



YOUTH CLIMATE CHANGE SUMMIT SUMMARY REPORT

Kaua'i Climate Adaptation Plan
June 21, 2022

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YOUTH SUMMIT SUMMARY REPORT

Climate change will impact everyone, but today's youth will bear the brunt of its consequences and have the most at stake in how society responds to it. Therefore, it is critical that young people are engaged in the climate action and adaptation decision-making process. In recognition of the key role youth play in addressing climate change, the Kaua'i Climate Adaptation Plan (CAP) aims to include and elevate youth perspectives throughout the planning process by creating spaces for youth voices to be heard.

This report provides an overview of the ideas, knowledge, and opinions that Kaua'i's youth shared during the County's first ever Youth Climate Change Summit. In addition to being incorporated in the technical work for the CAP, this summary document will also serve to help guide future engagement, including youth engagement efforts.



Youth Climate Change Summit Overview

PURPOSE

The purpose of the Youth Climate Change Summit (Youth Summit) was to engage youth, between the ages of 11 to 25 years old, in the early stages of developing the Kaua'i Climate Adaptation Plan (CAP). Specifically, the main objectives of the Youth Summit included the following:

- Introduce Kaua'i's youth to the project;
- Provide information about local climate hazards and vulnerability;
- Foster a comfortable and creative space for youth to share their personal experiences, knowledge, opinions, and ideas on how the island of Kaua'i and its communities are vulnerable to and can better mitigate and adapt to the impacts of climate change;
- Understand how the County and CAP project team can better engage youth throughout the planning process; and
- Encourage youth participation in the climate change movement, including other CAP outreach events/items.

Feedback from the Youth Summit will serve to complement technical work completed by Raimi + Associates and inform the next phase of outreach and education efforts.

APPROACH

The Youth Summit was held on Saturday, May 7th, at the Philippine Cultural Center from 10:00 am- 12:00 pm. Pre-registering for the event was encouraged, but youth who attended the event without pre-registering could still participate. For participants under 18 years of age, a parent/legal guardian was required to sign the County's "Youth Waiver, Release, and Indemnity Agreement" and "Release and Waiver for Use of Image and Likeness of Minor Child" consent forms prior to participating in the Youth Summit.

The first hour of the Youth Summit consisted of an initial presentation, which introduced the CAP and the Youth Summit program. This was followed by a Youth Panel Discussion, where four Kauai youth leaders talked about their journey towards climate action, including:

- Ezikio Quintana, north shore resident and undergraduate student in the Department of Natural Resources and Environmental Management at the University of Hawaii' at Mānoa
- Hayley-Jay Kaeo, west side/Līhu'e resident and Business degree student at Kaua'i Community College
- Kai Mottley, Līhu'e resident and high school senior at Kaua'i High
- Jesse Brown-Clay, east side resident and one of three founders for Compost Kaua'i.

The remainder hour of the Youth Summit allowed participants to walk through the 'Open House stations,' which consisted of various booths that provided information about local climate hazards and vulnerability and interactive activities where youth could share their knowledge and opinions (Image 1). Each booth focused on climate hazards and framed by recreational activities (i.e. cruising at the beach, playing sports, walking, skating, and biking) to help draw connections between climate impacts and how youth may navigate their daily

lives. Each of these booths, staffed by a County CAP team member and a community volunteer, provided visual materials and interactive activities for youth to provide their input.



Image 1: Youth Panel Discussion (upper left), the interactive lego model showing inland flooding and landslides (upper right), one of the climate hazard focused booths (lower left), and Kapa'a Middle School student with native bird pamphlets created by Kapa'a Middle School students (lower right).

Youth were also able to provide their input on a large (10'x10') floor map that illustrated climate hazards on the island, including sea level rise, wildfire hazards, and landslides (Image 2). For the interactive mapping activity, youth were encouraged to share their experiences, identify vulnerable locations, and provide possible adaptation and/or mitigation strategies. Applicable comments were added to the Story Bank on the CAP website.¹

The remainder of the booths showcased student-led projects and organizations heavily involved in climate related work. This included the following projects and organizations:

- The West Kaua'i Energy Project conducted by students from the Kaua'i Community Science Center;
- The Protect Ohi'a project conducted by students from Hawai'i Technology Academy (HTA);
- Brochures about native birds created by students from Kapa'a Middle School;
- University of Hawai'i Sea Grant College Program;
- Kauai Resilience Project; and
- Zero Waste Kauai, who assisted in waste assortment.

In order to encourage youth participation and engagement, a raffle drawing took place near the end of the Youth Summit, in which prizes were distributed to those who won the drawing. Getting a raffle ticket required

¹ View the Story Bank at <https://kauaiadaptation.com/story-bank/>

interacting with the various booths at the Youth Summit, such as completing the 'Climate Bingo' card (Image 3). It is also worth noting that a free breakfast was provided to all Youth Summit participants.



Image 2: Youth members engaging with the interactive floor mapping activity. The wooden structures to hold comment cards were created by HTA students with strawberry guava and hala bush. Source: Ruby Pap

Climate Change Bingo				
WHAT IS CLIMATE CHANGE?	WHAT ARE ACTIONS WE CAN TAKE TO INCREASE OUR FOOD SECURITY?	WHAT ARE THE MOST EFFECTIVE WAYS ME AND MY FAMILY CAN DECREASE OUR CARBON FOOTPRINT?	WHAT ARE RELATED IMPACTS TO SEA LEVEL RISE?	WHAT ARE THE CLIMATE HAZARDS THAT WILL AFFECT OUR ISLAND?
WHAT ARE PROJECTED CHANGES RELATED TO PRECIPITATION?	WHAT EMITS GREENHOUSE GASES?	WHICH COMMUNITIES ON KAUAI ARE AT HIGH RISK FOR WILDFIRES?	WHAT IS OCEAN ACIDIFICATION?	WHAT WAS THE RECORD SETTING TEMP IN 2019 AND WHAT CAUSED IT?
WHAT THREATS CAN A TROPICAL CYCLONE BRING?	WHICH COMMUNITY MEMBERS WILL BE MOST VULNERABLE TO CHANGING HEAT PATTERNS?	Free	WHAT IS THE FAMILIAR STRUCTURE DESTROYED BY HURRICANE IRMA THAT MANY DROVE BY EVERYDAY?	WHAT IS VULNERABLE TO CHANGING PRECIPITATION PATTERNS?
WHAT ARE THE PROJECTED CHANGES RELATED TO PRECIPITATION?	WHAT DOES CLIMATE CHANGE HAVE TO DO WITH HEALTH?	WHAT DOES CLIMATE CHANGE HAVE TO DO WITH SEVERE WEATHER?	WHAT IS CLIMATE CHANGE ADAPTATION?	WHICH ELEVATIONS TEMPERATURE EXPECTED TO INCREASE THE MOST AND AT AND WHAT BECOMES VULNERABLE?
WHY ARE CORAL REEFS IMPORTANT FOR OUR ISLAND?	WHAT CAUSES EROSION AND LANDSLIDES TO OCCUR ON KAUAI?	HOW DOES CLIMATE CHANGE EFFECT THE FOOD SUPPLY?	HOW CAN YOU AND YOUR FRIENDS GET INVOLVED AND ACT ON CLIMATE CHANGE?	WHAT IS CLIMATE CHANGE MITIGATION?

Image 3: Climate Bingo card

Following the Youth Summit event, an unpublished draft of the Youth Climate Change Summit Summary Report was shared with all Youth Summit participants. Participants were given a couple of weeks to review and comment on the Draft Report, and to provide any additional input to incorporate into the Report's findings. No additional feedback or comments were provided.

OUTREACH

To encourage youth to become involved in the CAP process, the CAP project team reached out to 18 public and private middle and high schools to introduce the CAP process and offer a pop-up event with students. Because the Youth Summit educational content and interactive activities were designed for middle-high school students, the project team prioritized reaching out to middle and high schools. Public schools were also prioritized. After initially reaching out and connecting with school staff members, the CAP project team conducted a total of 23 pop-up events in seven middle/high schools, and one elementary school. The purpose of the pop-up event was to spread awareness about climate change impacts on Kaua'i and to encourage youth to engage in the CAP process. After introducing the CAP project, the project team conducted an interactive activity with the students (Image 4). Teachers could choose which of the following interactive activities may be more appropriate for their class:

1. **Climate Change in Photos.** Students analyzed and discussed photos to learn about the impact of climate change as well as understand what adaptation and mitigation is.
2. **Domino Effect- Web of Interdependence.** Students explored how climate change disrupts the relationships between all land and sea organisms, resulting in a 'domino effect' of consequences, through an interactive game using string and resource cards.



Image 4: Engaging Island School students in the 'Climate Change in Photos' activity (left) and Waimea Middle School students in the 'Domino Effect- Web of Interdependence' (right) activity.

Following the activity, the project team spoke more about youth engagement in the CAP process, encouraged students to attend the Youth Summit event, and to participate in other CAP engagement processes, including the online survey and future deep-dive workshops. The project team maintained contact with teachers to provide them with further information and CAP youth engagement opportunities that they may share with their students.

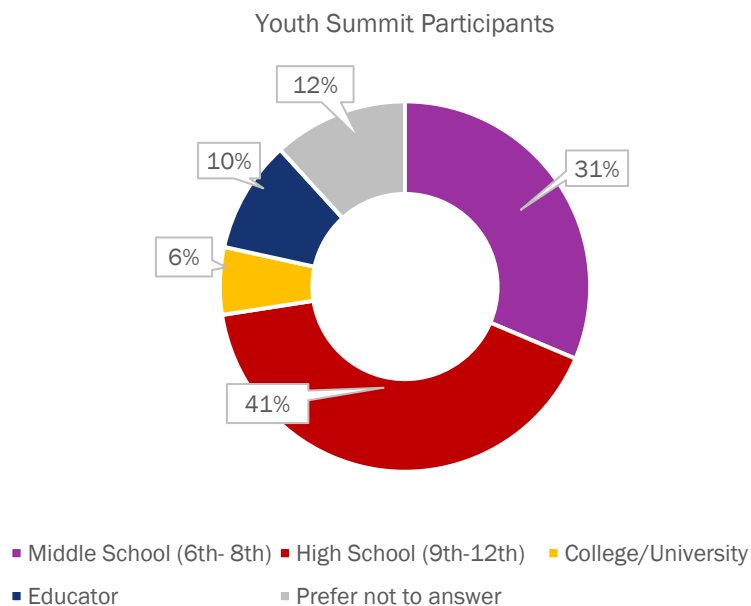
In addition to the pop-up events, the project team spread the word about the Youth Summit through the following methods and channels:

- Encouraging talk story participants² to share the Youth Summit flyer with their networks;
- Posting a Youth Summit promo video and the flyer on social media (i.e. Instagram and Facebook) platforms and on the CAP website;³ <http://www.youtube.com/watch?v=4LKAgZO7xV8>
- Writing a press release about the Youth Summit, which was published in The Garden Island Newspaper and the County's facebook page;
- Reaching out to organizations that work closely with youth to encourage them to share the Youth Summit flyer and information with their networks; and
- Emailing the Youth Summit flyer to all members of the County of Kaua'i Planning Department's mailing list.

PARTICIPATION

There was a total of 51 people who participated in the Youth Summit, in which forty-one of those participants were youth and five were educators (Figure 1). Majority (41%) of participants were high schoolers (grades 9-12), while 31% of participants were middle schoolers (grades 6-8). Six percent of participants were college/university students. Figure 2 displays the various schools that participants currently attend or work at.

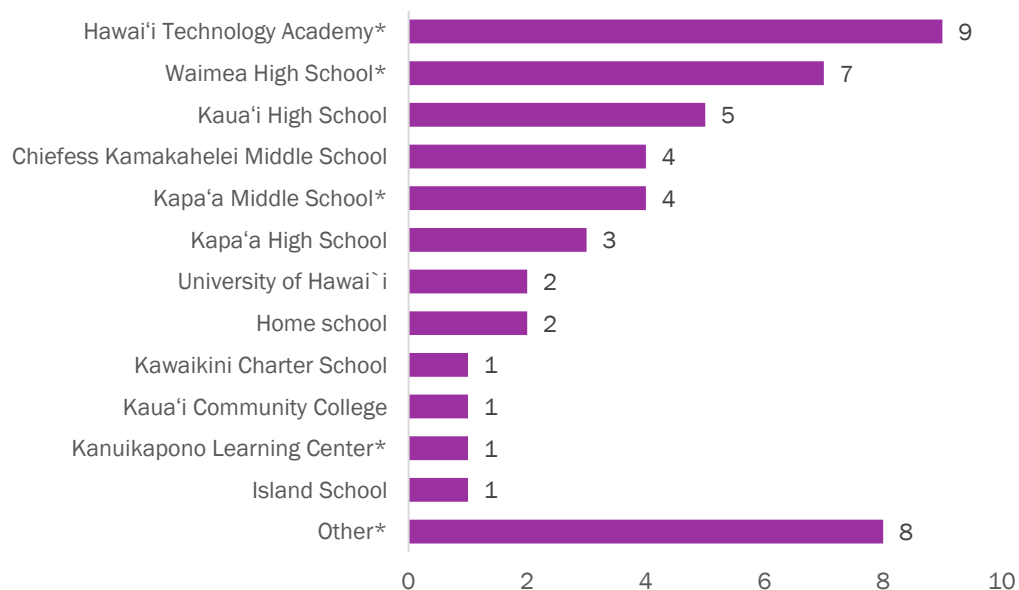
Figure 1. Participant Grade Level



² The County of Kaua'i Resiliency Team held conversations with 36 individuals representing 26 community groups as part of the Climate Adaptation Plan's pre-planning stage. The Talk Story Summary document can be found here, [KCAP-Talk-Story-Summary_051322.pdf \(kauaiadaptation.com\)](https://www.kauaiadaptation.com/KCAP-Talk-Story-Summary_051322.pdf)

³ This video was produced by Kai Whitfield-Seebeck, Sea Grant Youth Planning Intern, who worked with the County during the Kaua'i Community College winter semester on youth outreach for the CAP.

Figure 2. Number of Participants by School



An asterisk * next to the school name indicates that an educator from that school attended the Youth Summit.

Summary of Results

YOUTH PANEL DISCUSSION

Four main questions were posed to the Youth Panel:

1. What is your background and what are you doing now?
2. What led you to become involved in climate change activism?
3. If you were advising the County/State government about one thing they should do right now, what would you tell them?
4. What would you say to those who get overwhelmed by climate change or feel that they cannot make a difference as an individual?

A CAP project team member facilitated the discussion amongst the panelists. The responses from the panel discussion is summarized in five main takeaways:

Pilina (relationships): Connection to 'āina drives climate change activism

Youth panelists shared their stories about how they became involved in the climate change movement. One common driving factor amongst the panelists was their strong connection to and care for 'āina. They spoke about the outdoor activities that they like to engage in, as well as their love for their home and their Native Hawaiian culture. This relationship with 'āina and culture helped them to form an understanding that in order to maintain our healthy livelihoods, it is our moral responsibility to respect and take care of 'āina so that 'āina

will continue to care for us. It was because of this maintained pilina that youth panelists found themselves involved in climate change activism.

Kuleana (responsibility): We need to take personal and collective responsibilities for the well-being of our future communities

“What are you willing to do now to be here in the future?” – Hayley-Jay Kaeo

Youth panelists recognized that the longer we take to address climate change, the more we compromise the well-being of our future communities. Addressing climate change will require a shift away from the extractive and convenience mentality that our society has adopted.

Prioritizations: Government needs to prioritize climate change efforts

Youth panelists identified that a major challenge in addressing climate change is the lack of funding, staff, and resources provided to County/State departments that work towards restoring island abundance and addressing climate change. Youth panelists stressed that government leaders need to reassess where resources are being prioritized and dedicate more resources toward climate change efforts. This also requires collaboration amongst County and State departments given that a lot of land and resources that will be impacted by climate change is managed by the State.

Laulima (to work together): Addressing climate change will require everyone, including youth, to speak up

“...and the biggest ones [drivers of change] are us forcing them to by continually asking for it and at a certain point demanding that these changes be implemented and not prioritizing other things.” – Ezikio Quintana

Youth panelists recognized that change is slow and it does not come easy, especially when the political actions that need to take place to address climate change are not popular amongst people in power. Youth panelists stressed that igniting change will necessitate that everyone, especially youth, come together to voice the changes they wish to see until these changes are implemented.

Re-frame your impact: Small actions can lead to bigger differences

Given the complexity and large scale of the climate change problem, knowing how to address climate change can feel overwhelming. Youth panelists recommended that youth focus on smaller actions that they can do within their capacity, as well as breaking down a bigger goal into smaller goals to make a bigger action feel less intimidating. Other recommendations included prioritizing your mental health, doing hobbies that you love, going outside to ground yourself and stimulate your creativity and motivation. Another suggestion was to research all the positive work being done by different organizations, as well as focusing on positive media, such as goodnews.com.

OPEN HOUSE BOOTHS

Youth Summit participants were encouraged to provide their input at several of the open house booths. The ‘Cruising at the Beach,’ ‘Walking, Biking, Skating, Driving,’ and ‘Playing Sports’ stations were guided by the following two questions: 1) What do you notice; and 2) What are some ways we can ensure that we can continue enjoying these activities? Youth participants could respond to these prompts via writing on sticky notes and placing them on the posters and maps.

Participants could also provide their input at the interactive floor map. On the floor map, participants could write on different colored cards to share their concerns and experiences (purple), identify focus areas (green), and provide mitigation and adaptation ideas (blue).

The comments from the open house booths are summarized in the following section by topic areas:

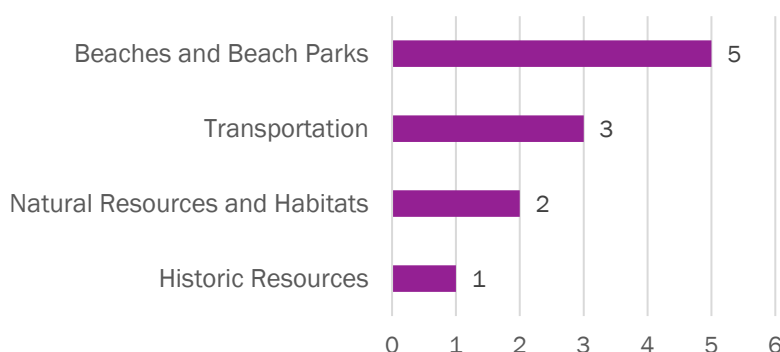
- Local climate hazards and vulnerability; and
- Mitigation and adaptation ideas.

Raw comments grouped by open house booth can be found in Appendix A.

Local Climate Hazards and Vulnerability

Participants shared the climate change impacts they've observed, including hotter conditions on the west side, flooding events in the towns during storm events, landslides on the North Shore, and eroding beaches. Beaches, roads and bridges, and natural resources and habitats were identified as resources and assets of main concern. Participants also brought up how poorly managed natural resources, such as streams or wetlands, may exacerbate climate change consequences.

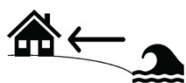
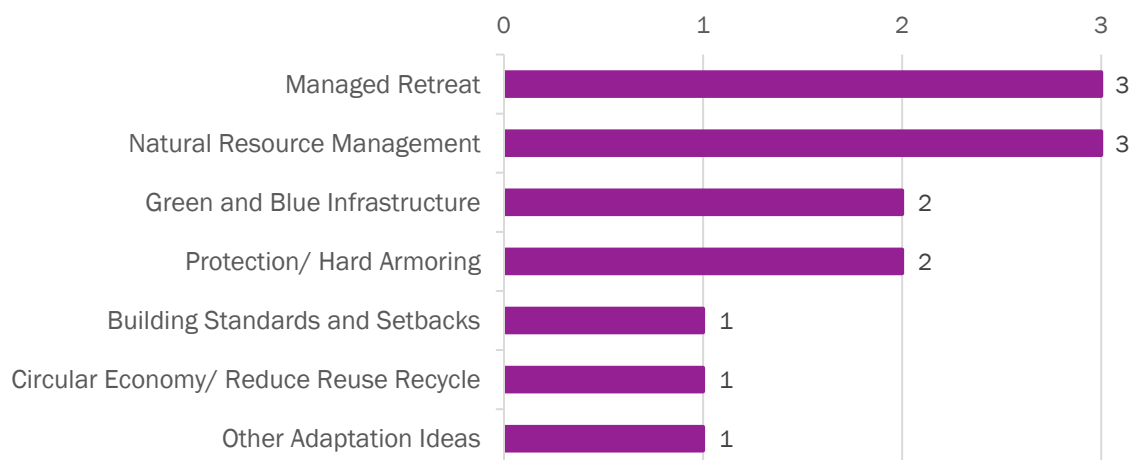
Figure 3. Assets and resources of concern



Mitigation and Adaptation Ideas

Participants highlighted the need for managed retreat and mentioned the opportunity to create and preserve natural habitats, such as wetlands, as managed retreat takes place. Participants also called for nature-based solutions, such as rehabilitating coral and invasive species management for fire prevention. Two comments focused specifically on the purchasing of the Nounou and Wailua area, the land where the former Coco Palms once stood, and community stewardship to maintain that land for Hawaiian cultural, food harvesting, and native planting purposes. Two comments expressed the need to fortify infrastructure, such as bridges and roadways, as sea level rises and as storms and rainfall events intensify. Figure 4 illustrates how many Youth Summit comments pertained to specific mitigation and adaptation strategies.

Figure 4. Recommended mitigation and adaptation strategies



Managed Retreat

Gradually shifting development mauka and away from vulnerable coastal areas either by the physical movement of structures or changing the restrictions and management of Hawai'i's coastal areas.



Natural Resource Management

Expansion of protected areas, management of threatened species, enforcement of rules and regulations aimed at preserving and conserving natural resources



Green and Blue Infrastructure

Using natural solutions to strengthen resilience of the built environment, such as engineered wetlands, engineered coral reefs, and sand replenishment



Protection/ Hard Armoring

Using physical structures, such as seawalls, to protect the land from climate change hazard impacts



Circular Economy/ Reduce Reuse Recycle

Promote a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing energy and material loops; this can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling, and upcycling.



Building Standards and Setbacks

Changes to building standards and permitting process (parcel level mitigation)



Other Adaptation Ideas

Appendix A: Youth Summit Booth Comments

Raw Comments

The comments from the Youth Summit are grouped below by open house booth.

Cruising at the Beach Booth

What do you notice? What are some ways we can ensure that we can continue enjoying these activities?

- Move things away from the water
- Will waves disappear from the water rising?
- Erosion is happening quickly around the island. We can fortify bridges and roadways to make sure they stand strong to rising water levels

Walking, Biking, Skating, Driving

What do you notice? What are some ways we can ensure that we can continue enjoying these activities?

- Increase water barrier strength and relevancy

Playing Sports

What do you notice? What are some ways we can ensure that we can continue enjoying these activities?

- Climate ready housing

Interactive Floor Map

In parenthesis indicate where the comment was located on the floor map.

Share your story

- Iniki 92: water raised 3 feet and Kekaha was underwater - Bambi (Kekaha)
- Hanalei landslide 3/2021 (Hanalei)
- north shore flooding landslides 2018 rain bomb (Hanalei, NS)
- Kalapaki beach
- Hanamaulu
- wind knocked over and broke the Hanapepe swinging bridge in the last year (Hanapepe Swinging Bridge)
- Brenekes in Koloa has changed. it used to have no rocks and big backwash (Koloa, Brennecke's Beach Break)
- the sandbar at Poipu beach is completely eroded, while it was totally there less than a decade ago (Tombolo at Poipu)
- flooding (Wailua-Kapaa area)
- the degradation of native forests due to crop agriculture industry

- the people in my area talk about how hot it has gotten (Kaumakani)

Identify focus areas

- Anini beach park: update the septic system! (Anini)
- we should focus on hillsides along the highway past Princeville towards Hanalei (Hanalei)
- Sea level rise along Hanapepe river (Hanapepe River)
- the hanalei bridge is at risk of being unusable due to severe weather worsened by climate change (Hanalei Bridge)
- the bridge by Kalapaki could be flooded (Kalapaki)
- rehabilitating bleached coral in Kalapaki (Kalapaki)
- Kapaa library will have to be relocated due to sea rising (Kapaa Public Library)
- water has been redirected, causing bad flooding (2018 NS flood). wetlands unmanaged in general have devastating effects (stand in Hanalei area)

Brainstorm Ideas

- cleaning up trash and stop dumping trash everywhere
- remove dry invasive species for fire prevention
- release wolbachia mosquitos!!!!
- COCO Palms: raise money to purchase the land and put it into a land trust. turn into a community center that focuses on Hawaiian culture and sustainable agriculture (Cocopalms)
- organize community to steward Nounou and Wailua park (create healthier green spaces with native species) (Wailua)
- planned retreat along Hanapepe river, dechannelize the stream and create wetlands for habitat and water retention (Hanapepe)