



important to them. Robinah is excited to work alongside the Sierra Club of Hawai'i focusing on water and waste management bridging the gap between

stakeholders through community outreach and will build a foundation for her career in environmental | legislative work. management and sustainable development.

# **Get Out and Vote!**

### by Charessa Fryc, Sierra Student Coalition UH Mānoa

It's a big election year! By this time, you can't miss all of the candidate banners around the islands and the groups smiling people sign waving at the busy intersections. Hawai'i's election season is quickly approaching—our primary election is Saturday, August 11th and absentee ballots will start hitting mailboxes the middle of July.

If you are still unsure who you will vote for, now is the time to identify the issues that are important to you, research the candidates and their platforms, and look to organizations you know and trust to see which candidates they support or endorse. It is imperative to be an active and informed voter in the upcoming elections.

Unfortunately, voter apathy continues to be a huge problem, especially in Hawai'i, perpetuating a cycle where many voices are not heard. Locally in 2016, the average voter turnout was just 34.8% in the primary and 58.4% in the general election. Millenials are a large group that does not typically vote. As a student at UH Mānoa, I have encountered voter apathy firsthand. During my time canvassing, I have been able to talk with hundreds of students on campus and encourage them to vote. It is saddening to learn that most students are unwilling to discuss issues that matter to them, don't have opinions on current events, and/or generally don't vote. But it is possible to turn this around. A lot of youth were activated by the Bernie Sanders campaign and then again with the election of Trump. First and foremost, make sure you are registered to vote and encourage your family and friends to do the same. Registering to vote and casting your ballot has gotten easier. 2018 is the first year that voters can go to their polling place, register, and vote all on election day—all you need is a driver's license or state ID. This alone, overcomes a huge barrier to voting. You can also register to vote online up until 30 days before each election. Many of the issues facing Hawai'i-the fight for food security, water security, affordable housing, and a living wage-are addressed through systematic change that depends on voter activism. So please, register to vote now if you are not already and encourage others to do the same. Take time to volunteer for candidate's campaigns that you support and with local organizations that are involved in elections. And don't forget to fill out your absentee ballot or

make it to the polls on August 11th!

You can check to see if you are registered, register to vote, find your polling place, and more with the Office of Elections online at elections.hawaii.gov.



hiking, playing baseball, and creative writing. One of his biggest accomplishments was winning best screenplay at Mid-Pacific Institute's student film festival his senior year of high school. Brayden is extremely excited for the opportunity to work with the Sierra Club on an array of projects and campaigns and hopes to gain skills and environmental education. She hopes this experience insight that will help him in the future in environmental

Read more about Robinah & Brayden at bit.ly/SCH-insu18

# Fall in Love with 'Ohi'a

### by Erin Bishop, O'ahu Invasive Species Committee Outreach Specialist

Last year the O'ahu Invasive Species Committee conducted a series of public opinion surveys at popular trailheads to find out if hikers knew about 'ohi'a and gauge their willingness to help protect it. We were surprised to find the majority of hikers, 64%, were O'ahu residents and nearly 70% of people had not heard of 'ōhi'a. These surveys revealed that we need to educate people about this important species if we want the public's help and support to protect them. To know 'ōhi'a is to love 'ōhi'a...so here's a brief introduction.

'Ōhi'a lehua, Metrosideros polymorpha, is the dominant forest tree in Hawai'i, covering nearly 1 million acres statewide. They can grow as a short shrub or as old-growth trees that are centuries old. They are one of the first plants to colonize lava flows, breaking down the lava rock with their roots and creating soil for other plants and organisms to thrive. The structure and pattern of 'ohi'a leaves are perfectly designed to capture moisture from passing clouds and funnel raindrops down their trunks into the ground aquifers. The flowers are a direct food source for many native birds, including the renowned honeycreepers such as the 'apapane, 'i'iwi and 'amakihi, and they provide critical habitat for a host of native plants and animals.

'Ōhi'a are found on all the main Hawaiian Islands from coast to tree line (~8200 ft.), living in both dry forests that receive only 16 inches of rain per year and in wet areas, like Mt. Wai'ale'ale on Kaua'i, that get 400 inches of rain. 'Ōhi'a lehua is the most common native tree in Hawai'i, but it is complex. The Greek derivation for the genus Metrosideros is metra meaning "heartwood" and sideros meaning "iron", referring to the hard wood of 'ōhi'a trees. Polymorpha means "many forms", appropriate for 'ōhi'a lehua's many variations in growth patterns, leaf shapes, and blossom colors.

Its extensive distribution across a wide range of climatic conditions is evidence that the tree is adaptable. These adaptations to different environmental conditions are so remarkable that *Metrosideros polymorpha* can be further separated into eight unique varieties.

Aside from Metrosideros polymorpha, there are four additional species of 'ohi'a endemic to Hawai'i, meaning they exist nowhere else in the world! These include:

- 1. Metrosideros macropus is endemic to O'ahu. The flowers are yellow but sometimes you can find a rare red blossom. Macropus means big-footed and refers to the leaves of this species, which are the widest all our native 'ōhi'a. You can see *M. macropus* in the Ko'olau and the Wai'anae Mountains.
- 2. Metrosideros rugosa is also endemic to O'ahu and is found on the windward summits of the Ko'olau Mountains. Lehua papa is the Hawaiian name with papa meaning "flat or low-lying", referring to the short, stocky shape that it has adapted to survive the wind swept summits. Rugosa is Latin for "wrinkled" and describes lehua papa's leathery, grooved leaves.
- Metrosideros tremuloides, also known as lehua 'āhihi is named in songs and chant about the Nu'uanu Valley on O'ahu. It is endemic to O'ahu and can be found in forests of the Ko'olau and Wai'anae Mountains. Lehua 'āhihi has red blossoms and elongated pointy leaves with red stems. The silhouette of 'āhihi is more like that of a weeping willow with long, hanging branches. The species name tremuloides means "trembling" and refers the fluttering of these long leaves.
- 4. Metrosideros waialealea is endemic to the island of Kaua'i and can be subdivided into two varieties and found on the summit ridges of Mt. Wai'ala'elae, the highest mountain on Kaua'i and one of the wettest places on Earth. This species of 'ōhi'a also has long, pointed leaves with rusty-red colored blossoms.

Now that you've had an introduction to this special tree, be sure you are doing your part to protect them. Only enter the forests with clean hiking gear. Invasive weed seeds and the deadly Rapid 'Ōhi'a Death (ROD) fungus can be transported in soil that can be stuck to shoes and gear. Making sure your shoes are free of debris and spraying them with 70% isopropyl alcohol will kill any fungal spores, ensuring you aren't a vector for the ROD disease. You can also help spread 'ohi'a awareness by taking photos, tagging them with #ohialove and share them on social media...after all, to know 'ohi'a is to love 'ohi'a!

For more information on ROD and how to protect 'ohi'a, visit rapidohiadeath.org

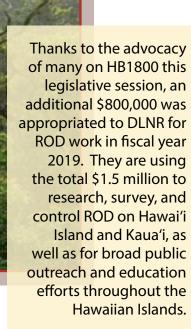
Next issue, we'll talk about the cultural significance of 'ohi'a lehua.





The eight variations of the species 'ōhi'a lehua (*Metrosideros polymorpha*):

dieteri	Middle to high elevations on Kaua'i. Small trees. Leaves with raised veins.
glaberrima	Middle to high elevations on Oʻahu, Molokaʻi, Lānaʻi, Maui, Kauaʻi, and Hawaiʻi. Shrubs to tall trees.
incana	Low to middle elevations on O'ahu, Moloka'i, Lāna'i, Maui, and Hawai'i. Shrubs to tall trees.
macrophylla	Middle elevations on Hawai'i. Small to tall trees. Relatively large leaves.
newelli	Low to middle elevations on Hawai'i, usually along streams. Small to large trees.
polymorpha	Middle to high elevations on O'ahu, Moloka'i, Lāna'i, Maui, and Hawai'i. Small to large trees. Leaves usually with dense woolly pubescence on lower surface.
pumila	Middle to higher elevation swamps on Kaua'i, Moloka'i, and Maui. Prostrate shrubs.
pseudorugosa	Higher elevation bogs on West Maui. Prostrate shrubs.
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SIERRA CLUB OF HAWAI'I

July-September 2018

# Rapid 'Ōhi'a Death spreads to Kaua'i

### by Ambyr U. Mokiao-Lee, Rapid 'Ōhi'a Death Statewide Outreach Coordinator

In early May, one of the two fungal pathogens causing Rapid 'Ōhi'a Death was detected on Kaua'i. Before the detection on Kaua'i, Rapid 'Ōhi'a Death (ROD) was only known on Hawai'i Island. Though the disease has been spreading on Hawai'i Island, scientists were surprised to detect it at the other end of the state.

Both species causing ROD are new to science and have been named for their devastating impacts on 'ōhi'a trees; Ceratocystis lukuohia (formerly species A), destroyer of 'ōhi'a, and Ceratocystis huliohia (formerly species B), disruptor of 'ōhi'a. Of the two pathogens, the less aggressive *C. huliohia*, was found in a remote section of the Moloa'a Forest Reserve on the northeastern side of Kaua'i.

C. huliohia is slower spreading than its cousin, C. lukuohia, forming localized areas of dead woody tissue, called cankers, that eventually cutoff water to the tree and kill it. C. huliohia has been documented as being responsible for 5-10% of the death of infected 'ohi'a trees on Hawai'i Island, but is no less concerning for the potential damage it can inflict on Kaua'i's 'ohi'a forests.

Scientists are already on the ground on Kaua'i, along with state, federal, and non-governmental organizations that mobilized rapid response efforts within a few days of detection to map the area and take additional samples for testing. Efforts continue to answer basic questions and contain infected trees. Both Ceratocystis pathogens



enter 'ōhi'a through open wounds made by humans or other animals, or broken branches caused by strong winds/storms. The origins of both fungal pathogens are currently unknown but are the subject of ongoing research.

Symptoms of the disease result in whole branches or the entire crown turning from green to yellow to brown in a matter of a couple of days to weeks-hence the name Rapid 'Ōhi'a Death. The fungi shows up as dark staining in the sapwood that may result in a fruit-like odor. These symptoms are not apparent unless you cut into the tree where the fungi are present. To confirm ROD in an 'ohi'a tree, samples must be submitted to a lab for analysis.

We are asking forest users and the general public to keep an eye out for symptomatic trees. If you see 'ohi'a with ROD symptoms, take a photo and a GPS point if possible and send reports to your local Invasive Species Committee. All this information is essential to accurately manage data and support effective ROD management strategies. And remember, always decontaminate shoes and gear before and after entering forests and stay off of 'ōhi'a roots...this will stop ROD from being spread to uninfected 'ōhi'a forests.

### It is recommended that you practice the "5 things" list to help prevent the spread of ROD throughout the state.

### 1. Keep your eyes open

If you see 'ohi'a with ROD symptoms, take a picture and contact your local Invasive Species Committee right away. Samples of the wood must be taken and tested to confirm the presence of the ROD pathogen.

### 2. Do not move 'ōhi'a

The disease can be spread to new areas by moving 'ohi'a plants, plant parts, and 'ohi'a wood from infested areas such as Hawai'i Island. Don't transport 'ohi'a interisland without a permit.

### 3. Avoid injuring 'ōhi'a

Avoid cutting or wounding 'ohi'a. Openings in the bark create entry points for the fungus and increase the odds that the tree could become infected with ROD.

### 4. Clean your shoes, tools, and gear

ROD disease spores can be spread in soil from infected areas. Always clean your shoes, clothes, and gear before traveling to another island or areas free of ROD. If you work around or cut 'ohi'a, clean tools and gear before and after use. Brush all dirt off equipment, then spray with 70% rubbing alcohol. Wash clothes with hot water and detergent.

### 5. Wash your vehicles

Invasive species are known to move on and in vehicles. Wash the tires and undercarriage to remove dirt and mud, especially after traveling off-road. Take special care when shipping vehicles interisland.

## Nate's Adventures: New Seabird Colony on O'ahu by Nathan Yuen, Chapter Conservation Chair

I was thrilled to go on a Sierra Club outing to James Campbell National Wildlife Refuge (JCNWR) to see the genesis of a new seabird colony of ka'upu–albatrosses and 'ua'u–petrels on the north shore in Kahuku.

Pacific Rim Conservation and US Fish & Wildlife are developing techniques to save seabird colonies on Pacific Islands threatened by climate change. The eggs of bonin petrels and black-footed albatrosses were removed from low-lying islands doomed to sea level rise. Eggs are moved from nests that are too close to the ocean edge where the eggs will be destroyed by extreme weather and high tide conditions.



Also being translocated to JCNWR is the ka'upu or Black-footed albatross, *Phoebastria nigripes* —which is on the IUCN Red List because they are vulnerable to extinction. Decoys give the albatross chicks the feel of being with adult birds. Recordings of albatross calls and noises are played so the chicks are properly socialized.



The Black-footed albatross chicks

were losing their down in favor of feathers. Albatross chicks stick out their feet to cool off and regulate their body temperature. The birds are put into their "A frame" shelter after feeding. Many chicks prefer to hang with their friends or with the decovs.



Nathan Yuen is an artist/photographer/naturalist whose body of work is a confluence of hiking, conservation, and fine art photography. Each weekend you can find him hiking, backpacking, or kayaking to out-of-the-way locations to photograph Hawai'i's native plants and animals, many of which are rare or endangered. His goal is to showcase these biological treasures to give you a reason to protect them for future generations. You can view his art and read about his adventures at hawaiianforest.com.

If you see ROD symptoms, contact:

**O'ahu Invasive Species Committee** 

**Kaua'i Invasive Species Committee** 

**Maui Invasive Species Committee** 

**Moloka'i Invasive Species Committee** 

Email: oisc@hawaii.edu

Phone: (808) 266-7994

Email: kisc@hawaii.edu

Phone: (808) 821-1490

Phone: (808) 573-6472

Phone: (808) 553-5236

Email: miscpr@hawaii.edu

Email: lbuchanan@tnc.org

The eggs are being relocated to the north shore site at JCNWR where a predator-proof fence protects the birds. Since there are no adult birds to provide food, humans feed the chicks a blended smoothie of fish and squid. This cute little fuzzball is a 'ua'u or Bonin petrel, *Pterodroma hypoleuca*.

Simulated burrows have been created for the petrels which

live in burrows underground. 4 tubes in the sand lead to 4

Feathers sprout on the birds and they stretch their wings to simulate flying in the wind. When the birds are ready, they fledge and fly away. The birds have a homing instinct and will return to the site in 4-5 years when they are ready to breed and nest.

Here's to hoping the birds survive the most perilous part of their lives and avoid predators when they leave. Tons of plastic float around in the ocean and birds inadvertently eat them. If too much accumulates in their gut the plastic will kill the birds. If all goes well, the birds will return and a new seabird colony will be created on the north shore of Oʻahu.



### Explore, enjoy and protect the planet



### With your help we can clean up our water

Sierra Club Water Sentinels are the first line of defense of America's waters. We live on the water planet. However, water is a finite resource with only about 1 % of the world's water actually being available for human consumption. Water pollution & over-use are threatening both the quality & quantity of our water resources at an alarming rate

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Supporting	<b>\$</b> 75	\$ 100
Contributing	\$ 150	\$ 175
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Limited Income	\$ 25	\$ 35

ns, gifts & dues to Sierra Club are tax deductible; they support o ive, citizen based advocacy & lobbying efforts. Your dues include \$ 7.50 for a to SIERRA magazine & \$ 1.00 for your Chapte

Enclose a check and mail to: Sierra Club, PO Box 421041 F94Q W 1 Palm Coast, FL 32142-1041 sit our website: www.sierraclub.org

# **AES: Pass the Toxic Gas Please**

### by Marti Townsend, Hawai'i Chapter Director

AES is the last coal-fired electrical plant in all of the Hawaiian Islands. It is also the single largest source of toxic pollutants in Hawai'i.

Every year, AES imports 650,000 tons of coal from Indonesian coal mines. Coal mining in Indonesia employs some of the most destructive extraction practices, harming the environment, public health, and the local economy.

AES then burns all of that Indonesian coal to produce 10% of O'ahu's electricity and 330 tons of local, toxic gas every year. The air pollution emitted from AES mixes with that of its neighbors like Kahe Power Plant, Waimanalo Gulch Landfill, PVT landfill, legacy military dump sites, and numerous illegal dump sites to undermine the amazing natural beauty of Oʻahu's west coast.

State law requires AES to reduce its toxic greenhouse gas emissions this year by 16%. But AES does not want to take the steps needed to reduce its toxic emissions. It does not want to invest in improvements to the facility that would make it cleaner. It does not want to reduce its electricity projection to keep emissions below the maximum allowed levels.

Instead, AES wants special treatment. AES and Hawaiian Electric are petitioning the Department of Health and the Public Utilities Commission to allow them to share emission quotas between their facilities, allowing both entities to sidestep their responsibility to reduce the air pollution spewed from their facilities.

The Sierra Club has petitioned to intervene in the decision-making processes at both agencies. We are calling on state officials to defend the public's best interests, protect public health, and reduce electrical costs by ensuring electricity producers do all that they can to move to cleaner, cheaper, locally sourced renewable energy options. This includes not making it easier to produce toxic electricity.

We know better options exist. Solar power is already providing 22% of the electricity used on Kaua'i and at a rate lower than paid on O'ahu. This includes a solar-battery storage facility run by the renewable energy side of the AES corporation.

We expect better. The profit margin on fossil fuel is not more valuable than the health of our children or our planet. There will be many opportunities for the public to participate in agency decisions on AES' greenhouse gas proposal.

To stay up to date and learn more about this issue, sign up for our email list on our website: sierraclubhawaii.org.

# It's election season!

Help environmental warriors secure elected office by supporting our political action committee "Vote Sierra Club of Hawai'i".

Find our list of candidate endorsements and ways to offer support on the PAC website at

# VoteSierraClubHawaii.com

Paid for by Vote Sierra Club of Hawai'i

SIERRA CLUB OF HAWAI'I

July-September 2018

# This year Hawai'i made history by:

# commiting to become carbon neutral

On the anniversary of adopting the Paris Accord into state law, Governor Ige furthered his commitment to the environment by signing SB2182 into law. This makes Hawai'i the first state to set benchmarks to capture more carbon than it emits by 2045.

Also signed into law to help us get to carbon neutrality is HB1986 that supports state-level carbon sequestration programs.

# prohibiting the sale of toxic sunscreen

By signing **SB2571**, Hawai'i became the first state to **ban** the sale of suncreens containing the toxic chemicals, oxybenzone and/or octinoxate. These chemicals have been found to lead to coral mortality.

## banning chlorpyrifos

SB3095 bans all uses of chlorpyrifos and creates buffer zones around schools to protect keiki from open air spraving of pesticides during school hours. Hawai'i became the first state to ban chlorpyrifos, a known neurotoxin that impacts children's developing brains after the Trump Administration's EPA refused to do so.

## establishing performance based rates

A Sierra Club of Hawai'i priority for years, **SB2939** brings the **financial** interests of Hawai'i Electric Company in line with the public's interest in cheaper, cleaner energy for all.



## accounting for sea level rise in future development

SB2106 requires that the latest sea level rise predictions be included in environmental assessments and impact statements. This will hopefully help moderate future development in areas vulnerable to rising seas.

him at 586-0034 or write to him at bit.ly/gov-e.



# 2018 Bills Signed into Law

# It is not too late to thank Governor Ige for being a #climatechampion and working to protect our environment for generations to come. You can call

SIERRA CLUB OF HAWAI'I

# **Coalition Continues Campaign for Maui's Future**

### by Adriane Raff Corwin, Maui Group Coordinator and Rob Weltman, Maui Group **Executive Committee Chair**

The end of Central Maui sugarcane cultivation on thousands of acres held by Alexander & Baldwin has brought about a tremendous opportunity for Maui residents to address many of the long-standing problems they face. As Maui's population continues to grow and tourism reaches new levels, residents are being priced out of their homes, the majority of the food is imported, and unique environments and culturally sensitive lands are being destroyed or access is denied.

The Hukilike No Maui: Together for Maui Coalition has set out to rise to this opportunity. The coalition formed in 2017 with the help of the Sierra Club Maui Group and is a group of affordable housing advocates, local food production advocates, environmentalists, and Maui residents who recognize the need to unite their voices for the sustainable future of Maui.

"In 2017, the Hukilike Coalition did an affordable housing survey where we asked residents to tell us about their problems with housing on Maui. The responses were sobering: so many people who have lived here

for generations are not seeing a future on this island because they can't afford to buy or rent housing in this market," said Rob Weltman, chairperson of the Maui Group. "It's clear the island's environmental resources are under stress, but so are Maui's people. We need to build far more affordable housing and expand our local food production."

These problems are interconnected; progress requires working together to identify solutions that meet the needs of the whole community and collaboratively planning for the long-term future, as well as protecting the quality of our 'āina, kai, wai, and the integrity of our special places.

"For too long, there has been too much animosity between the groups about how to develop this island. Now we're coming together to listen to each other's concerns and make a decision together," said Stan Franco, FACE Maui Housing Co-Chair and member of the coalition. "No single person or organization has answers to all the challenges. But working collectively with the community, big, innovative solutions can be found."

After a year of meeting with stakeholders, the coalition publicly announced their first campaign, "15% for the Future," which petitions Alexander & Baldwin to 1) donate or allow the sale of 5,000 acres (about 15% of the former sugarcane lands) for sustainable communities in Pu'unēnē and Hali'imaile that are integrated with affordable housing and small scale agriculture for local food production, and 2) preserve land and cultural resources at Baldwin Beach Park, Ma'alaea Bay, Keālia Pond, and Wai'ale sand dunes and reservoir.

Maui residents presented the petition with over 1,000 signatures to A&B at its annual shareholder meeting on April 24th. "Our message was very well received today by A&B," said Angel Mau, a Hukilike coalition member who attended the shareholder meeting.



15% for the Future

and Areas Requested

Sierra Club supporters and community members outside the A&B shareholder meeting in April.

"We were even able to talk with Christopher Benjamin, A&B's CEO and president, after the meeting. He expressed his gratitude for us sharing our ideas and we look forward to meeting with them again soon," said Mau.

The coalition's next steps are to come up with an even more concrete vision of what Central Maui could become and how to make it a reality. In addition to continuing a public conversation with A&B, the group is also working to make the "15% for the Future" campaign a key topic of the 2018 local election by asking all local politicians whether they support the Coalition's goals and if so, how they would help make it a reality.

"All of Maui's people could benefit if we adopt a sustainable approach to the use of the Central Maui lands. We have an unique opportunity right now to address the needs of Maui's residents. If we make those changes today, Maui's future will be so much brighter for ourselves and our future generations," said Lehua Simon, lifelong Pukalani resident and member of the Coalition.

To learn more, sign the petition and get involved, visit togetherformaui.org

# 'A 'oia Adriane!

### by Marti Townsend, Hawai'i Chapter Director

Congratulations to Adriane Raff Corwin for securing a full scholarship to study playwriting at the prestigious Arizona State University. "I will always love Maui," Adriane told me. "But I just could not pass up on this once in a lifetime opportunity. I care so much about Hawai'i and will support the Club's mission from afar. I hope I can make my way back to the most beautiful place on earth someday soon." We are so proud of Adriane. Of course it is

bittersweet because we are losing a key member on the Sierra Club of Hawai'i team. Not only did Adriane start our child-focused outings program called Sprouts, but

she also served as a vocal supporter on critical issues at the Maui County Council.

Adriane's advocacy helped Maui residents push for the countylevel ban on toxic sunscreens. That bill served as the basis and motivation for statewide action to protect coral reefs and public health from oxybenzone and octinoxate. That campaign revealed Adriane to be a master meme maker, and diehard snorkeler (who knew?!).



I really appreciated how

Adriane supported the work of 'iwi protectors to stop the mining of culturally significant sand dunes in central Maui. HC&D, owner of Maui Lani, used simple "grading and grubbing" permits to circumvent environmental and historic site protections, so that they could convert entire areas of rare in-land dunes into money. Dunes like these are well-recognized as traditional burial grounds, yet no assessment of the cultural impacts of this mining has been completed. Thanks to the attention brought to this issue, the mining is currently on hold while the courts decide on the legality of the decision-making process.

Most of Adriane's work, however, focused on planning for the future of Maui in a way that ensures everyone can thrive there. Adriane worked tirelessly to advance the goals of the Hukilike No Maui Coalition. She helped to get three solid advocates into the annual shareholder meeting for Alexander and Baldwin to present a comprehensive land use plan. It is this kind of strategic coalition-building and planning for the longterm benefit of all residents that makes long-lasting big changes happen. We look forward to continuing and complementing Adriane's work on this coalition to ensure its strategic goals are met. But for now, hoʻomaikaʻi!

Way to go, Adriane! We are so proud of you.

have loved my time with the Sierra Club Maui Group and am proud to be a part of such important work on the islands. Mahalo to everyone I have worked with over the past two years - I've learned so much and am very sad to be leaving you all. A hui hou kākou 🗋 -Adriane Raff Corwin









SIERRA CLUB OF HAWAI'I

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