‘O Wai o Waiawa? (Who is Waiawa?)

A Summative Report of the 2017 Wahi Kupuna Internship Program

Prepared for:
Kamehameha Schools

Prepared by:
The 2017 Wahi Kupuna Internship Program

Kepoʻo Keliʻipaʻakaua, BA
Halena Kapuni-Reynolds, MA
Dominique Cordy, MA
Kelley L. Uyeoka, MA

Nohopapa Hawaiʻi, LLC
Huliauapaʻa 501(c)(3)

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He Leo Mahalo

Before we delve into the content of this report, it is especially important that we mahalo and express our deepest aloha to the kūpuna that came before us. To those ancestors that have helped to carve the path that we walk upon today, and to those who held Hawai‘i’s history in memory and took to documenting their ‘ike on paper, mahalo ā nui loa.

Mahalo to our ‘āina-based collaborators who made this internship possible by opening their ‘āina and their hearts to our program. To Ron Fitzgerald and Samantha Ai of Kuhiawaho, Andre Perez of Hanakēhau Learning Farm, and Ali‘i Minor of Kuhialoko, we are truly grateful to have had the opporunity to learn from you all about your efforts to restore Waiawa.

The Wahi Kupuna Internship Program would not exist without the support, assistance, and guidance of numerous individuals and organizations. We wish to mahalo Kamehameha Schools Land Assets and ‘Āina Based Education Division for continuously supporting the program for the past seven years. Through our supporters in KS, including Jason Jeremiah, Natalie Kurashima, B.J. Awa, Sean McNamara, John Tulchin, and Māhealani Matsuzaki, our program has continued to flourish and grow.

We also express our gratitude to the the various higher education institutions that partnered with our program this year to provide students with classrooms, credits, and academic support. To Hālau ‘Ike o Pu‘uloa and the Hawaiian Studies program at Leeward Community College; the Hawaiian Studies and American Studies Departments at the University of Hawai‘i at Mānoa, mahalo for graciously offering space for our program to offer interns with an array of classroom experiences. Special thanks also goes out to Dr. Noelani Puniwai (UH Mānoa), Dr. Ku‘uipo Losch (Leeward CC), Dr. Ross Cordy (UH West-O‘ahu), and Dr. Peter Mills (UH Hilo) for working with our students during the 2017 fall semester to receive upper division undergraduate credits for their work during the internship.

Mahalo also to our interns who worked vigorously over the course of the internship and during the fall semester to complete their internship papers. To La‘akea Ai, Daven Chang, Lei Freed, Joshua Fukumoto, Kama Ka‘aikaula, and David Pereira, keep up the good work, and always strive to do better.

Lastly, mahalo always to Kelley Uyeoka and Dr. Kekuewa Kikiloi for envisioning a program that empowers our communities in caring for our cultural resources. Finally, mahalo to the staff and volunteers of this year’s Wahi Kupuna Internship program for all of your hardwork and commitment to training the next generation of resource managers in Hawai‘i.

Ke aloha nui iā ‘oukou pākahi a pau!

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Figure 1. The 2017 Wahi Kupuna Internship Interns. From left to right: Laʻakea Ai, Joshua Fukumoto, David Pereira, Kama Kaʻaikaula, Daven Chang, Kuʻulei Freed.

In partnership with the Kamehameha Schools Land Asset Division (LAD) and ʻĀina-basd Education Division, Huliauapaʻa and Nohopapa Hawaiʻi, LLC successfully implemented the seventh-annual Wahi Kupuna Internship Program (WKIP). This year, our program took place in the water-rich ahupuaʻa of Waiawa, located in the moku (district) of ʻEwa on the mokupuni (island) of Oʻahu. The year 2017 marks a significant year for our program, because it was the first time in WKIP's history that the internship has taken place on an island other than Hawaiʻi. Like any new program taking place for the first time in a new area, our experience over the past s of summer in hosting the internship in Waiawa had its logistical challenges. However, our general concensus is that this summer's internship will continue to push Huliauapaʻa to expand its programs to reach students from across the pae ʻāina (islands).

As always, the driving goal of the Wahi Kupuna Internship Program is to train ʻŌiwi and kamaʻāina undergraduate students in both the cultural and technical side of cultural resource management so they have a strong cultural foundation, are connected to their ʻāina and community in meaningful and impactful ways, and have the appropriate skills needed to be well rounded resource managers. In order to provide our students with such an immersive experience, we offered a five-week long intensive internship that introduced them to archival research, fieldwork, report writing, and public speaking. During the five weeks, our interns visited various archives, hiked the uplands of Waiawa, worked in the loʻi at Kuhiawaho (an ʻili ʻāina, land division, in Waiawa), and mapped out sections of Hanakēhau (another ʻili ʻāina in Waiawa). They worked on sites at Ka Lae Loa Heritage Park, learned of the restoration efforts at Loko Paʻaiau, and created compelling presentations for their research that they presented at a community hōʻike. These activities, and many others, represent the variety of lessons and skillsets that each of the students are exposed to during our program. By providing them with these experiences, Huliauapaʻa intends to broaden their horizons, challenging them to think critically about the following question: What does cultural resource management mean to you?

This past summer, six interns participated in our internship—the largest cohort to have completed our program to date. These students were all from Oʻahu, but came to our program from four higher education institutions, including the University of Hawaiʻi at Mānoa, the University of Hawaiʻi at West-Oʻahu, the University of Hawaiʻi at Hilo, and Leeward Community College. Within their cohort, there was a mix of traditional and nontraditional students, studying a diverse range of fields including anthropology, Hawaiian studies, Hawaiian language, geography, and sustainable agriculture. Through the program, we wanted them to consider how cultural resource management encompasses all areas of study, and how the skills that they gained through the internship could be applied in whatever career they intend to pursue in the future.

This summative report is structured in the following manner: After the introduction, we provide a program narrative that describes some of the significant activities that we undertook this past summer. This provides readers with an idea of the intensive nature of the internship through the places that we visited and the lessons that the interns were privy to. Following the narrative is an evaluation summary based on three evaluations that were completed during the internship by interns and community members. By conducting these evaluations, we hope to learn first-hand from the interns about what worked/what did not work, and how the internship can be improved for the next cohort. After the evaluation section, a brief ethnohistory of Waiawa is provided, with emphasis on the groundwater resources that can be found there. Sections on the partnerships that we formed over the summer and our recommendations for WKIP and KS in the future are also included.

Cohort Name and Logo

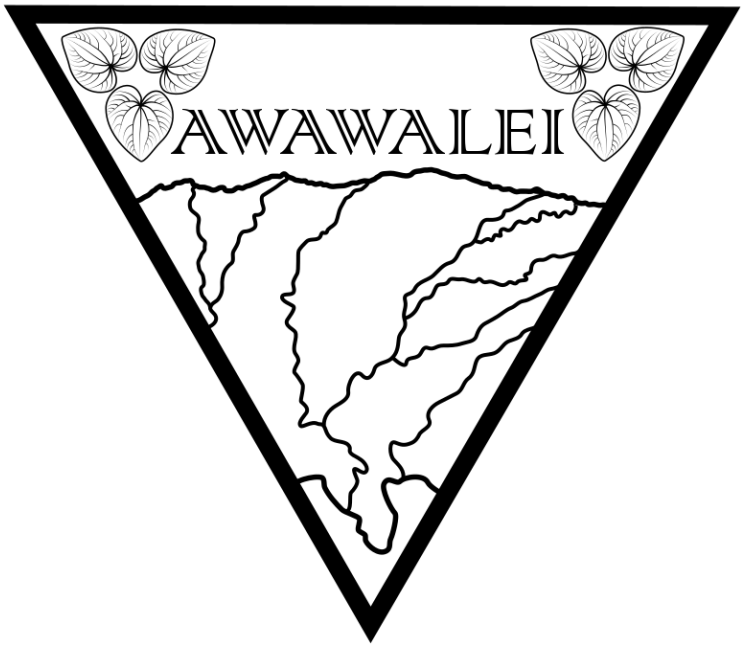


Figure 2. The logo for the 2017 WKIP cohort.

Each year, the Wahi Kupuna interns are tasked with creating a cohort name that speaks to their cohort's character and connection to the place that the internship took place. The name for this year's cohort was Awāwalei (Figure 2). The name Awāwalei is an older name that references Ke Awa Lau o Puʻuloa, which refers to the numerous bays that are home to the abundant marine resources of the Puʻuloa area. When translated, "Awāwalei" can be dissected into the words "Awāwa," which refers to a ravine or a valley, and "lei", which refers to garlands made of natural materials. When these two words are combined, Awāwalei references the numerous valleys and gulches of the ʻEwa Moku. From these valleys come the life-giving waters of Kāne, in the form of springs, rivers and streams. If one were to trace all of the streams that run down from the uplands to the sea, the image would look like a lei that wraps around the land. The vertical lines running from the top to the bottom of the cohort's logo represents these running waterways and the lei that they form.

At the top of the image the vertical lines connect to a horizontal line that mimics the mountains of the Waiʻanae Range. The outline of the range that is included here is what the Waiʻanae mountains look like on any given day from the birthing stones of Kūkaniloko. The thumb-looking line at the bottom of logo is the Waiawa Peninsula. By combining these three elements, the interns are in effect making a visual reference to the ahupuaʻa of Waiawa and its connections to wai (freshwater) and the aliʻi (chiefs). Lastly, the six ʻawa leaves that are depicted at the top of the logo represent the six interns. ʻAwa leaves were chosen because the plant is associated with the name Wai*awa.* Furthermore, the veins that can be found on the awa leaf were similar to the lei of waterways that is made reference to in Awāwalei.

Ka Papahana - Program Narrative

The following program narrative provides a chronological summary of the program. The lessons that were conducted each day, the sites that we visited, and the people that we met, all form the basis of section. For a detailed schedule of daily events, see Appendix A.

Daily Program Structure

Although different activities, workshops, and sessions were conducted each week, the daily structure of the program remained relatively unchanged. Thanks to the generous support of the department of Hawaiian Studies at Leeward Community College (LCC) and Hālau ʻIke o Puʻuloa, the Native Hawaiian student support organization on campus, we were provided with a secure classroom at LCC that allowed us to store our program supplies, to implement classroom lessons, and to access online databases and program resources that were available online. We were also fortunate enough to work with the caretakers of Hanakēhau (Andre Perez) and Kuhiawaho (Ron Fitzgerald, Samantha Ai), who welcomed our program to their ʻāina, and allowed us to hold our lessons there throughout the five weeks of the internship.

Daily Program Structure	
8:00am	Meet in Waiawa, either at Leeward Community College, Hanakēhau, or Kuhiawaho
8:15am - 8:30am	Morning Piko
8:30am - 12:00pm	Classroom/Fieldwork lessons
12:00pm - 1:00pm	Lunch
1:00pm - 3:50pm	Classroom/Fieldwork lessons
4:00pm	Afternoon Piko, Pau Hana

From Monday to Thursday, the students and instructors commuted to Waiawa and met at 8:00am. Depending on our activities for the day, we either met at Leeward Community College, Hanakēhau, or Kuhiawaho. Our days began with morning piko, which consisted of forming a circle, providing the students with a breakdown of the day's activities, sharing an inspirational message, asking one of our living and/or dead relatives to provide us with inspiration and knowledge for the day, chanting the oli "Nā ʻAumākua," and offering a pule in the Hawaiian language. Afterwards, we would engage in morning classroom/field activities, enjoy a brief lunch, and return to afternoon classroom/field activities. Each day concluded at 4:00pm with a closing piko, which consisted of a brief discussion of the day's work and a performance of the oli "He Oli Mahalo." A pule was also offered in the Hawaiian language to complete our afternoon piko.

Although our daily program structure did not change on Fridays, the interns and instructors met at the University of Hawai‘i at Mānoa on that day in order to provide students with access to the resources that are available on the flagship campus. Thanks to generosity of the Department of American Studies, as well as Hawai‘inuiākea School of Hawaiian Knowledge, we were able to meet our students in seminar-style rooms. Whereas the activities that took place during the first four days of the week focused on building each intern’s field skills, our Fridays were dedicated to professional and academic development.

After our morning piko, students received lessons on writing and presenting a compelling research project that we called the “Friday Writing Workshops.” The purpose of these workshops and of meeting at UH Mānoa was to provide students with in-class time to work on their research papers. This time also allowed the students to get timely feedback from their instructors on their research and writing. During Friday lunches, a guest speaker, either a professional working in the field of Hawaiian Archaeology or a professor at UH Mānoa, also met with our students to share their experiences. The afternoons composed of “research time” for the students to work on their internship papers.

Program Highlights

The following section provides program highlights that outline some of the activities that the interns participated in throughout the internship. Some of these activities took place over the span of a few hours or up to a few days.

WKIP Orientation - June 12, 2017

The first week of the program focused on introducing the students to the internship as well as the ‘āina of Kuhiawaho. Our first official day of the internship was Monday, June 12, 2017. Joining us for the day was Dr. Kekuewa Kikiloi, Board President for our nonprofit, Huliauapa‘a, and Kelley Uyeoka, Huliauapa‘a’s Executive Director. Both Kikiloi and Uyeoka founded the Wahi Kupuna Internship Program in 2010. The year 2017 was significant for the Program because it was the first time that WKIP did not take place on the island of Hawai‘i. Expectations were high and all were enthusiastic to see the what the outcome would be for our O‘ahu-based internship.

Before stepping foot on our primary field sites for the internship, Kikiloi and Uyeoka joined the students for a quick trip to the birthing stones at Kūkaniloko, located in central O‘ahu. The purpose of this trip was to provide ho‘okupu (offerings) to Kūkaniloko and to the ali‘i (chiefs) that are connected to that place. After performing a few oli and offering lei and wai (water), we circled up to have a brief discussion about the cultural/spiritual significance of Kūkaniloko. Kikiloi and Kepo‘o Keli‘ipa‘akaua, the Place-Based Instructor for our internship, both provided background information on the history of Kūkaniloko and the chiefs that it is connected to. After spending some time with the birthing stones, our group returned to Waiawa; We made our way to the ‘ili ‘āina (smaller land division) of Hanakēhau.

At Hanakēhau, the day continued with brief presentations by Uyeoka and Kikiloi regarding the history of the Wahi Kupuna Internship Program and the impetus of its creation. Following their lecture was an orientation to KUPU, which provided our interns with the opportunity to receive

educational awards valued at $1222.00 for their work during the WKIP. The orientation was provided by KUPU Program Coordinator Maeghan Castillo and Program Manager Joyce Santiago. Following the orientation, we closed our first day with afternoon piko. Each of the interns and instructors shared what they hope to gain from the internship.

Discussion on Cultural Protocols, LCC Library Tour, "Walk Story," and Lecture by Dr. Ross Cordy - June 13, 2017

On Tuesday, June 13th, the students and instructors met once more at Hanakēhau to continue the orientation. Beyond sharing introductions, describing potential research project ideas with the students, and reviewing the schedule for the internship, a healthy discussion on cultural protocols within the context of Hawaiian archaeology occured. Based on the "Lawena for Working at Wahi Kupuna" document that we provide each year to our students (Appendix B), the instructors and students shared their experiences of what constitutes proper lawena (protocols, manners) when working at wahi kupuna. Some of the lawena that we discussed included the importance of hoʻokupu, of listening to your naʻau (gut) and speaking up if you are uncomfortable in visiting or working in particular places, and of leaving plants, coral, and artifacts in situ. What made this discussion significant is that the instructors were not merely telling the students about protocols in a one-way manner. Rather, each of the students discussed other cultural protocols and beliefs that they practiced and/or heard of through their previous experiences. As much as this was a learning experience for the interns, so too did the instructors learn from the students.

For lunch, WKIP interns met with Annemarie Paikai, Hawaiian Pacific Resource Librarian at the Leeward Community College Library. Paikai provided the students with a lesson on finding books and accessing various library databases. She also provided the students with a running list of resources relating to Waiawa that the students could access throughout the course of the internship.

Following the discussion with Paikai, the interns were treated to a walking tour of Waiawa by Kepoʻo Keliʻipaʻakaua (Figure 3). The tour took place on the LCC campus, and at each of the stops, Keliʻipaʻakaua shared the names of places throughout Waiawa and the moʻolelo (stories) associated with those places, hence the term "walk story" to describe the event. Included in his tour were the moʻolelo of Kahiʻukā and his cave dwelling, Kaʻahupāhau and the disappearance of the oysters (pipi) of ʻEwa, and the death of Kānepaiki in the construction of the ʻEwa Church.

Figure 3. Kepoʻo Keliʻipaʻakaua, WKIP Place-Based Instructor, speaking during the "walk story" of Waiawa.

Figure 4. Presentation by Dr. Ross Cordy, Professor of Hawaiian and Pacific Studies, University of Hawaiʻi - West Oʻahu.

Later in the afternoon, the students met Dr. Ross Cordy, a Professor of Hawaiian and Pacific Studies at the University of Hawaiʻi - West Oʻahu with extensive knowledge in Hawaiian pre-contact history (Figure 4). Having done significant research on the region of ʻEwa, Dr. Cordy prepared a presentation for the interns on the development of Hawaiian settlements in ʻEwa and Waiawa. He also described the various aliʻi genealogies that are connected to Oʻahu.

Lesson on Accessing and Reading Historical Maps - June 14, 2017

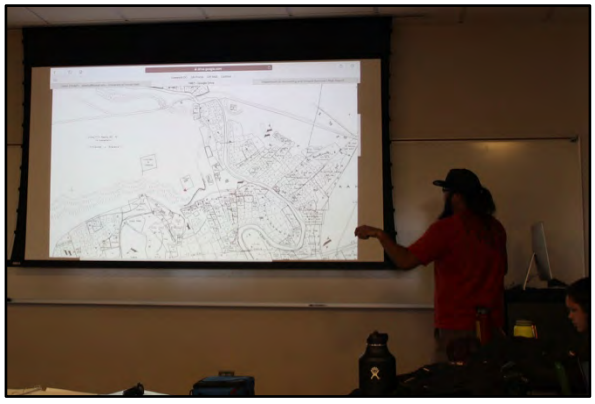


Figure 5. WKIP intern Daven Chang describing the information that can be found on a registered map of Waiawa dating to 1887.

Figure 6. WKIP Place-Based Instructor Kepoʻo Keliʻipaʻakaua (left) discussing a registered map with WKIP intern Joshua Fukumoto.

In preparation for their independent research, Keliʻipaʻakaua conducted a lesson on accessing and reading historical maps. Since these maps are crucial for reconstructing the historical landscape of places like Waiawa, teaching the students how to find these maps and what they can use them for was a major component of the internship. Rather than overwhelm the students with hundreds of varieties of maps, we chose to focus on the registered maps that are available digitally through the Hawaiʻi Department of Accounting and General Services (DAGS) (http://ags.hawaii.gov/survey/map-search/). For most of the students, this was their first time accessing this database. After describing some of the procedures that go into finding a registered map, Keliʻipaʻakaua assigned each of the students to analyze one of the maps of Waiawa that are

available on the DAGS website (Figure 5 and 6). After 30 minutes, the students presented their research findings to the larger group and described the significant information that appeared on each of their maps.

Kuhiawaho Site Visit - June 14, 2017

Figure 7. Ron Fitzgerald (right) talking to WKIP interns about the abundance of wai (freshwater) in Kuhiawaho.

Figure 8. The main pūnāwai (freshwater spring) at Kuhiawaho.

Following our lesson on maps, we joined Samantha Ai and Ron Fitzgerald, the kahu (caretakers) of Kuhiawaho, for lunch and for a tour of the ʻāina. While at Kuhiawaho, Ai and Fitzgerald shared moʻolelo of how they received their lease to farm in Kuhiawaho from Kamehameha Schools, and oral histories about the area that they have collected over the years. As a kamaʻāina (someone who has grown up in a particular area) of the area, Fitzgerald also relayed stories of growing up along Puʻuloa's shores. It was during this tour that the students received their first in-depth lesson on bountiful resources that are available in Waiawa. The various loʻi that Ai, Fitzgerald and their ʻohana cultivates, as well as the bubbling springs that can be found in Kuhiawaho, were tangible signs of this (Figure 7 and 8).

Detour of Honolulu and ʻEwa - June 15, 2017

Everywhere you turn in the broader ʻEwa region, the presence of the US military is apparent. Even in Waiawa, one cannot look out to the ocean without seeing multiple warships anchored in the lochs of Puʻuloa (Figure 9). Therefore, it was fitting for our interns to go on a "detour" of the area with Kyle Kajihiro, a PhD candidate in Geography at the University of Hawaiʻi at Mānoa and a demilitarization activist, and Terri Kekoʻolani, a seasoned Hawaiian activist and political organizer. Our day began at the University of Hawaiʻi at Mānoa, where we joined Kajihiro and Kekoʻolani to begin our detour. Starting off with a discussion of the relationship of the university to the US military, we then made our way to ʻIolani Palace to discuss the overthrow of the Hawaiian Kingdom and the involvement of the US military in that event. On our way to Puʻuloa, we also discussed the Massie Case and the murder of Joseph Kahahawai in the 1930s, yet another incident that involved US military personnel in the islands.

Our first stop in Puʻuloa was the Pearl Harbor Visitor Center, where Kajihiro and Kekoʻolani provided a brief history of Puʻuloa and how it became one of the most heavily militarized

landscapes in Hawai‘i (Figure 10). They also shared statistics and historical facts that demonstrated how Hawai‘i is one of the most militarized states in the US. After offering an oli to Pu‘uloa, in hopes that one day soon it will be restored, our detour continued up to the hills of Aiea where we stopped by the United States Pacific Command (PACOM) headquarters. At this altitude we were able to all of Pu‘uloa, including the various military installations that can be found throughout. The detour ended in Hanakēhau, where we all shared reflections of what we learned that day.

Figure 9. Waiawa Kai from the vantage point of Leeward Community College. US warships were anchored in Pu‘uloa throughout the internship.

Figure 10. WKIP interns discuss the militarization of Pu‘uloa with Kyle Kajihiro and Terri Keko‘olani at the Pearl Harbor Visitor Center. Docked in the distance was a visiting aircraft carrier.

Tour of Hamilton Library - June 16, 2017

June 16th marked the first Friday that we would spend at the University of Hawai‘i at Mānoa. In addition to talking with the students about their research papers, we were afforded the opportunity to meet with Kapena Shim, a Hawaiian Specialist Librarian at Hamilton Library, to talk about the resources that are available through the library. Shim walked the students through the library’s website, showing them how to search for books and other materials, and how to request materials. He also took them to the Hawaiian collection and reading room, providing instruction on how to access these materials along the way.

Māhele Records Workshop - June 19, 2017

During the second week of our program, we were joined by GIS Specialist Dominique Cordy. On Monday, June 19, 2017, she conducted a three-hour workshop that introduced the interns to Māhele land records. Drawing from some of our lessons from the previous week, Cordy elaborated on the importance of Māhele records for reconstructing the history of land use in Hawai‘i; she also talked about the contemporary significance of land research today, especially within the context of protecting kuleana land claims from quiet title actions.

Huaka‘i to Palehua - June 19, 2017

Following the lesson provided by Cordy, the instructors and interns made their way to Makakilo to meet Kēhaulani Kupihea at the entrance of Palehua. Palehua is the contemporary name that is used for the mauka (upland) area of Makakilo. It is located on the southern face of the Wai‘anae

Mountain range. Having worked in the field of cultural resource management for over twenty years, Kupihea was a treasure trove of knowledge. She spoke briefly to the interns about her experiences working on Oʻahu and the shift towards a more Hawaiian-oriented approach to CRM work over the decades.

Figure 11. WKIP interns with McD Philpotts (left) and Kēhaulani Kupihea (right) on the slopes of Palehua. From left to right: McD Philpotts, Joshua Fukumoto, Kuʻulei Freed, Daven Chang, Kama Kaʻaikaula, Laʻakea Ai, David Pereira, Kēhaulani Kupihea.

Figure 12. View of Nānākuli from the summit of Mauna Kapu.

After we made our into Palehua, we were met by McD Philpotts, a Hawaiian woodworker who grew up and continues to live in Palehua. Having extensive knowledge about the area, Philpotts guided us on a tour of Palehua with an emphasis on the significant archaeoastronomical sites that can be found along the hillsides (Figure 11). Various waterworn foundations were described as house sites for kāhuna (priests) who came to Palehua to study the heavens and observe the horizon. During our tour, Philpotts explained that Palehua is one of the few places in the Hawaiian Islands where one can see Maui, Lānaʻi, Molokaʻi, Kauaʻi, and the slopes of Mauna Kea from a single location. This is why Palehua was such a culturally significant place. While we visited these sites, the interns also were able to see Waiawa off in the distance. Towards the end of the tour, we continued to ascend towards one of the peaks of the Waiʻanae mountain range until we reached Mauna Kapu. There, Philpotts explained the moʻolelo behind this sacred place and further offered observations on the astronomical patterns that can be observed. Overall, this huakaʻi was special, providing students with an opportunity to further learn of the knowledge that is attached to are wahi kupuna (ancestral places).

Māhele Role Play Activity and Work Day at Kuhiawaho - June 21, 2017

Throughout the first and second week of the internship, each of the students were tasked with a mini-assignment to do research on a single individual who claimed land in Waiawa during the Māhele. This exercise was a means to familiarize the students with the various Māhele records that could be read for information on individuals, agriculture, and natural features. Such records included kuleana awards, foreign testimonies, and native testimonies. From their research, the students then crafted a first-person narrative that they acted out during our visits to each of the

different parcels of land in Waiawa that were claimed (Figure 13). Some of the claimants that were selected included Namomoku, Nahalepili, Haa, and Kamalii, who all claimed in Kuhialoko; Kakoo, who claimed land in Kuhiawaho; and Makanui, who claimed land in Hanakehau. From this activity, the students gained a better understanding of the people who once resided in Waiawa, and the resources that were abundant in the area. Rather that regard these individuals as simply names on historical documents, the activity allowed the students to humanize these kūpuna (ancestors) in ways that fostered a greater engagement with the past.

Figure 13. WKIP intern Kuʻulei Freed performing as Kamalii, a claimant during the Māhele who claimed lands in Kuhialoko.

Figure 14. WKIP interns and instructors cleaning two small loʻi at Kuhiawaho.

After a few hours, our role playing activity ended in Kuhiawaho with a discussion on how effective the activity was in familiarizing the students with Waiawa's landscape and cultural history and what they were able to learn through Māhele records. Following this conversation, the students and instructors spent the last two hours of the day working in two of the loʻi at Kuhiawaho. As much as the internship was about exposing students to the basic techniques of cultural resource management, we wanted to also engage in mālama ʻāina (land stewardship) activities so that the interns recognized the importance of gaining intimate understands of the ʻāina not just through archival research but through hands-on, place-based work.

A Visit with Kamehameha Schools Natural and Cultural Resources Team - June 22, 2017

On Thursday, June 22, WKIP interns and instructors went to Kawaiahaʻo Plaza to meet with members of Kamehameha Schools Natural and Cultural Resources team. Those who were in attendance included Jason Jeremiah, Director of Natural and Cultural Resources, Natalie Kurashima, Integrated Resources Manager, Sean McNamara, Cultural Resources Manager, and Jon Tulchin, Cultural Resources Manager. During our meeting, introductions were exchanged and the purpose of the Natural and Cultural Resources (NCR) team within the larger organization of Kamehameha Schools was explained. The interns were also informed about where the collaboration of Huliauapaʻa and KS' NCR team falls within their efforts to manage the natural and cultural resources on the vast land holdings of Kamehameha Schools. Following this conversation, the interns had lunch with Nālani Kealaiki, who was then recently named the new ʻEwa Regional Director.

Visits to the Bureau of Conveyances and the Mission Houses Archives - June 22, 2017

After our visit to Kawaiahaʻo Plaza, the interns visited the archives at the Hawaiian Mission House Historic Site and Archives and the Bureau of Conveyances, located in the Department of Land and Natural Resources. In order to maximize the amount of the time that the interns had at each of these places, they were split into two groups that rotated between both institutions.

At the Mission Houses archive, the interns met with John Baker, Curator of Archives, who pulled out missionary accounts and photographs of the ʻEwa Church, which was previously located in Waiawa. Beyond these documents, Baker also provided the students with a behind-the-scene tour of the archives. At one point, he even showed the students (and allowed them to handle) the original letter of protest that was written by Queen Liliʻuokalani regarding the overthrow of the Hawaiian Kingdom.

Figure 15. WKIP intern Laʻakea Ai examining the original Letter of Protest handwritten by Queen Liliʻuokalani. The original is housed at the Mission Houses Archive in downtown Honolulu and was shown to the students by John Barker, Curator of Archives.

Figure 16. Dominique Cordy (left) walking students through the process of doing research at the Bureau of Conveyances in the Department of Land and cultural Resources.

At the Bureau of Conveyances (BoR), the students met with Dominique Cordy, who walked them through the process of retracing land ownership in Hawaiʻi. Working with the grantor index ledgers, Cordy challenged the students to locate information on parcels of land in Waiawa that were transferred and sold. It was evident throughout this exercise that the interns were deeply engaged in this research. Although the BoR is working towards digitizing a vast majority of their records, being able to physically handle the original ledgers allowed the students to experience first hand the importance of visiting archives to study physical documents, rather than relying solely on digital materials.

Introduction to GIS - June 23, 2017

On Friday, June 23, 2017, the interns were treated to an introduction to creating maps through the use of Geographic Information Systems using Esri software (Figure 17 and 18). Dominique Cordy led this lesson and walked the students through the various ways in which GSI technology can be

used in layering various elements onto maps to highlight key features. This lesson took place at the GIS lab located on the basement floor of Hamilton Library at the University of Hawai‘i at Mānoa.

Figure 17. Dominique Cordy instructs the WKIP interns on how to create polygons using GIS software.

Figure 18. WKIP intern Ku‘ulei Freed examining a 2010 aerial image of Waiawa overlaid with polygons that represent the various kuleana claims that were made in Waiawa during the Māhele.

Huaka‘i to Ka Lae Loa - June 26, 2017

Figure 19. Students prepare site forms for two “cultural” sinkholes located in Ka Lae Loa Heritage Park.

Figure 20. WKIP instructors & students with Shad Kane of Ka Lae Loa Heritage Park (fourth from the left). From left to right: Joshua Fukumoto, Kepo‘o Keli‘ipa‘akaua, Daven Chang, La‘akea Ai, Ku‘ulei Freed, Shad Kane, Kama Ka‘aikaula, David Pereira, Halena Kapuni-Reynolds.

On Monday, June 26, 2017, the interns and instructors traveled to Ka Lae Loa Heritage Park, located south of Kapolei. The purpose of this huaka‘i was to train students in identifying, documenting, and mapping archaeological sites. Since there were no pre-contact sites in Waiawa for the students to work in during the internship, visiting Ka Lae Loa was an opportunity for the students to see what Hawaiian pre-contact sites look like within a relatively undisturbed context. Joining us that day was Kau‘ilani Rivera, a WKIP alumni who received her masters in applied archaeology from the University of Hawai‘i at Mānoa. Rivera led the lessons for the day, teaching

interns how to read a compass, fill out archaeological feature forms, and create a map of a site using the radial tape-and-compass mapping technique (Figure 19).

Prior to these lessons, the students were given a tour of Ka Lae Loa by Shad Kane, the kahu of the area (Figure 20). Kane shared his extensive knowledge of the foundations, "cultural" sinkholes, and house foundations in Ka Lae Loa, all of which were made of white coral limestone. Structures made of limestone are atypical in Hawai'i, making Ka Lae Loa a precious Hawaiian archaeological site. He then continued to share mo'olelo of the area's past cultural history, and conveyed to the students the reason why Ka Lae Loa was preserved as a heritage park and his future preservation and restoration plans. One piece of information that he shared with the students was that an older name for the area of Kapolei was Kaupe'a, and that Kapolei was regarded as a place where spirits roamed.

Huaka'i to Pa'aiau Fishpond and Ka'onohi Farm - June 27, 2017

Following our huaka'i to Ka Lae Loa, the interns were afforded the opportunity to visit two more wahi kupuna in 'Ewa. The first was Loko Pa'aiau, a fishpond located in what is now known as McGrew Point in 'Aiea (Figure 21 and 22). While there, the interns met with Jeff Pantaleo, a cultural resource program manager for the US Navy whose responsibilities are to steward the archaeological sites that are located on Joint-base Pearl Harbor-Hickam. Pantaleo provided a brief history of Pa'aiau, its form, function, and evolution overtime, and later described the current restoration effort that is underway. He also pointed out some of the remaining fishpond walls that are still visible on the surface. In partnership with the 'Aiea Hawaiian Civic Club, Pantaleo is working to restore the fishpond walls and to remove the invasive mangroves that grow along the pond's edges. There are also plans to dredge the pond in order to remove decades worth of organic material. Visiting Pa'aiau allowed the students to reflect more on the abundance of fishponds in the 'Ewa region. And since we were unable to access the fishponds that can be found in Waiawa, Pa'aiau served as an alternative location.

After our muddy trek in Pa'aiau, we spend our afternoon in Ka'onohi, an 'ili 'āina located in the ahupua'a of Kalauao. There, the interns met with Mahealani Matsuzaki, Land Legacy Education Specialist at Kamehameha Schools, and Anthony Deluze, a kalo farmer and kahu of Ka'onohi. Deluze spoke to the students about how he acquired a lease to Ka'onohi, as well as his background as a kalo farmer. He also shared his experiences of working in close proximity to the Sumida watercress farm, and some of the observations that he has made over the years regarding the fluctuating water levels in the area. Matsuzaki, on the other hand, talked to the students about Kamehameha School's 'Āina Ulu Land Legacy program. Through 'Āina Ulu, KS is able to partner with organizations that specialize in land-based education and restoration in order to broadened their impact. The huaka'i to Ka'onohi ended with a tour of the property, which included a brief lesson on the different varieties of kalo that are grown there.

Figure 21. Students listen to Jeff Pantaleo, a cultural resource program manager for the US Navy, talk about the history and restoration of Loko Paʻaiau.

Figure 22. WKIP interns pose for a photo at Loko Paʻaiau. From left to right: David Pereira, Daven Chang, Kuʻulei Freed, Laʻakea Ai, Kama Kaʻaikaula, Joshua Fukumoto.

Fieldwork at Hanakēhau - June 28 - 29, 2017

After receiving training at Ka Lae Loa, the students put their newly acquired mapping skills to the test at Hanakēhau. For two days, the students filled out site feature forms and collected numerous points to create maps of the shack, loʻi, and native plants that can be found there (Figure 23). Dr. Kekuewa Kikiloi also stopped by on both days to teach the students how to create baseline maps (Figure 24). One thing in particular that Andre Perez, the kahu of Hanakēhau, wanted the students to illustrate through their maps are the coconut trees on site that are infested with Asiatic rhinoceros beetles. These beetles are invasive to Hawaiʻi and bore themselves into the trunk of coconut trees, effectively killing healthy trees overtime. After the work at Hanakēhau was complete, the students were able to visit some of the ponds that are located above Hanakēhau. Although we did not conduct any archaeological work there during the internship, this was an opportunity for the students to visit a site that is directly connected to what occurs downhill at Hanakēhau.

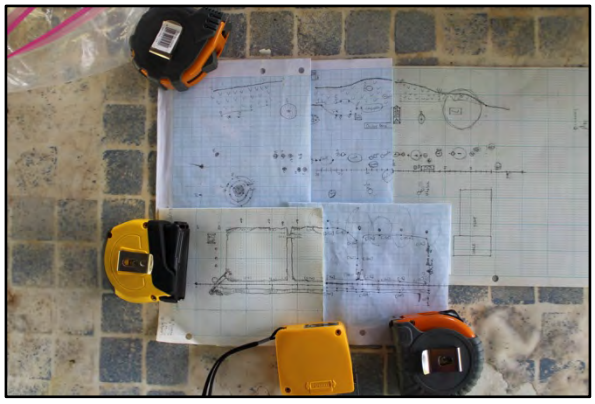


Figure 23. Field map of Hanakēhau created by the WKIP interns.

Figure 24. Dr. Kekuewa Kikiloi providing a lesson on baseline mapping.

Site Visit to Kuhialoko - July 3, 2017

Although the majority of the fieldwork took place in Hanakēhau and Kuhiawaho, we were fortunate enough to visit Kuhialoko and to meet Aliʻi Minor, a kamaʻāina of the area whose ʻohana (family) has cared for Kuhialoko for generations. While there, Minor described his life growing up in Kuhialoko, pointing out some of the significant features on the landscape and the abundance of native birds that flock to the area. He also showed the students his "kalo bank," which is home to numerous varieties of kalo that he grows to sustain his ʻohana. While we were there, we speculated that the area in which Aliʻi grew his kalo was part of a feature known as a loko moʻo that was noted on an 1887 registered map of the area. Loko moʻo will be discussed further in the ethnohistorical portion of this report. After meeting briefly with Aliʻi, the interns and instructors split up into three groups to take GPS points around Kuhialoko. Lessons on GPS mapping were provided earlier that day at the Leeward Community College Campus.

Fieldwork at Kuhiawaho - July 4 - 6, 2017

Between July 4 - 6, 2017, fieldwork at Kuhiawaho took place. Our primary objective there was to map out the existing loʻi system in place (Figures 25-28). Momi Wheeler, an archaeologist and staff member of the Wahi Kupuna Internship Program, and ʻIolani Kauhane, a WKIP alumni who currently works as a Cultural Resource Technician at Pōhakuloa Training Area, joined us on those days to assist the interns and instructors in creating maps of Kuhiawaho. Overall, fieldwork at Kuhiawaho progressed nicely. The weather conditions were ideal and the students were given ample time to practice their mapping skills.

On July 3, 2017, the students were also treated to an overnight stay at Kuhiawaho. It was there that they were able to talk story with Francis Oshita, a long-time resident of ʻEwa who grew up at Kuhiawaho. Oshita was a wealth of information, describing what life was like growing up in Kuhiawaho in the 1940s and her memories of the attack on Pearl Harbor. Following our conversation with Oshita, Ron Fitzgerald instructed the students on how to prepare and ʻimu (underground oven). The students produced delicious puaʻa kālua (kālua pig) that was enjoyed the following day.

Figure 25. WKIP interns Joshua Fukumoto and La‘akea Ai work together to plot out points for a baseline map.

Figure 26. WKIP intern Kama Ka‘aikaula works on a profile map to show elevation change in the lo‘i at Kuhiawaho.

Figure 27. Place-based instructor Kepo‘o Keli‘ipa‘akaua (left) discusses mapping strategies and methods with WKIP interns Lei Freed and La‘akea Ai.

Figure 28. Program Instructor Halena Kapuni-Reynolds (left) assists WKIP intern Daven Chang in creating a baseline map of the lo‘i at Kuhiawaho.

Huaka‘i to Kipapa Trail - July 10, 2017

The last Monday of the internship was a full-day hiking trip at Kipapa Trail, located in Waiawa Uka (Figures 29-30). Hosting us for the day was Pua Heimuli, Community Outreach Liaison for the Ko‘olau Mountains Watershed Partnership, a nonprofit that works with multiple land owners to ensure the protection and conservation of the Ko‘olau Mountains. At Kipapa, the interns hiked on a six-mile round trip trail, which gave way to panoramic views of Waiawa Kai. During the hike, Heimuli shared the story behind the name of Kipapa, which references a battle that took place in the area during the reign of Mā‘ilikūkahi around the fifteenth and sixteenth centuries. The bodies of the defeated were so vast, that it was said to have paved (kipapa) the area. Additionally, Heimuli conveyed information about the origins of wai (freshwater) in the Ko‘olau Mountains. The majority of the wai that makes its way to Waiawa kai and punctures through the ground at places like Kuhiawaho originated from these upland regions. While we were at Kipapa, the interns participated in trail clearing activities, removing invasive species like strawberry guava that was starting to overtake certain portions of the trail.

Figure 29. Image of Waiawa gulch taken from Kipapa trail. Waiawa Kai can be seen in the distance.

Figure 30. Pua Heimuli, Community Outreach Liaison for the Koʻolau Mountains Watershed Partnership, shares information about the kōlea plant with WKIP intern Joshua Fukumoto.

Friday Writing Workshops - June 16, 23, 30 and July 7, 2017

On all of the Fridays leading up to the community hōʻike, the interns were provided with writing workshops to aid them as they conducted research for their internship paper/presentation. These workshops were organized and implemented by WKIP Program Instructor Halena Kapuni-Reynolds. As part of our hands-on approach to teaching CRM methods to the interns out in the field, the writing workshop series provided students with the opportunity to work one-on-one with their instructors to strengthen their overall research design and project in class. The workshops primarily focused on how to:

1. Formulate a strong research question and structure a research paper (June 16);
2. Develop a compelling thesis statement and create a paper outline (June 23);
3. Cite documents properly (June 30); and
4. Present research in a compelling and creative manner (July 7)

Through these workshops, the interns were given the opportunity to improve their writing and research skills within a supportive and critical environment.

Additionally, the interns were required to read a series of articles/book chapters each week which were then discussed on Friday during the workshops. These readings focused on Hawaiian archaeology and the importance of collaborating with Hawaiian communities in order to make informed decisions on caring for wahi kupuna.

On June 30, 2017, we were afforded with a special visit by Kauʻilani Rivera and Lokelani Brandt (via skype). Brandt is a WKIP alumni, and both Brandt and Rivera received their master's in fields related to archaeology. During their visit, we held a brief discussion regarding the work of Native Hawaiian women in the field of Hawaiian archaeology, in addition to the importance of gendered archaeology within a Hawaiian context.

Friday Lunch Lecture Series - June 16, 23, 30, 2017

In order to maximize the student's time at UH Mānoa, we held a series of lunch conversations that featured UHM faculty members and CRM professionals. These informal get togethers allowed the students to meet with kumu that they might want to study under in the future; It also allowed them to hear first hand the development of Hawaiian archaeology over the decades from seasoned individuals who have in the field. Included in our line up of guest speakers were Dr. Karen Kosasa, Director of the Museum Studies Graduate Certificate Program at the University of Hawai'i at Mānoa, who spoke to the students about the American Studies Department and her experiences as a critical scholar; Dr. Kekuewa Kikiloi, Assistant Professor of Hawaiian Studies at Hawai'inuiākea School of Hawaiian Knowledge, who shared his experiences of working in CRM and the importance of fostering a Hawaiian perspective within that field; and Muffet Jourdane and Toni Han, two Hawaiian women who have worked in Hawaiian archaeologist since the late 1970s. These conversations were well-received by the students, broadening their perspectives on the challenges that Hawaiian archaeology face, as well as journey that one undergoes when pursuing graduate studies.

Community Hō'ike - July 13, 2017

The last week of the Wahi Kupuna Internship Program culminated with a community hō'ike that was held on Thursday, July 13, 2017 at the Education Building at Leeward Community College (Figure 31 and 32). It was here that each of the interns presented some of the research that they pursued during the internship (for WKIP interns' research papers, see Appendix C). Dr. Kekuewa Kikiloi and Kepo'o Keli'ipa'akaua also gave presentations, speaking respectively about the origins of the Wahi Kupuna Internship Program and the history of Waiawa.

Overall, the hō'ike was a success; there were over 65 attendees which ranged from KS staff, LCC staff, Waiawa community members, and friends and families of the interns. This hō'ike marked the first time that we also streamed the presentations online via GoMeeting software. After the presentations were complete, all in attendance were provided with a light meal. Later in the afternoon, two site visits to Hanakēhau and Kuhiawaho were facilitated.

Figure 31. WKIP interns present their research at a community hōʻike held at Leeward Community College on July 13, 2017.

Figure 32. WKIP intern and instructors pose with Huliauapaʻa President Dr. Kekuewa Kikiloi. From left to right: Kepoʻo Keliʻipaʻakaua, Kama Kaʻaikaula, Kuʻulei Freed, Halena Kapuni-Reynolds, Laʻakea Ai, Daven Chang, David Pereira, Joshua Fukumoto, Dr. Kekuewa Kikiloi.

Last Day of the Internship - July 14, 2017

The day following the community hōʻike was the last day of the internship. It was at this time that the instructors and interns conducted closing ceremonies at Kuhiawaho. Dr. Kekuewa Kikiloi was also in attendance, organizing and facilitating an ʻawa ceremony that allowed the students to reflect on their experience and to commit to some form of action in the future. This ended our program, which we consider to have been a success on many fronts.

Society for Hawaiian Archaeology Conference Panel Presentation - September 30, 2017

Although the internship officially ended in the summer, the students were required to present their research at the Society for Hawaiian Archaeology Conference, which was held from Friday, September 29, 2017 to October 1, 2017 (Figure 33). The conference took place at the University of Hawaiʻi at West Oʻahu, and the theme focused on the notion of kuleana (responsibility) as a driving force behind the work that archaeologist do in Hawaiʻi. Through the focus on Indigenous issues and a keynote that was provided by Dr. Manulani Aluli Meyer, Director of Indigenous Education at UH West-Oʻahu, it was clear that the conference organizers this year wanted to shift the conversations within the archaeological community towards native concerns. The interns' presentations were a part of these conversations. Additionally, the interns' registration fees were sponsored by Cultural Surveys Hawaiʻi. We appreciated their support of our interns and the internship program.

As part of the conference, the interns and program instructors organized a huakaʻi day for SHA conference attendees to visit the ʻili ʻāina of Kuhiawaho in Waiawa. Kamehameha School employees and partners who were unable to attend the community hōʻike in July were also invited to participate as well. Overall there was about 10 huakaʻi attendees. After the students gave their SHA presentations, various professionals in the archaeological community came up to praise them for their incredible research and presentations.

West Maui Conference on Pacific Peoples and their Environments Presentation - October 14, 2017

Another conference that WKIP interns presented their research at was the West Maui Conference on Pacific Peoples and their Environments, which was held from Friday, October 13, 2017 to Saturday, October 14, 2017, at Nā ʻAikāne o Maui Center in Lahaina, Maui (Figure 34). Travel and lodging expenses, in addition to conference registration fees, were sponsored by the West Maui Peoples Fund. In attendance for this conference was Place-Based Instructor Kepoʻo Keliʻipaʻakaua, Program Instructor Halena Kapuni-Reynolds, and WKIP Interns Joshua Fukumoto and Laʻakea Ai. Overall, the presentations by the instructors and students were well received by the audience.

Figure 33. WKIP intern Lei Freed presents her research at the 2017 Annual Society for Hawaiian Archaeology Meeting.

Figure 34. WKIP interns and instructors pose for a photo after their panel at the West Maui Conference on Pacific Peoples and their Environments. From left to right: Kepoʻo Keliʻipaʻakaua, Joshua Fukumoto, Laʻakea Ai, and Halena Kapuni-Reynolds.

Evaluation Summary

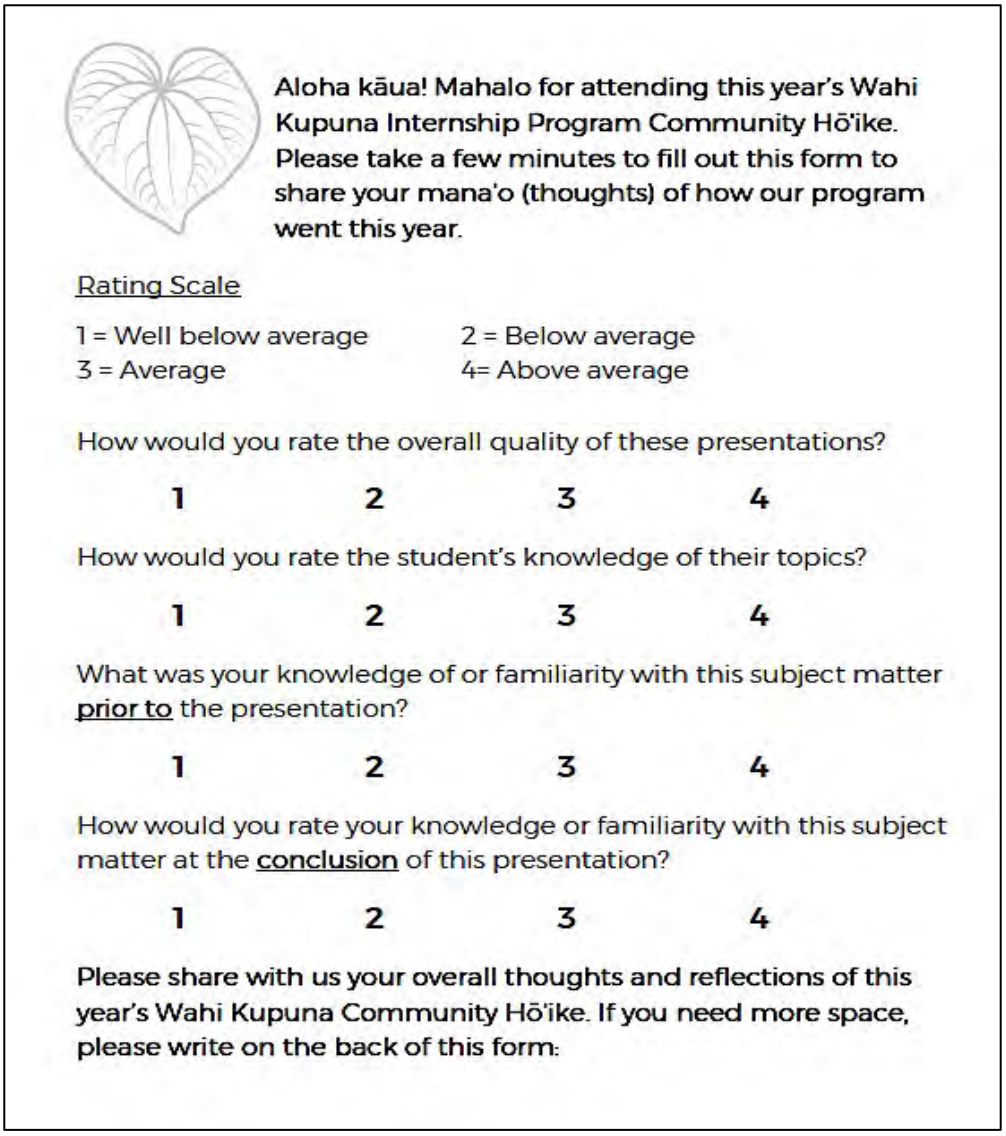
The Wahi Kupuna Internship Program (WKIP) actively works to develop stronger evaluation tools to measure the impact of the program on the interns and the broader community. These evaluations are crucial for they allow us **(1)** to determine how the program promotes our mission to increase the number of Native Hawaiians and Locals working in the field of CRM in Hawai‘i, and **(2)** to adapt the program every year to meet the needs of our students and ‘āina-based community partners. This year, WKIP staff developed three evaluation tools that were utilized during the internship program.

The first evaluation that was administered was a pre-internship evaluation that the students filled out on Tuesday, June 14, 2017. The evaluation consisted of eight questions that asked the students about how they found out about the internship; why they were interested in participating in this year's program; their definition of cultural resource management; and what they hoped to learn through their participation in the internship. This evaluation form was crucial in gaining a better understanding of each student's experience or lack thereof in doing ‘āina-based research. It also allowed the students to reflect on their hopes and expectations for the program.

The second evaluation was an audience feedback form that was disseminated on Thursday, July 13, 2017 at the community hō‘ike. The hō‘ike took place at Leeward Community College and was the most well attended hō‘ike to date. This was the first year that WKIP staff collected responses from those who attended the hō‘ike. Using a likert scale, audience members were asked to rate the overall quality of the presentations; how knowledgeable the students were regarding their research topics; and how much they learned about Waiawa as a result of attending the hō‘ike (Figure 35). A comments section also provided audience members with the opportunity to write down their opinion of the hō‘ike. Audience members who attended the hō‘ike via a live video stream were not able to fill-out audience forms. The audience feedback forms were useful because they allowed us to measure the success of the hō‘ike.

The third and last evaluation that was utilized was a post-internship evaluation form that the student interns completed on the last day of their internship (July 14, 2017). This form consisted of over 25 questions that asked the students to provide their thoughts on what went well during the program; whether or not the instructors prepared them adequately to do fieldwork and research; and how the program could be improved in years to come. Gathering this information from interns at the end of the internship was crucial for receiving feedback on how the program impacted each individual student. Additionally, it provides valuable insight into the ways that the program can be improved in years to come.

With regards to how the evaluations were administered, the first and third evaluation were distributed through Google Forms. Each of the interns utilized their own personal laptops in order to fill out the forms. We find that Google Forms is an effective, low-cost way to collect qualitative information from our interns regarding their experiences. Lastly, the second evaluation, i.e. the hō‘ike feedback forms, was disseminated to attendees through a physical form that was made available at the hō‘ike.



Aloha kāua! Mahalo for attending this year's Wahi Kupuna Internship Program Community Hō'ike. Please take a few minutes to fill out this form to share your mana'o (thoughts) of how our program went this year.

Rating Scale

1 = Well below average
2 = Below average
3 = Average
4= Above average

How would you rate the overall quality of these presentations?

1 2 3 4

How would you rate the student's knowledge of their topics?

1 2 3 4

What was your knowledge of or familiarity with this subject matter prior to the presentation?

1 2 3 4

How would you rate your knowledge or familiarity with this subject matter at the conclusion of this presentation?

1 2 3 4

Please share with us your overall thoughts and reflections of this year's Wahi Kupuna Community Hō'ike. If you need more space, please write on the back of this form:

Figure 35. Sample evaluation form that was disseminated to community hōʻike attendees on Thursday, July 13, 2017.

Student Evaluation

Learning about the WKIP internship

Students were asked to indicate how they learned about the internship program. This allowed us to gain feedback on how information regarding the internship was circulated within the University of Hawaiʻi and the broader Hawaiʻi community. *The majority of students indicated in the evaluation that they heard about the Wahi Kupuna Internship Program by word of mouth, either through professors or other mentors from their respective UH campus***.** Some of the students also stated that they learned about the program via email or flyers posted around their university campus.

One of the students mentioned that they learned about the program primarily through social media. During the internship, the student briefly elaborated on this by stating that he saw the flyer for the program on a WKIP alumni's Instagram account. He continued by describing that he would have not known about the program had it not been posted on Instagram. Although only one of the students this year indicated that they learned about the internship via social media, *utilizing social media platforms to disseminate information on internship opportunities is expected to increase in the coming years as institutions of higher education, as well as community-based non-profits, turn to social media platforms like Instagram, Facebook, and Snapchat as tools to disseminate information to the broader public*.

Reasons for applying to the program

In the pre-internship evaluation, the majority of *students indicated that they applied to the program to gain more experience in (1) conducting fieldwork and (2) learning how to appropriately conduct Hawaiian cultural protocols and practices within the context of Hawaiian archaeology* (Figure 36). Some of the students also expressed that their interest in the internship was because of its potential to strengthen their own personal connection with the island of Oʻahu, as well as the opportunity to gain a better understanding of the field of cultural resource management itself. One of the interns expressed these shared reasons for applying to the program in one of their responses:

> ***"Cultural and community based archaeology was my main draw [to apply for the program, in addition to] the chance to deepen my own connection with Oʻahu."***

Another intern described how the internship was appealing to them because of how it was grounded within a Hawaiian framework:

> ***"I wanted to learn more about Hawaiian culture and practices. I was interested in meeting new people who share my interest in things Hawaiian and are just as passionate about those things as me… Lastly it gives me another avenue to hear and possibly speak 'Ōlelo Hawaiʻi."***

These various reasons suggest that WKIP interns join the internship seeking to learn a range of research/professional development skills that are grounded in Hawaiian culture.

Learning new skills

When asked "what kind of skills or topics do you hope to learn in the next five weeks?", many of the students listed specific fieldwork-related skills that they wanted to learn, such as interviewing kūpuna (elders), learning how to use GIS, and developing their mapping skills. Beyond these skills, some of the students also noted that they wanted to learn how to give presentations, write professional-grade reports, and analyze moʻolelo Hawaiʻi (Hawaiian stories). Furthermore, a

majority of the students indicated that they wanted to learn how to properly engage with wahi kupuna and the communities that care for them. As stated by one of the interns:

> ***"I hope to learn the fundamental skills of an archaeologist and the skills that are needed to apply them in appropriate wahi pana. Also I hope to learn the correct protocols [to use] with[in] the correct situation. My number one priority is to learn the balance between doing archaeological work and cultural preservation."***

Figure 36. WKIP instructors and students have a conversation about cultural protocols within the context of working in the field.

Figure 37. WKIP intern Kama Ka'aikaula learns how to read a compass at Ka Lae Loa Heritage Park in Kapolei, O'ahu.

In their post-internship evaluation, the students were also asked to reflect on their pre-internship responses and to indicate whether or not the Wahi Kupuna Internship Program provided them with the opportunity to gain the skills that they wanted to learn during the program (Table 2).

In summary, *the interns indicated that they were able to learn most of the skills that they hoped to learn by the end of the internship and much more* (Figure 37). A few stated that they appreciated the lessons in archival research as well as the hands-on lessons in the field (i.e. creating maps and filling out site feature forms). One of the interns also noted how the internship prepared them to give better presentations. During the final week of the internship, the interns practiced their community hō'ike presentation three times. This was done to ensure that each student was given ample feedback on how to better improve the visual component as well as the oral delivery of their presentations. As one intern explained in their evaluation:

> ***"I've not experience feedback in this way as I rarely do my presentations more than once, but it was extremely valuable finding out how I could tighten up and focus my presentation."***

Elsewhere in their evaluations, other interns further explained how they found the practice presentations useful in preparing them for the community hō'ike. When asked "do you think your program kumu adequately assisted you in preparing for and presenting at the community hō'ike?", one of the interns responded:

"Yes, they gave us multiple times to have our powerpoints edited. They provided us with time to have practice presentations and provided constructive criticism for all of us to improve our presentations in order to show the people of the community our best presentation that we could give."

Clearly, the interns found the practice presentation runs to be useful and critical to the success of the community hōʻike (Figure 38). Even though the interns had three opportunitites to practice their presentations, some of the interns indicated that it would have been useful to have one or two more practice runs before the presentation to ensure perfection.

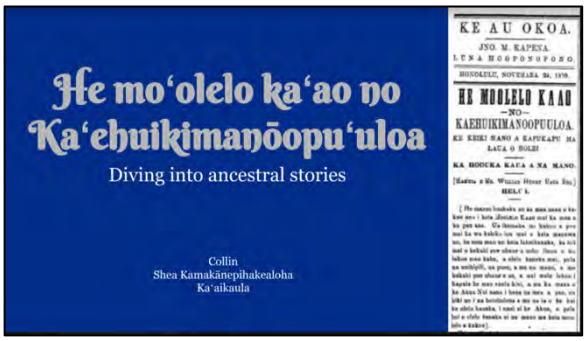


Figure 38. Examples of introductory slide to students' presentations. After receiving a lesson on creating compelling visual powerpoints, each of the students utilized their varying aesthetics to develop effective powerpoints using vivid images and large text.

Another learned skill that some of the interns described was the lessons on cultural protocol that they received during the internship. As a program rooted within a Hawaiian worldview, students were constantly informed of the reasons why the collective group performed certain chants and interacted with community members in culturally grounded ways. One of the interns noted that they appreciated these lessons, as well as the guidance they received from their instructors on cultural protocols:

"...the leaders of our cohort always made sure to have us know what is culturally appropriate for where we were visiting. Then when we met with some of the community members; how they greeted us and how we asked for permission to enter…teaches us the importance of protocol and culture in visiting sacred sites and places."

Table 1. Responses from the pre-internship evaluation and the post-internship evaluation regarding the skills that interns wanted to/did learn.

Intern	**Pre-internship evaluation question:** What kind of skills or topics do you hope to learn in the next five weeks?	**Post-internship evaluation question:** How did the Wahi Kupuna Internship Program help you to gain the skills that you wanted to learn?
1	I hope to better my research skills, learn more about what goes into field work, and hopefully uncover cool unknown things about waiawa that could potentially help the community.	This program introduced me to many different types of research options and taught me how to navigate them, including online sources, library sources, and archival sources. I also learned basic mapping skills and was briefly familiarized with field work studies and what it entails.
2	Field work, history about the area, presentation skills	I initially wrote, "field work, history about the area, and presentation skills", and I truly learned all three of those things. Field work through our third and fourth weeks of mapping, history about the area through fascinating archival research and countless talk story sessions with community members, and presentation skills through presentation practices with valuable critical feedback, I‘ve not experience feedback in this way as I rarely do my presentations more than once, but it was extremely valuable finding out how I could tighten up and focus my presentation.
3	As far as skills goes, I believe that research is an important one to have for any college student. Through the various resources and databases we will be exposed to during these five weeks, I believe that it will greatly benefit me and all of the other participants in their future research endeavors. Again it will be great to learn more about the protocols involved when visiting and working on various sites as well.	We were able to take a field trip to different archives and be introduced to different avenues for research. As well as meeting with various librarians to learn about all of the resources that are readily available online. As far as the protocols involved with visiting and working in different sites, the leaders of our cohort always made sure to have us know what is culturally appropriate for where we were visiting. Then when we met with some of the community members, how they greeted us and how we asked for permission to enter that in itself teaches us the importance of protocol and culture in visiting sacred sites and places.
4	I want to better my mapping and research skills and learn about interviewing kupuna and community members. I would also like to hear more on the topic of the Hale Pe'a and Hale o Papa.	During the course of the internship we went over both Mapping and Research skills, I now feel I have enough confidence to go out and do both of those things on my own for my own personal research. We did not touch on interviewing kupuna or community members unfortunately but in lieu of that we did meet many members within the Ewa district that are doing amazing things.
5	Mapping/surveying, GIS, the methodologies of archaeology, other types of data collection, Hawaiian protocols and approaches to resource management and preservation, more about archaeology in general, research skills, polishing our writing skills, professional presentations, how to articulate our findings in a professional context, and mo`olelo.	Yes it did, but I wish we were able to do more archival research practice.
6	I hope to learn the fundamental skills of an archaeologist and the skills that are needed to apply them in appropriate wahi pana. Also I hope to learn to appropriate the correct protocols with the correct situations. My number one priority is to learn the balance between doing archaeological work and cultural preservation.	The Wahi Kupuna internship program helped me gain the skills that i wanted to learn by giving me hands on experience as well as individually tailored guidance along with the right amount of patience and discipline which allowed me to develop the skills that i wanted to learn.

Another intern, in their response to the question "what else did you learn as an intern of the Wahi Kūpuna Internship Program?", summarized one of the overall goals of the program. That goal was to be able to allow students to come to the realization that the skills that they gain through their participation in the internship are life skills that will aid them wherever their career takes them.

> ***"As an intern of WKIP I learned not only field techniques...[I also learned] other valuable skills that can be used in the real world...[, such as] networking with...alumni of this program as well as other experts who are supporters of the program. Besides networking, I was afforded the opportunity to hone my skills as a researcher and [a] academic in the form of the different workshops that we had throughout the program. The GIS workshops as well as the writing workshops I found very useful as I had no formal training in either. Lastly this internship taught me discipline and patience as we were tasked with different situations everyday."***

As instructors for the internship, it is always rewarding to read that the interns learned a plethora of new skills that they will continue to use throughout their academic/professional careers. Rather than provide them with skills that they will only utilize within a cultural resource management context, the Wahi Kupuna Internship Program aims to use the lens of cultural resource management in order to give students vital life skills that they will be able to draw from in whatever pathway they choose.

Students' perspectives on fieldwork

Figure 39. WKIP intern Kuʻulei Freed works diligently at completing a map of Hanakēhau.

Figure 40. WKIP interns and instructors work in teams to develop sections of a larger map of Kuhiawaho.

In the post-internship evaluation, students were asked to reflect on their experiences in conducting fieldwork during the internship (Figure 39 and 40). Over the years, the students' responses have varied from those who thoroughly enjoyed the experience and those who realized that they are not inclined to doing fieldwork in the future. *Similarly, the interns expressed mixed reactions*

regarding their fieldwork experiences. All of the students, for example, indicated that they either enjoyed the fieldwork or found the "knowledge gained [to be] valuable." One of the students noted that the fieldwork experience provided them with skills that "I can directly apply to my studies and future career." The student elaborated on this by stating the following:

> ***"I think that these skills are important for anyone who is going into a field similar to Hawaiian Studies or Anthropology because it will help you to grasp a deeper understanding of these fields as well as help in the protection of these valuable sites."***

Another intern also expressed their positive experience in conducting fieldwork. Specifically, they noted how they enjoyed creating maps and clearing thick vegetation from sites (Figure 38):

> ***"I really liked the mapping portion. I like to draw so being able to draw to scale what a landscape looks like from a bird's eye view was pretty awesome. Another thing I enjoyed was clearing. When I helped to clear the mauka portion of Hanakēhau, it was exciting to go in and to rediscover these water ponds and search for the edges and how to get around them. It was a very fun experience overall."***

Although all of the students appreciated the experience, the long hours working directly in the sun was something that one of the interns realized was not something that they wanted to do as a career choice:

> ***"The knowledge gained was valuable, but what's even more valuable is knowing that fieldwork isn't for me, I was pretty burnt out after the first day, and we had 7 days of field work after that."***

As an internship geared towards *introducing* students to the field of cultural resource management, we expect some students to enjoy fieldwork and others to find it less enjoyable than other aspects of the internship. *By providing students with a variety of experiences both in the field, in the archives, and in the classroom, we hope to encourage students to critically reflect on where they would like to work in the future.*

Students' perspectives on the research process

Students were also asked in the post-internship evaluation to reflect on their experience in conducting research for and working on their research papers during the internship. *Although the concensus among the interns was that doing research on their internship papers/presentations during the internship was valuable, a few of them expressed how stressful it was for them to have to do a substantial amount of work in a relatively short amount of time* (Figures 41 and 42). The feeling of "being rushed" was something that a few of the interns noted, not to mention their responses throughout the post-internship evaluation regarding their desire to spend more time in the archives that we visited. In light of this, the interns pulled through and acknowledged the

importance of working closely with their instructors to stay on task and to craft compelling presentations and papers. As expressed by one of the interns:

> ***"There were some feelings of being rushed and having to cram research time in and being stressed because I might not be able to pull this off, though I also understand we had limited time and I was able to pull it off. At this point, I would have to say that having a Kumu who would continuously pull us back on track when we wondered off subject was highly valuable and more likely a necessity to have."***

Another intern described how the internship catered to his interests and provided him with the resources that he needed to be successful. He also noted the value of being able to work with people other than the primary instructors of the internship in order to improve his research project:

> ***"I love to do research, and in this program I happened to be looking into things that I really love, Mo'olelo Hawai'i. We were all accurately prepared and greatly supported in our research efforts not only by the program leaders but various other program alumni and helpers. On top of that we had the assistance of both the leeward community college librarians and UH Mānoa librarians."***

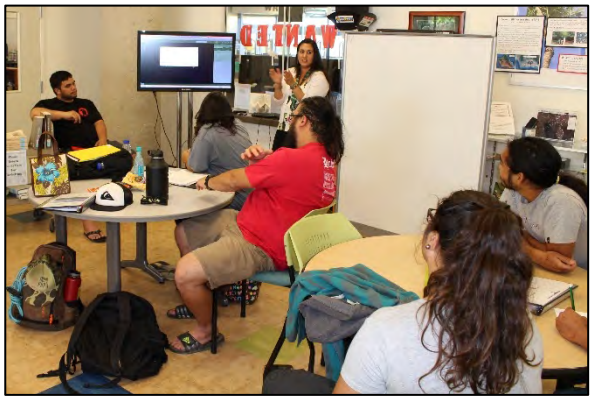


Figure 41. Students meet with Annemarie Paikai, Hawaiian Pacific Resource Librarian at Leeward Community College to talk about secondary and primary sources related to Waiawa and the broader 'Ewa region.

Figure 42. WKIP interns browsing through grantor indexes at the Bureau of Conveyances, Department of Land and Natural Resources.

Although the interns expressed some consternation in having to do a great deal of research in a short amount of time, we find this tension to be productive to their overall growth as students and professionals. Having to work against pressing deadlines is a fundamental skill for any researcher. Thus, challenging them to do the bulk of their research and writing during the internship was a way for us to provide them with real-world research experience, not to mention that it forced them to work on their papers in the summer rather than later in the fall academic semester. However, it

must be said that in light of the opportunity to finish their internship papers before the start of the fall semester or towards the beginning of the semester, the majority of the interns waited until the last two weeks to write the majority of their papers. This is a challenge that the internship program must address.

Students' perspectives on the Friday writing workshops

When asked to elaborate on whether or not they found the Friday writing workshops to be useful, *all of the interns indicated that the workshops indeed were essential to their overall success in the program.* Some of the interns described the writing workshops as "refreshers" from earlier coursework. However, these refreshers were needed because it outlined concepts and practices that are taken for granted when one engages in the research/writing process. ***"I looked forward to our Friday Writing Workshops,"*** stated one of the interns. ***"It was important to have that quiet time to write and research with our kumu [who were] available for questions and additional help."*** Another intern provided a more detailed response that outlined exactly what made the workshops effective:

> ***"…the workshops helped to clarify what exactly the paper should look like and what kinds of things to look for and look out for when you are trying to write, as well as providing different tips and techniques in both the writing and presentation aspects of this program. I will be utilizing these skills in the future years of my education."***

In the future, we plan to continue reserving our Fridays for writing and research days for our interns. The challenge will be to ensure that the interns are turning in sections of their internship papers in a timely manner to the internship instructors. During the 2016 Wahi Kupuna Internship Program, which took place in Piʻopiʻo, Hilo, Hawaiʻi, the interns also expressed how important these writing days were for allowing them to do research and to write out their internship papers. The 2017 interns shared the same sentiments. Clearly, these days are needed so that the students can complete their commitments to the program.

Preparing for the Community Hōʻike

The final week of the internship focused on preparing the students for the presentations that they gave at the community hōʻike. However, when asked to describe their experience in preparing for the community hōʻike, many of the students described it as one of the most stressful times during the internship. One student wrote, ***"it was hectic, but that is only because I chose a topic that I guess I didn't really know how to research."*** Another student expressed similar sentiments: ***"I personally stress myself out before doing big presentations, so it was a very stressful time for me."***

Despite the challenges and time constraints that the interns faced at the end of the program, they all, to varying degrees, noted the importance of working closely with the program instructors in order to strengthen the delivery of their presentations.

> ***"[T]he practice runs through our presentation were absolutely needed. I do not think I could have pulled off what I did without those practice runs."***

As their instructors, it was our responsibility to ensure that each of the students was able to present their best work to the community. This means that each of the students received individualized comments and assistance that catered to their learning needs. For instance, one of the interns was not proficient in utilizing Microsoft Powerpoint or Google Slides. This became apparent during our practice presentation runs when the student's presentation slides were not up to the quality of other interns' work. As the student worked on the oral portion of their presentation, one of the program instructors assisted him in creating a more compelling and visually-appealing presentation. The result of their collaboration was a presentation that was effective and well put together. By building on each intern's strengths and by helping them to improve on their weaknesses, the internship program empowers students to find their voice and aesthetic as presenters. As one intern commented, having to present in from of the community was invaluable experience:

> ***"...overall the hō'ike itself and the presentations w[ere] an awesome experience. Just being apart of it and presenting to the leaders of the community was a very eye opening and exciting experience. I also liked the practice runs that we had before hand to give us an idea of what we had to work on."***

Changing perspectives on the field of cultural resource management

Through the post-internship evaluation, the students noted how the internship broadened their perspective about the field of cultural resource management (Figure 43 and 44). Rather than have a vague idea of what CRM entails, the interns now have a greater appreciation of the variety of skills that are needed to be an effective cultural resource manager.

> ***"It was really cool seeing all the different avenues for CRM, it's far from just archaeology. Through all of our experiences, I've seen that all of the organizations [that we collaborated with] are practicing CRM through their work."***

Three of the interns noted in their responses that they realized the important work that Kanaka Maoli (Native Hawaiians) working in the field of CRM are doing to create a new paradigm. One student said that they ***"now know that there are people out there who are doing CRM with a cultural mindset and that is to me very important."*** Another student further explained that seeing Kanaka Maoli within this profession was encouraging:

> ***"This internship helped me change my perspective on Cultural resource management. It showed me that there are Kanaka Maoli out***

there that are in these fields fighting to protect our Wahi Kupuna. Before this internship I thought that this was a completely Haole field. However it is good to see this sort of change in this field."

Clearly through their responses, the Wahi Kupuna Internship Program has fulfilled its goal of exposing students to doing cultural resource managment from a Hawaiian perspective. Furthermore, by meeting other Native Hawaiians whose careers are dedicated to the care of wahi kupuna, the interns were able to put Hawaiian faces to a field that historically was dominated by White males.

Figure 43. WKIP interns meet Muffet Jourdane and Toni Han, two Hawaiian women who have worked in Hawaiian archaeology for decades.

Figure 44. WKIP interns listen to Shad Kane, kahu (caretaker) of Ka Lae Loa Heritage Park, describing their work in preserving the cultural landscape there.

Preparing students for graduate school

Throughout the internship, one of our goals was to demystify graduate school for the interns so that they left the program encouraged to continue their graduation after receiving their undergraduate degree. When asked "do you feel that the Wahi Kupuna Internship Program better equipped you to pursue a future graduate degree?", *all of the students indicated that the program did prepare them for future graduate studies.* In their responses, the interns described how the internship demonstrated the level of commitment that is needed to obtain a graduate degree; allowed them to network with academics and professionals; and provided them with research and writing skills that will be useful in their later studies.

"If not the skills and workshops...it would be the vast network of support that I have gained through this experience. If I need assistance or if I have questions, I now have a small army of people that would be more than willing to hear me out and if possible lend me some assistance."

Another intern had this to say about how the internship prepared him to pursue a graduate degree:

"I think that the Wahi Kupuna Internship Program has given me a glimpse of what pursuing a graduate degree is like. And I can honestly say that I feel that I am a little more confident and prepared to pursue a graduate degree. It has inspired me and excited me to pursue my graduate degree even as far as a Phd."

By encouraging students to obtain their masters and/or to work towards a PhD, the Wahi Kupuna Internship Program works towards developing a pool of highly qualified CRM professionals that can fill leadership roles across the field. Having more Native Hawaiians within these higher-positions are crucial for creating and sustaining long-term change in the profession.

Feedback from the Community – Community Responses

The graphs and responses provided here represent 32 feedback forms that were filled out by audience members of the Wahi Kupuna Internship Program Community Hō'ike this year. The Hō'ike took place at Leeward Community College in Education Building 201 between 10:00am and 12:30pm. Over 65 people were in attendance both in-person and online via GoToMeeting software. *Generally speaking, the hō'ike was well received by the community. Many of the individuals who filled out the community feedback forms noted how impressed they were with each of the student's presentation and knowledge about their research topics.* The graphs and table below aim to show some of the results that were collected from the audience at the hō'ike.

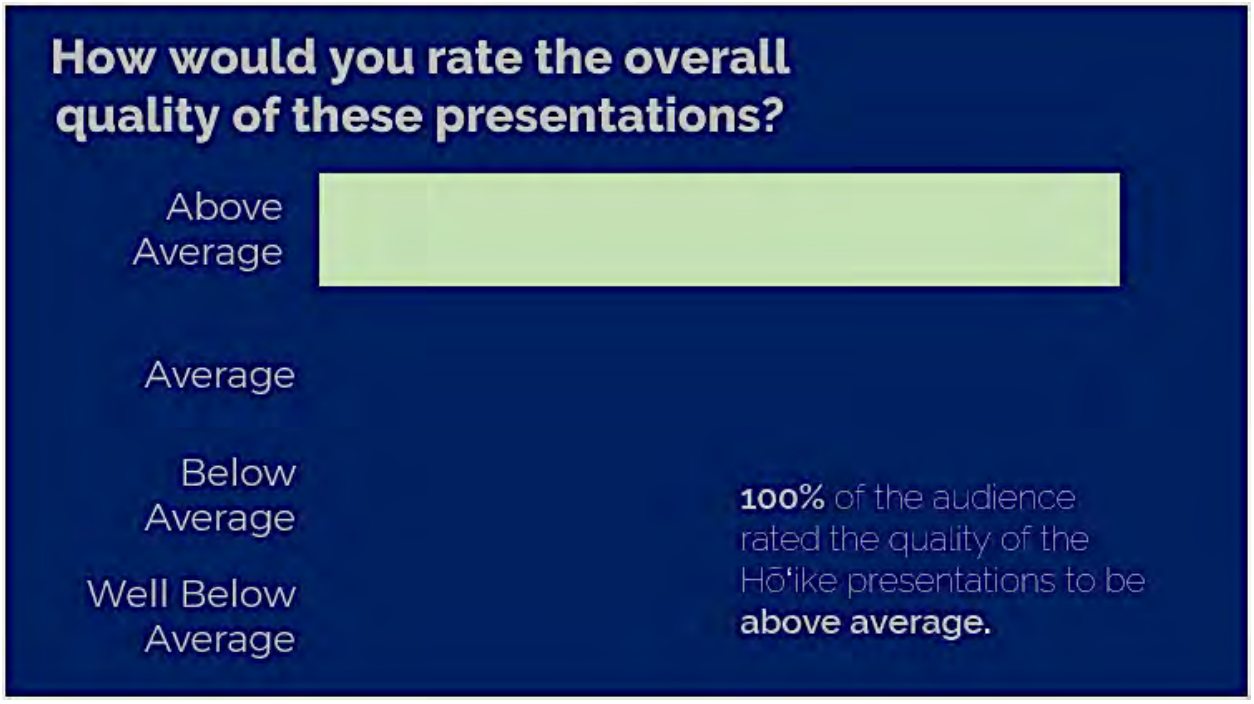


Figure 45. Audience feedback regarding the overall quality of the WKIP presentations during the community hō'ike.

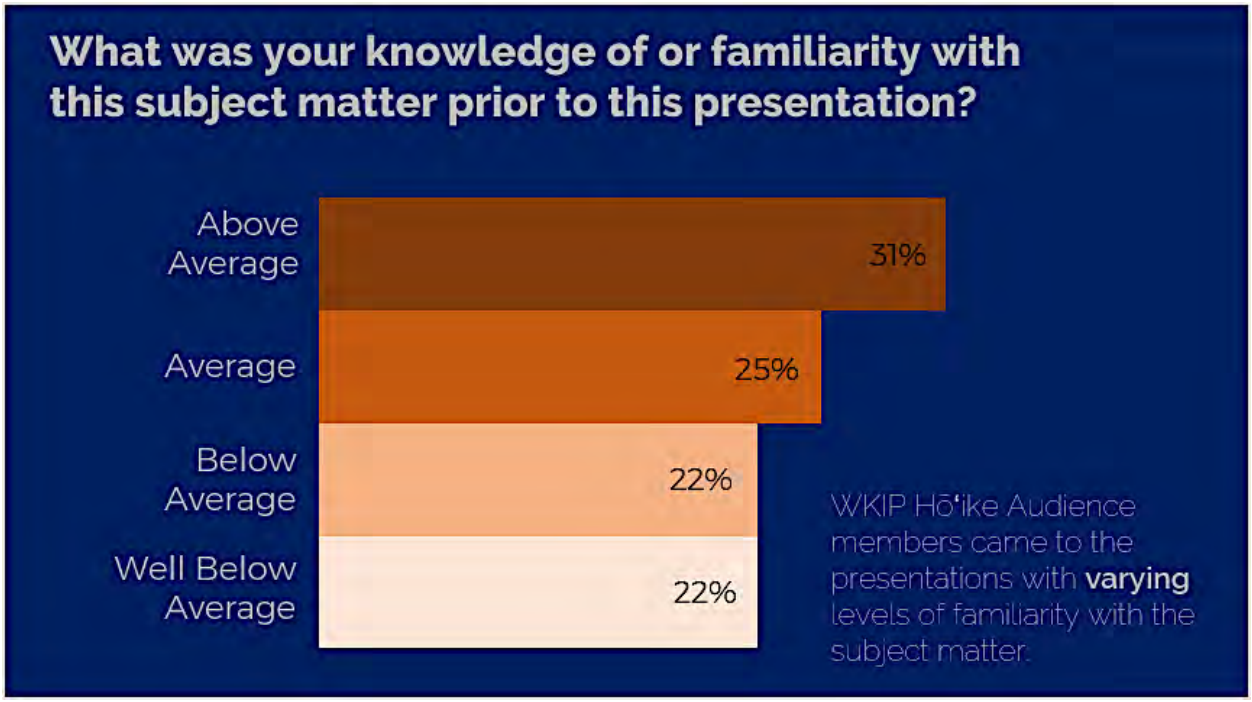


Figure 46. Audience feedback regarding their knowledge of or familiarity with the subject of the WKIP presentations *prior* to the community hō‘ike.

Figure 47. Audience feedback regarding their knowledge of or familiarity with the subject of the WKIP presentations at the conclusion of the community hō‘ike.

Community Feedback Form Responses from WKIP Hō‘ike, 7/13/17

I want to say thank you for this presentation being a “rising” senior at Kamehameha Schools I don’t see such dedication to teaching students the mo‘olelo or the simply history behind our

home land. I've actually worked at La'akea's family kalo patch for Hawaiian language class, & I'm really proud to know that I worked with her family. Thank you all for paving the pathway back to our kūpuna & for showing the importance of our home. God Bless, Isabella

Really great quality presentations in terms of knowledge, research questions, & delivery. Great group of presenters who noticeably cared about research topics & had a great way of presenting it to the community. Seems like their work & research could really benefit the community.

So amazing! This template of learning is wholesome & grows/supports future leaders of Hawai'i's communities.

You did well, keep up the good work. I want to learn more. Mahalo for your presentation, La'akea 'Ohana.

Excellent presentations. Was a learning experience too. Will do research on Waiawa too—the years before my time.

Maika'i. Very Informative!

Inspiring, enlightening, so sincere motive for studying, learning, and teaching. Mahalo for your mana'o + aloha.

The haumana were very thoughtful in their presentations. Topics that they made me ponder because of it were: community passion, ideas of land knowledge, creating branding, showing value in aina restoration for all in a community + a special enjoyment for Daven Chang. His presentation was well structured and had many elements interwoven through mele + comic.

Amazing to learn so much about Waiawa + Pu'uloa!

So proud of the work of both the haumāna as well as the alaka'i to revive these mo'olelo and contribute to the overall revitalization of our resources + stories.

The students personal/academic connection to their topics was obvious and wonderful!

I believe every student under Hawai'inuiākea should go through this program. It was informative and inspiring!

Students did a great job. Integrated past with present. The presentations were varied and interesting.

1. Holistic—Practice/academia integrated in a manner that is practical with the landowner, the research + the practitioner, aligned.
2. Urban Ahupua'a: Critical to restore the life to urban landscapes.

So important and awesome to witness this! We need to see this in every ahupua'a. Please share template/format w/Hawaiian places of knowledge .

Not enough praise can be given. Mahalo to all for taking on the challenge and for your carrying on the responsibility of sharing the knowledge.

What a wonderful program and thank you for sharing on O'ahu this year. Kama is one of our students here at Leeward and would love to learn more about possibility of other students applying in the future. Ho'oulu project.

Mahalo for sharing the mo'olelo of Waiawa. I learned something new today that I can now appreciate and share with my 'ohana.

The wonderful presentations, show how much chare and thought had been given to this important program.

Impressed with each interns passion. Especially appreciated how each presentation transitioned into the next presentation. Completetly "wowed" by Daven's mele opening his presentation which elaborated on his mele!

The mo'olelo shared was amazing! Would love to see more of this! Uplifting to hear such promise!

- How will info be shared with community after presentation
- Does internship ID community needs prior to research?
- Beautiful presentations! Thank you!
- Wonderful example of how hungry our people are of learning about "who" they are. Mahalo for all that you do!!
- I appreciate the depth of the content presented & the confidence in their presentation. The presentation is very valuable as info to be used in the future plans to this area. Mahalo, mahalo, mahalo.
- Excellent presentations and discussion. Students passion + interest evident in their work—Great program!! Mahalo for all
- Mahalo nui for giving life & mana to Waiawa
- Kupaianaha i nā hōʻike ma kēia ʻaha o ka wahi kūpuna! Mahalo nui.

Discussion

Through these three forms of evaluation, we have been able to capture some of the intern's thoughts and sentiments regarding their participation in the Wahi Kupuna Internship Program. We also have had the opportunity to learn from our community hōʻike attendees, who clearly left the presentations with a good impression of the type of students that we produce through our internship. In the future, we plan to continue utilizing these evaluation tools and improving them along the way. We value the insights that are provided by our students and the broader community on how we can continually strengthen the internship program.

O Wai ‘o Waiawa? - Ethnohistorical Background

This section briefly describes the Waiawa area within the context of the 2017 Wahi Kupuna Internship Program. This concise description will include a general overview of Waiawa’s geographical location, akua and mo‘olelo pertaining to Waiawa and the Pu‘uloa area, place names, and information gathered from the Māhele period.

Project Location

Waiawa is located in the moku of ‘Ewa, on the island of O‘ahu. To the South it adjoins the middle loch of Ke Awalau o Pu‘uloa, with the ahupua‘a of Waipi‘o along its Western and Northern sides, Mānana to the East, and the Ko‘olau mountain range to the Northeast. The Waiawa Stream separates Waiawa from Mānana, dividing the two ahupua‘a along the North-South length of the Mānana Peninsula. Waiawa’s lower elevations along the shoreline are approximately 3 meters Above Mean Sea Level (AMSL) and its higher elevations along the Ko‘olau mountain range are approximately 5.6 kilometers AMSL (Genz, et al 2010:7).

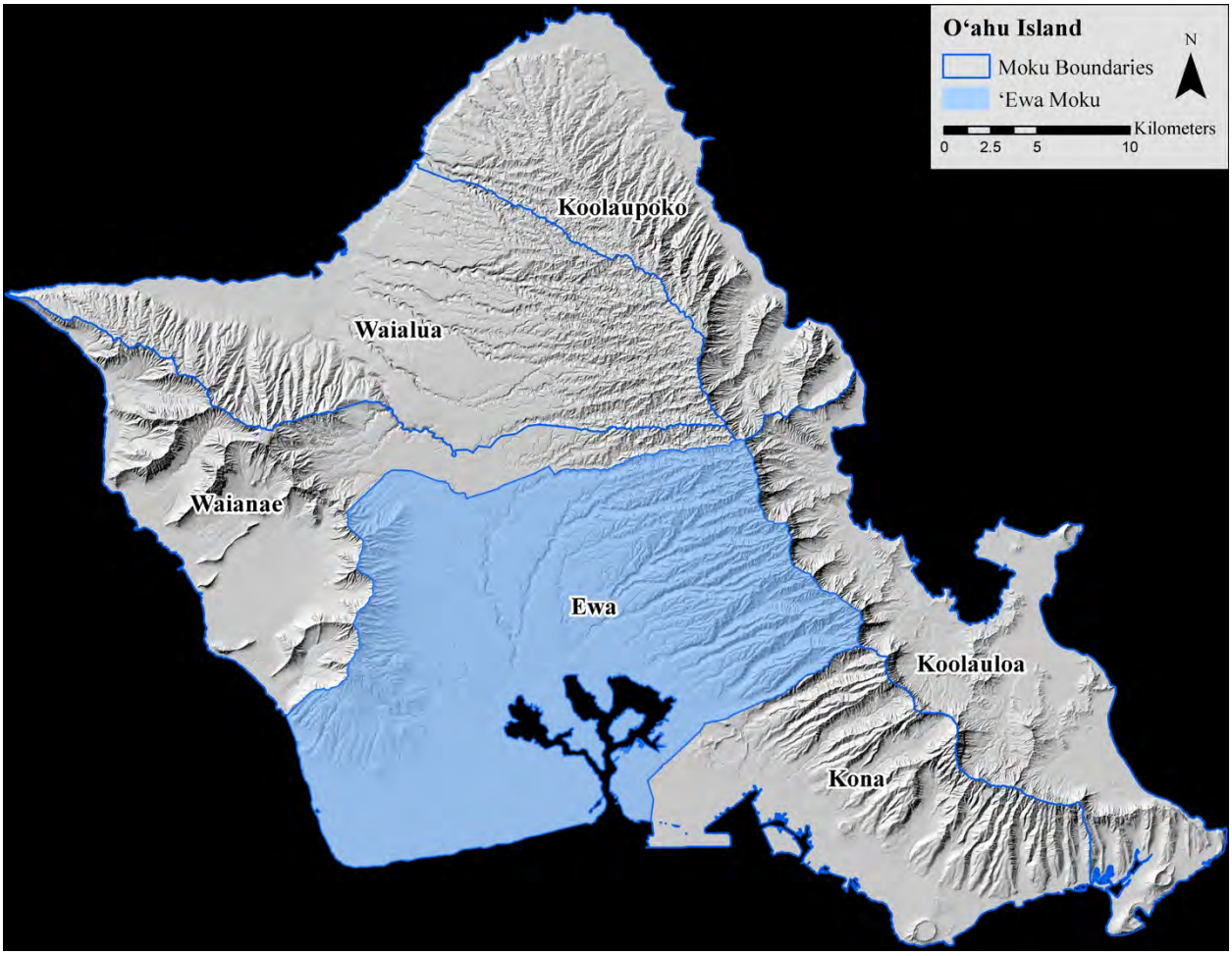


Figure 48. ‘Ewa moku shaded in blue.

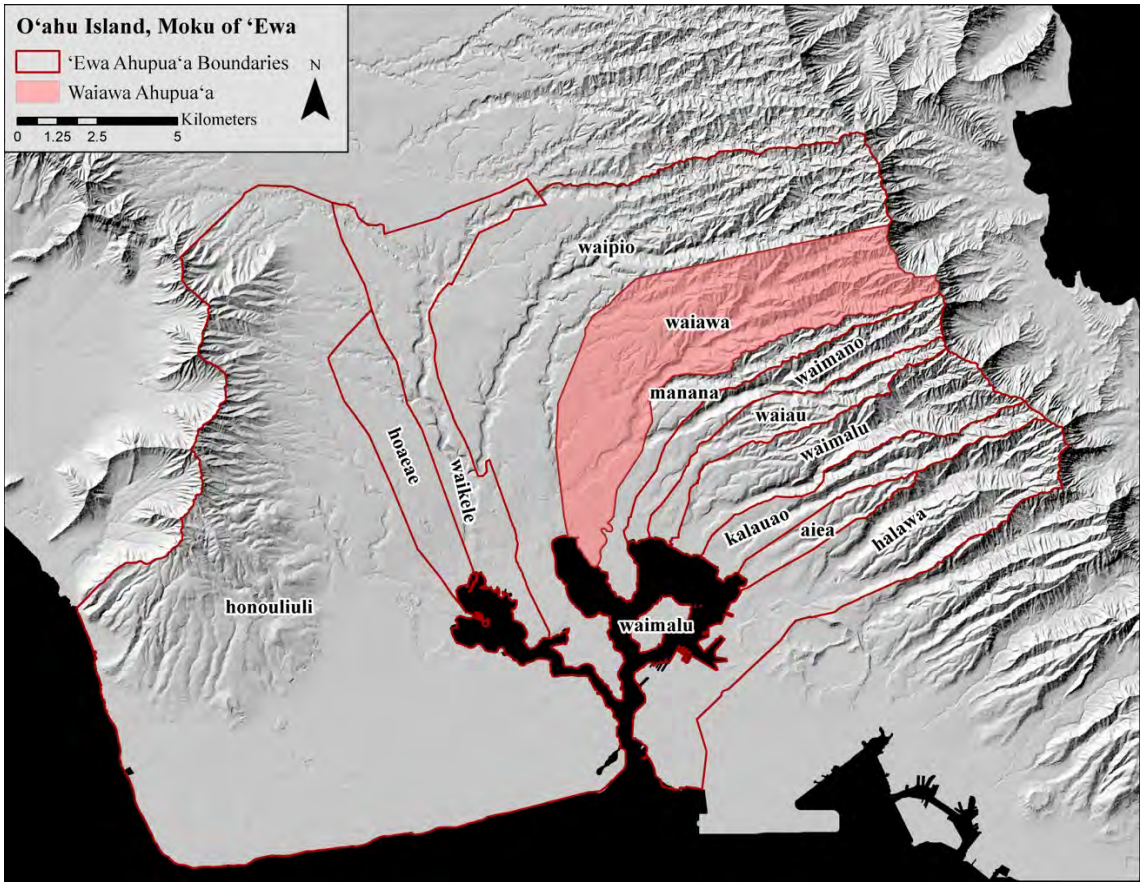


Figure 49. Waiawa Ahupua‘a within the moku of ‘Ewa.

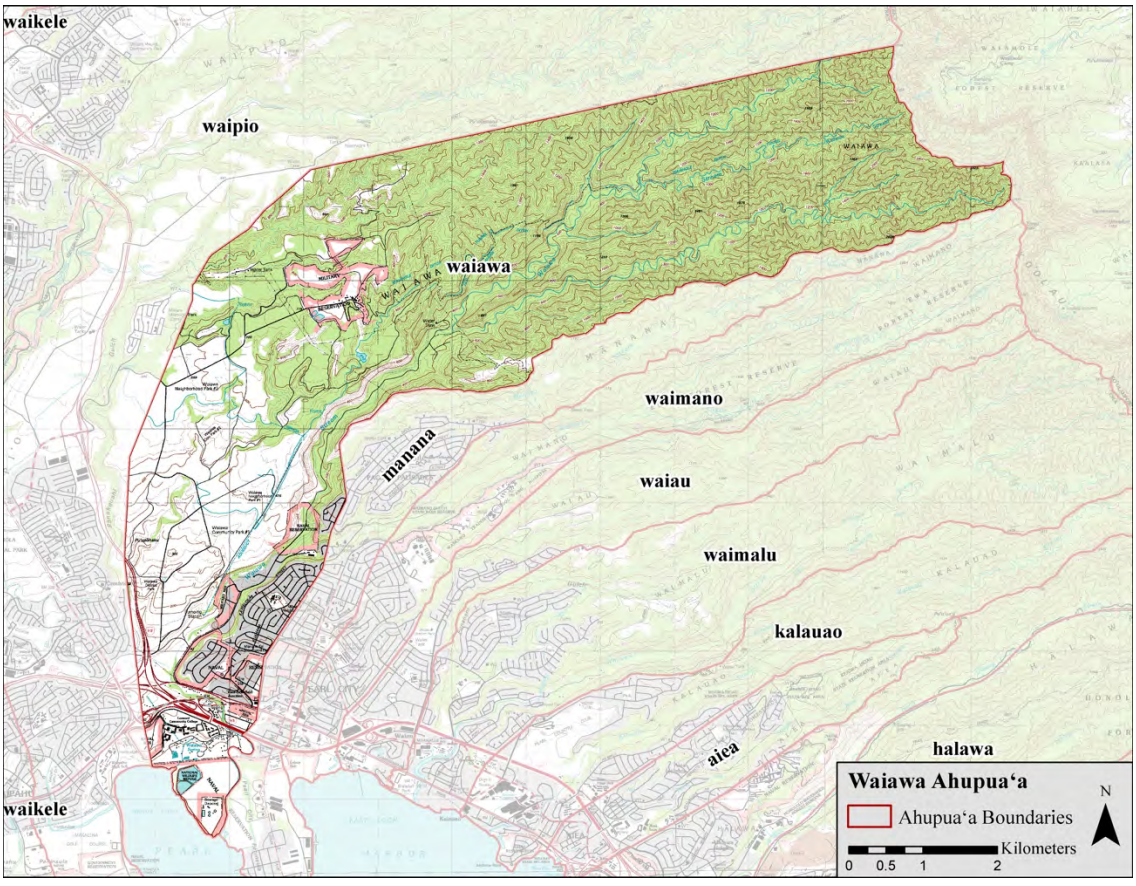


Figure 50. USGS topographic map of Waiawa Ahupua‘a.

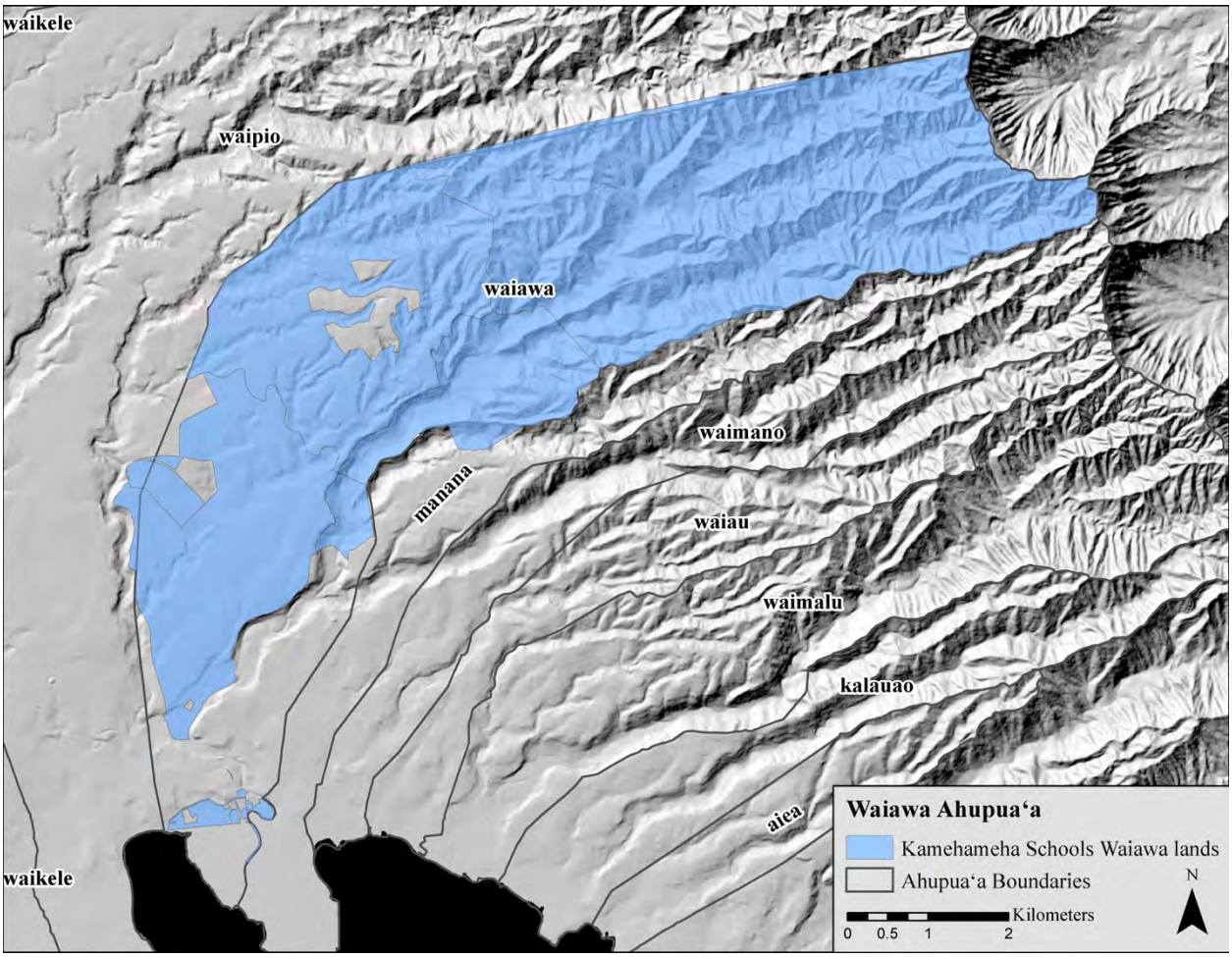


Figure 51. DEM map of Waiawa Ahupua‘a with KS lands shaded in blue.

The 2017 WKIP focused primarily on the seaward portion of Waiawa, hereafter referred to as Waiawa Kai, which includes the area where Leeward Community College is situated and extends to the southern point of the Mānana Peninsula.

Figure 52. Aerial image of KS lands in Waiawa Kai.

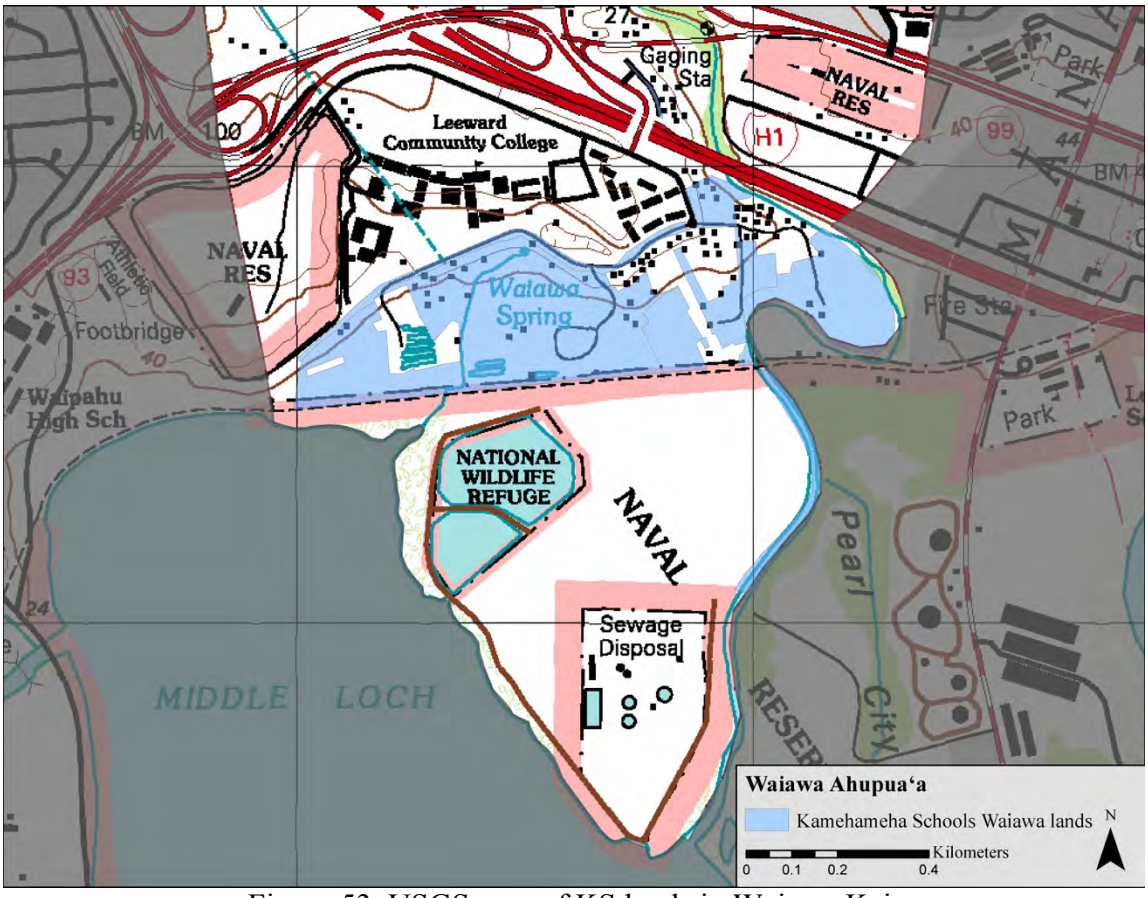


Figure 53. USGS map of KS lands in Waiawa Kai.

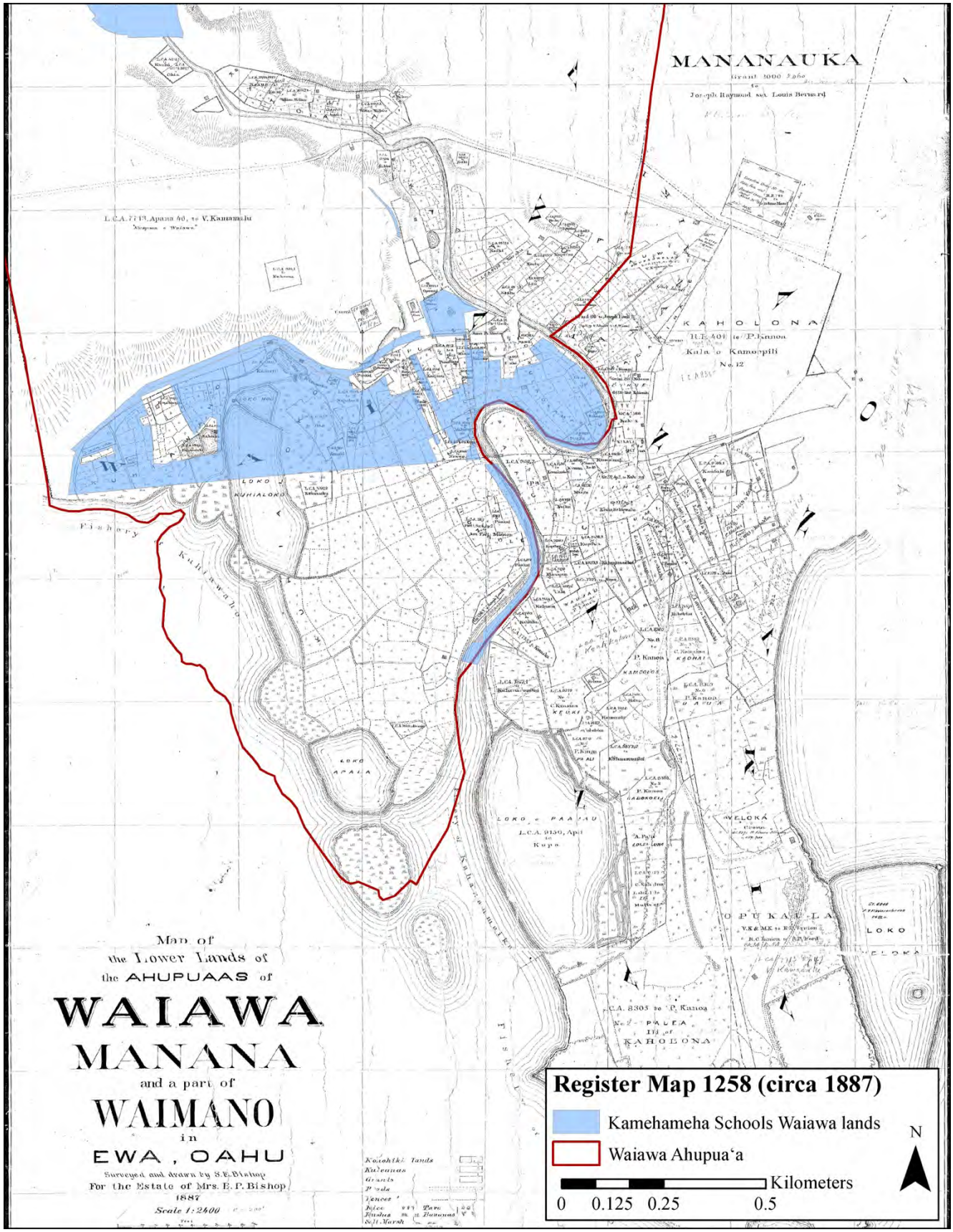


Figure 54. Circa 1887 map of KS lands in Waiawa Kai.

Nā Akua o Waiawa

Waiawa is abundant with water, ranging from fresh water streams and springs to brackish and salt water fishponds. Given these abundant water resources, it is no wonder that a majority of the akua associated with the area are closely affiliated with the aquatic realm. The akua manō are perhaps the gods who are tied to Waiawa most conspicuously with akua moʻo having direct associations to the area as well. The brothers Kāne and Kanaloa were also attracted to the area due to a unique variety of ʻawa planted by the Kahuna Maihea.

Kaʻahupāhau mā

Kaʻahupāhau is the famous akua manō of Oʻahu who lives in Puʻuloa. She is the wife of Kuhaimoana, the largest in size of all akua manō whose home is a large cave on the island of Kaʻula. Her brothers are Kānehunamoku and Kamohoaliʻi. One of her retainers was Kuhia – two ʻili in Waiawa share this name – Kuhiawaho and Kuhialoko. Both ʻili are located on the western portion of the ahupuaʻa. Kaʻahupāhau's brother, Kahiʻukā has a home in Waiawa, a cave near the old ʻEwa church. Other sources place the home of Kahiʻukā at the old dry dock in Ke Awa Lau o Puʻuloa (known commonly as "Pearl Harbor"), though others (including Pukui) disagree with this, and have stated that the old dry dock area was the home of Kaʻahupāhau's son, Kūpipi. Yet another location possible location of the home of Kahiʻukā is an underwater cavern near Moku ʻUmeʻume (commonly known as "Ford Island").

Kānekuaʻana

Kānekuaʻana is a moʻo akua of ʻEwa and is attributed with bringing the famous pipi, or shell oysters to the area from Kahiki. Kānekuaʻana is said to have removed the oysters from the area in response to the greedy actions of a konohiki of the area.

Kawelo

Kawelo lived in Waiawa for a time with his fishing companion Makuakeke. The two found difficulty in catching fish in their net, and resolved to secure an uhu (parrot fish) to help them lure other fish into their nets.

Inoa ʻĀina

Place names, especially in Hawaiʻi, function as much more than mere names of places, they carry within them keys to understanding ʻāina and also serve to perpetuate the moʻolelo of events, people and gods that are significant to the area.

"Waiawa" or "Waiʻawa"?

Though it cannot be stated definitively whether the name Waiawa should be spelt without an ʻokina, or with an ʻokina (as "Waiʻawa"), there may be enough evidence to substantiate that both variations in spelling could be correct. When spelt without the ʻokina, Waiawa can be translated to mean "mullet (awa) water," a fitting name considering that the awa fish is known to be one of

the primary fish species cultivated in fish ponds of which Waiawa kai had at least seven. Kamakau also notes that the Oʻahu Mōʻī Kākuhihewa was fed on the "fat awa fish of Kuhia" in his youth (Kamakau 1991:68). Kuhia, as it will be seen here, is the name of two different ʻili in Waiawa Kai, Kuhialoko and Kuhiawaho with Kuhialoko also being the largest fishpond in the ahupuaʻa of Waiawa. When spelt with the ʻokina, Waiʻawa could be translated as "bitter water," or could refer to water as associated with the ʻawa plant (*Piper methysticum*). The wealth of fresh water found in the area along with its location near the shore allows for many areas for brackish water to be found which is often described as "bitter" in taste. This brackish water is also ideal for the fishponds referred to above. The moʻolelo of Keaomelemele and that of Maihea each refer to a specific variety of the ʻawa plant that could be found only in this ahupuaʻa (Handy and Handy 1972:472; Manu 2002:138). Therefore, it seems that perhaps neither spelling of the name of this ahupuaʻa is the only "correct" one, but rather both are valid variations of this place name.

ʻIli ʻĀina in Waiawa

Waiawa is not the only important place name within the project area. As with most ahupuaʻa, Waiawa is in part, further subdivided into ʻili ʻāina which are typically areas smaller than the ahupuaʻa within which they are found. These names are valuable tools in helping us to learn even more about the characteristics and moʻolelo of an ʻāina. The following table contains a list of 12 to 13 place names that have been identified for ʻili ʻāina within the ahupuaʻa of Waiawa thus far. Twelve names have been definitely identified as ʻili, the thirteenth name, Kionaole, is identified on maps and in LCA 387 awarded to the A.B.C.F.M., but so far, no documentation has been found that explicitly identifies Kionaole as an ʻili. Where possible, it is noted whether the ʻili is located within Waiawa Kai or Waiawa Uka, the more inland portion of the ahupuaʻa, though it is important to note that these designations are not definitive as there may be some instances of ʻili lele, whereby an ʻili may contain non-contiguous portions of land that may be found in both seaward and inland locations within the ahupuaʻa. So far, eight ʻili have been identified as being in Waiawa Kai and four have been identified as being in Waiawa Uka. The ʻili names are listed in alphabetical order.

Table 2. Names of ʻIli ʻĀina in Waiawa.

ʻIli Name	Waiawa Kai	Waiawa Uka
Hanakehau	**X**	
Holoipiapia		**X**
Kahoaiai		**X**
Kalona	**X**	
Kapaloa		**X**
Kapopou	**X**	
Kapuaihalulu	**X**	
Kionaole*		
Kuhialoko	**X**	
Kuhiawaho	**X**	
Kulaokamakau	**X**	
Panaio	**X**	
Piliaumoa		**X**

Moʻo ʻĀina and Other Inoa ʻĀina in Waiawa Kai

Many moʻo ʻāina, subdivisions of land that are typically smaller than an ʻili, exist within Waiawa. Other inoa ʻāina, such as the names of specific loʻi kalo or loko iʻa have also been identified. There is still a lot of work that needs to be done to document these names, but the table below contains some examples as found in the ʻili of Kuhiawaho.

Table 3. Moʻo ʻĀina and other place names within the ʻili of Kuhiawaho.

Inoa	Place Type	LCA #	ʻĀpana	Claimant	Position	Notes
Kopili	Moʻo ʻĀina	{1711 {9361	1	Hanamaulu		Contains a puʻuone
Kumuulu	Moʻo Kalo	{1711 {9361	2	Hanamaulu		
Kumuula		{1711 {9361		Hanamaulu		
Hoopili/Hopili/Hoapili	Moʻo ʻĀina	{1711 {9361		Hanamaulu	Adjacent to SW/ "H"	This is either an inoa ʻāina or name of a person
Kaaiohe		{1711 {9361	2	Hanamaulu	Adjacent to NE	
Kawaiolaloa		{1711 {9361		Hanamaulu		
Noa		{1711 {9361		Hanamaulu		
Kuaihoe	Moʻo ʻĀina	{1711 {9361		Hanamaulu	Adjacent to "M"	
Kahoowahikahuna		{1711 {9361		Hanamaulu		
Mooiki	Moʻo ʻĀina Moʻo Kalo	{1604 {9368		Kakoo	Parcel is Mooiki or is within Mooiki	Mentioned in Hanakēhau and Kapuaihalulu claims
Ulu	Moʻo ʻĀina	{1604 {9368	1	Kakoo	Adjacent to NW/ "M"	
Kalaeopua		{1604 {9368	1	Kakoo	Adjacent to SE	
Kanakai		{1604 {9368	2	Kakoo	Adjacent to SE	Possibly name of a claimant (there is a Kanakaokai in Mānana nui)
Kaakaukahewahewa	Moʻo ʻĀina	{1604 {9368		Kakoo	Adjacent to "M"	
Paamua		{1604 {9368		Kakoo		This is either an inoa ʻāina, or the name of a person

Inoa	Place Type	LCA #	ʻĀpana	Claimant	Position	Notes
Kahoowahakaluna	Moʻo ʻĀina?	{1604 {9368		Kakoo		This is either an inoa ʻāina, or the name of a person, possibly same as Kahoowahikahuna above

Māhele ʻĀina

Thirty-two Land Commission Awards (LCAs) were awarded within the ahupuaʻa of Waiawa at the time of the Māhele. One of these was to Victoria Kamāmalu for the entire ahupuaʻa. Of the 32 LCAs awarded to other individuals, 21 are situated within Waiawa Kai. Table 4 below depicts the number of LCAs awarded per ʻili. Note that the numbers on the table may appear to show more LCAs than the 21 mentioned here. This is because singular LCAs which included awards to multiple ʻili were not counted more than once toward the total number of awards in Waiawa Kai.

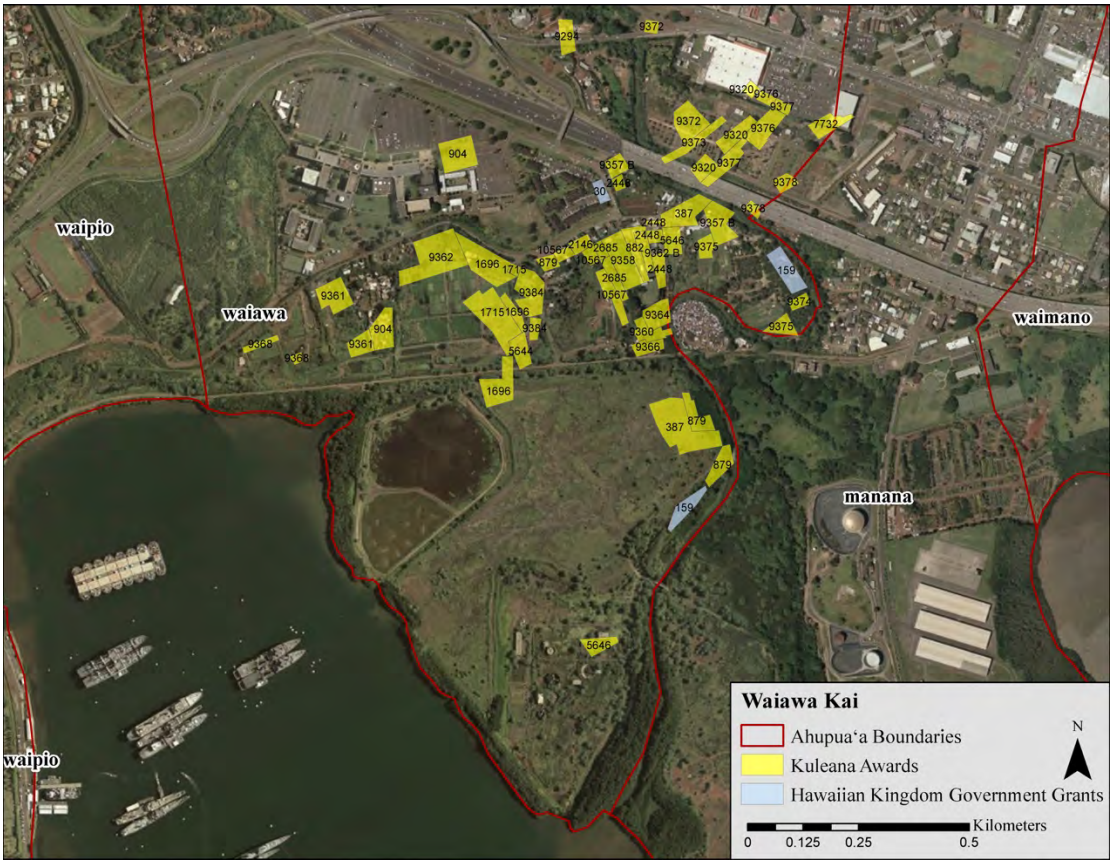


Figure 55. Waiawa Kai kuleana and government grant parcels.

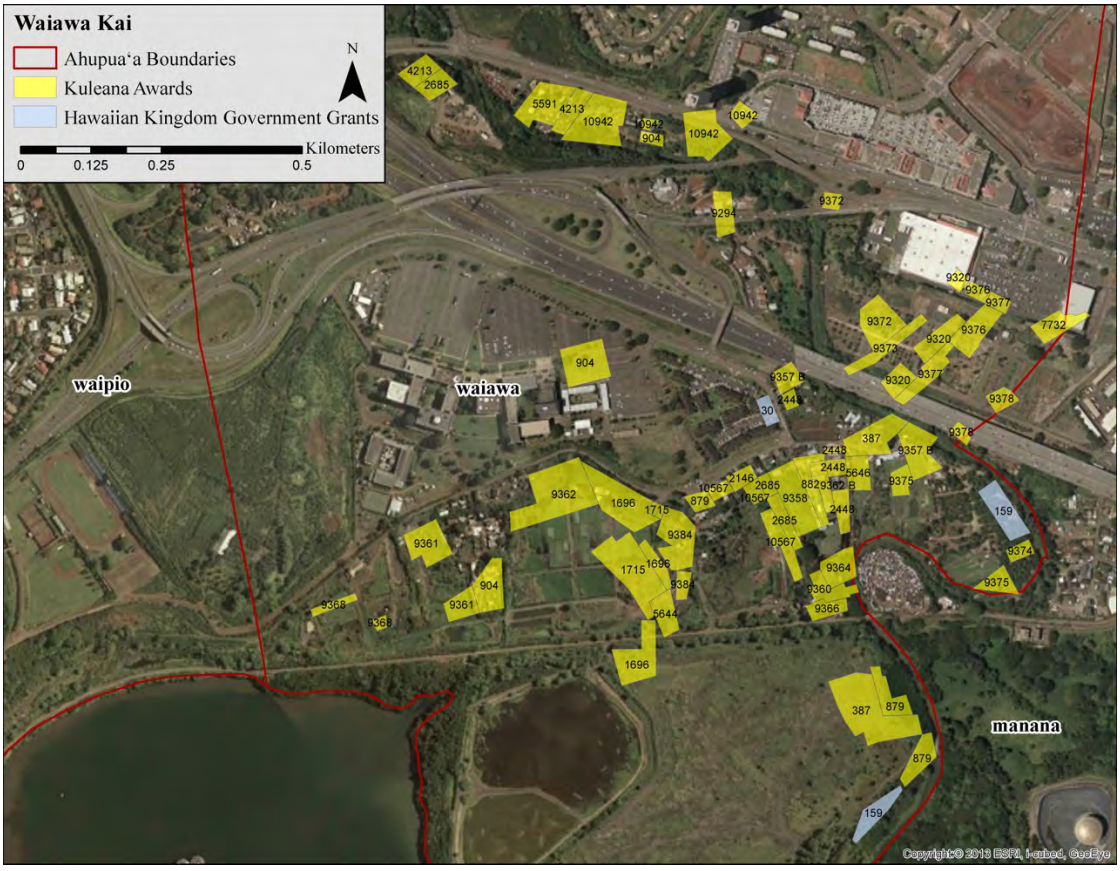


Figure 56. Close up of Waiwa Kai kuleana and government grant parcels.

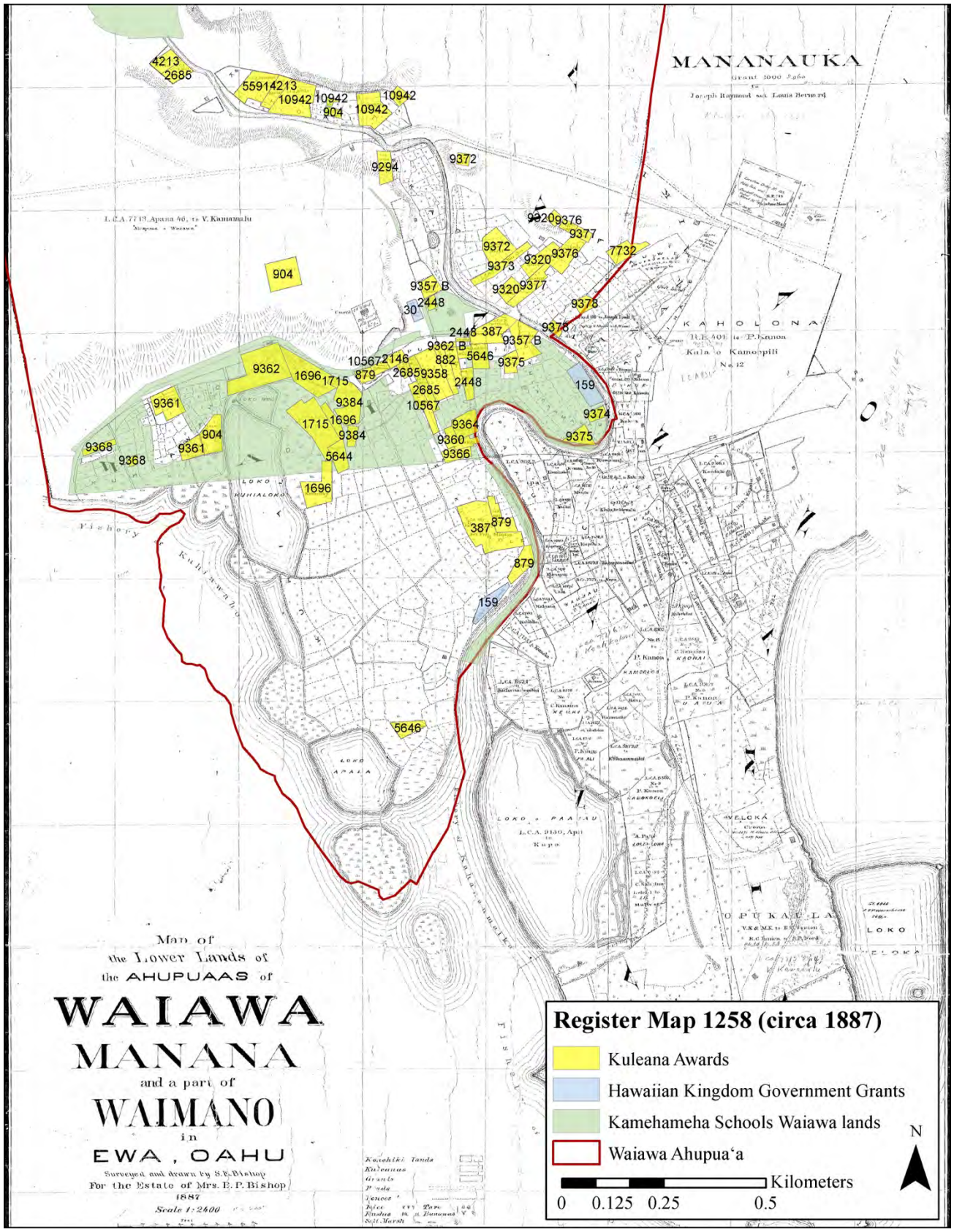


Figure 57. Circa 1887 map showing KS lands in relation to kuleana and government grant parcels in Waiawa Kai.

Table 4. Māhele claims within the ahupua‘a of Waiawa.

#	‘Ili Name	LCA #	RP #	Claimant Name	Awarded in other ‘ili?	Other ‘Ili	Waiawa Kai?	Total LCAs in ‘ili
1	Hanakēhau	{5847 {9360	206	Kapaa			X	3
2	Hanakēhau	{1594 {9366	226	Keawe				
3	Hanakēhau	{6086 {9364	205	Makanui				
4	Holoipiapia	4213	199	Kauhi	X	Kahoaiai		2
5	Holoipiapia	{2685 {4529	200	Ohia	X	Kapuaihalulu		
	Kahoaiai	4213	199	Kauhi	X	Holoipiapia		4
6	Kahoaiai	{5591 {9357	874	Kekua				
7	Kahoaiai	904	228	Naheana	X	Kuhiawaho Panaio		
8	Kahoaiai	10942	402	Wallace, William				
9	Kalona	10567	178	Ohulenui	X	Kapuaihalulu	X	2
10	Kalona	{9386 {9387	3637	Puakai	X	Panaio		
11	Kapaloa	9373	223	Kamoku				5
12	Kapaloa	9372	207	Keiki				
13	Kapaloa	9320	209	Keoho				
14	Kapaloa	9376	{875 {8311	Kupihea for Kumaihiwa				
15	Kapaloa	9377	208	Lio				
16	Kapopou	9384	7345	Nahalepili			X	1
17	Kapuaihalulu	9358	222	Kaanuu			X	7
18	Kapuaihalulu	2448	227	Kikane	X	Panaio		
19	Kapuaihalulu	9362-B	225	Naone				
	Kapuaihalulu	{4529 {2685	{200 {178	Ohia	X	Holoipiapia		
	Kapuaihalulu	10567	178	Ohulenui	X	Kalona		
20	Kapuaihalulu	2146	{221 {160	Paahana				
21	Kapuaihalulu	882	328	Poonui				

#	‘Ili Name	LCA #	RP #	Claimant Name	Awarded in other ‘ili?	Other ‘Ili	Waiawa Kai?	Total LCAs in ‘ili
	Kionaole*	387	1947	ABCFM/Bishop, A.	X	Panaio	X	1
22	Kuhialoko	1715	212	Haa			X	3
23	Kuhialoko	{5644 {9362	179	Kamalii				
24	Kuhialoko	1696	198	Namomoku				
25	Kuhiawaho	{1711 {9361	210	Hanamaulu			X	3
26	Kuhiawaho	{1604 {9368	{2883 {3083	Kakoo				
	Kuhiawaho	904	228	Naheana	X	Kahoaiai Panaio		
27	Kulaokamakau	{1683 {9375	160	Peahi	X	Panaio	X	1
28	Kulina*	1996	769	Naea				1
29	Panaio	387	1947	ABCFM/Bishop, A.	X	Kionaole	X	7
30	Panaio	{5646 {9374	229	Kaionio				
	Panaio	2448	227	Kikane	X	Kapuaihalulu		
	Panaio	904	228	Naheana	X	Kahoaiai Kuhiawaho		
31	Panaio	9357-B	224	Opunui				
	Panaio	{1683 {9375	160	Peahi	X	Kulaokamakau		
	Panaio	{879 {9386 {9387	3637	Puakai	X	Kalona		
32	Piliaumoa	{9294 {9399	211	Kekini				1
33	Waiawa, ahupua‘a	7313	4475	Kamamalu, V.				

* The name “Kionaole” is found mainly in LCA 387 to the A.B.C.F.M. and on the 1887 Awana map, but no documentation has been found yet that explicitly describes Kionaole as an ‘ili. Kulina is listed in the 1929 LCA index as being in Waiawa, but this was a misprint as Kulina is actually located in Hālawa as described in LCA 1996 to Naea.

Water Resources and Agricultural Resources in Waiawa Kai

In the LCAs examined for Waiawa Kai, at least 100 agricultural features have been identified and over 12 ponds which include at least seven loko iʻa and two loko kalo. A majority of the agricultural resources identified were for kalo cultivation (80 to 88 features). Other agricultural features identified were for the cultivation of maiʻa, niu and hala. Table 5 below shows a breakdown of these resources by ʻili for all documents that have been examined in detail thus far. This inventory is by no means comprehensive. Further examination of the resources within Waiawa Kai is forthcoming.

Table 5. Summary of resources within Waiawa Kai.

ʻIli	Total Agricultural Features	ʻAuwai/ Paukū ʻauwai	Adjacent ʻauwai	Total lokowai/ punawai	Total loko iʻa	Total loko kalo
Waiawa Kai Total	100-114 total features 10 ʻāina/moʻo kalo 9 ʻāina/ʻāpana kula 61-63 loʻi 7-13 taro patches [unclear if wet/dry] 2 loko kalo 8-14 kula/huʻa/moku/pali maiʻa 1 huʻa niu 2 Puʻu hala	5	3	3+	7	2
Hanakēhau Total	2 moʻo kalo 1 ʻāpana kula 11 loʻi 2-8 kula/moku maiʻa 1 loko kalo		1	1		1
Kapuaihalulu Total	2 ʻāina/moʻo kalo 1 ʻāina kula 25-27 loʻi 7 taro patches [unclear if wet/dry] 4 maiʻa (huʻa/kula/pali) 2 puʻu hala	4				
Kuhialoko Total	2 ʻāina/moʻo kalo 2 kula 10 loʻi 6 kalo patches [possibly w/in 3 loʻi in ko Namomoku ʻāina] 1 pali maiʻa			1+	4	

‘Ili	Total Agricultural Features	‘Auwai/ Paukū ‘auwai	Adjacent ‘auwai	Total lokowai/ punawai	Total loko i‘a	Total loko kalo
Kuhiawaho Total	2 mo‘o kalo 5 lo‘i 3 kula		1	1	3	
Kulaokamakau Total	2 Kula 1 hu‘a niu					
Panaio Total	2 mo‘o kalo 10 lo‘i 1 loko kalo 1 kula mai‘a	1	1		2	1

Student Māhele Exercise

During the first two weeks of the 2017 WKIP, each of the students researched Māhele documents pertaining to a Māhele claimant in the Waiawa Kai area to introduce them to techniques for conducting land research from these specific resources. The students looked for any information pertaining to water and agricultural resources, structures, transfer of land/title, and the relationship between their claimants to their neighbors. The selected claimants were from different ‘ili within Waiawa Kai which allowed the students to piece together a better understanding of what and who existed in the area at the time of the Māhele. The claimants selected are listed in the table below.

Table 6. Claimants researched by WKIP 2017 students.

‘Ili Name	Claimant	LCA Number	Student
Hanakēhau	Makanui	{6086 {9364	David Perreira
Kapopou	Nahalepili	9384	Kama Ka‘aikaula
Kuhialoko	Haa	1715	Joshua Fukumoto
Kuhialoko	Namomoku	1696	Daven Chang
Kuhialoko	Kamalii	{5644 {9362	Ku‘ulei Freed
Kuhiawaho	Kakoo	{1064 {9368	La‘akea Ai

Fieldwork Summary

Fieldwork conducted during the 2017 WKIP focused primarily on pond resources and modern agricultural features so that these features may be documented and later compared to the previous landscapes. This focus on agricultural features, specifically modern features, is a departure from work done in previous programs that documented historic or prehistoric structures. However, this comparison may guide future projects to restore the current landscape to one that more closely reflects how the area functioned in the past if it is deemed that such restoration would be more efficient and sustainable than how it is currently being utilized.

Four main areas were selected for fieldwork: The Hanakēhau Learning Farm, the Kuhiawaho farm, an area near Hanakēhau described as a moʻo loko in Māhele documents, and selected ponds in the ʻili of Kuhialoko.

Training

Initial training in conducting tape and compass radial mapping was done at Kalaeloa Heritage Park in Honouliuli at the gracious welcome of Uncle Shad Kāne whose organization cares for the park. The haumāna were trained under the guidance of Kauʻilani Rivera with assistance by the instructors. They learned how to properly use a sighting compass and metric tape, how to conduct good photo documentation, and how to record pertinent information onto field data forms.

Additional training continued at the Hanakēhau Learning Farm where the students had more practice in conducting tape and compass radial mapping and learned how to do baseline mapping and how to take points with a handheld GPS unit. During the course of the program, we were able to gain access to portions of Kuhialoko through permission from Joe "Aliʻi" Miner who currently cares for the area. At Kuhialoko the haumāna learned how to take GPS tracks with the handheld GPS units. All of the methods mentioned above were used in documenting the final work site at the farm in Kuhiawaho.

Location 1 – Hanakēhau

Overall Description

Site HKEHAU1 is the Hanakēhau Learning Farm located in the ʻili of Hanakēhau along the western portion of the Waiawa ahupuaʻa. Five features were identified on the site of which four were mapped due to time constraints. All five features are modern and have been documented to geospatially represent its proximity to water sources (ponds, streams, etc.) as they exist now and as they have been documented in the past back to the Māhele period. This documentation will aid the current lessees as they find ways to mālama the area in ways that may be consistent with previous sustainable management methods. Mapping of site HKEHAU1 was completed utilizing tape and compass radial mapping and baseline mapping methods. GPS Data and photo documentation were also completed.

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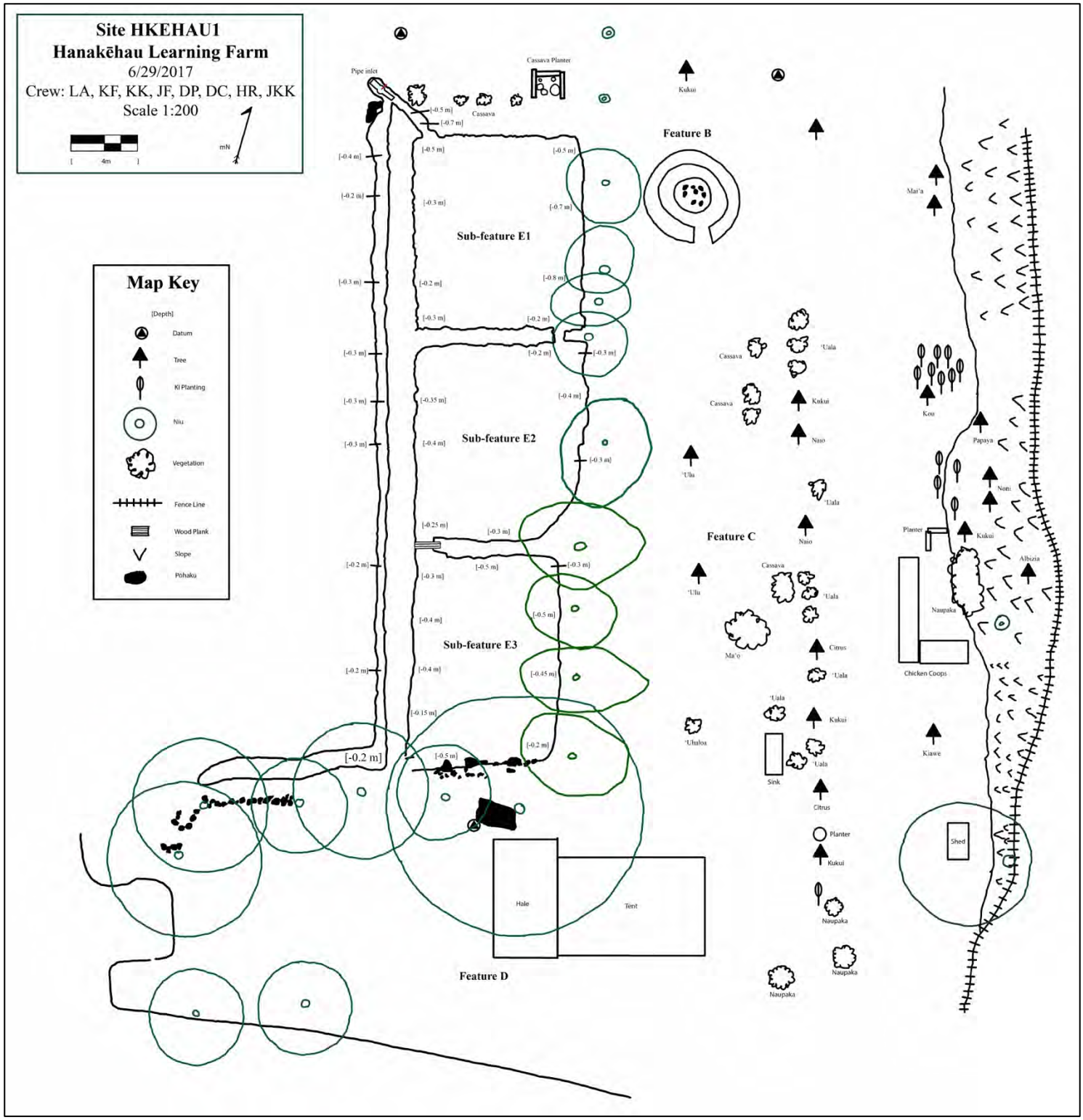


Figure 58. Overall plan view map of Hanakēhau

Figure 59. Overview of HKEHAU Feature E

HKEHAU1 Feature A

HKEHAU1 Feature A is a stone ahu at the northern portion of the property. It is rectangular in construction and is positioned atop a small pu‘u. The ahu is used for ceremonial purposes. Future work at this site should include documentation of this feature.

HKEHAU1 Feature B

HKEHAU1 Feature B is an imu located just south of Feature A. Feature E is located approximately three meters to the West, and Feature C is located approximately five meters to the East of Feature B. The feature is approximately six meters in diameter with an inner depression measuring approximately 2.2 meters in diameter. At the time of documentation, the depression measured approximately 0.4 meters in depth.

HKEHAU1 Feature C

HKEHAU1 Feature C is an alignment of plantings running roughly North to South in alignment. The feature contains an assortment of plantings and trees including ‘uala, kukui, and naupaka. Feature C is approximately 35 meters in length.

HKEHAU1 Feature D

HKEHAU1 Feature D is a house, a lawn and a tent area at the southern portion of HKEHAU1. The house is approximately 3.5 meters wide by seven meters long. The tent, which adjoins the eastern edge of the house is approximately nine meters long by six meters wide. The lawn area sits to the west of the house and is just south of Feature E2. The hoʻi wai for feature E runs along the northwestern portion of the lawn emptying out to the western side of the lawn where there is a portion of a large pond/marsh area. A large slab measuring approximately 1.5 m by 2m is situated at the northeastern portion of the lawn. The slab has many carved and partially carved stones on top of it.

HKEHAU1 Feature E

HKEHAU1 Feature E is a loʻi consisting of two patches, sub-features E1 and E2. An inlet is located at the Northwestern corner of feature E with an ʻauwai running parallel to the feature approximately two meters to the West. Eight niu trees line the eastern edge of Feature E.

HKEHAU1 Sub-feature E1

The northern patch, sub-feature E1, measures approximately 10.5m in width by 12.5m in length. The average depth of E1 along the western edge is approximately 0.3 meters and approximately 0.7 meters on average along the eastern edge. It is fed by the inlet at the Northwestern corner, though at the time of documentation no water was flowing through the entirety of feature E.

HKEHAU1 Sub-feature E2

The southern patch, sub-feature E2 measures approximately 8.6 m in width by 13 m in length. It has an average depth of approximately 0.3 m along its western edge and 0.4 m along its eastern edge. It is fed by an inlet at the Northeastern corner which connects it to sub-feature E1.

Location 2 – Kuhiawaho

Figure 60. Loʻi at Kuhiawaho. View to South.

Overall Description

Site KWAHO1 is the Kuhiawaho farm currently cared for by Ron Fitzgerald, Samantha Ai and their ʻohana. It is located on the westernmost portion of the Waiawa ahupuaʻa. Four features were identified within this site, each of them being either historic or modern features. The largest feature, Feature B, contains a system of loʻi kalo which is modern in its creation, however, documentation from the Māhele era indicates that the area was previously used for cultivation. The mapping done in this area was for the purpose of documenting the two pūnāwai that feed the loʻi system and to compare the current layout of the loʻi to what it looked like during the Māhele area so that the current lessees can move toward remodeling their current system to fit the older model, if feasible, to make kalo production more efficient in accordance with older methods. Mapping of site KWAHO1 was completed utilizing tape and compass radial mapping and baseline mapping methods. GPS Data and photo documentation were also completed.

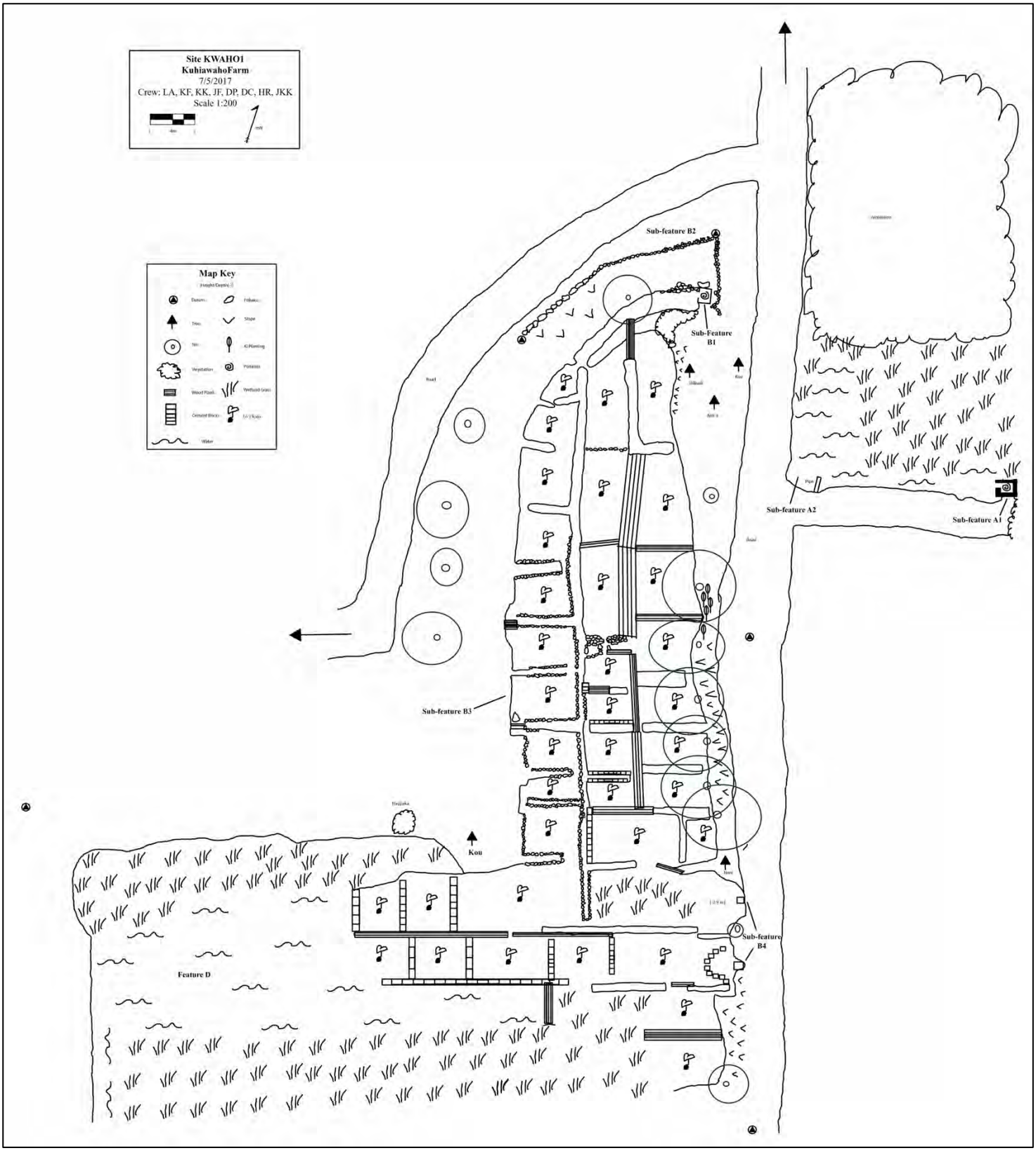


Figure 61. Overall plan view map of Kuhiawaho

KWAHO1 Feature A

KWAHO1 Feature A is located on the Northeastern corner of KWAHO1. It consists of two sub-features: sub-feature A1, a pūnāwai and sub-feature A2, a bermed terrace. Feature A is approximately 17m in width by 20m in length.

KWAHO1 Sub-feature A1

Sub-feature A1 is a pūnāwai at the Southeastern corner of Feature A. A square, cement enclosure from the historic surrounds the pūnāwai and is 1.53m in length and 1.39m in width with a depth of approximately 1.12m.

KWAHO1 Sub-feature A2

Sub-feature A2 is a bermed terrace which encloses the entirety of Feature A. Sub-feature A1 is located within the Southeastern corner of Sub-feature A2. Sub-feature A2 measures approximately 17m in width and 20m in length. The bermed terrace encloses a pond of water generated by the pūnāwai (KWAHO A1). The deeper depths of KWAHO A2 range from 4 to 4.4 m near the center to as shallow as 0.2m to 0.56m along the berm edges.

KWAHO1 Feature B

KWAHO1 Feature B comprises the largest area of the site and contains 4 sub-features within it: Feature B1, a pūnāwai; Feature B2, a terraced rock wall; Feature B3, a loʻi consisting of 36 patches; and Feature B4, two pipe inlets connecting Feature B to Feature C. Feature B is located roughly within the center of site KWAHO1 and measures roughly 66m in length by 20m in width.

Figure 62. Feature B2 (in foreground) and Feature B3 (background). View to South.

Figure 63. Sub-feature B1, pūnāwai. View to East.

KWAHO1 Sub-feature B1

Sub-feature B1 is a pūnāwai at the Southeastern corner of Feature A. A square, cement enclosure from the historic surrounds the pūnāwai and is 1.5m in length and 1.3m in width with a depth of approximately 1m.

KWAHO1 Sub-feature B2

Sub-feature B2 is a terraced retaining wall in a rough "L-shaped" formation. The western portion of the wall measures approximately 20.1m in length. The southern portion of the wall measures approximately 7.8m in length. The walls are two to three coarses of stacked stones. Sub-feature B1 is enclosed by this wall near the northeastern area where both portions of the wall form a corner.

Figure 64. Feature B2 (Feature B1 is visible in the background near the niu tree). View to Northeast.

KWAHO1 Sub-feature B3

Sub-feature B3 is a loʻi consisting of 36 patches. The patches are arranged in three columns in a rough North-South orientation. Two main walls divide the patches into the three columns, portions of these walls consist of one-coarse high stacks of either stone or cement blocks enclosing organic material to form berms. Other portions of the wall are constructed from wooden planks of which

some of these planks originate from the railroad built by Dillingham and the Oʻahu Railway and Land Company (OR & L) in the late 1800s. The loʻi is fed primarily from water supplied by the pūnāwai (sub-feature B1) and from water in Feature C as it flows through the inlets classified in this report as sub-feature B4.

Figure 65. Feature B3, multiple loʻi. Feature B4, a concrete inlet is visible in the foreground. View to Northwest.

KWAHO1 Sub-feature B4

KWAHO1 Sub-feature B4 consists of two concrete inlets at the Southeastern edge of feature B. The inlets direct water from feature C into sub-feature B3.

KWAHO1 Feature C

KWAHO 1 Feature C is a bermed terrace near the Southeastern corner of KWAHO1. It measures approximately 20m in length and 41m in width. The terrace is heavily overgrown with weeds and grasses. The terrace encloses fresh water that appears to originate from an adjacent pond that is outside of the property. This water feeds feature B through the inlets designated as Sub-feature B4.

KWAHO1 Feature D

KWAHO1 Feature D is a large, pond-like ho‘i wai at the Southwestern corner of KWAHO1 measuring approximately 12m in width and 22m in length. It is directly adjacent to the Southernmost patches of sub-feature B3 along Feature D’s Eastern border.

Figure 66. Feature D. View to Southwest.

Figure 67. Hoʻiwai at Feature D. View to South.

Location 3 – Moʻoloko

An area near the ʻili of Hanakēhau identified as a moʻo loko in Māhele documents contains multiple ponds which may corroborate a theory that this term "moʻo loko" may designate a collection or an area of ponds in the same way that a "moʻo kalo" specifically designates areas for kalo cultivation. As the area was too dense with vegetation for any clearing and manual mapping (via tape and compass or baseline methods) to be completed in a timely manner, aerial images from multiple years from Google Earth and Bing Maps was utilized to identify the ponds and to create digital outlines of them. These ponds were verified visually via personal visits to the area.

Location 4 – Kuhialoko

Due to time constraints, selected ponds in the ʻili of Kuhialoko were only documented utilizing GPS tracks. However, GIS maps (below) depict where the former location of Loko Kuhialoko would be located today.

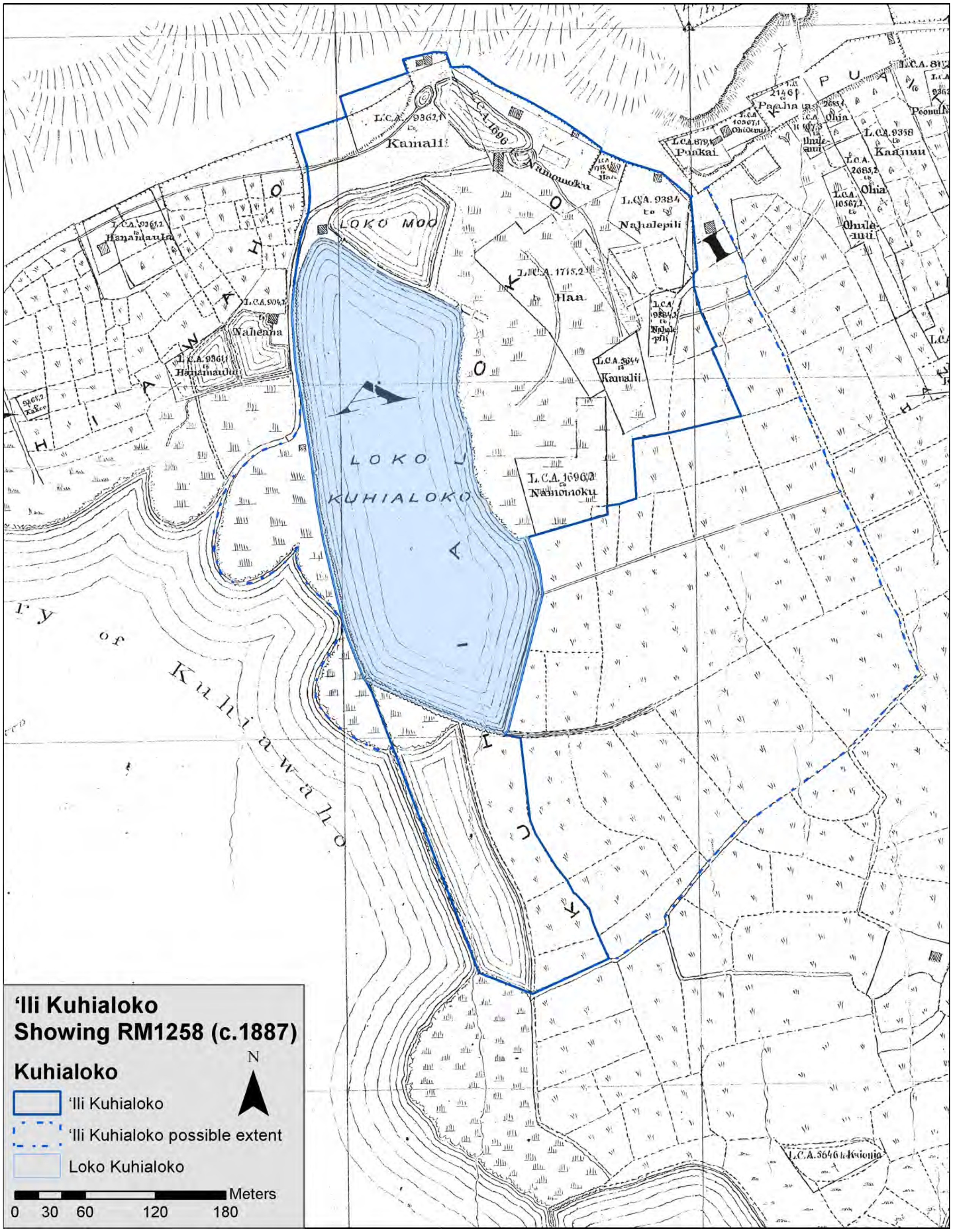


Figure 68. Circa 1887 map showing the ‘ili and loko of Kuhialoko.

Figure 69. Overlay of the circa 1887 map showing the ʻili and loko of Kuhialoko on a 2013 aerial image of the landscape.

Conclusions and Recommendations

Waiawa is a significant ahupuaʻa in the ʻEwa moku that needs to be stewarded for future generations. Various Hawaiian individuals and organizations have begun this process by restoring loʻi, fishponds, and other agricultural features in the area. Although portions of Waiawa Kai are heavily polluted, overgrown, and urbanized, the community members of Waiawa today work against these negative characterizations by cultivating the land and producing agricultural products in abundance. The pristine groundwater resources found throughout Waiawa Kai in the form of springs also evinces the importances of caring for one of Oʻahu's largest groundwater systems. Through ethnohistorical research, the abundance of Waiawa is further told through moʻolelo and māhele records. The unique landscape of the area allowed for specific place-based practices such as loko moʻo and loko kalo to be utilized. Such practices have the potential to be revitalized and used once more in the area by those who care for ʻili ʻāina in Waiawa.

Overall, the 2017 Wahi Kupuna Internship Program was a success on multiple fronts. This was the first year that the internship took place on the island of Oʻahu, which has enlivened discussions on hosting the program throughout the year at multiple locations across the island chain. The internship also hosted our largest cohort to date, which has encouraged us to continue expanding the program by increasing the amount of interns each year. By having the internship on Oʻahu, the interns were afforded more experiences to visit archives and to visit wahi pana across the ʻEwa moku. These opportunities allowed them to develop fundamental skills that will aid them in their future ʻāina-based research endeavors. Presenting their individual Waiawa research papers to members of the community at the end of the internship and at two professional conferences further allowed the students to educate others about Waiawa's cultural significance, as well as advocate on behalf of our community partners in Waiawa that remain steadfast in caring for the natural and cultural resources of that area.

References

Genz, Joseph H., Constance R. O'Hare, and Hallet H. Hammatt
2010 Ethnohistoric Study of Kamehameha Schools' Lands in Waiawa, Waiau, and Kalauao (Kaʻōnohi ʻIli) Ahupuaʻa, ʻEwa District, Island of Oʻahu. TMK: [1] 9-4; 9-6; 9-8 (various plats and parcels). Cultural Surveys Hawaiʻi, Inc. Kailua.

Handy, E. S. Craighill, and Elizabeth Green Handy
1972 Native Planters in Old Hawaii: Their Life, Lore and Environment. Bishop Museum Press, Honolulu.

Kamakau, Samuel Manaiakalani
1991 Tales and Traditions of the People of Old: Nā Moʻolelo o ka Poʻe Kahiko. Bishop Museum Press, Honolulu.

Manu, Moses
2002 Keaomelemele; He Moolelo Kaao no Keaomelemele. Bishop Museum Press, Honolulu.

Appendix A: Master Schedule for 2017 WKIP

Master Schedule Overview

2017 Wahi Kupuna Internship Program

**Schedule is subject to change without notice*

SCHEDULE

Daily Activities	
08:00AM	Meet at Leeward Community College- Hālau
08:15-08:30 AM	Morning Piko
12:00PM -12:45PM	Lunch
3:15PM	Afternoon Piko
4:00PM	Pau Hana, Return to LCC for pick up

Week One: Hoʻolauna June 12-16, 2017	
Monday, June 12 *Lunch provided by WKIP*	Location: Kūkaniloko ● 8:00am - Meet at LCC and go to Kūkaniloko ● 8:30-9:30am - Opening ceremonies at Kūkaniloko/Introductions lesson/discussion ● 9:30-10:30am - Protocol lesson/discussion Location: Hanakēhau ● 11:00-12:00pm - Huliauapaʻa presentation by Kelley Uyeoka and Kekuewa Kikiloi ● 12:00-1:00pm - ʻAina Awakea ● 1:00-4:00pm - Kupu Orientation **Evening Activity:** Read **(1)** Kawelu (2015), "Introduction: Changing the Trajectory of Hawaiian Archaeology" and **(2)** Kekahuna, n.d. "The Knowledge of our Own Native Sons and Daughters." Transcribed by Kekuewa Kikiloi.
Tuesday, June 13 *Lunch provided by WKIP*	Location: Hanakēhau ● 8:30-11:30am - WKIP Orientation Location: LCC ● 12:00pm - Lunch and Library Tour with Annemarie Paikai ● 1:30pm - Lanai "Walk Story". Discuss what we can see compared to what is on maps. Start talking about Moʻolelo (brief overview of themes - manō, etc.) ● 2:30-4:00pm - ʻEwa presentation by Dr. Ross Cordy **Evening Activity:** Read **(1)** Kawelu (2015), "A History of Hawaiian Archaeology"
Wednesday, June 14	Location: LCC ● 8:30-10:00am - Fill out WKIP Pre-internship evaluation ● 10-11:30am - Mahele document and role-play activity Location: Kūhiawaho ● 12:00pm - Lunch with Fitzgeralds ● 1:00-2:30pm - LCA presentations

	Location: LCC ● 3:00pm - Lecture - researching Moʻolelo (Legends Index, etc.) ○ **Choose moʻolelo or mele to present on Tuesday, June 20** **Evening Activity:** Read **(1)** "Native Hawaiian Perspectives in Archaeology". The SAA Archaeological Record, January 2013.
Thursday, June 15	Location: Multiple locations ● 7:00 - 2:30 Detour Huakaʻi **Evening Activity:** Brainstorm cohort name, Read **(1)** "Native Hawaiian Perspectives in Archaeology, Part II." The SAA Archaeological Record, March 2013.
Friday, June 16 *Lunch provided by WKIP*	Location: UH Mānoa, Moore Hall 328 ● 8:30am - Readings discussion ● 9:30am - Student research roundtable discussion ● 10:30am - Research writing workshop with Halena ● 11:30am - Talk Story Lunch with Noelle Kahanu (Native Hawaiian Program Specialist), Karen Kosasa (AMST, Director of Museum Studies Program) and Bill Chapman (AMST, Director of Historic Preservation Program) ● 1:00pm - Tour of Hamilton Library/Research Workshop with Kapena Shim ● 2:30pm - Oli practice/start work on papers and research topic **Weekend assignment #1:** ● Develop 1 research question to guide your research and paper ● Find five relevant sources for your research paper ● Practice protocols ● Read Alexander 2006 [1882], "Brief History of Land Titles in the Hawaiian Kingdom".
Week Two: Moʻokūʻauhau ʻĀina June 19-23, 2017	
Monday, June 19	Location: LCC ● 8:30-11:30am ○ Recap of Mahele research ○ Moʻokūʻauhau lecture - Oʻahu/Puʻuloa genealogies (?) ○ Moʻolelo research and activity ○ Intro to Ethnohistorical Research with Dominique Cordy ● 11:30-12:30pm- Lunch ● 1:00- 3:00pm- Huakaʻi to Palehua with Kehau Kupihea **DUE:** Weekend assignment #1 **Evening Activity:** Read **(1)** Kuleana Act of 1850. assign reading on one kuleana LCA (full NT, NR, FT, FR, Royal patent & LCA) to each student **(2) Review** 1882 W.D. Alexander (Hwn Surveyor General) A Brief History of Land Titles in the Hawaiian Kingdom. **(3)** Waiawa Boundary Commission No.73 (7pgs), 4) Handy Handy 1972, "Tables of Hawaiian Measurements" , 5) Translating Survey Description

Tuesday, June 20	Location: LCC ● 8:30am-9:30am - Wrap up Mahele overview and historical timeline of lands ● 9:30am - 11:00am - Mapping in Hawai'i, Crown Lands, and GIS Introduction ● 11:00am - 12:00pm - Mo'olelo Presentations/Discussions ● 12:00pm - Lunch ● 1:00pm - Meet Hālau 'Ike o Pu'uloa staff Location: Kūhiawaho ● 2:00 pm - Work day at Kūhiawaho **Evening Activity:** Read **(1)** Langlas, Charles. 2006. Doing Oral History with Native Hawaiians. *Pacific Worlds Essays.* Online publication. **(2)** Lyons, C.J. 1874. Land Matters in Hawaii. 1902-3 excerpts from *The Islander*. Pg21-63 (I will try to cut down pages)
Wednesday, June 21	Location: LCC/Kūhiawaho (Summer Solstice) ● tracing mookuauhau of aina w/ GIS and archival research ● story maps ● researching potential w/ gis. New methodologies ● Kūhiawaho work day Readings on Geographic information systems. Using ESRI ArcGIS software.
Thursday, June 22 *Lunch provided by WKIP*	Location: KS/Mission/DLNR Archives field trip ● 8:00-11:00am - Hālāwai me Kamehameha Schools ● 11:00am- 12:00pm- Lunch with Nalani Kealaiki ● 12:30pm-3:00pm - Collections visits to the Mission House Archives and the Bureau of Reclamation ● 3:00pm - 4:00pm- Return to LCC Read **(1)** Excerpt from Chapter 10 of Kame'elehiwa, Lilikala. 1992. Native Land and Foreign Desires, pgs.287-318.
Friday, June 23 *Lunch provided by WKIP*	Location: UH Mānoa, Moore Hall 328 ● 8:30am - Research Writing Workshop with Halena ● 10:00am - Work on papers ● 12:00pm - Talk Story Lunch with Kekuewa and Kekailoa Perry ● 1:00 - 4:00pm - Work on papers *Cohort name should be confirmed and design should be pau.* *Research paper topics should be confirmed.* **Weekend Assignment #2:** 1. Develop a thesis statement/argument 2. Create an outline (DUE MONDAY, 6/26) 3. Start working on Introduction and Background Sections 4. Continue research
Week Three: 'Ewa and Site Mapping? June 26-30, 2017	
Monday, June 26	Location: LCC/ Ka Lae Loa ● 7:45am - meet at LCC and carpool to Kalaeloa Heritage Park ● 9:00 am - 10:00 am - Introduction to Kalaeloa Heritage Park and work area by Uncle Shad Kāne ● 10:00am - 11:00am - Intro to Archaeologial field methods by Kau'ilani Rivera

	at Ka Lae Loa Heritage Park ● 11:00am - 12:30pm - Practice Photography, Practice GPS points, learn tape and compass mapping ● 12:30pm - 1:15pm - Lunch ● 1:15pm - 3:00pm - Map site/features using tape and compass mapping ● 3:00pm - Drive back to LCC **Evening Activity:** Read excerpts from Brandt 2017
Tuesday, June 27	Location Pa‘aiau Fishpond ● 10:30am-12:00pm Fishpond Huaka‘i with Jeff Pantaleo ● 12:00: Lunch at Ka‘onohi ● 1:00-3:30: Ka‘onohi - Meet with Mahealani Matsuzaki and Anthony Deluze at Ka‘onohi Lo‘i **Evening Activity:** Read excerpts from Rivera 2017
Wednesday, June 28	Location: Hanakēhau Pond area ma uka of Andre’s farm ● Additional Vegetation Clearing as necessary ● GPS mapping of pond features ○ Include photo documentation ● GPS mapping of Andre’s farm and features within it (including kumu lā‘au niu) ● Tape and compass mapping of pond features
Thursday, June 29	Location: Hanakēhau Continue work in Hanakēhau ● All day field work ● Aina wai area / Alii Minor or Nakatani’s if accessible
Friday, June 30 *Lunch Provided by WKIP*	Location: UH Mānoa, Moore Hall ● 8:30am - Discussion on Readings, “Native Hawaiian Women in History/Cultural Resource Management” w/ Loke Brandt and Kau‘‘ilani Rivera ● Research writing workshop with Halena ● 12:00pm - Talk Story Lunch with Muffet Jourdane, Toni Han, ● 1:00-4:00 - Work on papers **Weekend Assignment #3:** 5. Start working on Analysis and Conclusion sections 6. Start working on presentations (DUE MONDAY, 7/3) 7. Continue research
Week Four: More fieldwork at Waiawa July 3-7, 2017	
Monday, July 3	Location: Hanakēhau (if not completed), Kuhialoko (tentative) or Kuhiawaho GPS Mapping of Pond features at Kuhialoko (if accessible) Kuhiawaho - Baseline Mapping Intro ● GPS mapping of current features (lo‘i, etc.) ● Baseline mapping of current features ● Document pond and elevations Vegetation clearing to loko in ‘Āpana 2 of Kāko‘o claim (tentative)

	Weekend Assignment #4: 1. Peer review introduction and background section of two other interns
Tuesday, July 4	Location: Kuhialoko (Tentative) or Kuhiawaho Baseline Mapping Intro ● GPS mapping of current features (loʻi, etc.) ● Baseline mapping of current features ● Document pond and elevations Vegetation clearing to loko in ʻĀpana 2 of Kākoʻo claim (tentative) ● All day field work Kuhiawaho
Wednesday, July 5	Location: Kuhialoko (Tentative) or Kuhiawaho Continue Baseline mapping of current features and veg. Clearing to loko ● All day field work at Kuhiawaho
Thursday, July 6	Location: Kuhiawaho Continue Baseline mapping of current features and veg. Clearing to loko ● All day field work at Kuhiawaho
Friday, July 7 *Lunch Provided by WKIP*	Location: UH Mānoa, Kamakuokalani 210 ● 8:30am - Discussion on Readings, “Kanaka ʻŌiwi Archaeology Futures” ● Workshop with Halena: Creating compelling presentations ● 12:00pm - Talk Story Lunch ● 1:00 - 4:00pm Work on papers **Weekend Assignment #4** ● Continue writing essay ● Create presentations
Week Five: July 10-14, 2017	
Monday, July 10	Location: 7:15 am meet at LCC then carpool to Waipiʻo Costco to meet Pua Heimuli from USFWS ● 8 am to 3 pm Kīpapa Gulch Huakaʻi with Pua Heimuli ● Prepare presentation for community hōʻike ● Work on research papers
Tuesday, July 11	Location: LCC ● 8:00am- 11:00am Prepare presentation for community hōʻike ● 11:00 am - 12:00 pm - Lunch ○ 11:00am - 11:30 am - Lunch with Chelsey Jay and haumāna from the Mālama Learning Center outside the Hālau ʻIke o Puʻuloa ● 12:00- 3:00pm Practice run #1
Wednesday, July 12	Location: LCC ● 8:00am-4:00pm -Prepare presentation for community hōʻike & work on papers
Thursday, July 13	Location: ● 8:00am - 9:30am Preparation ● 10:00am - 12:30pm Community Hōʻike
Friday, July 14	Locations: LCC/Kūhiawaho/Hanakēhau ● 8:00-4:00pm Closing ceremonies and program wrap-up

Appendix B: Lawena for Working at Wahi Kupuna

LAWENA FOR WORKING AT WAHI KUPUNA

LAWENA (Behavior & Mannerisms)	*MANA'O (Suggestions & Thoughts)*
Ask permission before entering a wahi kupuna and when leaving, give thanks	• You can offer an oli, mele, pule, a few simple words, or even a moment of silence (ho'omālie) to acknowledge the ancestors of the place and to share who you are and why you're there • If there is a kahu or kia'i on site, make sure they know who you are, why you're there, and what you'll be doing
Ho'okupu are not required, however if you feel inspired to present an offering, make sure it is appropriate	• If there is a kahu or kia'i at the site, ask them what is an appropriate ho'okupu and if its something, where to place it • Mele, oli, and pule are usually appropriate ho'okupu • Offer ho'okupu that will eventually go back to the 'āina (lā'au, lei, wai)
Treat the wahi kupuna with respect by maintaining positive attitudes, thoughts, and conversations	• Remember that while you're working at a wahi kupuna, you are at a significant, historical, spiritual, and special place • Avoid yelling, swearing or acting in ways that are disrespectful to the ancestors of the wahi kupuna, others around you, and yourself
Listen to your na'au and don't do anything that makes you feel uncomfortable	• If you feel uncomfortable entering or working at a certain site, let your alaka'i know
Avoid sitting and walking on stone structures at wahi kupuna	• Sitting and walking on structures could weaken them • If you need to walk on or over structures, then do it carefully making sure you don't disturb the structure
Avoid moving or disturbing pōhaku or artifacts	• Wahi kupuna were left in our care by the ancestors of this place. It is our kuleana to mālama them for future generations to experience • Many wahi kupuna have not been documented yet, so their current condition can provide a direct link to the past • Sometimes even random-appearing pōhaku and artifacts are part of an organized pattern that only is evident after mapping and documenting a site
If you see coral at a wahi kupuna, leave it in place	• Coral gives a wahi kupuna religious significance • Coral could have been offered as a ho'okupu. To move or remove it would be disrespectful. • Coral can be dated, giving us information about when and who built these places.
Try not to cut or clear native plants at wahi kupuna	• Some native plants, such as ti and noni, were purposely planted at wahi kupuna and are a precious link with the past • Some native plants are remnant populations of plants originally from the place and can provide historical information about the site and the surrounding environment • Check with your alaka'i before cutting down or clearing plants you might think are native or culturally significant • If native plants must be cleared, think of ways to reuse the vegetation for crafts, food, etc.
Avoid disturbing anything under the surface. This includes being too aggressive about pulling up plants by their roots	• Often, the most valuable information, such as charcoal deposits or midden, lies just under the surface • Layers of sub-surface information are fragile and can be easily destroyed
Check with your alaka'i before entering any caves	• Caves were commonly used for burials • Caves may preserve delicate remnants of the past, and are valuable places to collect sub-surface samples

Appendix C: Student Final Research Papers

1. Devin Chang
2. Kama Ka‘aikaula
3. Lei Freed
4. Josh Fukumoto
5. David Perreira

Piecing together the past of Kahikuonalani Church: The First 50 Years, 1834-1884

By: Daven Chang

Introduction

The removal of Mrs. Bishop to ʻEwa was a crucial decision made by the Bishops. It was a decision that would forever cement them in the history of the Kahikuonalani Church. Mrs Delia Bishop, the second wife of Artemas Bishop, had fallen ill due to the overbearing stresses of being a missionary school teacher and the extreme heat of 1830s Kailua, Hawaiʻi island. Their decision to move to Ewa was largely due to its lush green environment and cool breezes. Because Mrs. Bishop was recovering from her illness, it allowed them to stay in Ewa; and Artemas Bishop was able to establish his mission of twenty years of preaching the protestant religion to the kanaka of Ewa. Artemas Bishop played an important part in converting the kanaka maoli of the Ewa district over to the protestant religion.There are other parts of the churchʻs history that also align with this argument. Therefore the focus of this research is: How has the transitioning of the luakini heiau on Haupuʻu into a church aided in the conversion of Kanaka Maoli to western religions from the years 1834-1884

Background

The history of Haupuʻu Hill and an overview of the old Ewa church

Haupuʻu is located in the Ahupuaʻa of Waiawa in the Moku of Ewa. Haupuʻu has its place in history as a sacred place where the gods Kane and Kanaloa came to name all different features of Ewa. It is located makai of what is now Leeward Community College in the form of a parking lot. The church that once stood there has since been moved to Pearl City where it currently resides. Haupuʻu was once home to a luakini heiau and maika playing fields. The heiau remained there until the 1830s. In 1834 the old Ewa church was built and remained there for at least 50 years. The church itself is still in existence and still a member of the United

Church of Christ (UCC). The church has moved two times since its original building on Haupu‘u. In 1884 the church was rebuilt and given the name Kahikuonalani named after Kalakaua. The first move was in 1904 to an unknown location in Pearl City and the second move was in 1961to its current location on Ho‘omalu street in Pearl City. This year 2017 marks the church’s 183rd year of existence.

Hawaii (1820s and 1830s)

Hawaii during the 1820s and 1830s was undergoing many social and cultural changes. Due partly to the arrival of the missionaries in 1820, Hawai‘i and Kanaka Maoli had begun to transition over from the traditional kapu system and traditional beliefs over to western religions and western beliefs in the hopes of reviving the declining society. In 1820 only a few months before the arrival of the missionaries, the new mō‘ī Kamehameha II (Liholiho) under the influence of Queen Ka‘ahumanu made a decision that would (forever) affect Hawaii. His decision to cast aside the ‘aikapu and eat with his mother Keopuolani and Ka‘ahumanu cast the fate of Hawaii into stone. Change of this sort was greatly frowned upon by many kanaka maoli because of the ancient beliefs that were taught to them. These beliefs were that if the Kapu were to be broken or disregarded that the one who broke the Kapu would be struck down by the Akua with no chance of reprieve. Despite the very strong belief by many that the Akua would strike down Liholiho, nothing out of the ordinary happened. As time passed, people started to accept this new belief system which was melding the western religion of christianity and other western religions into the traditions of Old Hawaii.

Ka‘ahumanu

During the reign of Ka‘ahumanu, the powerful Kuhina Nui ordered the destruction of all heiau (sacred temples) and wahi pana (sacred sites). This bold decision made by Ka‘ahumanu was in part due to her conversion to Christianity, which led to her unrelinquished support for Calvinism. Under the reign of the powerful Kuhina Nui, the Moku (district) of Ewa was not

exempt from her decree for dismantling all heiau. One particular heiau that was affected by this new wave of change; was the luakini heiau (sacrificial temple) known as Haupuʻu. Though there is no direct information indicating that the conversion of the Luakini (sacrificial) heiau has any connection to the decree made by Kaʻahumanu, Kaʼahumanu also encouraged many of the aliʼi (chiefs) to convert over to Christianity or other western religions. This research examines the idea that many of the aliʼi converted to western religions such as Christianity or Protestant. With many of them becoming ordained "native pastors" in these churches and then encouraging the makaʼainana under them to convert to these religions. Many of the aliʼi were still regarded as such by their subordinates, therefore many of them followed the path of their aliʼi.

Methods

One of the main methods that I used was archival research. Through archival research I found large amounts of primary source documents about the Kahikuonalani church. In order to retrieve these documents I visited quite a few different archives which include: The Hawaiian Mission Houses Archive, Bishop Museum Archives, the archives of Mary Kawena Pukuʻiʻs Hawaiian Ethnographic Notes or HEN files, and the microfilm/microfiche archives at Hamilton Library at the University of Hawaii at Manoa. I also received primary source documents from the Kahikuonalani church itself. I frequented the Hawaii-Pacific section of Hamilton Library. This was one of my main repositories as this was the place where I spent the most time researching. An alternate source of information for me was the Honolulu Star Advertiser archives and other online sources.

Analysis

Haupuʻu and the story of Mr. Luau

The old Ewa church sat atop a hill named Haupu or Haupuʻu. It overlooks many sites such as the fishponds of Kuhialoko and Kuhiawaho, a salt bed, coconut grove, loʻi kalo (taro pond fields), a punawai (freshwater spring), and a kahua ulu maika (Ulu maika Field) ; all of

which were all named by Kane and Kanaloa according to a mo‘ōlelo found in the *Nupepa Kuokoa*. (Nawa'a, Samuel. Hawaiian Ethnographic notes; Story of Kane and Kanaloa. Pg 6-10) . The konohiki of the area was named Kanepaiki, Kanepaiki is said to have begun the construction on the old Ewa church. During the construction of the church Kanepaiki is warned by a man named Luau to not continue the construction of the church where the heiau stood. In his warning Mr. Luau says “The house shall not be finished to its ridge pole before the one who is having it built dies” (Maly and Maly (2013, 121). A more complete story of Mr. Luau was told by Rev. Simeon Kahelemauna Nawa’a in an interview with Mary Kawena Puku’i for her Hawaiian Ethnographic Notes (HEN) files. Mr. Nawa’a recounts the story as:

> At the time when Luau sailed from Maui to Oahu, he was a prophet and kahuna whose name was well known to the people, to King Kauikeaouli, and all the chiefs. Luau went to see the king, and after they were through with their talk, the king called for poi and fish, he ate, and when almost full, the kind remarked to him, “ I am relieved at last for you have come.” “yes” answered Luau. The King said again, “Let us stay here in Honolulu” and one of these days, you go to Ewa to see the church the chief is building with the commoners of Ewa and Waianae.” “What is the name of the chief who is building that church?” The King answered, “His name is Kanepaiki.” Luau said to the King again “on which ahupuaa is the church built Kanepaiki?” The King replied, “ It is on the ahupuaa of Waiawa, above the maika playing fields of Haupuu.” Then Luau spoke truthfully and correctly to the king not dreading the consequence of his words, which were fearlessly spoken, “ O heavenly one, to bad for the other chief of you two. The house will not yet be roofed when he shall die, because it is built over a heiau and a maika playing field…” When the king heard these words of Luau’s he bowed his head for a while and said “What is the best thing to do?” Luau said again. “Raze and move it back to Pueohulunui until it faces the pond down at Hanaloa and the sun [rise] at Kaheeka, then the evil influence will be removed.” “Then leave it to the power of the God brought by the whites.” Replied the King to Luau, and the prophet laughed at the witty saying of the King. Some days later, hardly ten days after Luau stayed at Kauikeaouli’s, news came that the chief, Kanepaiki, had died at Waiawa, Ewa. The words of Luau were true, for the roof was not put on the church when Kanepaiki died. J. Kahauolono, his successor, completed it. (HEN pp 1-25, “Book of Omens pertaining to Houses”Waialeale D.K. 1834)

In another account of this same story it mentions further details of the story of Mr. Luau, it states:

> At the time Luau came from Maui to dwell on Oahu, he arrived at Waiawa, Ewa. He saw some men thatching dried ti leaves on the Luakini

> (church) that was being built there. Luau asked some people, "Who is the one that is having this important house built?" They answered, "Kanepaiki." Luau then stated, "The house shall not be finished to its ridge pole before the one who is having it built dies." The people asked, "Why?" Luau answered, "The house is atop the Heiau (temple) and the Fishpond is below, it is because the waters [life and wealth] are flowing out from this place. (So too shall the life flow out.)" These words of Luau were true, the Luakini of Waiawa was not completed before Kanepaiki died. His body was buried in the uplands of Waimalu. (Ianuali 5, 1894 – Mei 10, 1895 Nupepa Ka Oiaio) (Maly and Maly 2015)

In this account found in the Maly and Maly report it leaves out an important part of the story, which is that as Mr. Luau came to visit with Kauikeaouli, that he approached the men thatching the roof directly and tells them that Kanepaiki will die because he is building his church atop of the luakini. The other major difference is that it mentions that Kanepaiki is buried in the uplands of Waimalu and not Waiawa. The importance of examining these two stories is that it gives us a more complete picture of what went on during that time. In summary the story of Mr. Luau and Kanepaiki leaves a blank spot in the history of the church as we do not know the exact date that this story has taken place. However we can guess that this story took place sometime before the arrival of Rev. Lowell Smith in 1834. We also don't know if Kanepaiki had any help from anyone or if he had been working together with a missionary perhaps Rev. Smith. Aligning points in the story of Mr. Luau and Kanepaiki; and the accounts of Lowell Smith recounted by Sereno Bishop in his book Reminiscences of Old Hawaii support this claim. "Reminiscences of Old Hawaii" says that the church was finished by Rev. Lowell Smith in 1837. Rev. Lowell Smith also constructed Kaumakapili church in Honolulu several years later.

The Smiths (1834 - 1837)

The arrival of Mr. and Mrs. Lowell Smith (see figure 1 Rev. Lowell Smith (1885) and wife Mrs. Abba(Willis Tenney) Smith 1880) http://tc-lib.org/Missionaries/Profiles/SmithL.html)

marked the beginning of the Christian parish in Ewa. Though they remained there only a few years (1834-1837) they accomplished quite a bit. From the Mission Station reports by Rev. Lowell Smith in 1835, he describes the location of the mission in Ewa that they would remove to as:

> "The Spot Selected for the Station is at " Waiawa ", by the Side of a beautiful Stream of water; & but a Short distance from the road which leads from Honolulu to Waialua. There I have erected a doby house - 40 ft. by 20, one Story high. By the way, Kinau ordered the people of Waiawa to put on a tii (!) leaf roof as a token of her good will toward us & the cause in which we are engaged. She also furnished the house with mats." (Ewa Mission reports 1837)

Figure 1 Rev. Lowell Smith(1885) and wife Mrs Abba (Willis Tenney) Smith (1880) (https://www.tc-lib.org/Missionaries/Profiles/SmithL.html)

Figure 2 Picture of Kahikuonalani Church a top Haupu‘u 1851 (Hawaiian Mission Houses Digital Archive)

This gesture of support by Kina’u shows that even the kuhina nui supported the building of the Old Ewa Hawaiian Church (see figure 3). Sereno Bishop (the son of Artemas Bishop) in his memoirs Reminiscences of Old Hawaii describes the size and material that the church was being built with “he had also erected the adobe walls of a church, capable of holding an audience of about one thousand people.” (Bishop 41) He also goes on to describe the physical dimensions of the church stating “the adobe walls fifteen feet high were covered by a steeply pitched roof, which extended out in a verandah on all four sides…” (Bishop 42) The church was a pretty substantial structure as further described by Sereno Bishop “Our great church on the hill would hold one thousand people, with four hundred more standing in the encircling verandah. It finally became necessary to cover the north side of the church yard with a lanai which would seat six thousand people.” (Bishop 53”) He also remembers on several occasions that the church was filled with up to thousand people. Shortly after the church was finished Rev. Smith and his ohana was called to the mission at Kaumakapili. However, it was Mrs. Smith‘s ill health was the main reason for the Smith‘s removal to Honolulu in 1836.

The Bishops (1836-1856)

The Smiths were relieved by Reverend Artemas Bishop and his wife Delia Bishop.(See figure 3) The Bishops were assigned to their first mission in Kailua in 1824, where they remained until 1828 when Elizabeth Bishop passed away on Feb. 28 1828. She left behind two infants. One of which was a son named Sereno Bishop who would later write his account of the years he spent at the church as a child, in his memoirs “Reminiscences of Old Hawaii” Rev. Bishop then remarried Mrs. Delia Stone on Dec. 1 1828. By 1836 His second wife Delia also falls ill due to overwork and the extreme heat of Kailua, Hawaii Island. They were subsequently removed to Ewa, Oahu in 1836.

Figure 3 Rev Artemas Bishop (1857) and Second wife Delia (Stone) Bishop (1857) https://www.tc-lib.org/Missionaries/Profiles/BishopA.html

According to the Ewa Mission reports by Artemas Bishop in 1837 he describes the removal to Ewa as

> "... the hope of benefiting the health of Mrs. Bishop in a cooler atmosphere than where we were formerly resided & where she might work in the garden & ride daily on horseback This course has been strictly pursued during a great part of the year to the evident benefit of her health. She has not been able however to relax her diet, without in every instance suffering the return of distressing symptoms of dyspepsia." (Mission Station reports 1835-1863, Report for the station at Ewa May 1, 1837)

Rev. Bishop describes his wife's condition as improving but still not able to resume her usual teaching duties. The illness that he describes mrs. Bishop to have was Dyspepsia which is a common condition not relating to a particular illness but is more a description of many related symptoms such as acid reflux disease, irritable bowel syndrome, lactose intolerance, swallowed air, or even anxiety or depression (WebMd, Dyspepsia) He also shows a fondness for his new mission in Ewa as he states "We shall feel it our duty in case Mr. Smith does not return to request permission to remain at Ewa, as it is probably that a return to our former field would be liable to bring on a return of the old complaint." (Mission Station reports 1835-1863, Report for the station at Ewa May 1, 1837)

Artemas Bishop's biggest obstacle had always been money. He tried relentlessly over the twenty years he served at the Old Ewa Church to keep the church afloat without funding from the ABCFM. His creativity led him to experiment with different forms of revenue. His financial endeavors spanned from selling kalo (taro), mai'a (banana), ulu (breadfruit), and other native plants to Mr. William Ladd, who was the founder of Ladd and Co. In exchange for materials such as glass and nails to help with repairs. Ladd and Co. started as a small general store in Honolulu. It was founded by Mr. William Ladd and his associates in July of 1833. Ladd and cp. would eventually grow to become a very successful trading company during the kingdom era. Rev. Bishop also herded cattle and sold cattle. Perhaps his greatest financial endeavor had to be his sugar mill. "Rev. Artemas Bishop at Ewa had a mill run by water power, where he had made for himself and the natives during the past season several tons of sugar, besides molasses…" (Hawaiian Kingdom Vol 1 Kuykendall 1938, 180). Reverend Bishop also tells his account for the building of this church in his mission station report of 1839:

> "There is at the present time a sugar mill in building to go by water, on a scale sufficiently large to grind the cane of all the natives of the district who wish to cultivate it. It has been undertaken not with a view to the emoluments of the business, which are altogether uncertain, but solely to encourage industry & enterprise among the people by affording them opportunity to obtain the avails of their labors. The expenses of its erection are divided between Kekuanaoa and myself." (Mission Station Reports 1839)

His efforts show that though he received many donations from the kanaka it was not enough to sustain all the expenses of the church at that time, as the congregation of the church grew upwards of 1500 people and reaching 2000 people on the sabbath. With a congregation this large and the sugar mill in operation, the donations that were collected and emoluments from the mill were enough to sustain the church for the time being. At one point Artemas Bishop as well as his teachers at Ewa and Waianae were very well paid. He recounts the salaries of his subordinates and himself. From the sugar mill they had accumulated a substantial amount of wealth for themselves and the church. He also boasts at the end of his mission report of

1847/1848 “In conclusion, I beg to add briefly that my people are abundantly able to support me. & I hope that ere long they may be willing.” (Mission Reports Ewa/Waianae 1847/1848 pg65)

In 1848 Artemas Bishop makes a statement that is quite shocking : “At any rate we must gird up our minds to meet the crisis which is approaching when the patronage of Am. Churches will be withdrawn, and not let that day take us by surprise.” (Mission Reports: Ewa 1847/1848 pg 65) He hints at the fact that his mission may be coming to an end sooner than he expected.

One year later in 1849 Artemas Bishop begins his mission report with

> “Brethren, this is perhaps the last time which I as a member of the mission, shall be privileged to present a Report to the Gen. Meeting. And yet I hope to continue my correspondence with you, and the patrons of this mission at Boston, as heretofore…I wrote to the board in June last applying for a dismission from their service, and am daily expecting a reply granting the same on such terms as shall be settled by us with the board at the present session.”

He later goes on to mention that if he is dismissed from his mission that support from the ABCFM (American Board of Commission for Foreign Missions) would continue regardless of whatever happens. Throughout the 1850s Rev. Artemas Bishop supports the idea of ordaining native pastors. He later documents the endeavors of his later replacements Solomona Kahoʻohalahala and Joel Hulu Mahoe. Rev. Artemas Bishop continues to submit reports to the board until 1863. Then in 1863 the mission reports from Artemas Bishop suddenly stop. During 1863 the ABCFM had begun to stop funding their churches and were beginning to pull back their missions in Hawaii. That is why we see this sudden stop in mission reports during the 1860s. However Artemas Bishop continues doing ministerial work for other churches until his death on December 18, 1872.

Ewa Hawaiian church and Joel Hulu Mahoe (1850s)

The Ewa Hawaiian Church is operating at its peak by the mid 1850s. The church at this time served nearly two-thirds of the population of Ewa (a little more than 2000 people). The congregation itself was only about 1500 people but during the sabbath that number would

balloon to 2000 people. It was said by a Kama'åina who will remain anonymous that the church not only served its congregation but it's community. His exact words were "The church was the place that all the people came to pay their taxes. They would come from all over to this church to pay their aliʻi, taxes, thatʻs why the church was built on a heiau" (Anonymous).[1]

Joel Hulu Mahoe took over the duties as pastor of the Old Ewa church in 1856 and remained there until 1858. Pastor Mahoe was a high ranking aliʻi who was a devout Christian. Another interesting fact that may aid in the connection to why Kalākaua may have supported the church is because of Joel Hulu Mahoe. It turns out that Joel Hulu Mahoe was the half uncle of Kalākaua and Liliʻuokalani.

Old Ewa church (1860s-1870s)

The story of the Old Ewa church in the 1860s and 1870s leaves yet another blank spot in my research. It has been difficult to locate much information about this period of time. The only thing that I have found was that John Papa Iʻi was perhaps a deacon of the Old Ewa church from 1869-1870. The source that was found shows John Papa Iʻi doing the ministerial reports for the Old Ewa Church from 1869 until his death in 1870. John Papa Iʻi was a well known 19th century Hawaiian scholar, author, and aliʻi. He accomplished many things in his life., It is known that John Papa Iʻi lived in Waiawa from 1869-1870. According to Marie Alohalani Brownʻs book "Facing the spears of change: The Life and Legacy of John Papa Iʻi" that he spent his last few years in Waiawa and as a deacon of a church. So these clues hint at him serving that the old Ewa church, though nothing is specified. Recently I have found new evidence from the Hawaiian Mission Houses Archives (in the Hawaiian Evangelical Association files) two letters written by John Papa Iʻi to the ABCFM asking for goods and supplies for the Ewa church. Though this is only one source of evidence and it cannot confirm his direct connection to the church it is

[1] This story was shared with staff and interns during the 2017 Wahi Kupuna Internship Program, which took place in Waiawa, Oʻahu.

definitely pointing this research in the right direction in regards to connecting John Papa I‘i to the old Ewa church.

The Nawa’a`s (1882-1889)

As we move forward in the church‘s history to the year 1882, the story of the Old Ewa church picks up quickly once again. In 1882 a man named Samuel Pilipo Keli‘imahi‘ai Nawa‘a was sent to revive the dilapidated church. Maintenance of the church had been none existent most likely due to lack of funding and due partly to the lack of Artemas Bishop and his ambitious financial endeavors. The story of Samuel Nawa‘a and the naming of Kahikuonalani church is told by a man named Simeon Nawa‘a in an ethnographic interview with Mary Kawena Puku‘i.

Samuel Pilipo Keli’imahi’ai Nawa’a began his mission to Mile island in Micronesia in 1878. He had been sent to Mile island to take over the mission from his brother Simeon Kahelemauna who had passed away in 1877. He married Mary Ka’aiali’i Kahelemauna the widow of his brother per her request. After the death of her husband Mary Ka‘aiali‘i Kahelemauna sent a request to the ABCFM to take over her husband‘s mission. Her request was swiftly and firmly denied as they refused to let a woman run a mission. This is the first instance of her passionate and fiery personality. This will not be the last time that we see Mary Ka‘aiali‘i Kahelemauna Nawa‘a take matters into her own hands. Samuel Pilipo Keli‘inahi‘ai Nawa‘a was stationed at Mile Island from 1878-1881 from which he and his new wife (Mary Ka‘aiali‘i Kahelemauna Nawa‘a) and hanai son (Simeon Kahelemauna Nawa‘a) returned aboard the missionary boat the Morning Star III to Oahu in May of 1881. Due to a smallpox outbreak during their return to Oahu they were forced to stay off island until they could safely return to Oahu in 1882.

Through many trials and tribulations they fought to keep their mission in Micronesia going. Mrs. Nawa’a being very strong willed and Mr. Nawa’a also fighting hard for their cause

ended up in a confrontation with the ABCFM leading to the ending of Mr. Nawa'a's Mission in Micronesia. Being stripped of his power of a pastor he was sent home to Oahu with his wife and young son. And that is where the story of the naming of Kahikuonalani begins. We look at an account by Simeon Nawa'a who would be 12 years old in 1882 recalling this crucial event. Later in life and during an interview he recounts the history of the Kahikuonalani church in a six page history giving many detailed facts and dates about the naming of the Ewa Church.

How Kahikuonalani got its name

This is the moʻōlelo of how the Old Ewa church got the name Kahikuonalani. We begin the story with Samuel Nawaʻa returning from his mission in the Marquesas. "When Simeon and his parents returned from the Marquesas, the old church was in a deplorable condition, the roof was gone, the benches, windows, doors, and pulpit broken and the cattle gained access to the interior. For a time meetings were held on the Lanai of the church and then in various homes all over the district." (HEN Vol 1 2740-2742) The church was in such bad shape that something desperately needed to be done so

> "A widow suggested that they strive to get a new chapel and she gave her savings from the sales of fish, crabs, and seaweeds which she brought weekly to Honolulu. But donations toward the building came in very slowly. It was some of the graduates of Lahinaluna School, old and young, who solved the problem. They liked to sing and so they began to organize in small groups. They all sang very well and so they decided to hold a concert. This brought out their supporters, each adhering to and bragging about his own groups. There was a lot of boasting then! On the night of the contest, there was a big turn out. When a singing group got up to sing, its supporters threw money, from small sums up to five dollar gold pieces. All of this went into the church fund which was enriched by seven hundred dollars. More was still needed." (HEN 2740-2742 Samuel Nawaa to Mary Kawena Pukui)

After all of the effort put in by the kanaka and Mr. Nawaʻa it still was not enough to rebuild the church. During this time the missions from the ABCFM had ended so there was no secure funding coming to aid Mr. Nawaʻa. Out of ideas Mr. Nawaʻa was about to give up. Seeing the defeat in his eyes Mrs. Nawaʻa took it upon herself through prayer to

persevere and went to see King Kalakaua for help. The story continues through the words of Samuel Nawaʻa

"When no more came, Nawaʻa became discouraged but not his wife, she made it a subject of prayer and then came to see the king, Kalakaua. She told him about their struggles to get a chapel in which to hold their meetings. The king was interested and promised to help, a promise he faithfully kept. She asked his presence at the dedication of the chapel and he was there that day. She suggested the name Ka-hiku-o-na-lani to the members of the congregation which was gladly accepted. The name means, " The-seventh-of-the-rulers", a title often applied to Kalākaua in his mele inoa or name chants because he was the seventh ruler from Kamehame, over the united island group." (HEN pg 2740-2742 Samuel Nawaʻa to Mary Kawena Pukuʻi)

Here is a coloured rendering of the church after the renovation. The year is unknown.

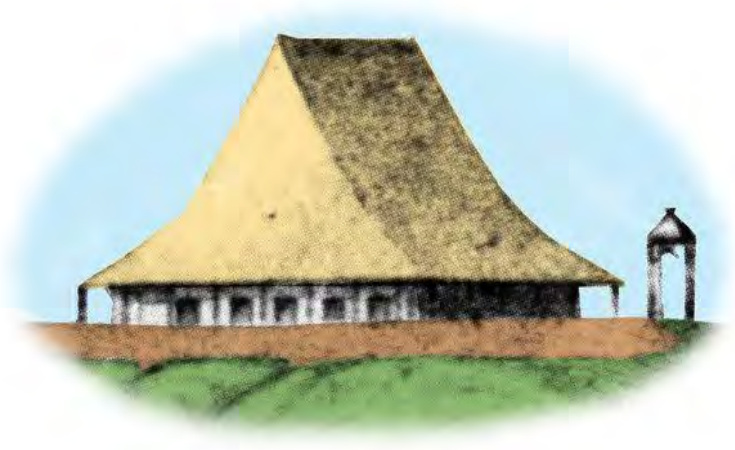


Figure 4: Coloring and editing done by Lori "Kahi" Grant of Kahikuonalani church. Figure taken from the original 1851 rendering of the church (labeled "Kahikuonalani church")

As I read through Dr. Ron Williams Jr.ʻs Dissertation called "Claiming Christianity: The Struggle Over God and Nation in Hawaii 1880-1900" I noticed in a footnote on page 28 a few lines describing the renovation of the church

> "Rebuilt in 1884 after a period of long neglect, the church was given the name "Kahikuonalani" (The Seventh Heavenly One) in honor of Kalākau, the seventh monarch to rule Hawaiʻi. The kings wife, Queen Kapiʻolani served as treasurer to the church, and when Kalākaua donated the final monies to rebuild, prominent

> congregant Mrs. Nawaʻa proclaimed "o oe Kahikuonalani ka malahini hanohano i ka wa e hoʻolaʻaiaʻi kuʻu luakini!" (And Thou, the Seventh Sovereign, shall be the honored guest at the dedication of my church!) (Williams jr. Pg 28)

The history of the Kahikuonalani church spans another 133 years extending all the way until today. However this research done on the first 50 years of church history paints a good picture for what is to come. We can never truly know what the next chapter of this moʻolelo has in store for us but we can continue to tell the moʻolelo of the Kahikuonalani church so that it may once again be returned to its glory.

Pupu aʻo Ewa

It is often believed that the song Pupu a'o Ewa refers to the composer playfully enticing the people of Ewa to visit this church. It is also believed that this mele was written early on in the church's history in order to draw more people in. One other theory is that the song was written in the 1880s during the fundraising that was done to rebuild the church. However new evidence that was found by Kyle Kajihiro tells a different story. Pupu a'o Ewa is often associated with the Kahikuonalani church as the mele written for the church. Interestingly enough through my research and through the help Kyle, we have found that the song Pupu a'o Ewa was not written specifically for the Kahikuonalani church, but for a branch of the Kahikuonalani church called Kapuaikaula located in Watertown at Pu'uloa. However I am not insinuating that the song "Pupu a'o Ewa" was not written for Kahikuonalani Church but merely to clarify the origin of the song.

The information comes from an article written on 12/22/1956 by Simeon K. Nawa'a. This is the same Simeon K. Nawa'a from whom we hear many other historical accounts about the church. Simeon Nawa'a writes:

> "The title of the song is 'Nani Ka'ala' and not 'Pupu o Ewa.' Pupu a o Ewa.' is correct. The "a" was left out in the article. The composer was my first cousin, Mr. James Awa. He once lived with his parents at "Halehana Paakai o Puuloa" (Salt Mint Factory of Puuloa). Located on the westside of Pearl Harbor entrance. Years later he and his family moved to Watertown known to the Hawaiians as

"Kapuaikaula" a branch of Kahikuonalani (Seven Sovereigns) congregational Christian Church of Ewa, and Mr. Awa was a deacon in charge of this branch."

(Nawa'a Honolulu Advertiser 12/22/1956)

Simeon K. Nawa'a later states that Mr. Awa had no chapel and held their sunday services in his yard under some Kiawe trees. Due to many instances of bad weather the group decided that they needed a chapel. In order to raise money to build their chapel they decided to hold a concert (similar to the Kahikuonalani fundraiser) inviting musical talents from all over to join in. Mr. Nawa'a recounts the event as

"Mr. Awa prepared his group and requested my help which I very much oblige to kokua. He then composed this imaginative song, prediction that the event would be a success, and it was so. Here is the chorus and its translation:

Pupu a o Ewa i ka nui o na kanaka
Ewa is blocked up by crowding people,

I naue mai e ike i ka mea hou o ka aina,
Who come to see the new view of the land,

A he aina ua kaulana mai na kupuna mai,
A land famous from the forefathers

Alahula Puuloa he alahele no Kaahupahau.
Puuloa, the way of Kaahupahau is excited.

(Nawa'a, Honolulu Advertiser 12/22/1956)

Mele: Eo Kahikuonalani

Throughout all the research that was done I struggled to find other mele connected to the Kahikuonalani church. This was very surprising to me because the church had played a prominent role in Ewa. Composing mele is a way to honor people and places. At one period of time during the internship I found myself struggling to find that spark to light the fire of passion to continue my research. This went on for a few days until suddenly a mele began to take shape.

My mele “Eo Kahikuonalani” is a mele that honors the Kahikuonalani church and helped me find my connection to my research. Here is the song with translation:

1st verse	**1st verse**
Eo Kahikūonalani	Oh Kahikūonalani
Eo Kahikūonalani	Oh Kahikūonalani
Noho ana ma luna o Haupu‘u	Built atop of the great hill of Haupu‘u
Kūpa‘a ko Kanepaiki ‘āina	Standing with pride over Kanepaiki‘s Land
2nd verse	**2nd verse**
Eo Kahikūonalani	Oh Kahikūonalani
Eo Kahikūonalani	Oh Kahikūonalani
Kaulana ka hale pule a‘o Ewa	The famous church of Ewa
He wahi nā kanaka i ho‘okipa ai	The place visited by all
3rd verse	**3rd verse**
Eo Kahikūonalani	Oh Kahikūonalani
Eo Kahikūonalani	Oh Kahikūonalani
E kia‘i iā Kahi‘ukā	Protected by Kahi‘ukā
Kahi‘ukā ka manō a‘o Pu‘uloa	Kahi‘ukā the great protector of Pu‘uloa
Last verse	**Last verse**
Eo Kahikūonalani	Eo Kahikūonalani
Eo Kahikūonalani	Eo Kahikūonalani
Haina ia mai ana ka puana	The story is told of the
Hanohano ka hale pule a‘ o Kanepaiki	Majestic is the church of Kanepaiki
Hanohano ka hale pule a‘o Waiawa	Majestic is the church of Waiawa
Hanohano ka hale pule a‘o Ewa	Majestic is the church of Ewa

Mele written by Daven Chang June 2017

Piecing together the past through mele

Through songwriting I am able to piece things together easier. I had many bits and pieces of random information that I did not know what to do with, so by composing this mele it helped me to organize my thoughts. The song was written to help us focus on the oral traditions associated with the church such as in the first verse the story of Kane and Kanaloa is reviewed identifying Haupu’u and establishing it as a place of importance. It also touches on the mystery of Kanepaiki the mysterious Konohiki to whom controls the area of Waiawa and the hill in which the church sits on.The second verse honors the idea that the church was a place that was visited by many and known by many with reference to the many accounts by Sereno Bishop and

other pastors of the church that there were a large number of members who frequented the church. The third verse pays homage to the story of Kahi'uka the shark god that is said to protect the area and the idea that he is acting as a kia'i (protector) who is watching over and looking after all of us. The last verse sums up everything mentioned in all the other verses and honors the church as belonging to Kanepaiki, Waiawa, and Ewa.

Early on in my research I found that the Kahikuonalani church was still in existence, so I made a phone call and asked their permission to do research on their church. They obliged then I proceeded to ask them if they would be willing to share any historical information they had about the church with me. They were so hospitable and generous with letting me use pictures and information that they had, that after I composed the mele "Eo Kahikuonalani" I decided that the song would be for the church. Though I have not met with the church yet to present them this song as gift for their kind gestures I would like to make that dedication here so that there is no question to which why the song was written and to whom it is for.

Discussion/ Reflection

Positive Outcomes

My research has shown that many of the Ali'i developed much more than a tolerance for the Kahikuonalani Church. They developed a feeling of connectedness and acceptance for this shift in beliefs. It is encouraging to see so many kanaka and ali'i showing their support for this particular church, and in return Kahikuonalani showed its support towards the kanaka and the culture of Hawaii.

One of the positive outcomes of the building of the church was the acceptance and support of Native preachers at Kahikuonalani. Ordaining native preachers was a way to use the ali'i to help convert kanaka quickly. Many of these native preachers were asked to come to and preach voluntarily. Many of the kanaka and the native preachers may have looked at Kahikuonalani as a place of hope.

The roles of Kahikuonalani

The Kahikuonalani church played huge roles in a religious and economic way for the people of Ewa. However it also played a metaphoric role in this concept of shifting beliefs. Though the luakini above Haupu'u was destroyed, the placing of the church at that location was an important choice. Haupu'u being 300 feet high over looks all of Ewa, the church which sits on top of Haupu'u being another 40 feet high is very intimidating.

After Kanepaiki's death a man named J. Kahauolono takes over as konohiki of this 'åina, however he is quickly forgotten in the pages of history. The Kahikuonalani church then becomes the konohiki or overseer of Ewa and Waiawa. "The church was the place that all the people came to pay their taxes. They would come from all over to this church to pay their ali'i, taxes, that's why the church was built on a heiau." (Anonymous) This quote given to me from a Kama'aina also supports this concept of the Church as a konohiki or ali'i. This mana'o insinuates and supports the church being built on Haupu'u and also supports the idea of the church playing an economic and metaphoric role. Referring back to page 11 and 13 of this paper, Artemas Bishop often collected and sold goods given to him by the kanaka. The types of food that were given to Rev. Bishop as support for the church, were things such as Taro, Bananas, Breadfruit which were all things that the konohiki of the old times would collect as tribute during makahiki season. It also shows in the mission reports in the late 1830s and early 1840s that Artemas Bishop asks the kanaka of Waiawa and Ewa for money to maintain the church. However with no money to give, the kanaka instead gave taro, bananas, and breadfruit as a way to fulfill Artemas Bishop's request. Therefore in a way Artemas Bishop can be seen as the konohiki whom the kanaka would give tribute to.

This mana'o spawns from several observations that were made throughout the research and while piecing together this research. The location a top Haupu'u places the Kahikuonalani church at the highest point in Waiawa, towering over and perhaps watching over or protecting

the area of Waiawa as did the luakini before it. Another way to entertain this idea is to look at the similarities of the two that share the same name"Kahikuonalani". Viewing Kahikuonalani as the mo'i Kalåkaua signifies that he is the ruler of the Lahui o Hawaii (Kingdom of Hawaii) and the overseer and protector of his lahui (kingdom). Now the same thing can be said for the church that sits atop Haupu'u. Its location puts it in a position similar to that of an ali'i which is the protector and overseer of the land of Waiawa and Ewa. It also places it as one of the places closest to the lani (heavens) which is similar to that of the role of an ali'i which is to be an earthly embodiment of the heavens or gods.

Concluding thoughts

My research only uncovers only the very tip of the iceberg, covering a mere 50 of the church's now 183 year history, therefore there is still much to learn about this iconic landmark, Haupu'u, and its surrounding areas. The information that I have found is merely a repeat of what several others before me have done. However the questions that arise from this research are plentiful and are ones that I hope to pursue. Some of these questions that I hope to pursue are: What is the story behind the mysterious church bell that suddenly appears in the church's tower in the 1840s- 50s? What were the thoughts of the native preachers who ran the church after Artemas Bishop? What were the thoughts of the Kanaka who endured this era of change? Was Kanepaiki the one who made the decision to destroy the luakini atop of Haupu'u or was it the decision of someone else? These are only a few of the questions that have lingered in my mind and that I fully intend to answer if given the opportunity. This research has afforded me a very general understanding of what the role of the Kahikuonalani church has played in the Ewa area, and therefore leaving much more to be done. My ultimate goal for this research would be to complete the 183 year history of the Kahikuonalani church and to share these findings with the community.

The final message that I have for my readers is, not only did many of the aliʻi of Ewa and Waiawa support the building of the church but they also in a ideological way may have replaced the old beliefs and physical idols with those of the church. However, these new physical idols such as the Kahikuonalani church represents new physical idols that have the same value as those of ancient times. The church physically sat on the highest point of Ewa, thus being Haupuʻu towering over the relatively flat landscape of Waiawa. But also in many ways the church did help the land flourish by giving its kanaka a place of sanctuary from the hardships of life at that time. Kahikuonalani the name give to the church also plays a role. This name is shared with the Moʻi Kalakaua and may also represent the position in which the church stood. To put it in perspective the Kahikuonalani church was the only church in the Ewa region except for a smaller chapel in Waianae. It is through the eyes of the church that Kalākaua watches over Waiawa, sitting at the highest point, watching over and protecting his precious ʻāina of Waiawa.

The findings of this research is to provide an alternative outlook to a unique history. In this research I found it very easy to get stuck in one point of view and it proved difficult to see the whole picture, but by focusing on the influential role that church played in Ewa a different view of the church started to emerge. By viewing the church as a konohiki I feel that rather than blaming anyone for the displacement of our people and destruction of our culture; that we may look to this glimmer of light that allows us to have a glimpse into what the manaʻo of the Kanaka at that time period may have been thinking. To parallel the aforementioned thought I leave you with the ʻōlelo noʻeau: ʻaʻole pau ka ʻike i ka hālau hoʻokahi, not all knowledge is found in one place.

Future Endeavors

Looking to the future I see this research continuing on for years to come. Through this short time I have spent researching and learning about Waiawa through the Wahi Kupuna Internship Program I have discovered so many leads and avenues for future research that I feel

must be pursued. Some of the new leads and ideas include finding more information on several pastors and people associated with the church. These include Solomona Kaho'ohalahala, Joel Hulu Mahoe, John Papa I'i, J. Kahauolono, and Kanepaiki to name a few. Another possible avenue of research is Solomona Kaho'ohalahala. I have heard from a friend that there is a Solomon Kaho'ohalahala that lives on Lana'i and that he may be worth talking to. Therefore I would like to contact Mr. Kaho'ohalahala and find out if he may be related to the Solomon Kaho'ohalahala that was a pastor at the Ewa church in the mid 1850s. Another lead would be to interview Hailama Farden whom I have discovered to be the expert on the Wai'anae branch of the Kahikuonalani church as well as a knowledgeable source on the Kahikuonalani church itself. There are also other aspects of the church I would like to look into such as the relationship with the Watertown church called Kapua'ikaula, run by a deacon named James Awå (cousin of Simeon K. Nawa'a), who coincidentally wrote the mele "Nani Ka'ala" or Pupu a'o Ewa as we know it today, for his church (Kapua'ikaula) at watertown in the early 1900s. A future pursuit would also be to present my song "Eo Kahikuonalani" as a gift to the Kahikuonalani church as a token of my appreciation for all the hospitality that they have shown me, as well as to honor them with a song directly representing the church. Also I would like to find out more about Queen Lili'uokalani's affiliation with the Kahikuonalani church as I have found a single account about the Queen donating money to have the church rebuilt in 1904. Also the relationship between John Papa I'i and the Kahikuonalani church is something that I would like to pursue. Also I believe that the church fills the role of Konohiki of Ewa after the death of Kanepaiki. It fills the void left by Kanepaiki. Kanepaiki was the overseer of the land his job was to act as a kia'i for Ewa as well as make sure that the 'aina flourished. In those ways the Kahikuonalani church fulfills the role of Konohiki. So the ideology of the church becoming the konohiki of the area is something that I would like to look into and do further research on.

Works cited

Books:

Bishop, Sereno E. *Reminiscences of Old Hawaii.* The Advertiser Historical Series No. 1. Honolulu, HI: Hawaiian Gazette Co., 1916

Ii, John Papa Fragments of Hawaiian History. Translated by Mary K. Pukui and edited by Dorothy B. Barrère. Honolulu: Bishop Museum Press, 1959. Pg 153

Kuykendall , Ralph S. *Hawaiian Kingdom Volume I: 1778-1854 Foundation and Transformation* . Vol. 1. 3 vols. Honolulu, HI: University of Hawaii Press , 1938.

Sterling, Elspeth P. *Sites of Oahu.* Honolulu, HI: Bishop Museum Press, 1978

Brown , Marie Alohalani. *Facing the Spears of Change: The life and Legacy of John Papa I'i.* Honolulu, HI : University of Hawaii Press , 2016.

Online Text sources:

"Dyspepsia-Topic Overview ." WebMD. Accessed October 4, 2017. https://www.webmd.com/digestive-disorders/tc/dyspepsia-topic-overview.

Maly, Kepa, and Onaona, Maly. *He Mo'olelo 'Āina: Tradtions and Storied Places in the District of 'Ewa and Moanalua (in the District of Kona), Island of O'ahu: A Traditional Cultural Properties Study-Technical Report.* Technical paper. Study No. 131. April 21,2012. Accessed August 23, 2017. http://www.kumupono.com/West%20Oahu%20Ethnography/west_oahu_ethnography.html.

"Joel Hulu Mahoe ." Alchetron. 2017. Accessed October 4, 2017. https://alchetron.com/Joel-Hulu-Mahoe-1158481-W.

"Rev. Lowell Smith D.D.- North China Mission ." *The Missionary Herald* (Boston Press of Samuel Usher 171 Devonshire street), August 1890, Vol 86 ed. Accessed October 4, 2017. https://books.google.com/books?id=34BEAQAAMAAJ&pg=PA528-IA50&dq=The Missionary Herald lowell smith&hl=en&sa=X&ved=0ahUKEwjKmaai6tfWAhVD4mMKHWXkCfgQ6AEIJjAA#v=onepage&q=The%20Missionary%20Herald%20lowell%20smith&f=false.

The Missionary Herald (Boston: Press of T.R. Marvin & son, 42 Congress Street), 1863, Volume 59 . pg 9 Accessed October 4, 2017.

Williams Jr. , Ronald C. .*Claiming Christianity: The Struggle over God and Nation in Hawai'i, 1880-1900.* PhD Diss. University of Hawai'i at Manoa , 2013. 28. Accessed September 29, 2017

Archival Sources:

"Mission Station Reports - Oahu - Ewa/Waianae - 1835-1863," Hawaiian Mission Houses Digital Archive, Accessed September 23, 2017, http://hmha.missionhouses.org/items/show/839

Nawa'a, Samuel. "Noted Places of Ewa (Kane and Kanaloa at Ewa)." *Ka Loea Kalai'åina* (Honolulu), 1899.

Wai'ale'ale, D. K. "The Book of Omens Pertaining to Houses ." Interview. 1834, 1-25.

Pictures/Images:

Extracted From "Portraits of American Protestant Missionaries to Hawaii" (1901) - Published by the Hawaiian Mission Children's Society

“N-0961 - Kahikuonalani Church, near Ewa, Oahu, 1851. Photograph., *Hawaiian Mission Houses Digital Archive,* Accessed September 29, 2017, http://hmha.missionhouses.org/items/show/4139

Grant , Lori Kahi. *Colored Picture of Kahikuonalani Church* . Kahikuonalani Church, Honolulu.
“Smith, Lowell - HMCS Family Photo Collection - Box 0021 - Image 0002A,” *Hawaiian Mission Houses Digital Archive*, accessed October 3, 2017, https://hmha.missionhouses.org/items/show/10326.

“Smith, Lowell - HMCS Family Photo Collection - Box 0021 - Image 0016A,” *Hawaiian Mission Houses Digital Archive*, accessed October 3, 2017, https://hmha.missionhouses.org/items/show/10354.

"Titus Coan Memorial Library ." Digital image. Titus Coan Memorial Library: Missionary Life in Hawaii (1800s). June 22, 2017. Accessed October 4, 2017. https://www.tc-lib.org/Missionaries/Profiles/BishopA.html.

Diving into Ancestral Stories

By: Kama Kaʻaikaula

He manō holo ʻāina ke aliʻi
-the chief is a shark that travels on land (Pūkuʻi 1983, 87)

Kanaka Maoli (Native Hawaiians) revere the manō (shark) in the same respect as their chiefs. For example, the ʻōlelo noʻeau (Hawaiian proverb) provided at the beginning of this paper compares the ferocity of aliʻi (chiefs) to the manō. Mary Kawena Pukuʻi further interprets the ʻōlelo noʻeau to mean that "...like a shark, a chief is not to be tampered with" (Pūkuʻi 1983, 87). In a society in which chiefs were seen as directly descended from the gods, Kanaka Maoli understood and honored manō in the very same respect: as descendents of these gods and in some cases, gods themselves. As Pukuʻi puts it, the shark is the chief of the ocean, in the same way that an aliʻi is on land.

Beyond this ʻōlelo noʻeau, there are numerous moʻolelo or stories that our Hawaiian ancestors have left for us that can be used to demonstrate how Kanaka Maoli viewed and connected to the manō. One such moʻolelo is that of Kaʻehuikimanōopuʻuloa. Kaʻehuikimanōopuʻuloa or Kaʻehuiki for short, is a manō aliʻi (shark chief) who traveled across the pae ʻāina Hawaiʻi (the Hawaiian islands) all the way to the mythical and godly realm of Kahiki. Although *He Moʻolelo kaʻao no Kaʻehuikimanōopuʻuloa* traces Kaʻehuiki's entire journey from Hawaiʻi to Kahiki and back, this paper specifically looks at Kaeʻhuiki's time spent in Puʻuloa (Pearl Harbor) in order to learn more about this area and the manō who lived there.

During this summer we had the opportunity to go and visit the Pearl Harbor Historic Sites Museum. However we were not there for a tour, but rather a detour, led by Kyle Kajihiro and Terry Kekoʻolani, where we learned of the displacement of Kanaka Maoli from

the area. We also examined the National Park Service's priorities when it came to what kinds of information was highlighted and presented. It became clear through our visit that the Kanaka Maoli history of area was secondary to the story of WWII.

It is interesting to see that as time has passed, not many people even remember that Pearl Harbor Naval Base was built as a result of treaties with the foreign powers in Hawai'i following the overthrow of the Hawaiian monarchy in 1893, nor do people recognize stories such as *He Mo'olelo ka'ao no Ka'ehuikimanōopu'uloa* or other stories which took place in that same harbor. By analyzing mo'olelo such as *He Mo'olelo ka'ao no Ka'ehuikimanōopu'uloa* for the information they can provide about Kanaka Maoli place names, beliefs, and cultural practices, we are able to learn and reflect upon the practices of our ancestors and the lands they lived upon, and are better equipped to restore these lands and bring back these culturally significant stories into modern memory.

Background

As previously mentioned, this paper focuses on the time that Ka'ehuiki spent in Pu'uloa. The name "Pu'uloa" literally translates to long hill, and comes from the longer name Ke awa lau o Pu'uloa. Ke Awa Lau o Pu'uloa translates to the many harbors of Pu'uloa, which references the natural marine landscape of the area. Another name for Pu'uloa is Awāwalei, which translates to a lei of harbors, again commemorating this area for its abundance of natural bays and harbors (Handy and Handy 1991, 469). Both of these names were given to the land by Kanaka Maoli who understood just how bountiful and productive this area was.

Today, Ke Awa Lau o Pu'uloa and Awāwalei are not widely used. The name that is commonly heard today is Pearl City or Pearl Harbor. The name Pearl City encompasses and

ultimately overshadows the names of six ahupua'a (Hawaiian land divisions) that include, Waiawa, Mānana, Waimano, Waiau, Waimalu, and Kalauao. While you may hear these names today, they are considered as being part of one whole division, Pearl City (Figure 1).

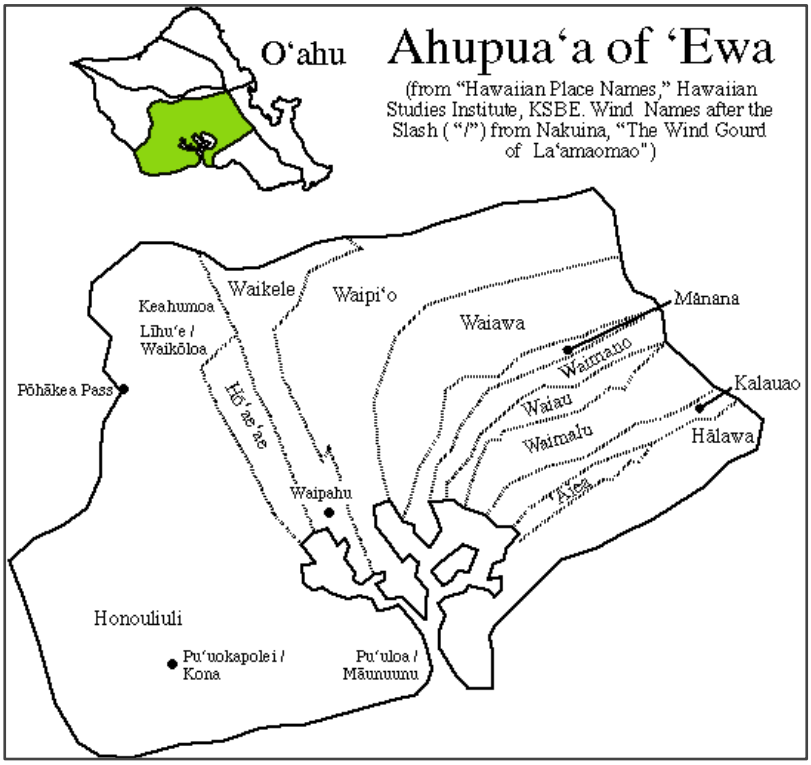


Figure 1. Map of the 'Ewa Region of O'ahu. Photo credit: (https://kanakagenealogy.wordpress.com/maps/islands/oahu/oahu-island-ahupuaas/ewa-ahupuaa-oahu-island/)

The indigenous history of Pu'uloa has been overshadowed by the names of Pearl City and Pearl Harbor, the tragic events of World War II, and the ongoing American military presence in the area. This is evidenced by the WWII Valor in the Pacific National Monument that is now there. The monument consists of four main attractions, which includes , the Arizona Memorial (and accompanying visitor center), the Battleship Missouri Memorial, the USS Bowfin Submarine Museum and Park, and the Pacific Aviation Museum Pearl Harbor. The National Park Service states that "[t]he visitor center consistently ranks among the top three most heavily-visited tourist destinations in Hawai'i. Visitors should expect

heavy visitation throughout the year, but our busiest seasons are summer, winter holidays, and spring break. Daily visitation averages about 4000 visitors, so reservations are recommended" (National Park Service 2017). So those 4000 visitors who come to this park every year are only exposed to the military history which began with the battle of Pearl Harbor, and not learning anything about Hawai'i or the culture and history of the place itself.

Although the names and stories of Pu'uloa are not the main focus of the narratives that are told in the historic sites surrounding Pearl Harbor, the indigenous history of the area continues to be rich. For exmaple, the Pu'uloa area is home to six manō. These manō are Ka'ahupāhau, Kahi'ukā, Honuiki, Komoawa, Kuhialoko, and Kuhiawaho, four of which are mentioned in the mo'olelo of Ka'ehuikimanōoPu'uloa. These manō were known to protect the people from man-eating sharks, known as niuhi. There are various reasonings as to why these manō upheld this purpose, all of which have to do with their leader Ka'ahupāhau. As the story goes, the kanawai (law) that no human be harmed by sharks on the island of O'ahu was created by Kanehunamoku and Kamohoali'i. However, one day their sister, Ka'ahupahau, broke this rule and killed a woman named Papio on the orders of her kahu (attendant, who shares a very intimate relationship with the deity). For this the kahu was killed and Ka'ahupāhau was placed in confinement for several years. Following her confinement and a nearly fatal sight seeing journey, she makes sure that this law is regarded as the most important (Kamakau in Maly and Maly 2003, 54). It was in her grief that the rule of harming no humans came to be. Whichever the reason, the fact of the matter is that the manō of Pu'uloa were here with the goal of protecting the kanaka.

Sharks in Hawai'i

Under the definition of manō in the Hawaiian language dictionary, different species of manō are listed. These include manō iʻa (ordinary shark), manō hae (fierce shark or fighter), and the manō kanaka (shark born of a human) (Pukuʻi 1986, 239). The manō kanaka are the shark gods who have the ability to turn themselves into humans if needed, and are the class of sharks that were worshiped and cared for by people. Now while the dictionary only provides a handful of species of manō found in the islands, when someone says manō you know they are talking about a shark whether that species is among these or not.

Another source that mentions the various manō species of these islands is *Ka Hana Lawaiʻa.* This is a report that was done by Kepa and Onaona Maly, utilizing native hawaiian traditions, Historical and Government information, as well as interviews of the Kamaʻāina (native born) of Hawaiʻi in regards to fishing practices here in the islands. . In this work, the authors identify five species of shark (Maly and Maly 2003, 75). These five include the kihikihi (hammerhead), alakea (white fin), manō kanaka (man shark), manō, and niuhi. The kihikihi and alakea were considered to be edible by the people of Hawaiʻi. The shark classified simply as manō is described as a large white shark that is not often seen. Lastly the niuhi is considered to be the most revered. These sharks are the largest and fiercest sharks of all and they can be identified by the bright greenish light of its eyeballs (Maly and Maly 2003, 75).

The Kanaka ʻŌiwi history of manō in Puʻuloa is rich. For example, there were various manō kanaka/akua manō who frequented, visited, and or lived in the area. The most famed manō of Puʻuloa is Kaʻahupāhau. Kaʻahupāhau along with Kahiʻuka, her brother, are praised throughout the island of Oʻahu for being the protectors of man from the threat of man-

eating sharks (Emerson 1892, 12). Another shark that is important to Puʻuloa is Komoawa; he is the shark that guards the entrance to Puʻuloa and his cave is located at the mouth of the Harbor on the Hālawa side of the bay (Uaua 1994, 17).

Methods

In order to analyze the moʻolelo behind Kaʻehuikimanōopuʻuloa, I had to look into the book itself. The first print of the book that I found was a reprint done in 1994. This version of *He Moʻolelo Kaʻao no Kaʻehuikimanōopuʻuloa* was published by Hale Kuamoʻo, which is a publishing company that is run by Ka Haka ʻUla o Keʻelikōlani College of Hawaiian Language at the University of Hawaiʻi Hilo. This version of the moʻolelo is publicly available on Ulukau, the Hawaiian Electronic Library (http://www.ulukau.org/elib/cgi-bin/library?c=hk13&l=haw). Beginning with this version, I then found the original version as it was printed in the Hawaiian language newspaper *Ke Au Okoʻa* as a series between November of 1870 to January of 1871. In order to access this version of the moʻolelo, I searched Papakilo database (https://www.papakilodatabase.com) and typed "Kaehuikimanoopuuloa" into the search bar. Both versions of Kaʻehuiki are written completely in the Hawaiian language. Thus, I used both the printed *Hawaiian Dictionary,* as well as the online Hawaiian dictionary (http://wehewehe.org/) in order to assist me in the translation process. Having a dictionary handy is very important because when it comes to Hawaiian words, one word can have multiple meanings. Sometimes phrases can even have a layer of meaning below the surface, which is called Kaona. Thus, as I translated the moʻolelo, I had to examine key words and phrases within the larger context of the moʻolelo in order understand what the author was trying to say.

For the purpose of making the reading and translating process easier, I decided to mainly look at the book version that can be found on the Ulukau website. I say it makes it "easier" because the original newspaper version of the moʻolelo has very little, to no diacritical marks at all. So the locations of the ʻokina and kahakō are harder to determine, and with the Hawaiian language, the placement of these marks change and modify the word and thus their meanings as well. Through my reading of the moʻolelo, Puʻuloa is only mentioned in chapters 3, 4, and 6. In order to fully understand the context of what is happening during these chapters, I believe it is necessary to read the book in its entirety so that the correct context can be gleaned.

Analysis

"He Moʻolelo Kaʻao no Kaʻehuikimanōopuʻuloa" (The legend of Kaʻehuikimanōopuʻuloa) was published in the newspaper, *Ke Au Okoa* in 1870-71 by a man named William Henry Uaua. Uaua was an english speaking graduate of Lahainaluna. In the year 1851, Uaua was baptized and became an integral part of the mormon presence on Maui (Kenney 1998, 1). In 1853, Uaua came to Oʻahu and in April of that year, Uaua became an ordained Mormon elder (Kenney 1998, 6) . Although Uaua was an elder in the Church of the Latter Day Saints, it is interesting to note that he published KaʻehukimanōoPuʻuloa as a way to connect his religious beliefs with Hawaiian traditions. At the very beginning of Kaʻehuiki, Uaua inserts a short author's note praising the power of the Lord:

> *He manaʻo hoʻākāka no ka mea nāna e kākau ana i kēia moʻolelo kaʻao mai ka mua a ka pau ʻana. Ua ʻikemaka nō kākou a pau mai ka wā kahiko loa mai a kēia manawa nō, he mea mau no kēia lāhui kānaka, ka hoʻi mai o kekahi poʻe ʻuhane a noho i luna o ko lākou mau kahu, a ʻōlelo kanaka mai. Pēlā nā ʻunihipili, nā pueo, a me ā manō, a me kekahi poʻe ʻuhane ʻē aʻe. A nui wale lākou i kapa ʻia he mau ʻānela kiaʻi a ma ka mana o ke Akua Nui nāna i hana nā mea a pau, ua hiki nō i nā holoholona a me nā iʻa o ke kai ke ʻōlelo kanaka, i nani ke Akua, a pēlā hoʻi e ʻōlelo kanaka ai nā manō ma kēia moʻolelo a kākou.(Uaua 1994, n.p.)*

> *This is an explanation provided by the one who is writing this tale from beginning to end. We have all witnessed for ourselves from ancient times to the present, a common occurrence of this nation of people, the return of some people's spirits to reside above their caretakers and to speak the language of humans. It is the same for spirits of the dead, the owls, the sharks, and some other supernatural/ghostly beings. Many of them are called guardian angels and by the power of the great God who created all things, the animals and fish of the sea can indeed speak our language, by the glory of God, and that is how the sharks can speak just like humans in our story.*

This note is interesting because it suggests that Uaua was attempting to bridge a traditional worldview with his religious beliefs.

Diving into the moʻolelo, Kaʻehuikimanōopuʻuloa was born in Puna, Hawaiʻi. His parents were Kapukapu and Hōlei. This young manō aliʻi of Puna, gathered his fellow manō aliʻi of Hawaiʻi island and they went on a sightseeing journey around the Hawaiian islands, from Hawaiʻi island all the way up to the northwest to Kahiki. Along their journey they encountered both friendly and not so friendly manō in a journey filled with parties, various tours around each of the islands, many manō, and a handful of manō battles. One thing that struck me as interesting is that in this story, they are saying that the sacred godly place known as Kahiki is located in the Northwest Hawaiian islands.

Manō and Social Hierarchy

Focusing specifically on their time in Puʻuloa, we can see that there were always manō there who were sworn to protect the kanaka. In the steps that Kaʻehuiki takes in order to even gain an audience with Kaʻahupāhau, we can see that as far as status goes, Kaʻahupāhau is at the top and she has her followers of different statuses below her. We can see how the manō and kanaka interacted, and it is also possible to gain a glimpse at what the natural environment was like back in the time of this moʻolelo.

When Kaʻehuiki arrives at Puʻuloa, he is not allowed to just enter. First, he meets with Komoawa. Komoawa is described in the moʻolelo as being the guardian of the

entrance or mouth of the harbor. Upon meeting Komoawa, Kaʻehuiki is then taken to meet with Kahiʻukā, who is manō who Komoawa answers to. When it comes time for... to meet with Kaʻahupāhau, they first had to meet also with Honuiki, who is described as the head caretaker of Kaʻahupāhau (Figure 2).

In this methodical progression up the chain of status, we can see that there was a similar division of society in the ocean as there was on land. Where on land you had the aliʻi nui as the paramount chief who has various aliʻi below him, so too in the ocean was there a social system, that in this case put Kaʻahupāhau above all other manō of the Puʻuloa area.

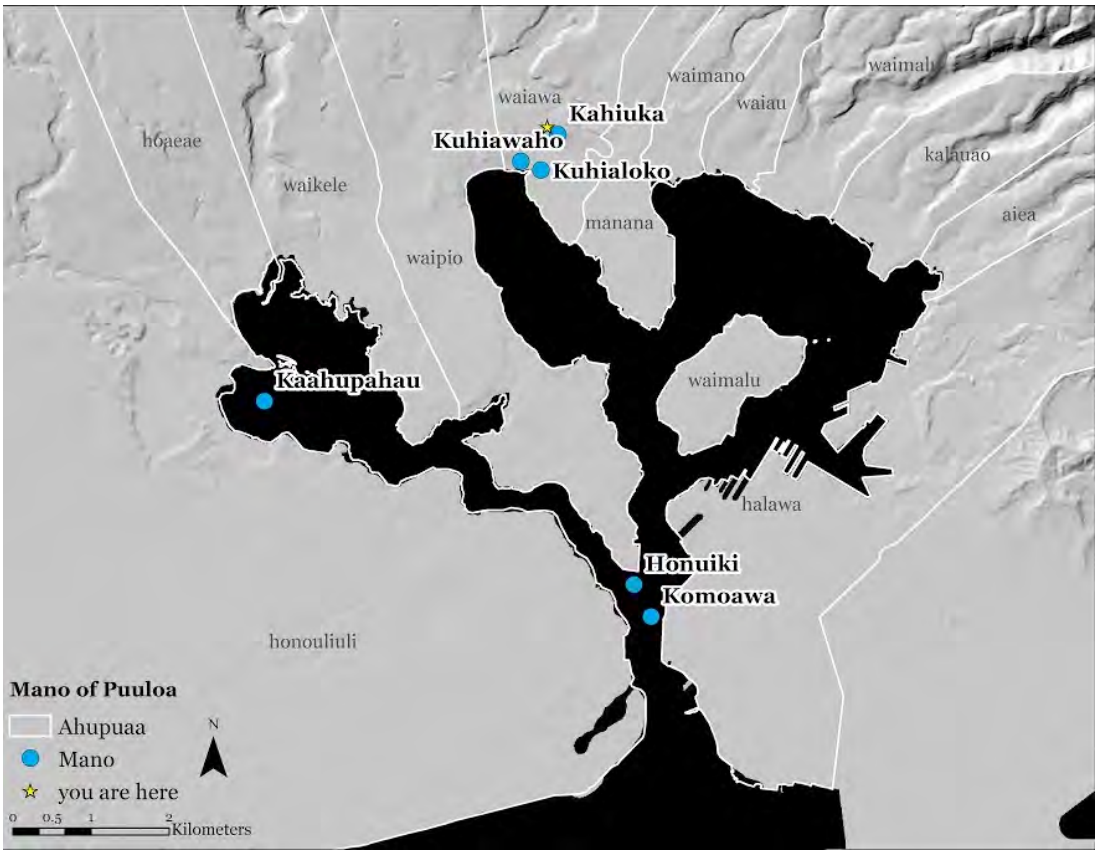


Figure 2. A map of the ahupuaʻa of the ʻEwa moku, with highlights points to denote the homes of different akua manō in the area. This map was created by Dominique Cordy and myself with help from Kumu Kikiloi.

ʻAwa: Drink and Food for Manō

In the moʻolelo, Kaʻehuiki and other manō frequently partake in consuming ʻawa. In Hawaiʻi, ʻawa had various uses. In the book *Hawaiian Mythology,* Martha Beckwith provides the following information: "Awa drink from the shrub of the pepper family (Piper methysticum) is invariably used in sacrifice to Kane gods." (Beckwith 1970, 94). She goes on to explain that before battle, chiefs would gather and ʻawa would be shared. One other interesting thing that she mentions is that " [b]abies were given the juice of the nene variety as a soothing syrup." This excerpt shows us that there were also medicinal uses for the ʻawa. Another use of ʻawa was for fishing. They would use the ʻawa to intoxicate sharks in order to catch them (Maly and Maly 2003, 75). In the moʻolelo, Kaʻehuiki is fed ʻawa diluted or mixed with his mother's milk when he was a baby. ʻAwa again shows up whenever Kaʻehuiki and his group stops to interact with the various manō aliʻi of each island.

Feeding ʻawa to sharks is a Kanaka Maoli practice that is tied to the belief in ʻaumakua. ʻAumakua are passed relatives who were pono or righteous in life that earned the honor of being able to come to the aid of their descendants in times of need. Many accounts of ʻaumakua refer to how a deceased relative might take on the shape of an animal to become a family guardian. One of those forms was the manō. Martha Beckwith writes in her essay "Hawaiian Shark Aumakua" that when a loved one passes away or a child dies before birth, it is possible that their spirit can come back. When it does so, the spirit requires sustenance. As an example, she tells a short story about a woman who would dump a pail of ʻawa over the cliff to the ocean below in order to feed her ʻaumakua (Beckwith 1917, 505). Elsewhere, she explains that the moi, hiwa, and papa varieties of ʻawa were those that were reserved for the chiefs and gods (Beckwith 1970, 94). The

feeding of ʻawa to an ʻaumakua was a very important kuleana (responsibility) and if you were faithful and consistent in your care of the ʻaumakua, that ʻaumakua could watch over you in times of need. Very similarly, ʻawa is fed to Kaʻehuikimanōopuʻuloa by all sharks along his journey in order to give him the respect a manō akua like him deserves. This moʻolelo does not explain how the manō get this ʻawa for all of their celebrations and gatherings, but it would seem likely that there were kanaka present at the time of this moʻolelo to gather things for them. There is a reference to kanaka in the book. A shark named Pehu was trying to eat surfers in Waikīkī and Kaʻehuiki and the other manō aliʻi confronted him. Ultimately this ended with Pehu fleeing and banging into a hard crevice in the coral, which resulted in his death (Uaua 1994, 53).

One interesting fact to consider then is that Kapukapu, father of Kaʻehuiki, is introduced to us as being a "kanaka mahiʻai" (Uaua 1994, 1). Being that Kapukapu is a farmer and his son is a manō, it makes sense to think that Kapukapu and his wife Hōlei possibly gave birth to a manō or their child turned into this manō. While this aspect of Kaʻehuiki's background is unclear, the case of kanaka giving birth to a shark child, or children becoming a shark can be seen in other moʻolelo, such as the moʻolelo of Kaʻahupāhau and Kahiʻukā. In the version of the story told in *The Water of Kāne and other legends of the Hawaiian Islands,* Kaʻahupāhau and Kahiʻukā are said to have been born human. One day, a shark god of the area turned them into manō. Upon returning home, their mother recognized them as her children and fed them ʻawa (Pukuʻi 1994, 148). Again this act of kanaka feeding and caring for the manō appears. Perhaps this is similar to the peculiar action of Hōlei and Kapukapu to feed their manō child ʻawa diluted in the milk of Hōlei.

Freshwater Bathing

Aside from the feeding of ʻawa to manō, the act of freshwater bathing is a recurring activity for the manō in Puʻuloa. When Kaʻehuiki meets with Kaʻahupāhau, they decided that they will go on a bathing journey across the ʻEwa moku. They began their journey at Waipahū which is located in Waikele. They then made their way to the wai ʻauʻau o Ulepuhi (bathing waters of Ulepuhi) in Waimano. From there they went to Waiau, to the wai ʻauʻau of Puhikani, and ended their journey in Kalauao in the waters of Kahuawai (Uaua 1994, 31). How these manō get to the different bodies of water is not specified in the story. From just this page of the moʻolelo, it is easy to see that the Puʻuloa area had a great abundance of water. Following the reading of this story, it was not a surprise for me to find out that one of the ahupuaʻa of ʻEwa, Waiawa, is essentially the biggest aquifer on the leeward side of Oʻahu, with almost the whole ahupuaʻa consisting of water (Figure 3).

There are other moʻolelo that also tell of the richness of ʻEwa's water resources. For example, in the moʻolelo of Laukakieie, written by Moses Manu in the newspaper *Ka Oiaio*, a person named Makanikeoe traveled around the island of Oʻahu and saw all of the various caves, tunnels, and resources of ʻEwa. In one section of the moʻolelo, Makanikeoe goes around ʻEwa and names different bodies of freshwater, landmarks, and important people associated with these lands. One example of a famed person that Makanikeoe mentioned is Kahiʻukā, who, as I have mentioned previously, was a manō that lived in Waiawa.

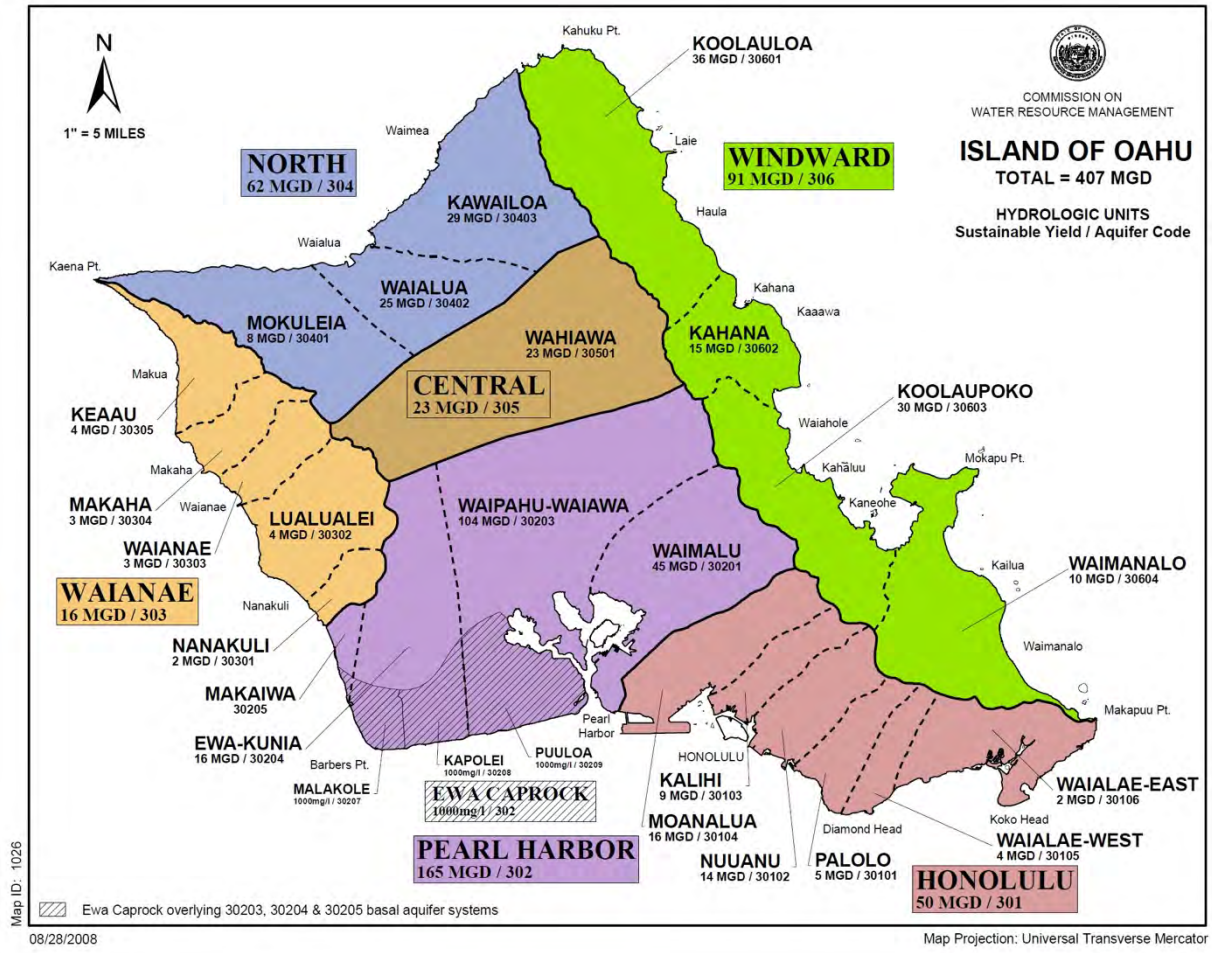


Figure 3. Map depicting the Hydrology of Oʻahu. As is illustrated, the region of Waipahu-Waiawa produces more water than any other region on Oʻahu. Map courtesy of the Commission on Water Resource Management.

Conclusion

It is my hope that this paper highlights the value of Moʻolelo Hawaiʻi, such as *He Moʻolelo Kaʻao no Kaʻehuikimanōopuʻuloa*, to be used as a tool to move forward and plan for the future in a pono way. We can utilize this information to restore areas of cultural significance, or even to just understand the significant cultural and archaeological sites that people find here in the islands. If we know what was done in an area, what resources were readily available, and if there were any akua associated with these places, we will be better equipped to inform the future development of this ʻāina and regain that close relationship

between kanaka and ʻāina that has seemed to fade from the modern memory of today's generations.

Reflection

Looking back at my experience this summer as a participant in the Wahi Kupuna Internship Program (WKIP), it really has been an educational journey. Not only did we learn about culture and history of the Puʻuloa area, but also various skills that can be used in the field of anthropology and archaeology. The place known as Waiawa, which is part of Puʻuloa is no longer Pearl City to me. After learning the history of this place and all of the culture that still resides there, I now take more pride in being a Leeward Community College student and I think that the history of Waiawa should be shared with all LCC students and staff. As a college in Hawaiʻi, it should be a priority to teach the history of where your campus lies, and that is something that I think LCC would benefit from.

Upon completion of this research, there is something about the story that inspires further research. I was told by one of my instructors this summer that the akua manō, Kamohoaliʻi is believed to be the protector of the waters of Kāne, who is the . Kāne being the Hawaiian god of creation and freshwater. This is interesting because in the moʻolelo, there is a reference to a "Huewai" or water gourd that Komohaliʻi uses when he bestows upon Kaʻehuiki his power and various body forms (Uaua 1994, 14). The question that I think would be interesting to investigate further is what is the connection between manō and fresh water? There is a chant that poses the question, "Aia i hea ka wai a Kāne?" and in that chant, the answer is essentially that the water of Kāne is all water and is ever present all around us. For Komohoaliʻi a manō to be the keeper of these sacred waters, and

for him to use it to empower Kaʻehuiki, there could possibly be a deeper connection to be found.

Work Cited

Beckwith, Martha. *Hawaiian Mythology.* Honolulu: University of Hawaii Press, 1970.

Beckwith, Martha. "Hawaiian Shark Aumakua". *American Anthropologist 19, no. 4 (1917): 501-517*

Emerson, J. S. "The Lesser Hawaiian Gods." Presented before the Hawaiian Historical Society, Honolulu, HI, April 7, 1892.

Handy, E. S. Craighill and Elizabeth Green Handy. *Native Planters In Old Hawaii: Thier Life, Lore, &Environment.* Honolulu: Bishop Museum Press, 1991.

Kenney, Scott G. "Mormons and the Smallpox Epidemic of 1853." in Hawaiian Journal of History, Volume 31. Honolulu: Hawaiian Historical Society, 1998.

Maly, Kepa and Onaona Maly. "He Moʻolelo ʻĀina- Traditions and Storied Places in the ʻEwa district and Moanalua (in the district of Kona), Island of Oʻahu." SRI Foundation Report, Kāneʻohe, 2012.

Maly, Kepa and Onaona Maly. "Volume 1: Ka Hana Lawaiʻa A Me Nā Koʻa O Na Kai Ewalu." Nature Conservancy Report, Hilo, 2003.

Pūkuʻi, Mary Kawena and Samuel H. Elbert. *Hawaiian Dictionary Revised and Enlarged Edition.* Honolulu: University of Hawaiʻi Press, 1986.

Pūkuʻi, Mary Kawena. *ʻŌlelo Noʻeau Hawaiian Proverbs & Poetical Sayings.* Honolulu: Bishop Museum Press, 1983.

Pūkuʻi, Mary Kawena. *The Water of Kāne and Other Legends of the Hawaiian Islands.* Honolulu: Kamehameha Schools Press, 1994.

Uaua, William Henery. *He Moʻolelo Kaʻao No Kaʻehuikimanōopuʻuloa.* Hilo: Hale Kuamoʻo, 1994.

Moʻolelo and Moʻo in Waiawa

By: Kuʻulei Freed

This paper examines moʻolelo, historical accounts or traditions, concerning moʻo in the ahupuaʻa of Waiawa to gain a better understanding of Akua Moʻo, spiritual beings or deities that can resemble a lizard, and moʻolelo moʻo, traditions relating specifically to moʻo, and how these traditions may be tied to ʻāina and what their place may be within Kānaka communities. A review of moʻolelo moʻo in Waiawa will reveal the level of importance placed upon moʻo within a kānaka world view.

Before this research on mo'o, I grew up with a pre-conceived notion that mo'o were not good creatures. Mo'o weren't spoken of unless a mo'olelo was being told to me, usually one that would reinforce how scary they were. This was always the underlying theme, mo'o were scary and thus we should be afraid. As I got older I began to question things, as young people do. I began to ask more questions about the mo'olelo and about my kupuna. Why they would do or say the things they did. Eventually, what I came to understand was that this "fear" of mo'o was more of a caution, a reverence and a respect which had morphed into a fear because mo'o – and the passing down of the mo'olelo mo'o – were no longer understood. Like other parts of our language and culture, there were some things that my kupuna did not pass down. When the opportunity for this research came up, I thought it would be the perfect chance for better understanding, my family agreed.

Various moʻolelo moʻo throughout Hawai'i present mo'o as sometimes malicious or mischievous beings, such as Kalamainu'u, a mo'o wahine that abducted an ali'i and initiated a war between the mo'o and Pele clans (Brown 2010, 9). Or Panaewa, the Akua Mo'o that tried to kill Hi'iaka during her journey to retrieve Lohiau (Hoʻoulumāhiehie and Puakea Nogelmeier 2006, 51-58) However in this paper, I argue that the role of mo'o, as seen through these

mo'olelo, works as a reminder of who we are and where we have been. The beliefs and values that Kānaka hold important are emphasized through the re-telling of these traditions.

Note on Language and Terms

Included here in this paper are the use of diacritical marks such as the ʻokina (glottal stop) and kahakō (macrons) when using Hawaiian words and terms; definitions where it might be appropriate are also included. ʻŌlelo Hawaiʻi is the Indigenous language of these islands and it is for that reason that Hawaiian words used throughout this work will not be italicized as may happen with a foreign language. Hawaiian words/terms such as Akua or Moʻo are also capitalized throughout this paper to signify the importance held within these concepts.

Additionally, the terms Hawaiian, Native Hawaiian, Kānaka and Kānaka Maoli are used interchangeably to refer to the aboriginal peoples of the Hawaiian Islands as existed pre-contact.

Definitions

Some terms and definitions that I think are pertinent to understanding the concept of Moʻo and the place they hold within the Kanaka worldview are discussed here. The following definitions are also tied into Kānaka belief systems and therefore contribute to an overall concept of Akua moʻo; evaluating each term independently will provide a stronger overall understanding. These terms include moʻo, moʻolelo, moʻokūʻauhau and moʻopuna.

Moʻo – Commonly known as a small house lizard. However, Moʻo is also known as a water deity or family ʻAumakua. Moʻo is defined as a small fragment, a series continuing into a succession such as a lineage. (Pukui and Elbert 1986, 253) In Hawaiian moʻolelo Moʻo are spoken of as deities of some sort. Sometimes as an ʻAumakua (family god), a protector or a devious mischief maker. When Moʻo are referred to as a lizard it usually as a big lizard, either one the same size as a person or larger, much larger. A Moʻo can also take the form of a kupua –

a supernatural being that can take many forms (Pukui and Elbert 1986, 186). In this form a Moʻo can take the shape of a lizard, a kanaka or even a pōhaku as we will see later in this paper.

The next term that relates to my research is **moʻolelo.** In Puakea Nogelmeier's book, *Mai Pa'a I Ka Leo: Historical Voice in Hawaiian Primary Materials, Looking Forward and Listening Back*, he states: "While the English language has clearly different meanings for terms like history, legend, and culture, Hawaiian language does not share the same semantic boundaries. The Hawaiian word moʻolelo . . . is a single concept in Hawaiian conveying multiple meanings (2010, 132). For this paper I will use the definitions of history, tradition or literature as the other definitions, especially the most commonly used definition of story, implies something that is not real or made up for the sake of entertainment. However, moʻolelo were not only told as a means of entertainment. Brandy Nālani McDougall writes that we become our mo'olelo; mo'olelo shape our perceptions, values and beliefs about ourselves and the world around us (2016, 4) Seen this way moʻolelo transmit directly to us our kupuna and their view of the world.

This term encompasses two words. Moʻo and ʻŌlelo, literally a succession or continuing series of talking as all histories and traditions were passed on orally and not written (Pukui and Elbert 1986, 254).

Moʻokūʻauhau is defined as a genealogical succession (Pukui and Elbert 1986, 254). In Marie Alohalani Brown's recent book she states that moʻokūauhau is the backbone of Hawaiian culture (2016, 27). Genealogical lineages reach further than just that of one's own biological family, moʻokūauhau also have intellectual, conceptual, and aesthetic genealogies (Brown 2016, 27). Many cultural practices also have a genealogical lineage that students must learn. Practices such as hula, lomilomi or lāʻau lapaʻau have lineages of knowledge that are passed down. Each student of these practices must learn during the course of their studies where this knowledge is

passed down from as well as learn about the person this knowledge came from, where it is possible and pertinent. Conceptually, genealogical lineages of deities, in this case Akua Mo'o, help to center Kānaka within their cosmogonic universe, giving Kānaka a sense of place and order to the world. This then allows Kānaka to aesthetically express the world around them, through oli or dance, whose reluts could potentially be passed down – again – thorugh an interllectual lineage. This concept is never ending, alsways continuous.

In another lineage of knowledge there are also such terms as moʻo aliʻi or moʻo kahuna. Both terms have dual meanings of lineage and history of the aliʻi and kahuna classes (Pukui and Elbert 1986, 254).

Lastly, moʻopuna is the Hawaiian word for grandchild. And as a term that is associated with a child and the next generation, it connotes feelings of adoration., as a moʻopuna is so cherished by their grandparents and others of that generation. Moʻopuna are the culmination of genealogical succession in the present. They are the future gatekeepers of our genealogies and knowledge. A moʻopuna is the end result that exists in the present of everything that came before them; all the love, labor, knowledge and experiences that stretch behind them is also held within them. As one cherishes their moʻopuna they also cherish themselves and their kupuna as well.

Moʻopuna is comprised of two words, moʻo and puna. Whereas the former word, which I have discussed, refers to succession, "puna" can be translated as a spring of water, or it can be short for punahele (favored or favorite) and kupuna (Pukui and Elbert 1986, 355) The use of the word puna in moʻopuna and kupuna, grandchild and grandparent respectively, can be thought of as a fountain of water or knowledge. In kupuna it is a sprouting forth of knowledge that is gained from our grandparents and ancestors. With our moʻopuna it is a continuing of such knowledge.

Both terms are tied to the concept of water, that element that all living things need to live, to continue living.

Each term defined above are all a series within a continuing succession, wether it be within a genealogical or historical one. The root word moʻo, referring to succession, is found within each of these terms. The terms moʻolelo, moʻokūauhau and moʻopuna are all signifiganct to Kānaka values in that this is how we see and structure the world that surrounds us. A constant reminder of where we came from, who we are and where we are going. The following moʻolelo are also a reminder of these same values.

Background

Before I analyze the various moʻolelo on moʻo that are central to this paper, a fundamental question must be answered: What and where is Waiawa? Waiawa is an ahupuaʻa, traditional land division, located in the district of ʻEwa, in what today is commonly referred to as Pearl City.

Waiawa is an ahupuaʻa abundant in fresh water sources, or wai, that continues to flow by means of the Waiawa stream. In pre-contact times up through the beginning of the 20th century the greater ʻEwa district, which stretched from Hālawa to the ahupuaʻa of Honouliuli, known better as the ʻEwa fields, were known for its abundance of fishponds, which were made possible due to the large amounts of water supplied by five major springs (Kalauao, Waiau, Waimano, Waiawa and Waikele) within the ʻEwa district. (Vishner and Mink 1964 ,35) Nowhere else on Oʻahu were there so many in one place. An estimate of fish ponds number upwards of 20 from what could be gathered from registered maps starting in 1873. These maps were very detailed as they also showed all the lochs of Pearl Harbor, which was of significance to foreign interests. However, by 1905 the registered maps only record about 10 fishponds in the ʻEwa district.

Methods

The mo'olelo of interest for this paper come from the ahupua'a of Waiawa and the surrounding ahupua'a within the greater 'Ewa district. Mo'olelo were gathered from two main sources, the first being a report that was published by Kepā and Onaona Maly with regards to the rail transit project and the second from *Sites of O'ahu.* I also consulted well known works that speak of mo'o such as *Keaomelemele* and *The Epic Tale of Hi'iakaikapoliopele.*

In my analysis of these mo'olelo I searched for related themes and found continuing themes that also correlated to Hawaiian values and belief systems. I aimed to analyze the mo'olelo through these particular lenses.

Analysis of Mo'olelo

Nā Mo'olelo o Kanekua'ana (The traditions of Kanekua'ana)

Kanekua'ana was considered a 'royal lizard' by Moses Manu as put forth in his writings *Ka Mo'olelo 'o Keaomelemele*. (2002, 161) Manu says that royal lizards were those that had people to worship them and to supply their needs. (2002, 161) Kanekua'ana was known to be worshipped throughout the 'Ewa district and many families there also tied their genealogies back to Kanekua'ana.

The following is a translation of an excerpt taken from the newspaper *Ka Nupepa Kuokoa* published May 20, 1893 where the traditions of Kanekua'ana as a mo'o guardian are told:

> "…Kanekuaana is the moo (water spirit) guardian of Ewa; many of the natives of Ewa, from Halawa to Honouliuli followed (believed) in her. If there was trouble with the fishing, the people dedicated her temple (Waihau) with the lighting of a fire to bring about blessings upon the land. The pipi (pearl oyster) is the famous fish of Ewa. Before six months would pass the hau branches would take hold, and the land would be filled with the pipi, from Nā-maka-o-Hālawa to Honouliuli, from the inland pond walls to the Pā-akule. From the depths to the nahawele reefs and flats. From the channel inlet to the stone-lined ponds, and so forth.

> There is within the flesh of the pipi a beautiful pearl, its size is similar to the eyeball of a fish. Some are like the shiny white of an eye, and are called mūheʻe kea. Others are shiny red, like a rainbow, and are called mūheʻe mākoko. Some are small and others are larger, and they are highly valued.
> The ʻōpae huna and ʻōpae kala [types of shrimps] are other fish, that are in the sea, the walled ponds, and dune banked ponds. The nehu pala is another fish which fills the waters from the entrance of Puʻuloa to the coastal flats of Ewa. It is the same with all of the lochs (awalau). This is why the saying is told:
> Nehu appear to be blown upon the sea, causing the water to shine It is the sea of ʻEwa, Dwelling in the calm of great ʻEwa, of Laʻakona"
> The mahamoe is another famous fish, and the ʻōkupe, another, and there are others. And if all these fish are seen there, here are the words of the natives of the land, "The old woman (Kānekuaʻana) has returned from the foundations of Kahiki; she dwells here perhaps for the love of her descendants…" (Maly and Pomroy-Maly 2011, 97)

Here is where Kanekuaʻana's role as a guardian is explained. She is referred to as a moʻo guardian and an old lady from Kahiki. All the fish, shrimp, and oysters – and pearls found within them – that are found within the lochs of ʻEwa are under her protection and watch. The last part of the above excerpt says: "The old woman (Kānekuaʻana) has returned from the foundations of Kahiki . . ." this is a saying of the people when all the different kinds of fish were seen in Puʻuloa. This would imply that when the waters of Puʻuloa were full of fish that it was due to Kanekuaʻana and her care over ʻEwa.

The following is a tradition relayed by Mary Kawena Pukui regarding Kanekuaʻana and the disappearance of the famous pipi of ʻEwa.

> The pipi was called the "i'a h**a**mau leo" or "fish with a silenced voice." It was not the pipi that was silent but the people who gathered them, for it was kapu to utter a sound lest a breeze arise suddenly to ripple the surface of the water and the pipi would vanish completely. Those who gathered the pipi gestured and pointed like deaf mutes until they had all they wanted.
>
> I have heard (not from a Hawaiian source) that it was muddy deposits on the sea floor that caused the disappearance of most of the pipi in that locality. According to the Hawaiians, it was the wrath of Kanekua'ana that made her take them back to Kahiki.

> In the olden days kapu were imposed on certain sea foods several months a year to allow them to multiply and increase. Then the kapu was lifted and the people were permitted to help themselves. In this way the food supply was insured year after year.
>
> One day, an old woman went to get some sea weeds and found a number of large pipi which were kapu at the time. They looked good to her so she took them and placed them in her bag under the sea weeds. The konohiki or head man came to look into the bags of the fishers and found the prohibited pipi in her bag. He emptied it into the sea and scolded her. She knew that she was wrong and answered nothing. After gathering enough sea weeds for herself, she departed for her home.
>
> The konohiki followed her and demanded payment. She pleaded with him not to be harsh because she was a widow and poor but he kept insisting until she gave him a coin, all the money she had. (This was a post-European period and the Haole had brought money to Hawaii nei.) Kanekua'ana, the guardian of the pipi saw all this and became very angry. She was fond of this old widow to whom she was related. The emptying of the basket she felt was just but the following after and the demanding of payment for the pipi he had already returned to the sea was unfair. That night her spirit took possession of a neighbor who often acted as her medium and told all of those present that she was taking the pipi to Kahiki from whence she brought them. Only a few would be left but they would never be as numerous as they formerly were. Kanekua'ana kept her promise to take most of the pipi away, for only a few can be found in the water there today.
>
> Nowhere else in all Hawaii were there so many kinds of bivalves as in Pearl Harbor. There were large and small ones, thin-shelled and thick-shelled ones beside the pipi, famed in legends and chants. These, too, have dwindled in number (Sterling and Summers 1978, 50).

Here again Kanekuaʻana's role as a guardian moʻo is emphasized by her decision to take away the pipi from ʻEwa. This moʻolelo also relates Kanekuaʻana's genealogical ties to the people of ʻEwa; in some versions of this moʻolelo the old widow is in fact a favored moʻopuna of Kanekuaʻana (Sterling and Summers 1978, 50). This genealogical connection would only serve to deepen the relationship of Kanekuaʻana to her moʻopuna as her actions concerning the removal of the pipi were a direct result of directions of her own kupuna. In the moʻolelo Keaomelemele, Moʻoinanea is said to have given the fish and pearl oyster as gifts to Keaomelemele, her moʻopuna, as a wedding gift. These gifts were given with the command:

“Here are my gifts to you two, therefore, take very good care of them. If you mistreat such things, they will return to our home at the Pillars of Kahiki” (Manu 2002, 159). Kanekua‘ana thus continues her own role in a continuous cycle of kupuna, mo‘opuna and as a protector of both.

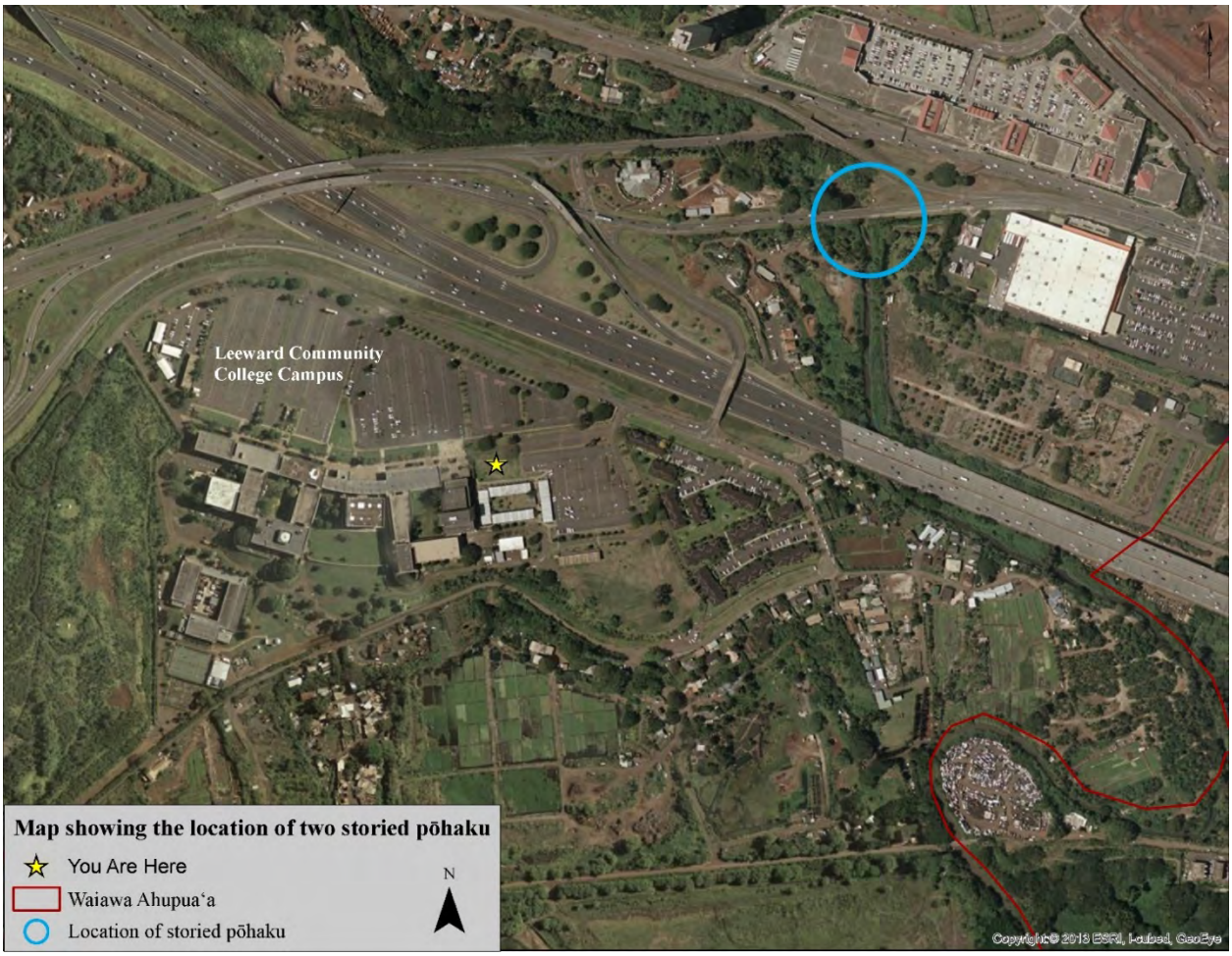
Ka Mo‘olelo o Piliamo‘o lāua ‘o Kuka‘eki (The tradition of Piliamo‘o and Kuka‘eki)

When looking for mo‘olelo mo‘o for this paper I came across the name Piliamo‘o. Within the explanation of her name was this short mo‘olelo.

> “Piliamo‘o was a supernatural woman who had both lizard and human forms. She met and fell in love with Kuka‘eki, and together, they speared ‘o‘opu fish in Waiawa stream. Near the place named Kuka‘eki, just on the edge of Mohoa, where the bridge crosses Waiawa gulch, Piliamo‘o and Kuka‘eki assumed stone forms. They were among the famous places pointed out by residents of the land. Cited in Na Wahi Pana o Ewa (1899).” (Maly and Pomroy-Maly 2011, 38)

Here is the first mo‘olelo that we come acorss that mentions a mo‘o kane. In the mo’olelo of Hi’iakaikapoliopel she comes across many mo’o, some are giant lizards whose gender is either male or female. However, when a mo’o takes on human form, the form is female (Ho‘oulumāhiehie and Nogelmeier 2006). This is the first mention I have come across that speaks of a man that has a mo’o form. This place that Piliamo‘o and Kuka‘eki speared ‘o‘opu and came to assume their stone forms together is also named Kuka‘eki. According to Larry Kimura “. . . place names are considered kupa (natives) themselves. Place names are esteemed grandparents linking people to their home, personal past, and their history.” (1983, 178) This place holds the name of a mo’olelo and links the community to the mo’olelo nd Piliamo’o and Kuka’eki through genealogical ties. This place as well as the pōhaku that represented these mo‘o would have been looked after and cared for in perhaps the same way we still care for our elders today.

There is another description of the name Kuka‘eki that also gives further locational information than what is mentioned above. “Situated at Mohoa, on the edge of the gulch crossed by the bridge of the government road.” (Maly and Pomroy-Maly 2011, 29) What was once known as the government road is now know as Kamehameha Highway (Figure 1). The highway still runs over Waiawa stream, which is where the bridge, mentioned above, would have crossed over the gulch. The area where Kamehameha Highway and Waiawa stream interescts is close to the front entrance of what is currently Sam‘s Club in Pearl City.



Map showing the location of the pohaku Piliamo‘o and Kuka‘eki where Kamehameha highway intersects with Waiawa stream.

Ka Mo‘olelo o Hi‘iakaikapoliopele i Moku ‘o Ewa (The tradition of Hi‘iakaikapoliopele in the District of Ewa)

In the epic tale of Hi‘iakaikapoliopele, Hi‘iaka is asked by her older sister, the goddess Pele, to travel from Kilauea on the island of Hawai‘i to Ha‘ena on the island of Kaua‘i to fetch Pele’s lover, Lohi‘au. On this journey Hi‘iaka has many adventures throughout the islands as well as many encounters with Mo‘o.

The entirety of the mo‘olelo of Hi‘iaka was published as a series of narratives in the Hawaiian language newspapers, this particular narrative concerning Hi‘iaka’s journey through the ‘Ewa district was printed in *Ka Hoku o Hawaii* on February 15th and 22nd 1927 (Maly and Pomroy-Maly 2011, 118) One of Hi‘iaka’s Mo‘o encounters happen in the ‘Ewa district as she is making her way back from Kaua‘i to Hawai‘i island. Hi‘iaka is traveling with her companions Wahineoma‘o and Lohi‘au as they are coming over the mountains from Wai‘anae down to the plains of ‘Ewa. When they reach there, Hi‘iaka tells her companions to travel by sea while she will travel over land on her own. As Hi‘iaka comes down to the plains of ‘Ewa she looks toward the ocean . . .

> “. . . Hiiaka then turned and saw her companion and Lohiau paddling their canoe. And her love welled up for her traveling companions. It was also then, that Hiiaka came to understand that Lohiau would be killed by Pele when they reached Hawaii. Hiiaka then turned and continued her journey along the path that crossed this unpeopled plain. While walking along, she saw two women who were busy stringing garlands of ilima [Sida fallax] blossoms. The women were sitting alongside the trail upon which Hiiaka was traveling. Now when these two women saw Hiiaka, one said to the other, ‘Say, this is Hiiaka who is descending along the path, we must depart with haste, lest she kill us.’ The two women hastily departed, and reached a stone that was situated along the side of the trail which continued on to Waianae. It was at this stone that the two women transformed themselves into their supernatural moo [lizard] forms. One of the lizards then went and hid in a little space on the stone, and the other went nearby. One moo said to her companion moo... ‘It is fortunate that we have hidden ourselves at this

> place, so that we may escape being killed by Hiiaka.' Now from ancient times till recently, the place at which this stone was situated, was called "Pee-kaua" (We two hidden). Now that the road has been made, the stone at which these two moo wahine (lizard women) has been destroyed.
>
> When Hiiaka saw that these two women had fled and taken their moo forms to hide on the stone along the trail, she chanted out to them:
>
> 'Greetings to you two women of the plain,
> It is a barren plain in the sun,
> Where the sun bears forcefully down,
> Having gone to hide,
> We two are hidden at Pee-kaua,
> Aloha to you two, Here I am traveling on.'
>
> Hiiaka then continued walking towards the shore. Hearing Hiiaka's chant of affection, these two moo women said to one another, 'Say, this is truly remarkable, for we will not die, but have been saved by Hiiaka. She has given us her aloha as she descends in the heat of the sun, and so it is that we shall remain upon this plain.' (Maly and Pomroy-Maly 2011, 121-123)

This moʻolelo concerning Hiʻiaka is noteworthy because Hiʻiaka is known to slay Moʻo and Moʻo wahine. She has developed this reputation throughout her journey from Hawaiʻi to Kauaʻi, engaing in battle with many different Moʻo such as Panaewa, Kalanamainuʻu and Kilioeikapua – the moʻo women of Keʻei, and Moʻolauwahine of Kohala (Hoʻoulumāhiehie and Nogelmeier 2006). Here in ʻEwa however, she greets and gives her aloha to two Moʻo that she knew were hiding from her. The moʻolelo also notes the surprise of the two Moʻo at being spared by Hiʻiaka. Perhaps this act on behalf of Hiʻiaka shows her understanding of the Moʻo of ʻEwa. Here in this place Moʻo have been shown to be protectors and caretakers of the ʻāina, resources and kānaka as has been shown through the previous moʻolelo. This was perhaps known to Hiʻiaka, that the moʻo here were different than the others she had come across on her journey. Hiʻiaka also leaves her mark by giving a name to the pohaku that the two Moʻo women hid behind, Peʻe kāua.

Conclusion

This connection as kiaʻi is also a continuous reciprocal relationship. Moʻo are as common to the landscape as kānaka are themselves. A binary is apparent as Moʻo and their moʻolelo speak to the spititual connection and endurance of this relationship while Moʻo within the sphere of protectors of resources speak to a physical connection. In this sense, Moʻo would be closely tied to bodies of water as water also has these same connections and is an vital element of what all living things need to endure a cycle of continuation.

In these moʻolelo, Moʻo are expressed as kiaʻi, protectors, of ʻāina and water in Waiawa and the district of ʻEwa. This role as kiaʻi is more than just a position or job. They are caretakers of their genealogical lineages, lineages that might perish without flourishing resources. In her book *Native Land and Foreign Desires*, Professor Lilikala Kame'elehiwa shares that the ". . . essential lesson is that every aspect of the Hawaiian conception of the world is related by birth, and as such, all parts of the Hawaiian world are one indivisible lineage." (1992, 2) Seen in this way mo'oelo mo'o help to remind us of the connections we have with our world as well as how it should be cared for.

Reflection

As a student at the University of Hawai'i Mānoa, my major is in anthropology, specifically geared toward archaeology. I applied for this internship with archaeology in mind, such as heiau sites, artifacts and mapping. However, although we did mapping of agricultural spaces, this years internship was primarly focused on research. We delved into maps, indexs and archival information. I found all these experiences to be invaluable. I learned that – at least within Hawaiʻi – archival reasearch and archaeology go hand in hand. I donʻt think a thorough job can be done archaeologically without archival research, specifically Hawaiian language documents. I donʻt think this would have become as apparent to me within the sphere of the

University as there aren‘t really many Kanaka archaeologists teaching classes. I greatly appreciate the oppurtunity and support that I found within this internship.

References

Brown, Marie Alohalani. 2016. *Facing the Spears of Change: The Life and Legacy of John Papa ‘Ī‘ī.* Honolulu: University of Hawai’i Press.

Ho’oulumāhiehie, and Puakea Nogelmeier. 2006. *The epic tale of Hi‘iakaikapoliopele: woman of the sunrise, lightning skirted beauty of Halema‘uma‘u.* Honolulu: Awaiaulu Press.

Kame‘elehiwa, Lilikalā. 1992. *Native Land and Foreign Desires: Ko Hawai‘i ‘Āina a me Nā Koi Pu‘umake a ka Po‘e Haole.* Honolulu: Bishop Museum Press.

Kimura, Larry. 1983. “Native Hawaiian Culture.” In *Report on the Culture, Needs and Concerns of Native Hawaiians,* 173-223. Washington, D.C.: Native Hawaiian Study Commission.

Maly, Kepā. 2001. *Mālama Pono I Ka ‘Āina: An Overview of the Hawaiian Cultural Landscape.*

Maly, Kepā and Onaona Pomroy-Maly. 2011. *Ethnographic and Traditional Cultural Property Study Honouliuli to Moanalua, Oahu – Part 1. He Mo‘olelo ‘Āina – Traditions and Storied Places in the District of ‘Ewa and Moanalua (in the District of Kona), Island of O‘ahu: A Traditional Cultural Properties Study – Technical Report.* Honolulu: Kumu Pono Associates.

McDougall, Brandy Nālani. 2016. Finding Meaning: Kaona and Contemporary Hawaiian Literature. Tucson: The University of Arizona Press.

Moses, Manu. 2002. *Keaomelemele* Trans. Mary Kawena Pukui and M. Puakea Nogelmeier. Honolulu: Bishop Museum.

Nogeleier, M. Puakea. 2010. *Mai Pa‘a I Ka Leo: Looking Forward and Listening Back*. Honolulu: Bishop Museum.

Pukui, Mary Kawena, Samuel H. Elbert. 1986. *Hawaiian Dictionary: Hawaiian-English, English-Hawaiian*. Honolulu: University of Hawaii Press.

Sterling, Elspeth P. and Catherine C. Summers. 1978. *Sites of Oahu*. Honolulu: Bishop Museum.

Vishner, F. N. and J. F. Mink. 1964. U.S. Department of Interior, Prepared in cooperation with the State of Hawaii, Department of Land and Natural Resources, Division of Water and Land Development. *Ground-Water Resources in Hawaii.* Washington: United States Government Printing Office.

Waiawa Food Systems

By: Joshua Fukumoto

Introduction:

In this paper looking into Waiawa Food Systems, I explore the question of how the natural environment could inspire Kanaka Maoli (Native Hawaiians), who were so deeply rooted in their world, to create sustainable agriculture systems individually tailored to a specific location among Hawai‘i’s many microclimates.

Historically, Waiawa and the greater region around Pu‘uloa (Pearl Harbor) was an important agricultural area for Kanaka Maoli. The place was natural rich in freshwater that the Kanaka Maoli utilized for their agricultural and aquacultural systems.

Utilizing Māhele documents from the mid 19th century such as Land Commission Award (LCA) testimonies and Royal Patents, as well as a Hawaii Territory survey map from the time period, we can get an idea of the agricultural systems that were in use specifically in Kuhialoko, a ‘ili ‘āina (land unit) within the boundaries of Waiawa. Understanding the array of agricultural methods that were used in Kuhialoko, I aim to show how Kanaka Maoli in Waiawa developed a place-based sustainable agricultural model. Knowing this history allows us to revitalize and restore place-based agricultural practices such as those found in Waiawa as we work towards a sustainable, food secure Hawai‘i.

Background:

The agriculture systems created by Kanaka Maoli were well developed by the time the time of western contact in 1778. In a journal entry from Captain George Vancouver’s visit to O‘ahu in 1798 he wrote,

> “We found the land in a high state of cultivation, mostly under immediate crops of taro and abounding with a variety of waterfowl, chiefly of the duck kind . . . At Woahoo [O‘ahu], nature seems only to have acted a common part in her dispensations of vegetable food for the service of man; and to have almost confined them to the taro

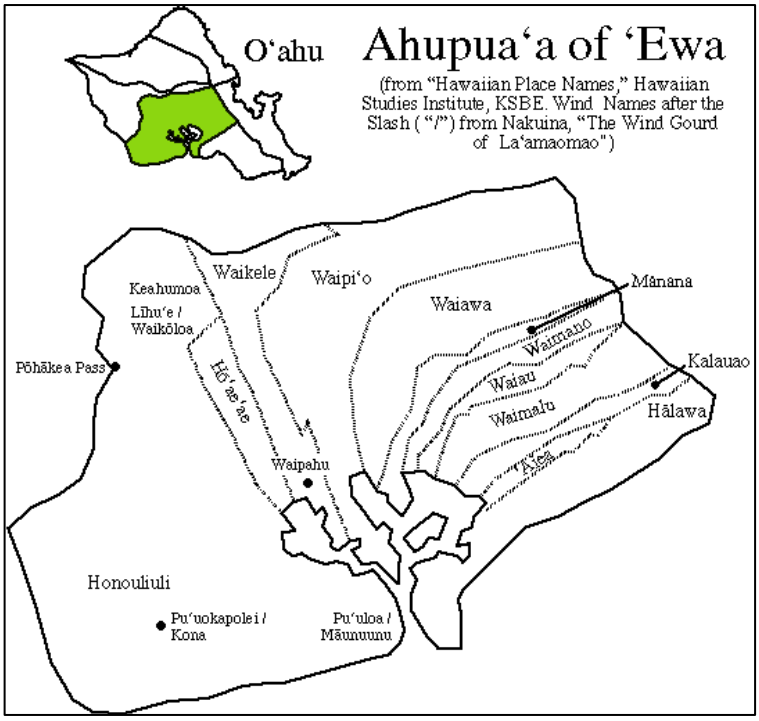
plant, the raising of which is attested with much care, ingenuity, and manual labour" (Vancouver, 1798, 163–164).

The system that is most well known is the ahupua‘a, a land division that divides resources from mauka to makai. A typical diagram of an ahupua‘a includes rain forest eco-systems in higher elevations that captures clouds and stores fresh water. Below these mauka regions are valley areas that may contain ulu (breadfruit), mai‘a (banana), and other food plant groves that depended on rainfall. Water collects in valleys forming streams that flow downward to lower elevations. As the streams travel further down they are diverted through elaborate lo‘i kalo (terraced taro patches) systems that pool stream water in a series of flooded ponds. After this journey the water eventually spills into the sea where the fresh stream water mixes with the ocean salt water forming a nutrient rich brackish mix that attracts fish. Rock walled loko i‘a (fishpond) were often built to capture and store these fish for human consumption (Handy & Handy, 1991, p. 49).

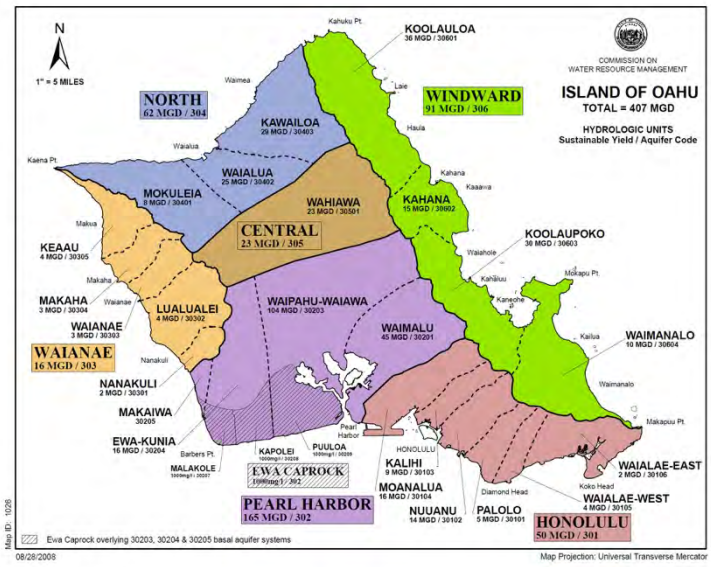
(Figure 1. "Agricultural Sink" in Kalaeloa, notice plants growing in barren environment)

Though these agricultural and aquacultural features did exist within the ahupua‘a, they were not the only types of agriculture systems developed by Kanaka Maoli. Hawai‘i is an extremely diverse place with a wide variety of microclimates; this is reflected in the variety of agricultural systems developed to utilize these different ecosystems. For example, Kanaka

designed the Kohala field system, a dryland system that utilized the thin band of rain to feed it's ʻuala fields along the Kohala mountain (Lincoln & Vitousek, 2017). That system was very different from the "agricultural sinks" of Kalaeloa, pits broken through the limestone surface to access underground waterways in an otherwise barren environment. Waiawa too had unique systems tailored to its unbearably dry, yet water rich environment (S. Kane, personal communication, June 26, 2017).



Waiawa is an ahupuaʻa within the Moku (land division) of ʻEwa, on the island of Oʻahu, that is located in the area that is known today as Pearl City. The ahupuaʻa stretches from the Koʻolau mountains to Ke Awa Lau o Puʻuloa (now referred to as Pearl Harbor). Waiawa is bordered by Waipahu and Waipiʻo to the west, and Manana to the east, separated by the Waiawa stream and Manana ridge. The name *Waiawa* can be broken up into two words: *"wai"* meaning fresh water, and *"awa", which* either refers to *Piper methisticum*, a favorite plant of Kane and Kanaloa, the brothers said to have named the ahupuaʻa; or *Chanos chanos*, a fish common to the area.



(Figure 2. Map of Oʻahu's aquifers showing the large amount of water (104 MGD) being produced under Waiawa. Courtesy of Commission on Water Resource Management)

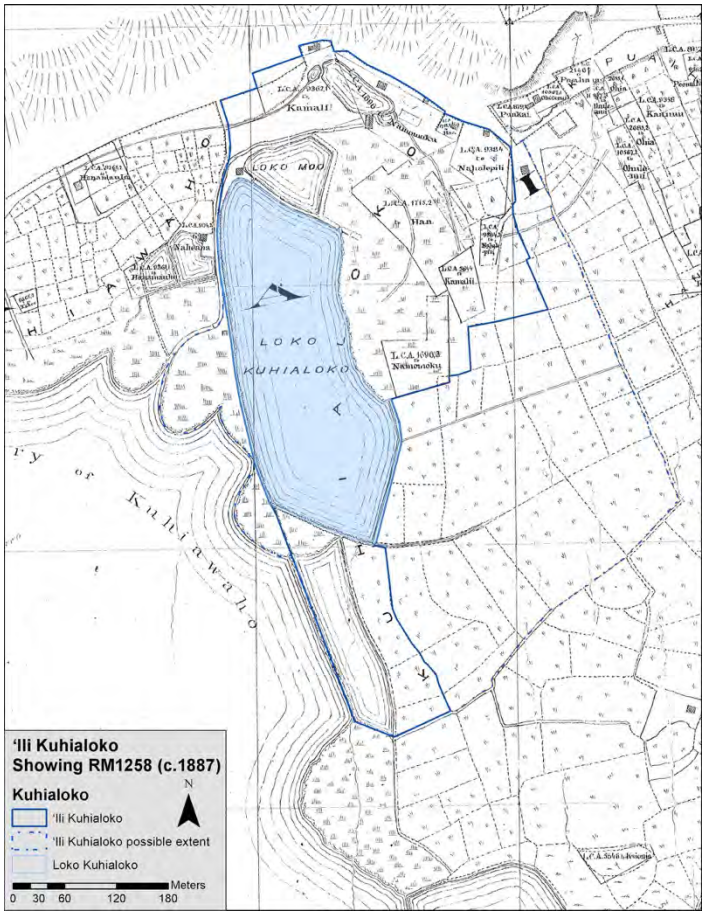
The Koʻolau mountains collect water that pool into upper valley streams that descend into flood plains that surround Puʻuloa. Aside from the mountain streams, the area is rich in water in groundwater springs. The area sits on the largest aquifer on Oʻahu, producing 104 million gallons of water per day (See Figure 2).

Method:

The resources used for this research were survey maps, Māhele documents (e.g. Land Commission Awards (LCA), Royal Patents), Geographic Information System (GIS) map making, interviews with residents and a visit to Kuhialoko. Through the use of these various documents we can get a glimpse into the agriculture systems that were in place in Kuhialoko during the 19th century. Māhele documents such as Native and Foreign testimonies, LCAs, and Royal Patent grants provide excellent data describing agriculture/aquaculture features utilized by local occupants, including loko and loʻi. Hawaiʻi Territory survey maps reaffirm these findings through visual representations of agricultural plots. The māhele documents were accessed using the GIS website Kipuka database run by the Office of Hawaiian Affairs (OHA, kipukadatabase.com).

Analysis:

The whole of Waiawa was a center for food cultivation from the many loʻi kalo in the kula region (plains) to the shallow loko iʻa (fishponds) that surrounded the shoreline.



(Figure 3. Registered Map 1258, a 1887 Hawaiʻi Territory survey map by T. Y. Awana showcasing Waiawa. Kuhialoko border drawn by Dominique Cordy)

Within Waiawa there are 12 ʻili ʻāina (Keliʻipaʻakaua, 2017, p.1), smaller land divisions within the larger ahupuaʻa. Kuhialoko is an ʻili ʻāina within Waiawa, a plain just below Haupuʻu, the hill that Leeward Community College sits on. Kuhialoko is rich in naturally occurring pūnāwai (groundwater springs)

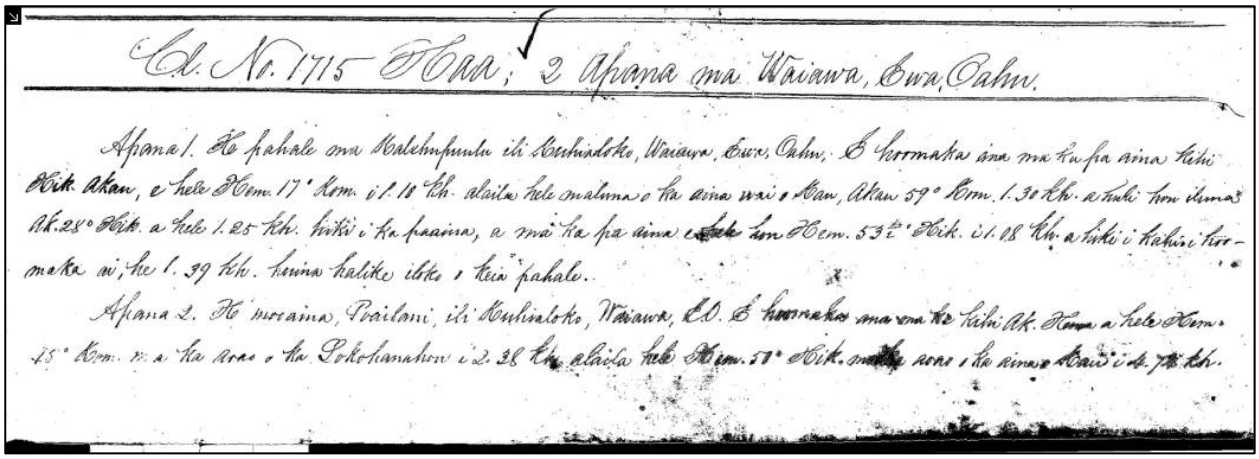
> “The seaward flow of groundwater is impeded by the caprock confining unit. Ground-water discharge from this area occurs as diffuse leakage through the caprock and as spring flow over the top and through the openings or breaks in the caprock” (Nicholas, Shade, and Hunt, 1996, p. 49)

The floodplain of Kuhialoko was optimal for the establishment of irrigated kalo patches (e.g. loʻi kalo, loko kalo). Fishponds existed within Kuhialoko as well as at the shoreline. Maps also indicate that rainfall dependant crops such as banana trees were grown inland (See Figure 3).

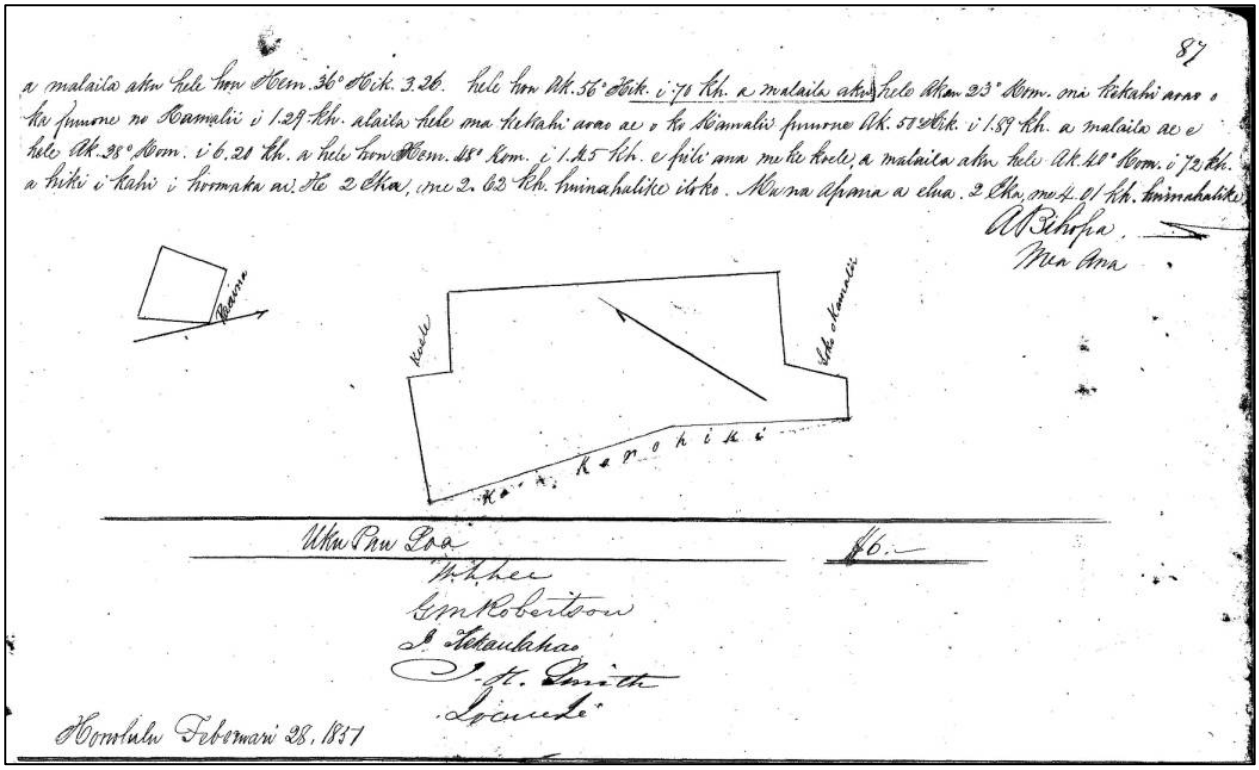
There were three land claimants within Kuhialoko; Haa, Namomoku, Kamalii, were found in LCA's and Royal Patent's from 1857. Between the three of them were 6 recorded moʻo ʻāina and 6 loko, all of these features were given names, a possible sign of reverence.

Registered Map (RM) 1258, a 1887 Hawaiʻi Territory survey map by T. Y. Awana, shows most of Kuhialoko's flooded plain is used for rice production. The ʻāpana's of Haa, Namomoku, and Kamalii are overgrown, while Nahalepili's ʻāpana still showed kalo and maiʻa production.

Haa claimed ownership of 2 ʻāpana (land parcel) within Kuhialoko. From Haa's LCA (Cl No. 1715) and Royal Patent (No. 212) a few features a noted, on Haa's ʻāpana there is a Moʻo ʻāina (set of kalo fields) referred to as *"Poailani"*, three Loko called *"Kamaihi", "Kuhiaakaakai", "Kalokohanahou"*, and a Puʻuone (near shore pond) called *"Kepoelalo"* (See Figure 4 & 5).



(Figure 4. Cl No. 1715, Haa's Land Commission Award. A written account of the features within Haa's apana)

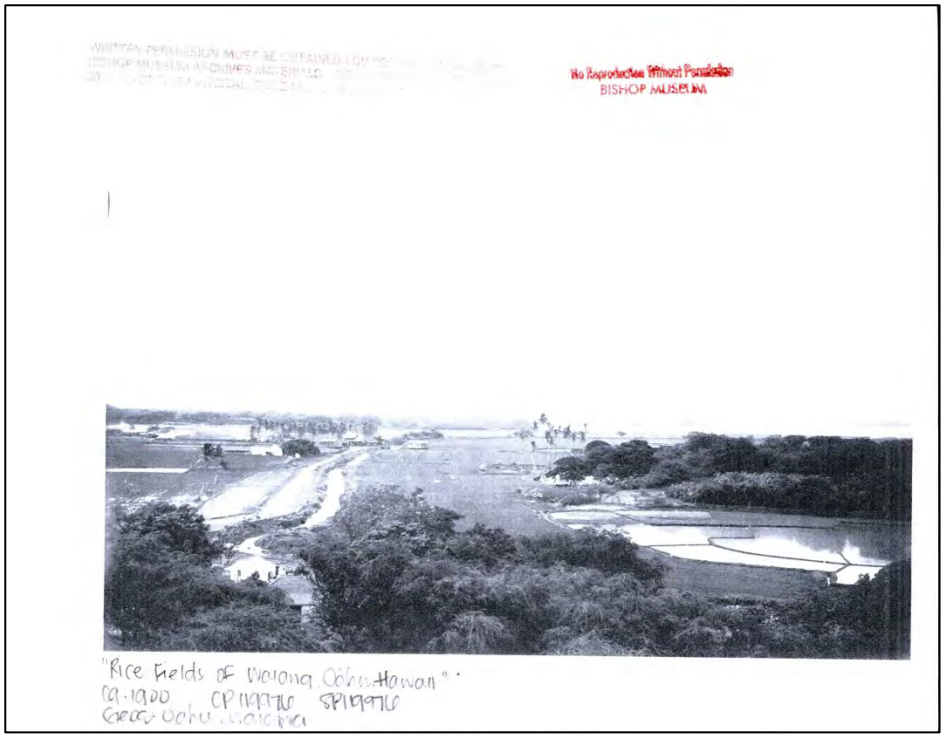


(Figure 5. Cl No. 1715, Haa's Land Commission Award continued. Notice illustrations of apana boundaries)

Namomoku claimed ownership of 3 ʻāpana within Kuhialoko. From Namomoku's LCA (Cl No. 1696) and Royal Patent (No. 198) a few features a noted, on Namomoku's ʻāpana there is a Moʻo ʻāina referred to as *"Lehupuulu"*, and two other unknown features referred to as *"Paauki"* and *"Kawaikini"*.

Kamalii claimed ownership of 4 ʻāpana within Kuhialoko. From Kamalii's LCA (Cl No. 5644 & 9365) and Royal Patent (No. 179) a few features a noted, on Kamalii's ʻāpana there are 4 Moʻo ʻāina referred to as *"Lehupuulu", "Kaluahine", "ka Pali"* and *"Mapuea"*, and three loko referred to as *"Kapoeluna", "Kalokoloa"* and *"Poowailani"*.

Discussion:



(Figure 6. Bishop Museum archive photo of Rice Fields in Waiawa, Ca. 1900. Notice large pond structures in bottom right corner)

There are still agriculture areas in production within Kuhialoko today. In the area down makai (seaward) from Leeward Community College, Nakatani farm still operates as a watercress farm, the watercress growing in flooded ponds. In an interview with Aunty Frances Oshiro of Kuhiawaho (an ʻili adjacent to Kuhialoko), it was explained that the after the loʻi kalo were modified for rice production, the paddies were again modified for watercress (F. Oshiro, personal communication, July 4, 2017).

In a visit to Nakatani farm on July 3, 2017, I could see that an area along the the edge of Haupuʻu had been restored to what looked like a feature that could be described as a loko kalo. It was a pond with kalo growing in mounds in the center. Near the loko kalo was a thriving loko iʻa.

Looking at the LCA's and Royal Patent's from the mid 1800s, we can read that Kuhialoko was a highly productive area. All claimants described named, large scale agriculture projects, labeled as moʻo ʻāina going on within the ʻili. At least kalo, maiʻa, and iʻa were

cultivated in this ʻili. By 1887, when the Hawaiʻi Territory commissioned RM 1258, the land is seen to still be used for agriculture, but a shift has been made from traditional loʻi kalo to wide scale rice production. Regardless of this shift, it can still be said that this area remained a source of abundance, considering how much rice appears to have been grown there.

From seeing the Kuhialoko today, as well as the other ʻili's within Waiawa, it is apparent that the potential for continued agriculture is possible. Up until the recent shift to urbanization, the area was highly prized for its agricultural viability being a center for taro and fish production for centuries and rice production in the 19th century. The ʻili of Kuhialoko is a sample of the greater Waiawa ahupuaʻa as well as the whole ʻāina around Puʻuloa. Kanaka Maoli utilized an abundance of naturally occurring pūnāwai and surface water to create vast networks of loʻi kalo and loko iʻa on land and around the shoreline. Up until the beginning of the 20th century the region was a massive producer of rice. Today groups like those working in Kuhiawaho, Kuhialoko, and Hanakēhau as well as Nakatani farms continue to utilize the natural environment to mālama ʻāina and grow food for Hawaiʻi's people. Going forward, as more information is researched about the area and the traditional systems in place, we can better understand how to build sustainable and resilient agricultural systems around the existing ecology.

References:

Vancouver, G. (1798). Voyage of Discovery to the North Pacific Ocean, and Round the World in the Years 1791–95. *Vols. 1, 2, and 3. London: Hakluyt Society*.

Handy, E. S. C., Handy E. G. (1991). Native Planters in Old Hawaii: Their Life, Lore, and Environment. *Bernice P. Bishop Museum Bulletin 233*

Lincoln, N., Vitousek, P. (2017). Indigenous Polynesian Agriculture in Hawaiʻi. *Oxford Research Encyclopedia of Environmental Science*

Keliʻipaʻakaua, K. (2017). Waiawa Place Names for the ʻIli of Hanakēhau, Kuhialoko, Kuhiawaho, and Kapuaihalulu. *Wahi Kupuna Internship Program 2017*

Nicholas, W. D., Shade, P. J., & Hunt, C. D. (1996). Summary of the Oahu, Hawaii, Regional Aquifer-System Analysis. *U.S. Geological Survey Professional Paper; 1412-A*

Award Books. Early 1850s. Award Books [with maps of each LCA parcel]. Handwritten volumes. Lands Division, Department of Land and Natural Resources, Kalanimoku Building, State of Hawai‘i, Honolulu.

An Ethno-Geographical Examination of the Wai of Waiawa

By: David Perreira

Introduction

Wai`awa is a waiwai ahupua`a in the moku of `Ewa. What makes Wai`awa unique is the amount of accessible groundwater available. The goal of this paper is to shed light as to why Wai`awa is so waiwai with pūnāwai and streamflow. Also, I've included a brief history of Wai`awa, and specifically Hanakēhau (as a case study,) to see how changes in land use dictated the changes in water use. I have also identified a few relevant threats to the water systems, and explain how Hanakēhau Learning Farm is using the knowledge of our kūpuna in restoration of the area to create a cultural gathering place. Despite urban and industrial development around Wai`awa kai and Hanakēhau, the water systems still remain viable for use in various forms of agriculture and cultural learning.

Background

Wai`awa is a traditional mauka-to-makai ahupua`a on the eastern side of the moku of `Ewa, sitting north of Pu`uloa (Pearl Harbor,) and extending mauka between Waipi`o and Waimano. Hanakēhau is an `ili `āina within Wai`awa kai, adjacent to the western bank of Wai`awa Stream. To the west of Hanakehau sits the `ili `āina of Kuhialoko and to the south lies the `ili `aina of Kiona`ole. In this paper, the term *`ili `āina* refers to a land section, generally a smaller subset of an ahupua`a (Pukui, 2012). Directly east of Hanakēhau, across Waia`awa Stream, is the ahupua`a of Mānana. To the north of Hanakēhau is the `ili `aina of Kapuaihalulu (eventually leading to the makai edge of Leeward Community College.) Figure 1 shows where Hanakēhau is in relation to its neighboring `ili `aina, and also its relation to the lochs of Pu`uloa and the fre`Eway mauka of Wai`awa kai.

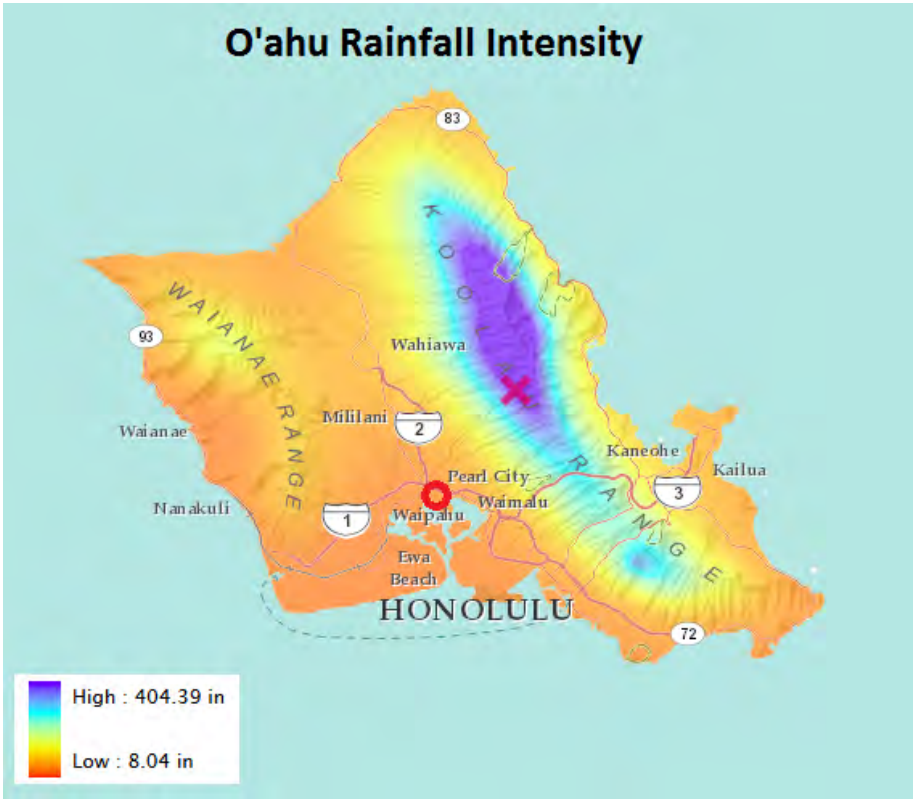
The importance of Wai`awa to early Hawaiians

It was known by our kūpuna how vast and important the water resources were in Wai`awa, and this is reflected in the naming of what are known as the *wai-lands* (lands with the word *wai* in the name.) One of the mo`olelo involving Wai`awa and the other wai-Lands of O`ahu is *He Mo`olelo no Kamapua`a*.

Wai`awa is included in the Wai lands that were given from Kamapua`a to Kahu Lonoawohi. Lonoawohi, who was a priest, had asked Kamapua`a for some of the lands he had in his possession. Lonoawohi asked, “Perhaps the water lands might be mine.” Kamapua`a agreed. So, the lands which have the word “water” (wai) in their names would become Lonoawohi`s, The wai-lands include Waialua, Waianae, Waimanalo, Waikele, Waipio, Wai`awa, Waimano, Waimalu, Waikiki, Waialae, Wailupe, Waimanalo 2,Waihee,Waiahole and etc." (Kahiolo, 1861)

The origin of the wai of Wai`awa

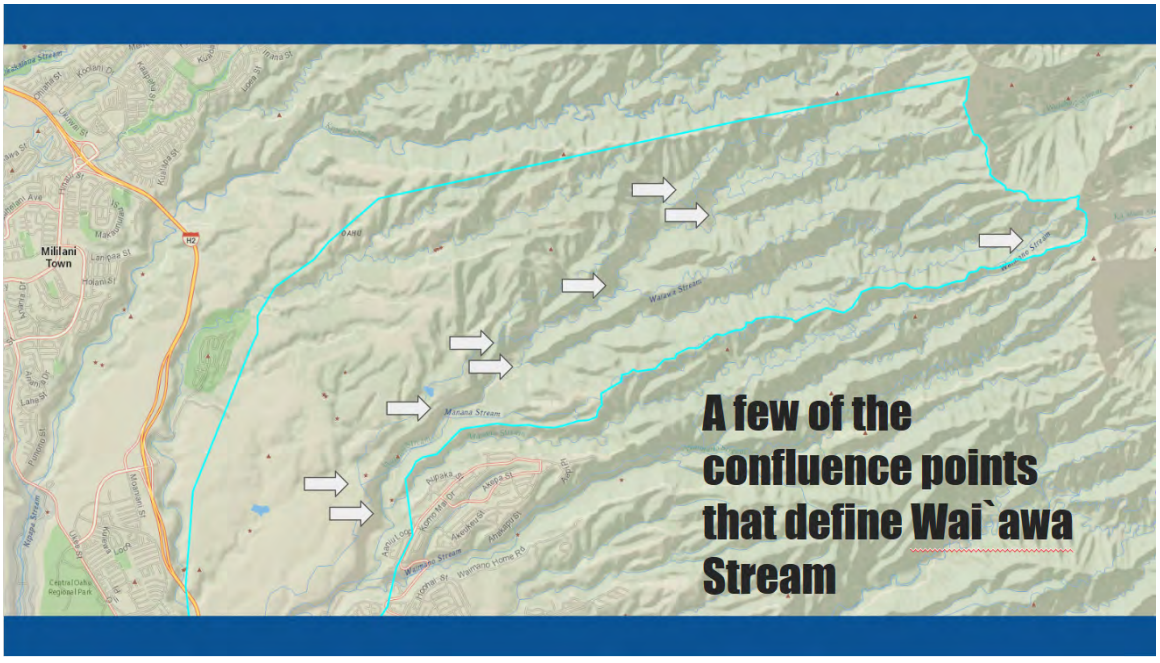
Since the wai of Wai`awa and Hanakēhau are what make those places unique and create agricultural abundance, it is important to understand where this wai orginates and how it reaches these places. As is the case in other ahupua`a, the most of the rainfall in Wai`awa occurs in the mauka regions. The area is lush because it is within the wettest zone of O`ahu (see Figure 1.)



(Figure 1. Map displaying wettest regions on O`ahu. The “x” indicates the northernmost point in Wai`awa uka, while the “o” indicates the southernmost point of Wai`awa kai.)

Looking at the mauka watershed of Wai`awa, we begin where rain first touches the surface of the honua (rainwater interception.) Water percolates in dike rock in Waiahole on the windward side of the ridge, as well as the neighboring valleys. This is the same zone that feeds the Waiahole Stream. In fact, the main origin point of one of the main feeder streams of Waia`awa Stream sits directly across the ridge of Waiahole Steam, less than half a mile away.

Near where the ahupua`a of Wai`awa begins, close to the Ko`olau Spine, numerous small streams exist, and run from mauka to Makai. There are at least seven streams originating from the very back of Wai`awa uka, Mānana uka, and Waipi`o uka that feed into Wai`awa stream. These streams include Mānana Stream, Waimano Stream, Kipapa Stream, and others. The multitude of confluence points are what make Wai`awa stream unique on O`ahu (indicated in Figure 2.) As a result Wai`awa kai, Hanakēhau, and Pu`uloa are able to benefit from a clean and reliable source of water, even though those areas receive very little rainfall annually.



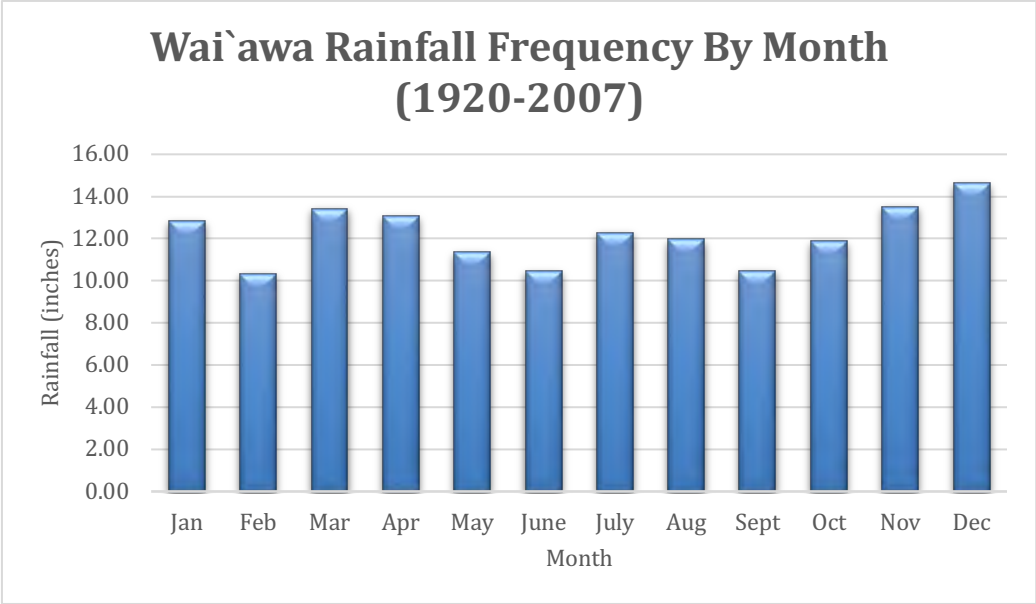
(Figure 2. Map displaying the location of the confluence points that define Wai`awa stream.)

Unique Rainfall Patterns

Wai`awa kai (including Hanakēhau) resides in one of the driest regions of O`ahu, rainfall-wise, while Wai`awa uka sits within one of the wettest (see Figure 1.) Hanakēhau receives approximately twenty-five inches of rainfall annually, while the mauka section of Wai`awa receives approximately two-hundred. Only two other ahupua`a on O`ahu, Mānana and Waipi`o, share this characteristic of *wettest and driest*. Without the excess mauka rainfall, it is possible that Wai`awa stream would not flow as profusely as it does.

Another unique rainfall characteristic is the consistency of mauka rainfall in Wai`awa. After analyzing eighty-seven years' worth of monthly rainfall totals, it is evident that the frequency of Wai`awa rainfall is uncommon when compared to that of other ahupua`a. Although Wai`awa receives most of its rainfall in December, the other monthly means do not vary by much (see Figure 3). According to Andre Perez, creator and director of Hanakēhau Learning Farm, "Wai`awa is riddled with natural springs that provide strong flow even during times of drought" (Perez, 2013). Could the consistency of the flow of pūnāwai water exist because of the consistency of rainfall in the mauka regions?

An interesting thing to note is that modern analysis of rainfall data from the island of O`ahu confirm that the aforementioned wai-lands are indeed the ahupua`a with the greatest rainfall and wai resources. The Wai-lands lay in the northern half of the Ko`olau Mountain Range, and receive much more rain than the southern half. For example, Manoa receives about half the amount of rain that Wai`awa Uka receives, and Pia Valley in Niu Valley only receives about a third.



(Figure 3, shows the differences in mean annual rainfall in Wai`awa over 87 years)

Methods

I utilized the following methods of research: Archival, book, and web research (including the translations of land commission awards and native testimonies.) To find pictures and old maps, I had searched tthe Bishop Museum Archives, Hawaii Mission Houses Museum, and the Hawai`i State Archives because I could not find many in books. Most library research was conducted at Hamilton and Sinclair Libraries. Web research was done using the Kipuka, Ulukau, and Papakilo databases.

Land Commission Awards and Native/Foreign Testimonies were obtained digitally via the Ulukau online database. I decided to focus on Hanakēhau to see how the natural water resources were utilized by the claimants of that area from the mid-1800s. The documents were translated and compared to see how many of the claimants utilized pūnāwai or Wai`awa stream, and in what ways.

For the rainfall section, datasets of monthly mean rainfall data were obtained via the online Rainfall Atlas of Hawai`i. The data was examined for completeness, and then aggregated in Excel. Annual means were calculated for each year, as well as 87-year means by month. Charts were then generated for clarification of results.

Results/Analysis

To observe the shifting landscape of Wai`awa in relation to water and land-use, I decided to look at specific times in history to see change. These times were chosen due to the availability of resources for those times. As a starting point, I decided to choose records produced around the time of the Māhele of 1848.

Māhele Land Claims in the Area…Who Lived here and what was there?

From about the year 1848, drastic changes to Hawai`i land tenure system began to take place under King Kamehemeha III. The Mahele consisted of a division of rights to land (as well as the divisions of lands themselves,) transitioning from a communal trusteeship to private ownership (Higgins, 2015). In making claims to land parcels that were resided upon from 1839 and prior, claimants filed foreign or native testimonies to describe the land areas and for witnesses to confirm residence of claimants. Without going into detail, these documents provide valuable historical information because they describe what was physically on the land, giving insight to the activities that have taken place at the time.

Much of Hanakēhau was devoted to agriculture by the inhabitants throughout the 1800s due to the abundance of pūnāwai and the wai of Wai`awa Stream. Looking through the Land Commission Awards of Hanakēhau, it is clear that there were three primary land claimants, as well as Kuhina Nui Victoria Kamāmalu. It is described in these three `apana that there were numerous water resources and agricultural plots.

Figure 4 shows the combined agricultural features of all three claimants. The first column pertains to wai-intensive agriculture, while the right pertains to drier-land crops. As illustrated, more wai crops were grown here than malo`o. this is a testament to how much water was present in this `ili at the time. The three claimants were Makanui (helu 6086 and 9364,) Kapa`a (helu 5847 and 9360,) and Keawe (helu 1594 and 9366.) Makanui and Kapa`a lands border Wai`awa Stream, while Keawe land is relatively close to the stream.

(Figure 4. The combined agricultural features in Hanakēhau as of 1851.)

Just a brief explanation of loko kalo and mo`o kalo. As far as I can tell, in this context loko kalo refers to a deeper than usual lo`i kalo terraces, as in a pond. It may also refer to kalo grown alongside small fish ponds for eating. Mo`o kalo could refer to a dedicated strip of land, most likely narrow, dedicated to kalo (Pukui, 2012).

Important change in Pu`uloa

It is difficult to speak about Hanakēhau without mentioning the area just south. The areas surrounding the mauka section of Pu`uloa were amongst the most fishery rich in the area, as Wai`awa Stream courses through and empties into Pu`uloa Harbor. At one time, streams from all the ahupua`a of `Ewa emptied into Pu`uloa, forming a nutrient-rich delta (Kumupono Assoc., 2012).

The shoreline and old harbors were heavily used by our kūpuna. “This branch of the estuary is called Waipio and Wai`awa. The titled land lords of this section of the estuary are Malaea Ii and the relatives of

Ruth Keelikolani. This is an expansive place, not filled with thousands of boats and more, from the point of Pipiloa to Mokuumeume, and from there to Halawa." (Kumupono Assoc., 2012)

After the Māhele, the area became less frequented due to the acquisition of some of these lands and fisheries as private property. The areas in the harbor fronting Wai`awa and Mānana were used my maka`ainana for many generations, yet the lands were now deemed off-limits because of restrictions enacted in 1868, with fines enacted as penalties.

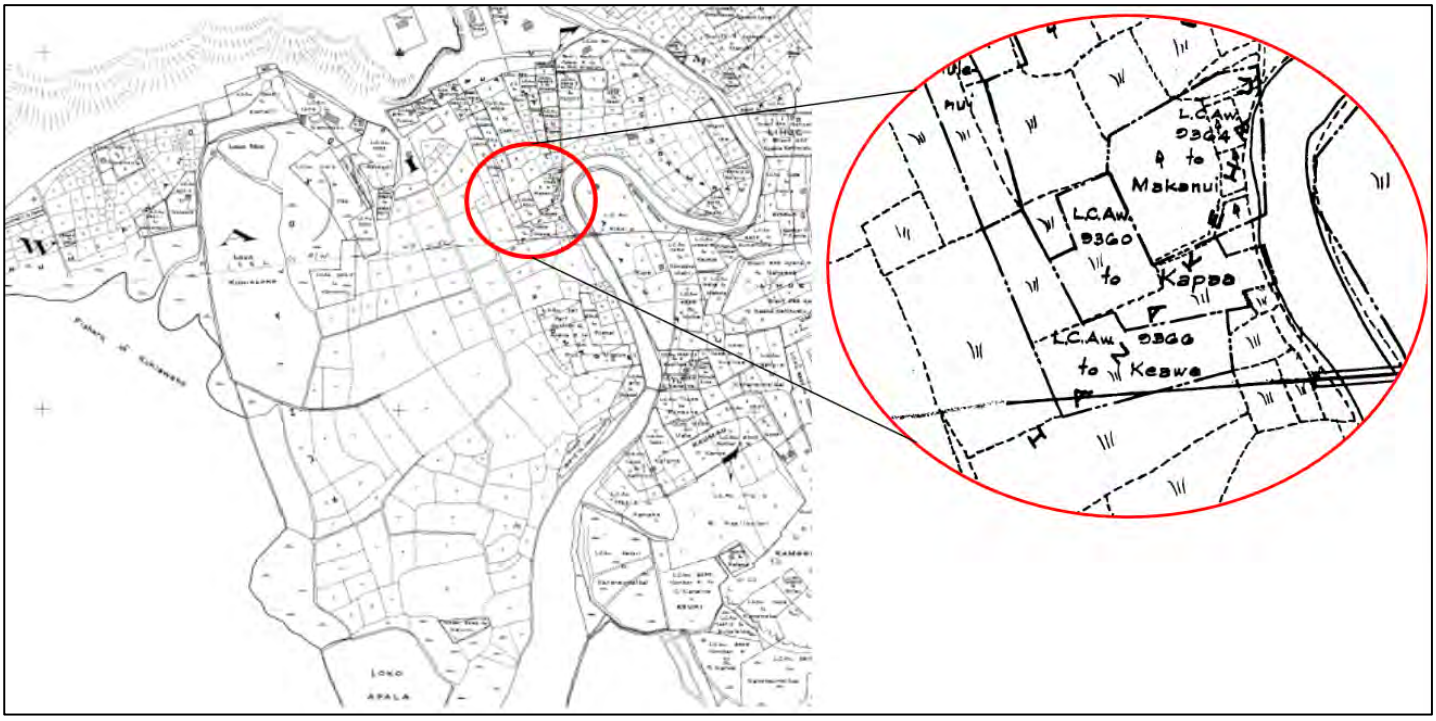
There were protests and petitions by many who expressed that they relied on these areas for many activities. These included transporting surplus kalo and other crops to sell in Honolulu, traveling up various streams by canoe to attend church and other gatherings, as well as fishing for various sea creatures including crabs and lobsters. In one of the petitions in 1868, it is stated, "Therefore, we ask the wise people, hear us, how can we maintain our rights to this path under the Law of the land? The customary trails of travel are free. Please answer quickly for the good of the multitudes, for we are in distress. We are –the native tenants of the land." (Kumupono Assoc., 2012)

The 1880's

Moving forward in history, we come to the 1880's. This period was chosen because a very detailed map of this time was available for examination. Figure 5 shows Hanakēhau and surrounding `ili `aina. Looking at the numerous land parcels around the claimed Māhele lands,
there are many with a symbol composed of three semi-vertical lines. This denotes lands dedicated mainly to rice farming. The symbol that resembles a standing leaf indicates kalo farming. The information on the map mirrors the changing demographic of Wai`awa, as well as neighboring ahupua`a. At this time, there were many residents of Chinese ancestry in the area.

However, it is important to note that Hawaiians also grew rice. Many were conscious of what this could mean for the future of this area, as it was written in Ka Lāhui Hawai`i in 1877, "These days at ``Ewa, the planting of rice is spreading among the Chinese and the Hawaiians, from Hālawa to Honouliuli and beyond. There will come a day when the mother food, taro, shall not be seen on

the land." (Kumupono Assoc., 2012) In the 1880's, much of the crops of the area were being transported by horse or boat, but from 1895, via the OR&L Railroad. Crops transported to Honolulu included kalo, sugar, rice, and fish caught from Pu`uloa and the numerous fishponds in the area (Kumupono Assoc., 2012). Shortly after the inaugural day of the railroad, on King Kalākaua's birthday in 1889, many foresaw that the area would become surrounded by residential development because of the newly planned Pearl City subdivision. (Kumupono Assoc., 2012)



(Figure 5. Location of land commission award parcels in Hanakehau)

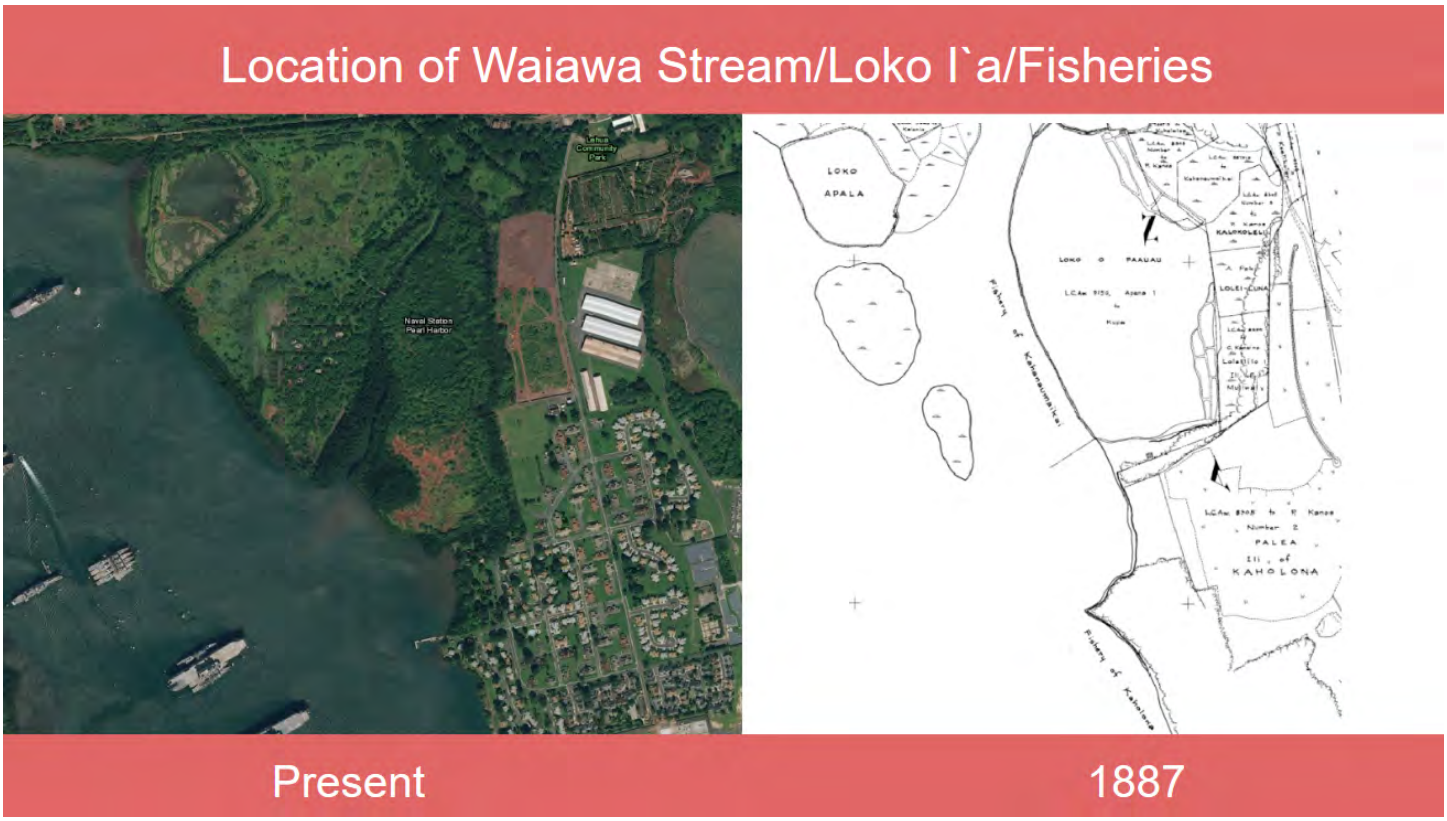
Discussion/Conclusion

Wai`awa Today

This is Wai`awa in 2012 (Figure 6.) You can see there are a few watercress farms, as well as numerous home gardens. Lo`i kalo also exist, however on a much smaller scale. As the population of O`ahu has nearly doubled from 1960 to 2010 (500,409 to 953,207), numerous residential subdivisions have since been built on the `Ewa plains in the surrounding ahupua`a (Census, 2010).

(Figure 6, showing modern development near Wai`awa. Hanakēhau is denoted by the red box.)

In addition, to support the growing population, many big-box retailers have successfully opened stores in the area. Land-use changes have riddled the area due to the rezoning of many land parcels from agricultural to various other designations. Most of the land and water of Wai`awa kai is now being used for residential and retail purposes, and not for agriculture as it was in the 1800's. All of the fisheries in Figure 7 are off limits under authority of the U.S. Navy. Despite these changes in the immediate surrounding areas, Hanakehau is still relatively undeveloped. This is due to the decisions made by leases and landowners to keep the area open.



(Figure 7, locations of off-limits fisheries. Note: The fishery of Kuhiawaho is just outside the map in the upper left hand corner.)

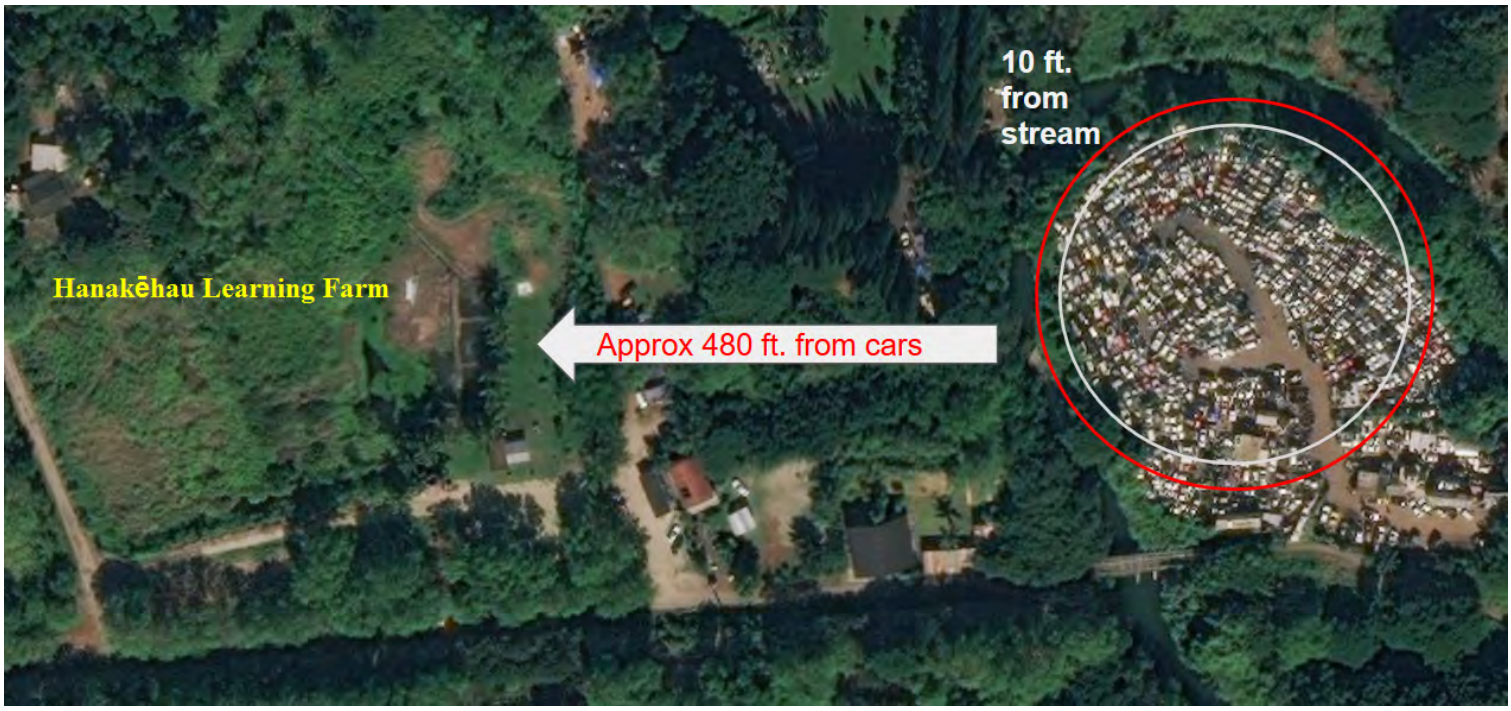
Environmental threats to Hanakēhau in the near future

Aside from recent development and land-zoning changes in the vicinity, there are a handful of threats to the ecosystem of Hanakēhau and Wai`awa in general. I feel that if decision makers, cultural practitioners, and the general public become aware of these issues, there may be more pressure on governmental agencies to find ways to adapt to, and mitigate some of the effects.

The outfall from illegal cesspools in Pearl Harbor is a possible threat. Three large-capacity cesspools that the Navy has been operating illegally since 2005 were finally shut down in 2012 by order (and penalty) of the Environmental Protection Agency. The waste from these cesspools still remain in the soil today. If coastal flooding were to occur, it is possible for some of the bacteria and dilution chemicals to reach the shoreline. More importantly, it is imperative to find out the extent to which these pollutants have contaminated the food chain.

A much bigger threat than the recently-closed cesspools are the amount of contaminated areas designated as Superfund Sites in Pearl Harbor. These contaminated areas are scattered over such a large area that the EPA had to divide these areas into 18 different regions. Landfills, burn areas, petroleum leaks, pesticide and herbicide dumps, as well as other pollution centers, comprise the Superfund Site. Although there seems to be some action being taken to contain and clean these areas, many groups such as The Sierra Club feel not enough is being done. These pollutants have already affected the bays and estuaries in the area, and have potential to reach freshwater aquifers and ponds during long periods of Kona weather due.

Yet another threat that is within very close proximity of Wai`awa is a legally operated automotive junk yard across and along Wai`awa Stream in the neighboring ahupua`a of Mānana. ABC Autos has over 1000 automobiles, and sits within six feet of the stream water itself (see Figure 7.) Although videos of the junkyard and stream during rainstorms have been uploaded online to help spread awareness to the issue of contaminated runoff, the business is currently still in operation. In this case, stronger setback rules must be put in place to prevent future potential stream contamination.



(Figure 7. Location of ABC Used Auto Parts junkyard. You can see Wai`awa stream curving around the north, east, and western flanks of the junkyard.)

Finally, there is the issue of decreasing rainfall island-wide. With a few exceptions, such as in Kahana Valley, rainfall around O`ahu has been decreasing since record keeping began (Chu, 2004). From my calculations, rainfall in Wai`awa has been decreasing at a rate of ~.03 inches a year from 1920-2007 (see Figure 8.) It is possible that during the period of the Māhele , Wai`awa received over 5 inches more rainfall per year. It is unclear how this rate of change will affect the future flow of wai from the numerous pūnāwai in Wai`awa, as well as Wai`awa Stream-therefore, future study of rainfall from Wai`awa, as well as comparisons to stream discharge and baseflow may prove valuable to current and future projects in Wai`awa.

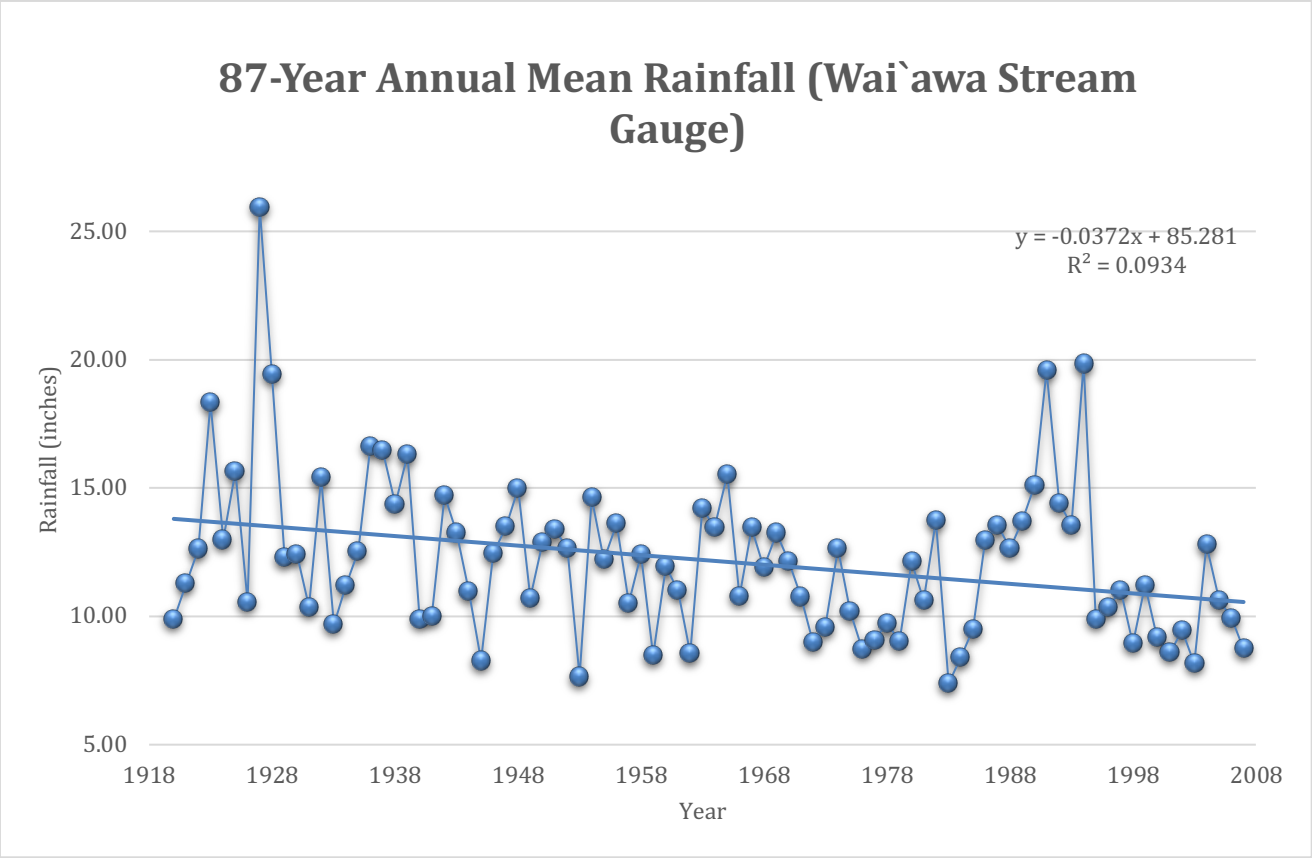


Figure 8. Annual mean rainfall for the Wai`awa Stream rain station from 1920-2007

Hanakēhau Learning Farm...a return to traditional land use

One of the locations we visited as a cohort in the Wahi Kūpuna Internship Program was Hanakēhau Learning Farm. It is an educational mala on the makai side of the `ili aina. We were trained in tape and compass and baseline mapping techniques, and we used these skills to map planted sections of the farm. It was an educational experience, as well as a spiritual one, in that we felt a much more intimate connection with the area after observing everything in detail during the mapping process. It was also a special place for us in that we worked on our various `oli in

the open areas of the mala, and were able to participate in discussions about the history of the area.

The farm began when Andre Perez obtained a land lease from Kamehameha Schools Bishop Estate (K.S.B.E.) with a goal to restore this parcel to it's traditional layout and use. Their motto is "Keeping Hawaiian hands, In Hawaiian Lands," which emphasizes that kanaka can reconnect with the land by

working with and learning from the land. He familiarized himself with the Māhele documents of Hanakēhau in order to find out specifically what was grown here, and in what ways (Perez, 2017). The parcel was once part of Victoria Kamamalu's land holdings, and now it is under KSBE, which allowed this land to remain as open space throughout the developmental changes of other neighboring areas.

Much time and energy was devoted to the restoration. When Andre and his hui initially began work on the land, they had to remove tons of debris from an illegal dump site on the property (Figure 9.) Many sections of useable water and wetland were covered in non-native vegetation and had to be cleared (Perez, 2017). Andre and his hui persevered throughout the process, knowing that this `apana had much potential as a learning and gathering place because of the amount of wai found in the northern section (Figure 10.)

(Figure 9. Debris removal, volunteering, and learning taking place at Hanakehau Learning Farm.)

Andre's farmers are working to clear this area and create `auwai (irrigation channels) for the numerous lo`i. They have already planted numerous native plants, as well as a few non-native food plants to aid in

accomplishing food-security and self-sufficiency (Perez, 2017). The water found here is wai that began its journey from all the way upland in Wai`awa `uka. This wai will now be used for mahi`aina restoration. Soon, the water will flow here in the same fashion as it once did. Hanakēhau Learning Farm has and will be successful in their future goals, because they are using the land as our kūpuna once did, and the `aina is grateful for that. They have created a space for all of us to reconnect w/the `aina, our culture, and our lāhui . Mahalo nunui to them.

(Figure 10 shows the locations of wai and pūnāwai in the northern section of Hanakehau Learning Farm.)

References

Census. (2010). State of Hawai`i 2010 Census. Retrieved December 14, 2017, from https://census.hawaii.gov/.

Chu, P. – S., Chen, H. (2004). *Interannual and Interdecadal Rainfall Variations in the Hawaiian Islands.* Journal of Climate, 23 (18), 4881 - 4900.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y. - L. Chen, P. - S. Chu, J.K. Eischeid, and D.M. Delparte, 2013: Online Rainfall Atlas of Hawaii. *Bull. Amer. Meteor. Soc.* 94, 313 - 316, doi: 10.1175/BAMS - D - 11 - 00228.1.

Higuchi, Dean. EPA requires U.S. Navy to close cesspools at Pearl Harbor. (2017, April 05). Retrieved December 08, 2017, from https://www.epa.gov/newsreleases/epa-requires-us-navy-close-cesspools-pearl-harbor.

Lau, L.S., & Mink, J.F. (2006). *Hydrology of the Hawaiian Islands*. Honolulu: University of Hawaii Press.

Kumu Pono Associates LLC. (2012.). He Mo`olelo Aina – Traditions and Storied Places in the District of `Ewa and Moanalua. Retrieved December 09, 2017, from http://www.kumupono.com/.

Perez, A. (2013). *E mau ke ea o Hanakēhau, Ahupua'a o Waiawa.* University of Hawai`i. Manoa, HI.

Perez, A. (n.d.). Hanakēhau Learning Farm. Retrieved December 13, 2017, from https://Hanakēhau.com.

Pukui, Mary K, and Samuel H Elbert. (2012) “Na Puke Wehewehe 'Ōlelo Hawai'i.” *Nā Puke Wehewehe ʻŌlelo Hawaiʻi*, Hale Kuamo'o, 11 Sept. 2002, www.wehewehe.com/.