

## Appendix E

Draft Cultural Impact Assessment for the Proposed Keālia Subdivision and Associated Sewer Line Project, TMKs: [4] 4-7-004:001; 4-7-003:002, 006: 4-6-014:026 and 031

Cultural Surveys Hawai'i

~~April 2018~~ March 2019

Letter to Aha Moku Advisory Committee dated June 19, 2019 requesting review of CIA

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**Draft**

**Cultural Impact Assessment for the  
Proposed Keālia Subdivision and  
Associated Sewer Line Project**

**Keālia and Kapa‘a Ahupua‘a, Kawaihau District, Kaua‘i**  
**TMKs: [4] 4-7-004:001; 4-7-003:002, 006; 4-6-014:026 and**  
**031**

**Prepared for**  
**Helber Hastert and Fee (HHF) Planners**  
**on behalf of Keālia Properties, LLC**

**Prepared by**  
**Hallett H. Hammatt, Ph.D.**

**Cultural Surveys Hawai‘i, Inc.**  
**Kailua, Hawai‘i**  
**(Job Code: KEALIA 3)**

**March 2019**

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**O‘ahu Office**  
**P.O. Box 1114**  
**Kailua, Hawai‘i 96734**  
**Ph.: (808) 262-9972**  
**Fax: (808) 262-4950**

[www.culturalsurveys.com](http://www.culturalsurveys.com)

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**Kaua‘i Office**  
**2970 Kele St.**  
**Lihue, Hawai‘i 96766**  
**Ph.: (808) 245-9374**  
**Fax: (808) 245-4883**

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## Management Summary

<b>Reference</b>	Cultural Impact Assessment (CIA) for the Proposed Keālia Subdivision and Associated Sewer Line Project, Keālia and Kapa‘a Ahupua‘a, Kawaihau District, Kaua‘i, TMKs: [4] 4-7-004:001; 4-7-003:002, 006; 4-6-014:026 and 031 (Hammatt 2019)
<b>Date</b>	March 2019
<b>Project Number(s)</b>	Cultural Surveys Hawai‘i, Inc. (CSH) Job Code: KEALIA 3
<b>Agencies</b>	State of Hawai‘i, Department of Health, Office of Environmental Quality Control (DOH/OEQC)
<b>Land Jurisdiction</b>	Private, County, and State
<b>Project Proponent</b>	Keālia Properties, LLC
<b>Project Location</b>	The proposed Keālia Mauka Homesites and associated sewer line project area is bounded by Kumukumu Stream to the north, Kūhiō Highway to the east, Kaiakea Fire Station to the south, and Keālia Farms, St. Catherine’s Cemetery, and Kapa‘a Homesteads to the west, including the intersection of Mailihuna Road and Kapa‘a Stream Bridge. The project area is depicted on a portion of the 1996 Kapaa U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle.
<b>Project Description</b>	<p>The proposed Keālia Subdivision project will involve the development of a residential subdivision consisting of approximately 235 lots ranging in size from about 5,600 square feet (sq ft) to 7,300 sq ft. The property is currently designated within State and County agricultural districts and will require an amendment to the State Land Use District Boundary and County Zoning District, followed by a County subdivision approval. The petition for a State Land Use District boundary amendment is limited to the 53.4-acre residential subdivision site, which will be referred to in the CIA as the “Petition Area.”</p> <p>Proposed off-site improvements associated with the development of the residential subdivision are not part of the Petition Area. However, these improvements will be identified as part of the project area for the CIA.</p> <p>The project will also include installation of utility infrastructure (e.g., drinking water, drainage, wastewater, electrical power, and telecommunications systems) and transportation improvements to serve each subdivided parcel. The subdivision plan includes two detention basins, located on the far south and far north ends of the project area, totaling 5.86 acres. The southern detention basin is 4.32 acres in size and will provide park/green space for active and passive recreation. It will also serve as a buffer with the neighboring subdivision on Ka‘ao Road. The detention basin on the north will be steep (due to the basin’s smaller size) and will not be usable for</p>

	<p>recreation. Access to the subdivision would be via Keālia Road from its intersection with Kūhiō Highway. A roundabout entrance to the subdivision is proposed on Keālia Road. All traffic on Keālia Road, including through traffic continuing past the subdivision, will be routed through the roundabout. A roundabout entrance to the subdivision is proposed in order to provide a safe and efficient central nexus for all adjoining subdivision roads. Proposed subdivision roads connecting to the roundabout will be “Collector” roads as defined by county road standards. Collector roads have a 56-ft right of way (ROW) and 40-ft wide pavement. There are two (2) Collector roads proposed for this project, totaling about 2,455 linear ft. One of the Collector roads will run in the north-south direction and the other Collector road will run in the east-west direction. The majority of the roads within the proposed subdivision will be “Minor” roads as defined by county road standards. Minor roads have a 44-ft ROW and 20-ft wide pavement. There are nine (9) Minor roads proposed for this project, totaling about 9,220 linear ft. Three (3) Minor roads will traverse the north-south direction and six (6) will traverse in the east-west direction. Currently, there is an old cane haul road entry to the property located on Kūhiō Highway. The road is currently gated and unused. This access point will be eliminated, and no direct vehicle access onto Kūhiō Highway will be allowed from the proposed subdivision, as mandated by the State of Hawai‘i Department of Transportation (HDOT). The County of Kaua‘i has indicated that improvements to the two-lane Keālia Road are needed to accommodate the increase in vehicular traffic associated with the project, and that the improvements shall be in accordance with the county’s Complete Streets Policy. Improvements are proposed to approximately 2,650 linear ft of Keālia Road, extending from the Hopoe Road intersection to the Kūhiō Highway intersection:</p> <ul style="list-style-type: none"> <li>• Widening the existing ROW from 40 ft to 56 ft</li> <li>• Reconstructing the roadway pavement from two vehicular lanes each approximately 9 ft wide to two vehicular lanes each approximately 10 ft wide</li> <li>• 5-ft wide paved road shoulders on each side of the travel lanes for roadway drainage and bicycle use</li> <li>• Green space between paved road shoulder and proposed sidewalk</li> <li>• 5-ft wide concrete sidewalk for pedestrians</li> </ul> <p>At the intersection of Keālia Road and Kūhiō Highway, a roundabout will be constructed to mitigate the increase in traffic due to the project, and to improve intersection safety. Two alternative designs for this intersection were considered: a traffic signal and a single-lane roundabout. The roundabout was identified by the County of Kaua‘i as</p>
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	their preferred alternative. A new sanitary sewer main will be needed from the Petition Area to a lift station along Kūhiō Highway, and then to an existing municipal sewer manhole near the Kaiakea Fire Station, nearly 1 mile away. A new sewer pump station will be constructed.
<b>Project Acreage</b>	The current Petition Area includes approximately 53.4 acres (22 hectares); offsite infrastructure and utility improvements will include approximately 21.3 acres (8.6 hectares). In total, the project area is approximately 74.7 acres (30 hectares).
<b>Document Purpose</b>	<p>This cultural impact assessment (CIA) was prepared to comply with the State of Hawai‘i’s environmental review process under Hawai‘i Revised Statutes (HRS) §343, which requires consideration of the proposed project’s potential effect on cultural beliefs, practices, and resources. The Constitution of the State of Hawai‘i makes clear that the State and its agencies are bound by a fiduciary duty to,</p> <p style="padding-left: 40px;">. . . protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778. [Hawai‘i State Constitution, Article XII, Section 7]</p> <p>Protections for <i>ahupua‘a</i> (land division extending from the mountain to the sea) or native tenants, had been set forth far before the ratification of the State Constitution. Recognizing the challenges of a Western system of private landownership, in which the appurtenant rights of native tenants had not yet been codified into law, the Hawaiian Privy Council, on 19 October 1849, adopted resolutions to protect the rights of the <i>maka‘āinana</i> (people that attend the land). The Kuleana Act of 1850, comprised of seven articles, confirmed and protected the rights of native tenants. Article 7 established access to roads, water sources, and other natural resources:</p> <p style="padding-left: 40px;">When the landlords have taken allodial titles to their lands, the people on each of their lands, shall not be deprived of the right to take firewood, house timber, aho cord, thatch, or ti leaf, from the land on which they live, for their own private use, should they need them, but they shall not have a right to take such articles to sell for profit. They shall also inform the landlord or his agent, and proceed with this consent. The people also shall have a right to drinking water, and running water, and the right of way. The springs of water, and running water, and roads shall be free to all, should they need them, on all lands granted in fee simple: Provided, that this shall not be applicable to wells and water courses which</p>

	<p>individuals have made for their own use. [5 August 1850; Territory of Hawaii 1925:2112]</p> <p>In 1992, the State of Hawai'i Supreme Court upheld these rights under HRS §7-1, amending it to include, "native Hawaiian rights . . . may extend beyond the <i>ahupua'a</i> in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner" (<i>Pele Defense Fund v. Paty</i>, 73 Haw. 578, 620, 837 P.2d 1247, 1272 [1992] cited in Dagher and Dega 2017:5). Act 50, enacted in 2000 with House Bill (HB) 2895, recognizes the importance of Native Hawaiian culture in defining the unique quality of life in Hawai'i. The act amended the definition of "significant effect" to include,</p> <p>. . . the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals as established by law, or adversely affect the economic [or] welfare, social welfare[.], or cultural practices of the community and State. [H.B. 2895, Act 50, 2000]</p> <p>Act 50 also requires that Environmental Impact Statements and Environmental Assessments "include the disclosure of the effects of a proposed action on the cultural practices of the community and the State," thereby including cultural impact assessments (CIA) as part of the overall determination. Through document research and cultural consultation efforts, this report provides information compiled to date pertinent to the assessment of the proposed project's potential impacts to cultural beliefs, practices, and resources (pursuant to the Office of Environmental Quality Control's <i>Guidelines for Assessing Cultural Impacts</i>) which may include traditional cultural properties (TCPs). These TCPs may be significant historic properties under State of Hawai'i significance Criterion e, pursuant to Hawai'i Administrative Rules (HAR) §13-275-6 and §13-284-6. Significance Criterion e refers to historic properties that have an important value to the Native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group's history and cultural identity (HAR §13-275-6 and §13-284-6). The document will likely also support the project's historic preservation review under HRS §6E and HAR §13-275 and §13-284. The document is intended to support the project's environmental review.</p>
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<b>Results of Background Research</b>	<p>Background research for this study yielded the following results:</p> <ol style="list-style-type: none"> <li>1. Keālia and Kapa‘a Ahupua‘a belong to the ancient district of Puna, one of five ancient districts on Kaua‘i (King 1935:228). For taxation, educational, and judicial reasons, new districts were created in the 1840s. In 1878, King Kalākaua, in an attempt to solidify the stature and influence of the Hui Kawaihau (a choral society established by Prince Leleiohoku), created the new district of Kawaihau.</li> <li>2. Keālia translates as “salt encrustation.” According to John Clark, who translates Keālia as “the salt bed” or “the salt encrusted area,” this is a direct reference to the natural salt ponds that formed along the low-lying coastal portions of Keālia Ahupua‘a. This salt or <i>pa‘akai</i> satisfied a variety of domestic, medicinal, and ceremonial needs (Clark 1990:11).</li> <li>3. Kapa‘a literally translates to “the solid or the closing” (Pukui et al. 1974:86).</li> <li>4. Generally, Keālia was described as “rather dry” (Handy and Handy 1972:423). This condition may be inferred by the relative lack of traditional rain names associated with Keālia Ahupua‘a. Due to the lack of rainwater, freshwater resources such as streams were modified to satisfy the needs of <i>maka‘āinana</i> living upon the lands.</li> <li>5. Three rains, the Hā‘ao, Kea, and Ho‘olua are associated with Kapa‘a. In addition to these rains, Kapa‘a was fed by smaller drainages flowing into the lowlands and creating an approximately 170-acre marshland. As consequence, traditional Hawaiian settlement occurred directly <i>makai</i> (towards the sea) of this marshy land.</li> <li>6. <i>Ka‘ao</i> (legend) places Hi‘iaka, the beloved sister of Pele the fire goddess, in the vicinity of the project area. Hi‘iaka and her companion, Wahine‘ōma‘o view Wai‘ale‘ale, Nounou Hill, and Kapa‘a. Their canoe lands on the beach of Kapa‘a where they jump ashore and Hi‘iaka offers <i>oli</i> (chant) (Ho‘oulumāhie 2008:167–168).</li> <li>7. <i>Mo‘olelo</i> (story) identifies the rocky headland between Kapa‘a and Keālia as the location where Pāka‘a was raised by his mother La‘amaomao and her brother Ma‘ilou, a bird snarer.</li> <li>8. Various members of the Kawelo family line are said to have spent time within Keālia and its environs. Two <i>mo‘olelo</i> are associated with this legendary line of Kaua‘i kings. The first involves Kaweloleimakua and Kauahoa at the <i>wahi pana</i> (storied place) known as Waipahe‘e. In the legend, the two kinsfolk, engage as young boys in a series of contests. In each of the contests, Kawelo is bested by Kauahoa. As grown men, they are</li> </ol>
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	<p>finally pitted in bloody battle against each other. In order to thwart the conflict, Kawelo attempts to remind Kauahoa of their boyhood excursions; Kauahoa is not swayed and swears to fight to the death. The second legend concerns Kawelomahamahaia, the shark man of Kaua‘i. The shark man, a man-eater who hunted in the waters between Keālia and Wailua, was finally caught and stoned to death. This shark man was believed to be associated with Chief Kawelomahamahaia, a grandfather of Kawelo and descended from Manokalanipo (Beckwith 1970:141).</p> <p>9. Several <i>heiau</i> (pre-Christian place of worship) once stood in Keālia and Kapa‘a Ahupua‘a including Pahua Heiau, Kumalae Heiau, Waiehumalama Heiau, Napuupaakai Heiau, Noemakalii Heiau, Puukoa Heiau, Piouka Heiau, Una Heiau, Mano Heiau, and Makanalimu Heiau (HEN 1885:214–216). Unfortunately, the exact locations of these <i>heiau</i> remain unknown. An additional significant temple was the <i>heiau</i> known as Kawelomamaia (Site 112) (Bennett 1976:129; Thrum 1907:41). <i>Heiau</i> explicitly identified in Kapa‘a are Mailehuna and Pueo. The <i>heiau</i> of Kaluluomoikeha is believed to have been located in the general area near the Mō‘ikeha Canal and the present day Hotel Coral Reef Resort.</p> <p>10. Other important <i>wahi pana</i> associated with Keālia and Kapa‘a include ‘Āhihi Point and Hōmaikawa‘a (“give me the canoe”); Keahiahi Point; Ka‘ea (the banana patch of Palila); Waipahe‘e (“slippery water”); Ōpae Kala‘ole (a <i>wailele</i> or waterfall); and a myriad of natural and man-made features including ‘ili (land division smaller than an <i>ahupua‘a</i>), streams, mountain peaks, and ridges.</p> <p>11. Early foreign accounts describe the east coast of Kaua‘i, including Keālia Ahupua‘a, as the “most fertile and pleasant district of the island” (Vancouver 1798:221–222). Captain George Vancouver places an extensive village, located in close proximity to a king’s residence, somewhere along the northeast coast, an area spanning from Keālia to Moloa‘a Bay.</p> <p>12. Māhele documentation provides insight into habitation and agricultural patterns. Kapa‘a was designated as Crown Lands while Keālia was granted to the <i>ali‘i</i> (chief) Miriam Ke‘ahikuni Kekau‘onohi. Kekau‘onohi was the granddaughter of Kamehameha, one of Liholiho’s wives, and served as Kaua‘i governor from 1842 to 1844.</p> <p>13. Beginning in 1850, the <i>maka‘āinana</i> began receiving their land titles. According to Māhele documentation, land commission awards (LCAs) were awarded in an area immediately southeast of the Petition Area, in close proximity to the Kapa‘a Stream</p>
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	<p>(also identified as the Keālia River). No LCAs were found within either the Petition Area or project area addition.</p> <p>14. With the increase in foreign interests on Kaua'i Island during the last half of the nineteenth century, an array of agricultural enterprises were attempted. The first large-scale agricultural enterprise in the area was begun in 1877 by the Makee Sugar Plantation (led by Captain James Makee) and the Hui Kawaihau (Dole 1916:8). Although hoping to establish a successful sugar corporation on the east side of Kaua'i, a series of unfortunate events led to the disbandment of the Hui, and the passing on of property and leasehold rights to Makee's son-in-law and the new Makee Plantation owner, Colonel Z.S. Spalding (Dole 1916:14).</p> <p>15. As part of Colonel Spalding's takeover in 1885, the Makee Plantation mill was moved from Kapa'a to Keālia. To transport their sugar product from the Keālia mill, a railroad was constructed in the late nineteenth century. This railroad line was part of a 20-mile network of plantation railroads with some portable track and included a portion of Keālia Valley and the <i>mauka</i> (towards the mountain) regions of the plateau lands north of Keālia (Condé and Best 1973:180).</p> <p>16. The Ahukini Terminal &amp; Railway Company was formed in 1920 to establish a railroad to connect Anahola, Keālia, Kapa'a to Ahukini Landing, and "provide relatively cheap freight rates for the carriage of plantation sugar to a terminal outlet" (Condé and Best 1973:185).</p> <p>17. In 1934, the Lihue Plantation Company absorbed the Ahukini Terminal &amp; Railway Company and Makee Sugar Company (Condé and Best 1973:167). Besides hauling sugarcane, the railroad was also used to haul plantation freight including "fertilizer. . . [and] canned pineapple from Hawaiian Canneries to Ahukini and Nawiliwili, pineapple refuse from Hawaiian Canneries to a dump near Anahola and fuel oil from Ahukini to Hawaiian Canneries Co., Ltd." (Hawaiian Territorial Planning Board 1940:11). Longtime <i>kama'āina</i> (native-born) families of Keālia recall a concrete pier (SIHP # 50-30-08-789:H) just north of Kumukumu Stream, where pineapple waste was dumped into the ocean. According to <i>kama'āina</i>, the current would carry the waste to Kapa'a, which would attract fish and sharks (Bushnell, Shideler, and Hammatt 2003)</p> <p>18. The explosive growth of the sugar industry within Keālia inevitably led to the development of a small town comprised mainly of sugar plantation workers, many of whom were immigrants from Portugal, Puerto Rico, the Philippines, Japan, and China (Kaua'i Historical Society n.d.). However, the decline of sugar also marked the end of Keālia Town. The town slowly</p>
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	<p>dispersed after the incorporation of the Makee Sugar Company into the Lihue Plantation in the 1930s. Many of the plantation workers bought property of their own and moved out of plantation camps. The plantation camps that bordered Kūhiō Highway were disbanded in the 1980s. In 1997, the entire <i>ahupua'a</i> of Keālia was sold off in an effort to downsize Amfac's landholdings. Because Keālia was the most distant from the Lihue Plantation sugar mill, it was considered the least profitable (<i>Honolulu Advertiser</i>, 7 July 1997).</p> <p>19. The conversion of <i>mauka</i> portions of Kapa'a to pineapple fields, coupled with the arrival of Hawaiian Canneries Company, Ltd. in 1913 had a profound effect on Kapa'a Town. Following the completion of their plantation contracts, Japanese workers moved into town and opened their own businesses. Kapa'a became "an integrated multi-racial town, containing an extraordinary mix of people living and working together in harmony" (Fernandez 2009:48).</p> <p>20. Previous archaeological studies locate two historic properties within the boundaries of the Petition Area; these sites are associated with sugar plantation operations (State Inventory of Historic Places [SIHP] #s 50-30-08-7013, "New Kumukumu Camp;" SIHP # -7016, railroad complex). Several historic properties are also located immediately north, west, and south of the Petition Area.</p> <p>21. Several burials have been located either within or near the sewer line installation project area. SIHP # -2162 has been recorded in the central portion of the sewer line installation project area. SIHP # -2074 is approximately 316 m south of the Petition Area and approximately 60 m northeast of the sewer line installation project area. SIHP # -3960 is approximately 460 m southwest of the Petition Area and 200 m west of the sewer line installation project area. Burials are also located both within and in close proximity to the southern portion of the sewer line installation project area as the sewer line approaches and enters Kapa'a Ahupua'a. SIHP # -2161 was inadvertently discovered during archaeological monitoring and later reinterred near the Keālia Beach corridor transmission line (Sholin et al. 2012), within the current sewer line installation project area.</p>
<b>Results of Community Consultation</b>	<p>CSH initiated its outreach effort in April 2017 through letters, email, telephone calls, and in-person contact. CSH completed its initial outreach effort in February 2018. CSH attempted to reach 34 individuals and agencies. The organizations consulted include the Office of Hawaiian Affairs (OHA), the Kaua'i-Ni'ihau Island Burial Council (KNIBC), the State Historic Preservation Division (SHPD) Burial Sites Specialist and History and Culture Branch, Queen Deborah</p>

	<p>Kapule Hawaiian Civic Club and the Kaua‘i Council of Hawaiian Civic Clubs (via the Association of Hawaiian Civic Clubs), and community members of Kawaihau District. Upon receipt of comments from the public comment period for the DEIS, CSH was notified of concerns regarding the documentation of Keālia’s plantation history during the 1950s, 1960s, and 1970s. CSH reinitiated consultation in July 2018, reaching out to those individuals recommended by the Wailua-Kapa‘a Neighborhood Association. Furthermore, CSH also reached out to additional individuals known to have once been affiliated with Lihue Plantation. CSH completed additional outreach in October 2018. Below is a list of individuals who shared their <i>mana‘o</i> (opinions) and <i>‘ike</i> (knowledge) about the Petition Area and Keālia Ahupua‘a:</p> <ol style="list-style-type: none"> <li>1. Kenneth Ponce, <i>kama‘āina</i> of Kapa‘a and descendant of former plantation workers, Pedring and Crescencia Ponce</li> <li>2. Kupuna Valentine Ako, <i>kama‘āina</i> of Kapa‘a</li> <li>3. Uncle Richard Kauī, <i>kama‘āina</i> of Keālia, <i>mahi‘ai</i> (farmer) within Keahapana Valley</li> <li>4. Timothy Reis, <i>mahi‘ai</i> within Keahapana Valley, <i>kālai pōhaku</i>, <i>kālai ki‘i</i> (artisan in stone and images)</li> <li>5. Ricardo Banquel and Magnolia Banquel, <i>kama‘āina</i>, and former residents of Kumukumu and Keālia Camps</li> </ol> <p>In November 2018, CSH was notified by HHF Planners regarding a portion of the project area that was not previously considered during earlier work on the CIA. Due to the addition of a sewer line and various other off-site infrastructure and utility improvements, CSH was prompted to reinitiate consultation to notify the community of these project area changes. Accordingly, this project area addition prompted CSH to broaden the study to also include the <i>ahupua‘a</i> of Kapa‘a. As part of a good faith effort, CSH expanded its contact list to also include community members of Kapa‘a Ahupua‘a. CSH attempted to reach 64 individuals and organizations as part of this renewed outreach effort. CSH received comment from the following individuals:</p> <ol style="list-style-type: none"> <li>1. Danita Aiu, <i>kupuna</i> of Kapa‘a</li> <li>2. Magnolia Banquel, <i>kama‘āina</i></li> </ol>
<p><b>Non-Culturally Relevant Community Concerns and Recommendations Associated with the Petition Area</b></p>	<p>During consultation, the community may discuss non-culturally relevant concerns. As these relate to the environmental, economic, and social welfare of the community, they lay beyond the purview of the current CIA. However, these concerns should be evaluated within the final environmental impact assessment (FEIS). Based on information gathered from community consultation, participants voiced the following non-culturally relevant concerns:</p>

	<ol style="list-style-type: none"> <li>1. A community concern expressed during consultation regarded the integrity of the Hala'ula Reservoir located <i>mauka</i> of the current project area. Comparisons were drawn to the Kaloko Dam catastrophe, and a request was made by Kupuna Beverly Muraoka that efforts be made to prevent a similar tragedy from occurring within Keālia. No additional recommendations were offered regarding this concern.</li> <li>2. Kupuna Beverly Muraoka expressed a concern about the presence of chemical fertilizers and pesticides within the soil. As former cane lands, chemicals once utilized for this industry may be present within project area soils.</li> <li>3. During an attempted follow-up with Mrs. Kalei Arinaga, concerns were shared regarding the DEIS. Mrs. Arinaga commented on the lack of studies on the integrity of local infrastructure and roadways, and if such infrastructure can support the proposed subdivision population.</li> </ol>
<b>Non-Culturally Relevant Community Concerns and Recommendations Associated with the Project Area Addition</b>	<p>Based on information gathered from renewed community consultation, the following non-culturally relevant concerns were voiced:</p> <ol style="list-style-type: none"> <li>1. Mrs. Magnolia Banquel noted the location of the proposed sewer line within the coastal portion of Keālia and Kapa'a, and inquired into construction material. Mrs. Banquel discussed the need for a corrosion resistant material as any metal sewer line will deteriorate in coastal areas.</li> </ol>
<b>Culturally Relevant Community Concerns and Recommendations Associated with the Petition Area</b>	<p>During consultation, the community expressed concerns for cultural resources and cultural practices existing outside the current Petition Area. Of those consulted, three community members articulated that currently there are no traditional cultural resources within the Petition Area, nor are there any traditional cultural practices currently being exercised within the Petition Area. However, comments provided by the community solely pertained to extant, surface cultural resources (or the lack thereof) within the Petition Area. Although traditional Hawaiian cultural resources and cultural sites are not known to exist above surface within the Petition Area, the community expressed concerns that subsurface cultural deposits (i.e., <i>iwi kūpuna</i>, <i>imu</i>, <i>pōhaku</i>) may be impacted by the proposed project.</p> <p>Despite the impacts of historic-era sugar plantation activities, interviewees, in general, described Keālia Ahupua'a as a rich cultural landscape. Although, no traditional Hawaiian surface sites were identified within the Petition Area during community consultation, subsurface remains such as burials, pre-Contact rock alignments, and/or occupation scatters may exist in areas that were not extensively plowed or developed. Cultural material related to burials, pre-Contact features</p>



	<p>and/or religious structures remain significant to traditional Hawaiian religious belief and practice. Due to the cultural significance of such material, and several community comments postulating the potential for subsurface finds, CSH has made an effort to report these concerns. The following list is intended to present the <i>mana 'o</i> (concerns and mitigation recommendations) of the community, and should not be understood to represent CSH's own findings and analysis.</p> <p>The following list also presents community concerns for cultural resources and practices existing outside the current Petition Area that may be affected by the proposed undertaking. Based on information gathered from community consultation, participants voiced the following specific, culturally relevant concerns, and provided mitigation recommendations when applicable:</p> <ol style="list-style-type: none"> <li>1. It is necessary to note that certain types of historic properties and cultural sites are difficult to recognize by pedestrian survey alone. It is possible subsurface cultural deposits (i.e., <i>iwi kūpuna</i>, <i>imu</i>, <i>pōhaku</i>) may yet exist, and may be encountered during ground disturbing activities. During community consultation, both Dr. Kamana'opono Crabbe (OHA) and Kupuna Valentine Ako articulated that <i>iwi kūpuna</i> and other cultural finds may be present within the Petition Area. Timothy Reis, a <i>kālai pōhaku</i> residing in Keahapana Valley, indicated culturally significant <i>pōhaku</i> may be buried within the Petition Area. Culturally significant <i>pōhaku</i>, as noted by Mr. Reis, are understood to represent pre-Contact lithic material (i.e., lithic scatter, tool, debitage) or isolated remnants of pre-Contact rock alignments (i.e., walls, enclosures, upright stones). Mr. Reis recommended that GPR be utilized prior to ground disturbance. Mr. Reis also recommended that those working on the project must be educated on the types and varieties of traditional Hawaiian cultural material. To facilitate education, Mr. Reis recommended that a field guide be generated and utilized as a reference for on-site construction workers and archaeological monitors. This field guide should be generated in conjunction with stakeholders and/or descendants of Keālia Ahupua'a.</li> <li>2. During community consultation with Kupuna Valentine Ako, it was requested that all inadvertently discovered human remains be reinterred within the <i>ahupua'a</i> where they were originally encountered. Kupuna Ako additionally recommended that the selected reinterment site remain inconspicuous and landscaped in an appropriate way.</li> <li>3. Current ongoing cultural practices within the <i>ahupua'a</i> of Keālia include the farming of plant resources. Farmed plant resources include <i>kalo</i>, <i>noni</i>, <i>mai'a</i>, cacao, cinnamon, and heliconia. In</li> </ol>
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	<p>addition to farming, pigs are also raised for consumption. The importance of <i>kalo</i> to the Keālia community has been underscored in both <i>mo'olelo</i> and <i>oli</i>. As such, the <i>kama'āina</i> of Keālia have remained committed to growing this culturally significant staple. Mr. Reis and his <i>'ohana</i> (family) still cultivate <i>lo'i</i> and <i>māla</i>, utilize spring water, gather flowers for burials, and raise pigs for meat. In particular, Mr. Reis expressed concern about potential impacts to a spring contained within his family's <i>kuleana</i> parcel (LCA 8061, approximately 1.64 km east of the current project area); this spring provides water to his <i>lo'i kalo</i>. Mr. Reis estimated that the proposed project will draw "2 million gallons a month (10,000 gallons x 200 homes) or 24 million gallons a year" from a well site near the project area. Mr. Reis requested "proof" that the proposed project will not have negative impacts on the aquifer and ground water resources throughout Keālia Ahupua'a. Mr. Reis believes that should his spring be impacted, it would be too late to rectify the situation, and thus did not provide mitigation recommendations.</p> <p>4. The community also expressed a concern about access rights to cultural resources located throughout Keālia Ahupua'a. In a letter submitted by Kamealoha Hanohano Smith, on behalf of Kaiaulu Papaloa representing members of the Keālia Community, it was noted that should the Petition Area be developed, rights to access the land for the exercise of traditional and customary rights will be extinguished. Although the letter did not state whether the Petition Area is currently accessed for traditional and customary rights, nor did it describe the nature of activity occurring within the Petition Area, the following was noted:</p> <p>Our primary concern is about preserving access to the land and resources in Kealia that our descendants will need. Most of these resources may occur outside the area proposed to develop. If we could assure unimpeded access to the resources elsewhere on the rest of the property, into perpetuity, then a voluntary release of our rights in the area proposed for development could be contemplated.</p> <p>Based on written testimony submitted by Kamealoha Hanohano Smith, on behalf of Kaiaulu Papaloa representing members of the Keālia Community, the landowner and/or developer should remain amenable to engaging in <i>ho'oponopono</i> (conflict resolution) in regard to access rights throughout the <i>ahupua'a</i>, with members of the Keālia Community.</p>
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	<p>5. During an attempted follow-up with Mrs. Arinaga, a concern was expressed regarding the lack of discussion of Keālia's pre-Contact and early post-Contact history within the DEIS. A well-rounded discussion of Keālia's history from the pre-Contact and post-Contact periods should be included within the FEIS.</p>
<p><b>Culturally Relevant Community Concerns and Recommendations Associated with the Project Area Addition</b></p>	<p>Based on information gathered from renewed community consultation, the following specific, culturally relevant concerns regarding the sewer line installation project area were voiced. Mitigation recommendations were provided when possible:</p> <ol style="list-style-type: none"> <li>1. Ms. Danita Aiu as well as Mrs. Magnolia Banquel discussed the potential to encounter burials near the proposed roundabout at the Keālia Road and Kūhiō Highway intersection. Ms. Danita Aiu highlighted the density of subsurface cultural deposits immediately <i>mauka</i> of Kūhiō Highway and called attention to previously documented burials. She commented that burials will most likely be encountered during ground disturbing activities but did not provide specific mitigation recommendations.</li> <li>2. Ms. Danita Aiu also expressed concern about the proximity of the sewer line to St. Catherine's cemetery. The project must not enter the private property of St. Catherine's Church, and a five-foot setback should always be maintained. She also expressed concern about project-related construction potentially blocking access to the cemetery grounds from Kūhiō Highway.</li> </ol>
<p><b>Analysis</b></p>	<p>The following analysis is a summarization of Section 8.7 of this report. Please refer to Section 8.7 to view the analysis in its entirety. Based on information gathered from the cultural and historical background, and the community consultation, no culturally significant resources were identified within the current project area. At present, there is no documentation nor testimony indicating that traditional or customary Native Hawaiian rights are currently being exercised "for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778" (Hawai'i State Constitution, Article XII, Section 7) within the Petition Area. Additionally, no traditional cultural practices are known to currently occur within the project area. While no cultural resources, practices, or beliefs were identified as currently existing within the project area, both Keālia and Kapa'a Ahupua'a maintain a rich cultural history.</p> <p>Evidence of pre-Contact settlement and land use, however, has most likely been obliterated by plowing and other historic-era sugar plantation activities. Large portions of both the Petition Area and sewer line installation project area have been subject to historic-era agricultural and, to a more limited extent, urban development. This has</p>

	<p>resulted in the loss of cultural resources and possible archaeological remains.</p> <p>Despite this loss, a reconstruction of the traditional landscape can still be achieved through an examination of the historic record. Keālia Ahupua‘a can be described as a stream valley, with a fairly large alluvial plain bisected by a major stream. Kapa‘a can be characterized as fairly flat, with irregularly shaped gulches and small valleys in the uplands through which small tributary streams run. Other smaller drainages flow directly into the lowlands of Kapa‘a creating a large (approximately 170-acre) swamp area (since in-filled in the Historic period), suitable for <i>lo ‘i</i> agriculture.</p> <p>Beginning in the twelfth century, a vast system of irrigated taro fields was constructed. Despite the fame of Keālia’s “large, heavy taros,” <i>lo ‘i kalo</i> were only one element of a complex of features that characterized Keālia during the pre-Contact (before 1778) period. Closer to the Keālia shoreline, house sites, salt beds, and fishponds once dotted the landscape.</p> <p>The post-Contact period brought numerous changes throughout the Hawaiian Islands. The socio-economic and socio-political changes of the nineteenth century were most visible within the landscape of both Keālia and Kapa‘a. By the early twentieth century, the entire <i>makai</i> half of Keālia Ahupua‘a was covered in sugarcane. Plantation infrastructure dominated the <i>makai</i> portion of the <i>ahupua‘a</i>; traditional sites and resources were most likely altered or removed entirely to make way for this new industry. Coupled with these landscape changes, were changes to the region’s racial and ethnic demographics.</p> <p>The growth of sugar within Keālia and Kapa‘a required the sponsorship of immigrant workers. Many of these workers were immigrants from Portugal, Puerto Rico, the Philippines, Japan, and China (Kaua‘i Historical Society n.d.). The influx of immigrants transformed Keālia, leading to the development of a small, diverse town. These new residents brought along their food, religion, and unique way of life. The genesis of Hawai‘i’s own “<i>kama ‘āina</i>” or “local” culture can be traced back to these populations of multi-ethnic working class people drawn together by the plantation experience. These workers played a pivotal part in shaping Hawai‘i’s history, and were responsible for the “changes that saw Big Five control over Hawaii give way to multi-ethnic participation in a more democratic society”(Taniguchi in Nishimoto et al. 1984:Foreword). Currently, the descendants of Keālia’s plantation workers still reside within the neighboring Keālia Town Tract. Throughout both Keālia and Kapa‘a, remnants of plantation history remains visible.</p>
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	<p>Although traditional Hawaiian cultural sites are not known to exist above surface within the Petition Area, historic properties related to sugarcane plantation operations are known to exist within the Petition Area. Previous archaeological studies have indicated the presence of two historic properties (SIHP # 50-30-08-7013, the “New Kumukumu Camp” and SIHP # -7016, a railroad complex associated with historic-era sugarcane plantation operations) within the Petition Area. Background research on sugarcane plantation operations indicates the project area was heavily plowed in the historic era. Typically, soils were plowed to a depth of 18 to 24 inches. Due to this disturbance, the likelihood of encountering subsurface cultural deposits (i.e., <i>iwi kūpuna</i>, <i>imu</i>, <i>pōhaku</i>) remains low.</p> <p>However, the community also indicated cultural material may exist below these plow zones, and thus may be impacted by the proposed project. Previous archaeological studies conducted in the vicinity of the Petition Area have largely resulted in the identification of historic properties associated with sugarcane plantation operations. No burials or traditional cultural material have yet been encountered within the Petition Area. In general, burials have been encountered along the <i>makai</i> portions of the <i>ahupua‘a</i>. The community expressed concern about potential impacts to subsurface cultural deposits and burials within the sewer line installation project area. Due to the density of both traditional and historic archaeological deposits within both the Keālia and Kapa‘a shoreline area, it is highly likely that cultural material remains preserved under existing infrastructure (i.e. <i>mauka</i> portion of Kūhiō Highway).</p> <p>A concern was also expressed about potential impacts to cultural practices occurring within greater Keālia Ahupua‘a. <i>Mahi‘ai</i> (farmer) Timothy Reis shared concerns about potential impacts to ground water resources and the aquifer. He currently cultivates <i>kalo</i> within Keahapana Valley, utilizing a natural spring to water his crops. Although, the farming of <i>kalo</i> represents a traditional cultural practice, this practice occurs well outside the Petition Area, as well as outside of the sewer line installation project area. Mr. Reis requested that CSH provide evidence that the proposed action would not impact his cultural practices within Keahapana Valley. Per HHF Planners,</p> <p style="padding-left: 40px;">The Proposed Action has estimated water demand of 118,000 gallons per day (gpd), with maximum daily demand of 17,250 gpd. [The] existing water service agreement with Kealia Water Company allows for drawing up to 300,000 gpd. Two existing wells will be used. The existing and proposed pumpage is well within</p>
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	the pump capacity approved by the DLNR Commission on Water Resource Management.
<b>Recommendations</b>	<p>Based on the above analysis, the following preliminary recommendations have been made:</p> <ol style="list-style-type: none"> <li>1. The proposed project may have an adverse effect on SIHP #s -7013 and -7016, historic properties related to sugarcane plantation operations. Consultation with the SHPD is recommended to determine if additional archaeological work is required.</li> <li>2. Although the likelihood of finds within the Petition Area remains low, project construction workers and all other personnel involved in the construction and related activities of the project must be informed of the possibility of inadvertent cultural finds, including human remains during a preconstruction meeting. As part of this preconstruction meeting, project construction workers and all other personnel involved in the construction and related activities of the project should be educated on the types of cultural material that may be encountered during the course of ground disturbance.</li> <li>3. In the event that any potential historic properties are identified during construction activities, all activities will cease and the SHPD will be notified pursuant to HAR §13-280-3. In the event that <i>iwi kūpuna</i> are identified, all earth moving activities in the area will stop, the area will be cordoned off, and the SHPD and Police Department will be notified pursuant to HAR §13-300-40. In addition, in the event of an inadvertent discovery of human remains, the completion of a burial treatment plan in compliance with HAR §13-300 and HRS §6E-43 is recommended.</li> <li>4. In the event that <i>iwi kūpuna</i> and/or cultural finds are encountered during construction, project proponents should consult with cultural and lineal descendants of the area to develop a reinterment plan and/or preservation plan. Proposed reinterment sites must be located within either Keālia or Kapa‘a Ahupua‘a, based upon the original location of the burial.</li> <li>5. Although, the above analysis places water draw well within the pump capacity approved by the DLNR Commission on Water Resource Management, it is recommended that a hydrogeologist investigate this situation. The results of this investigation and mitigative measures, if necessary, must be included in the FEIS. Should stakeholders (i.e., <i>mahi‘ai</i> and/or cultural descendants) observe changes or impacts to water</li> </ol>

	resources, the landowner and/or developer should remain amenable to engaging in <i>ho'oponopono</i> .
<b>Ka Pa'akai Analysis</b>	<p>In <u>Ka Pa'akai v. Land Use Commission</u>, 94 Hawai'i 31, 74, 7 P.3d 1068, 1084 (2000), the Court held the following analysis also be conducted:</p> <ol style="list-style-type: none"> <li>1. The identity and scope of valued cultural, historical, or natural resources in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;</li> <li>2. The extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and</li> <li>3. The feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.</li> </ol> <p>The CIA found there are no known traditional and customary Native Hawaiian rights exercised in the petition area. Under the Ka Pa'akai Case, the required analysis therefore ends after the determination that there are no known traditional and customary Native Hawaiian rights exercised in the 53.4-acre petition area.</p>

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## Section 1 Introduction

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### 1.1 Project Background

At the request of Helber Hastert and Fee (HHF) Planners and on behalf of Keālia Properties, LLC, Cultural Surveys Hawai‘i, Inc. (CSH) has prepared a cultural impact assessment (CIA) for the Proposed Keālia Subdivision and Associated Sewer Line Project, Keālia and Kapa‘a Ahupua‘a, Kawaihau District, Kaua‘i, TMKs: [4] 4-7-004:001; 4-7-003:002, 006; 4-6-014:026 and 031. The approximately 74.7-acre (30-hectare) is bounded by Kumukumu Stream to the north, Kūhiō Highway to the east, Kaiakea Fire Station to the south, and Keālia Farms, St. Catherine’s Cemetery, and Kapa‘a Homesteads to the west, including the intersection of Mailihuna Road and Kapa‘a Stream Bridge. The proposed Keālia Subdivision project will involve the development of a residential subdivision consisting of approximately 235 lots ranging in size from about 5,600 square feet (sq ft) to 7,300 sq ft. The property is currently designated within State and County agricultural districts and will require an amendment to the State Land Use District Boundary and County Zoning District, followed by a County subdivision approval. The petition for a State Land Use District boundary amendment is limited to the 53.4-acre residential subdivision site, which will be referred to in the CIA as the “Petition Area.” The Petition Area is understood to be privately owned and located in old cane lands. Proposed off-site improvements associated with the development of the residential subdivision are not part of the Petition Area. However, these improvements will be identified as part of the project area for the CIA. The project area, consisting of both the Petition Area and sewer line installation addition, is depicted on a portion of the 1996 Kapaa U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1), a tax map plat (Figure 2), and a 2013 aerial photograph (Figure 3). A client-provided plan of the proposed subdivision layout is also provided (Figure 4).

In addition to the development of a residential subdivision, the project will also include installation of utility infrastructure (e.g., drinking water, drainage, wastewater, electrical power, and telecommunications systems) and transportation improvements to serve each subdivided parcel. The subdivision plan includes two detention basins, located on the far south and far north ends of the Project Area, totaling 5.86 acres. The southern detention basin is 4.32 acres in size and will provide park/green space for active and passive recreation. It will also serve as a buffer with the neighboring subdivision on Ka‘ao Road. The detention basin on the north will be steep (due to the basin’s smaller size) and will not be usable for recreation. Access to the subdivision would be via Keālia Road from its intersection with Kūhiō Highway. A roundabout entrance to the subdivision is proposed on Keālia Road. All traffic on Keālia Road, including through traffic continuing past the subdivision, will be routed through the roundabout.

A roundabout entrance to the subdivision is proposed in order to provide a safe and efficient central nexus for all adjoining subdivision roads. Proposed subdivision roads connecting to the roundabout will be “Collector” roads as defined by county road standards. Collector roads have a 56-ft right of way (ROW) and 40-ft wide pavement. There are two (2) Collector roads proposed for this project, totaling about 2,455 linear ft. One of the Collector roads will run in the north-south direction and the other Collector road will run in the east-west direction.

The majority of the roads within the proposed subdivision will be “Minor” roads as defined by county road standards. Minor roads have a 44-ft ROW and 20-ft wide pavement. There are nine



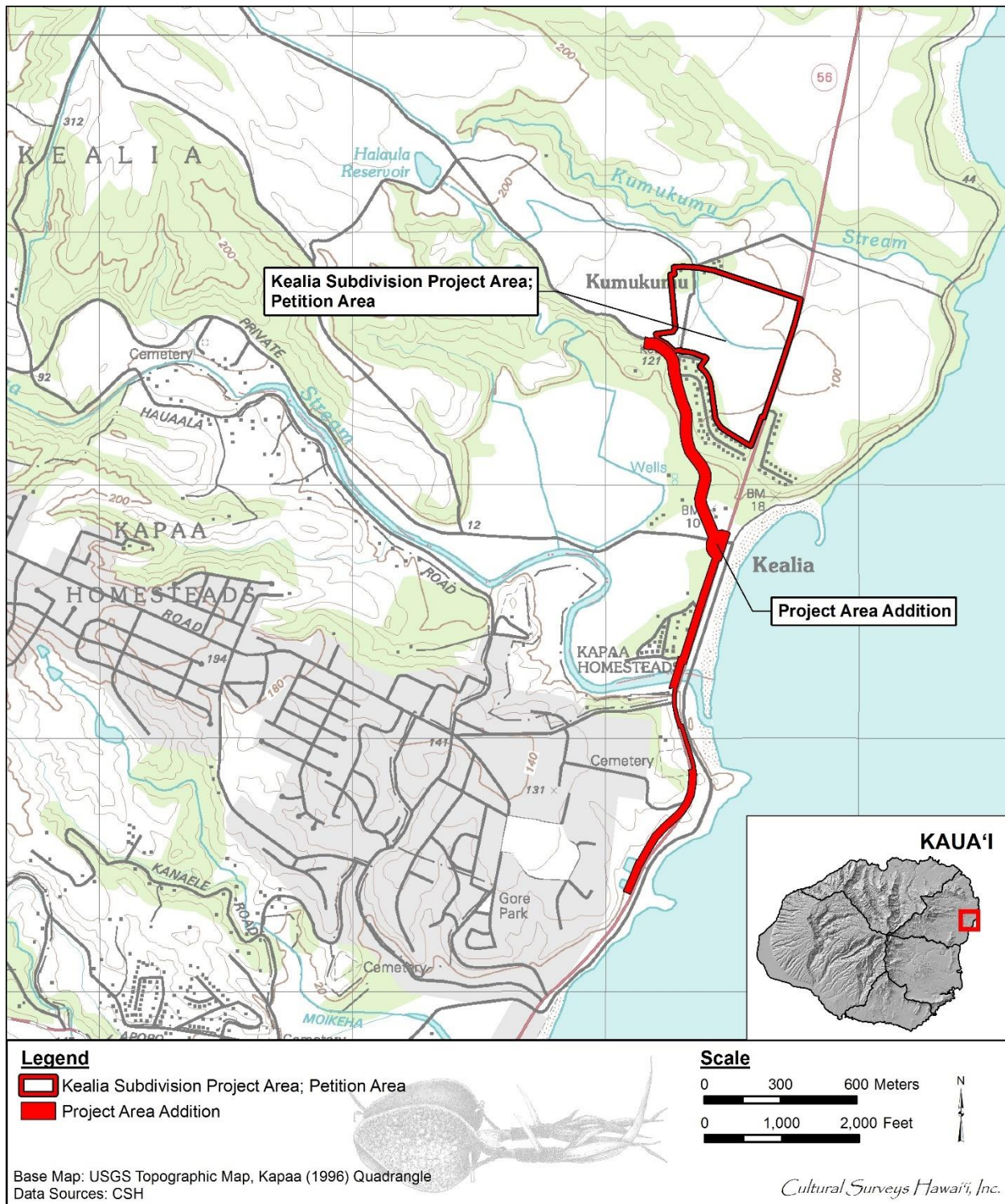


Figure 1. Portion of the 1996 Kapaa USGS 7.5-minute topographic quadrangle showing the location of the project area (inclusive of Petition Area and project area addition)





Figure 2. Tax Map Key (TMK) [4] 4-7-09 showing the project area (Hawai'i TMK Service 2014)



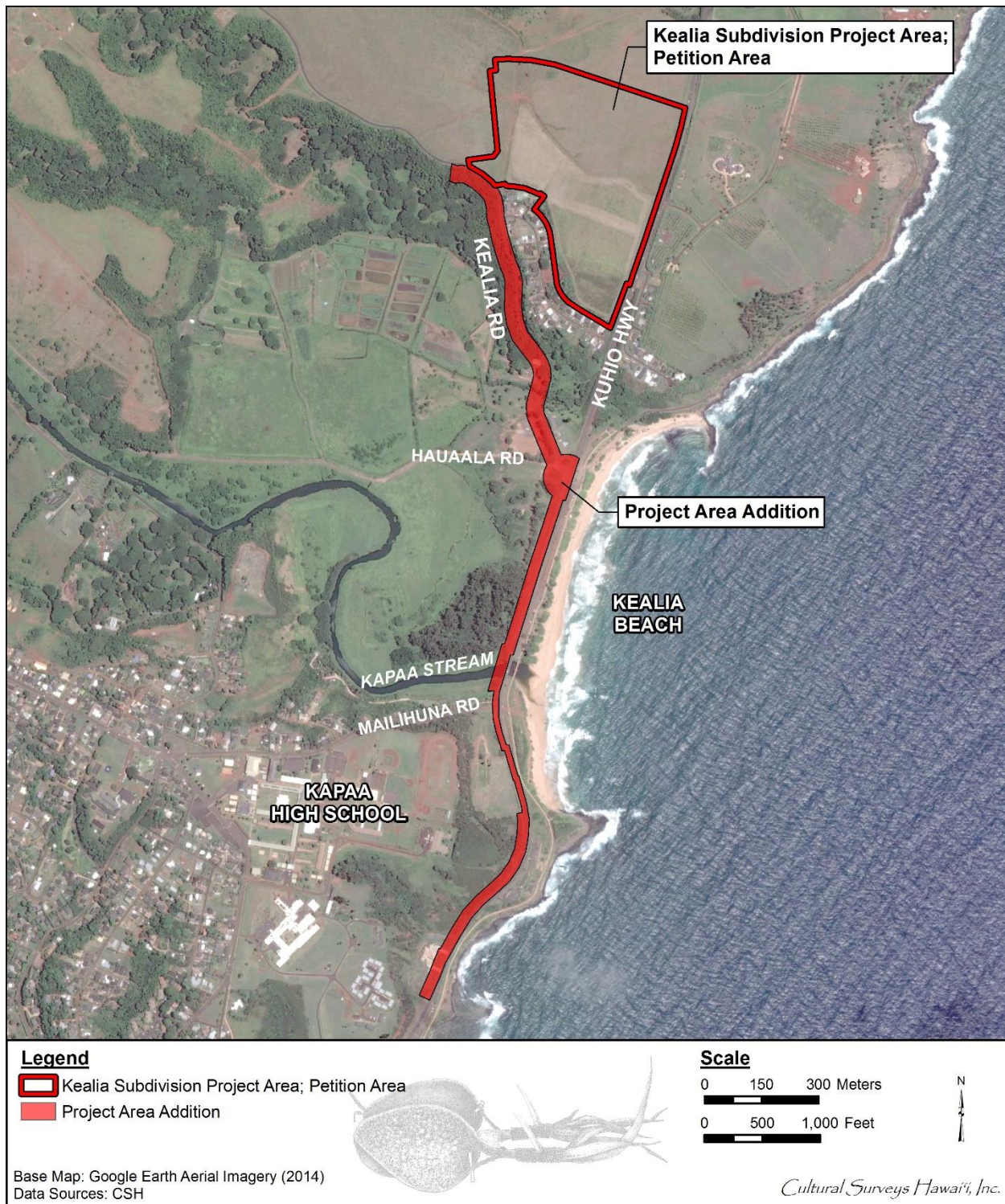


Figure 3. Aerial photograph showing the location of the project area (Google Earth 2013)



(9) Minor roads proposed for this project, totaling about 9,220 linear ft. Three (3) Minor roads will traverse the north-south direction and six (6) will traverse in the east-west direction.

Currently, there is an old cane haul road entry to the property located on Kūhiō Highway. The road is currently gated and unused. This access point will be eliminated, and no direct vehicle access onto Kūhiō Highway will be allowed from the proposed subdivision, as mandated by the State of Hawai‘i Department of Transportation (HDOT).

The County of Kaua‘i has indicated that improvements to the two-lane Keālia Road are needed to accommodate the increase in vehicular traffic associated with the project, and that the improvements shall be in accordance with the county’s Complete Streets Policy. Improvements are proposed to approximately 2,650 linear ft of Keālia Road, extending from the Hopoe Road intersection to the Kūhiō Highway intersection:

- Widening the existing ROW from 40 ft to 56 ft
- Reconstructing the roadway pavement from two vehicular lanes each approximately 9 ft wide to two vehicular lanes each approximately 10 ft wide
- 5-ft wide paved road shoulders on each side of the travel lanes for roadway drainage and bicycle use
- Green space between paved road shoulder and proposed sidewalk
- 5-ft wide concrete sidewalk for pedestrians

At the intersection of Keālia Road and Kūhiō Highway, a roundabout will be constructed to mitigate the increase in traffic due to the project, and to improve intersection safety. Two alternative designs for this intersection were considered: a traffic signal and a single-lane roundabout. The roundabout was identified by the County of Kaua‘i as their preferred alternative.

A new sanitary sewer main will be needed from the Petition Area to a lift station along Kūhiō Highway, and then to an existing municipal sewer manhole near the Kaiakea Fire Station, nearly one mile away. A new sewer pump station will be constructed.

## 1.2 Document Purpose

This CIA was prepared to comply with the State of Hawai‘i’s environmental review process under Hawai‘i Revised Statutes (HRS) §343, which requires consideration of the proposed project’s potential effect on cultural beliefs, practices, and resources.

The Constitution of the State of Hawai‘i makes clear that the State and its agencies are bound by a fiduciary duty to,

. . . protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778.  
[Hawai‘i State Constitution. Article XII, Section 7]

Protections for *ahupua‘a* (traditional land division usually extending from the uplands to the sea) or native tenants, had been set forth far before the ratification of the State Constitution. Recognizing the challenges of a Western system of private landownership, in which the appurtenant rights of native tenants had not yet been codified into law, the Hawaiian Privy Council, on 19 October 1849, adopted resolutions to protect the rights of the *maka‘āinana* (people that

attend the land). The Kuleana Act of 1850, comprised of seven articles, confirmed and protected the rights of native tenants. Article 7 established access to roads, water sources, and other natural resources:

When the landlords have taken allodial titles to their lands, the people on each of their lands, shall not be deprived of the right to take firewood, house timber, aho cord, thatch, or ti leaf, from the land on which they live, for their own private use, should they need them, but they shall not have a right to take such articles to sell for profit. They shall also inform the landlord or his agent, and proceed with this consent. The people also shall have a right to drinking water, and running water, and the right of way. The springs of water, and running water, and roads shall be free to all, should they need them, on all lands granted in feesimple: Provided, that this shall not be applicable to wells and water courses which individuals have made for their own use. [August 5, 1850; quoted from Territory of Hawaii 1925:2112]

In 1992, the State of Hawai‘i Supreme Court upheld these rights under HRS §7-1, amending it to include, “native Hawaiian rights. . . may extend beyond the *ahupua‘a* in which a native Hawaiian resides where such rights have been customarily and traditionally exercised in this manner” (*Pele Defense Fund v. Paty*, 73 Haw.578. 620, 837 P.2d 1247, 1272 91992 cited in Dagher and Dega 2017:5).

Act 50, enacted in 2000 with House Bill (HB) 2895, recognizes the importance of Native Hawaiian culture in defining the unique quality of life in Hawai‘i. The act amended the definition of “significant effect” to include,

. . . the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State’s environmental policies or long-term environmental goals as established by law, or adversely affect the economic [or] welfare, social welfare[.], or cultural practices of the community and State. [H.B. 2895, Act 50, 2000]

Act 50 also requires that Environmental Impact Statements and Environmental Assessments “include the disclosure of the effects of a proposed action on the cultural practices of the community and the State,” thereby including Cultural Impact Assessments as part of the overall determination.

Through document research and cultural consultation efforts, this report provides information compiled to date pertinent to the assessment of the proposed project’s potential impacts to cultural beliefs, practices, and resources (pursuant to the Office of Environmental Quality Control’s *Guidelines for Assessing Cultural Impacts*) which may include traditional cultural properties (TCPs). These TCPs may be significant historic properties under State of Hawai‘i significance Criterion e, pursuant to Hawai‘i Administrative Rules (HAR) §13-275-6 and §13-284-6. Significance Criterion e refers to historic properties that

have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or



oral accounts—these associations being important to the group's history and cultural identity. [HAR §13-275-6 and §13-284-6]

The document will likely also support the project's historic preservation review under HRS §6E and HAR §13-275 and §13-284. The document is intended to support the project's environmental review.

### 1.3 Scope of Work

The scope of work for this CIA includes the following:

1. Examination of cultural and historical resources, including Land Commission documents, historic maps, and previous research reports for the specific purpose of identifying traditional Hawaiian activities including gathering of plant, animal, and other resources or agricultural pursuits as may be indicated in the historic record.
2. Review of previous archaeological work within and near both the Petition Area and the sewer line installation project area that may be relevant to reconstructing traditional land use activities, and to the identification and description of cultural resources, practices, and beliefs associated with the Petition Area.
3. Consultation and interviews with knowledgeable parties regarding cultural and natural resources and practices in or near the Petition Area and the sewer line installation project area; present and past uses of the Petition Area and the sewer line installation project area; and/or other practices, uses, or traditions associated with the project area and its environs.
4. Preparation of a report that summarizes the results of these research activities and provides recommendations based on findings.

### 1.4 Environmental Setting

The environmental setting draws from previous environmental and historical surveys conducted throughout the Hawaiian archipelago (Foote et al. 1972; Juvik and Juvik 1998; Giambelluca 1986; Handy and Handy 1972) as well as cultural sources and may be thought of as being divided into two sections. The natural environment begins with a discussion of the 1972 soil surveys conducted by the Foote et al. research team, and then shifts to a description of precipitation, prevailing winds, geologic history and streams, and coastal/marine environment found within and in proximity to the project area. Throughout these subsections, an effort is made to ground scientific knowledge within traditional cultural frameworks or knowledge systems. That is, understandings of the Kapa'a and Keālia environment have also been informed by various traditional sources, including *mo'olelo* (stories), *mele* (songs), or *oli* (chant). As pointed out by anthropologist Laura Nader and reiterated by Dr. Kathleen Kawelu, "science is not free of culture; rather, it is full of it" (Kawelu 2015:6; Nader 1996: xiii). The second setting section concludes with a description of the built environment, emphasizing a transitional change into modernity.

#### 1.4.1 Natural Environment

The project area (inclusive of the Petition Area), within both Kapa'a and Keālia Ahupua'a, is situated on the northeast side of the island of Kaua'i. Once considered part of the ancient district or *moku* of Puna, the area is now recognized as the current district of Kawaihau. A detailed discussion of natural resources and their cultural associations, for both Kapa'a and Keālia, is included within the following subsections.

#### 1.4.1.1 *Ka Lepo* (Soils)

According to the U.S. Department of Agriculture (USDA) Soil Survey Geographic (SSURGO) database (2001) and soil survey data gathered by Foote et al. (1972), soils within the Petition Area include Ioleau silty clay loam, 2 to 6% slope (IoB); Ioleau silty clay loam, 6 to 12% slope (IoC); a small portion of Ioleau silty clay loam, 12 to 20% slope (IoD2); and Lihue silty clay, 0 to 8% slope (LhB) (Figure 5). Soils within the northern portion of the sewer line installation project area include Lihue silty clay, 0 to 8% slope (LhB); Rough broken land (rRR); and Lihue silty clay, 25 to 40% slope, eroded (LhE2) (see Figure 5). Soils within the central to southern portion of the sewer line installation project area include Mokuleia fine sandy loam (Mr); Mokuleia clay loam, poorly drained variant (Mta); Lihue silty clay, 25 to 40% slope (LhE2); and Badland (BL) (see Figure 5 and Figure 6).

Soils of the Ioleau Series are described as follows:

This series consists of well-drained soils on uplands on the island of Kauai. These soils developed in material weathered from basic igneous rock, probably mixed with volcanic ash. They are gently sloping to steep. Elevations range from 100 to 750 feet. The annual rainfall amounts to 40 to 70 inches. The mean annual soil temperature is 72° F. Ioleau soils are geographically associated with Lihue and Puhi soils.

These soils are used for irrigated sugarcane, pasture, pineapple, irrigated orchards, irrigated truck crops, wildlife habitat, and woodland. The natural vegetation consists of lantana, koa haole, guava, and associated shrubs and grasses. [Foote et al. 1972:47]

Soils of the Lihue Series are described as follows:

This series consists of well-drained soils on uplands on the island of Kauai. These soils developed in material weathered from basic igneous rock. They are gently sloping to steep. Elevations range from nearly sea level to 800 feet. The annual rainfall amount to 40 to 60 inches. The mean annual soil temperature is 73° F. Lihue soils are geographically associated with Ioleau and Puhi soils.

These soils are used for irrigated sugarcane, pineapple, pasture, truck crops, orchards, wildlife habitat, woodland, and homesites. The natural vegetation consists of lantana, guava, koa haole, joe, kikuyu grass, molasses grass, guinea grass, Bermuda grass, and Java plum. [Foote et al. 1972:82]

Soils of the Mokuleia Series are described as follows:

This series consists of well-drained soils along the coastal plains on the islands of Oahu and Kauai. These soils formed in recent alluvium deposited over coral sand. They are shallow and nearly level. Elevations range from nearly sea level to 100 feet. The annual rainfall amounts to 15 to 40 inches on Oahu and 50 to 100 inches on Kauai. The mean annual soil temperature is 74° F. Mokuleia soils are geographically associated with Hanalei, Jaucas, and Keaau soils.



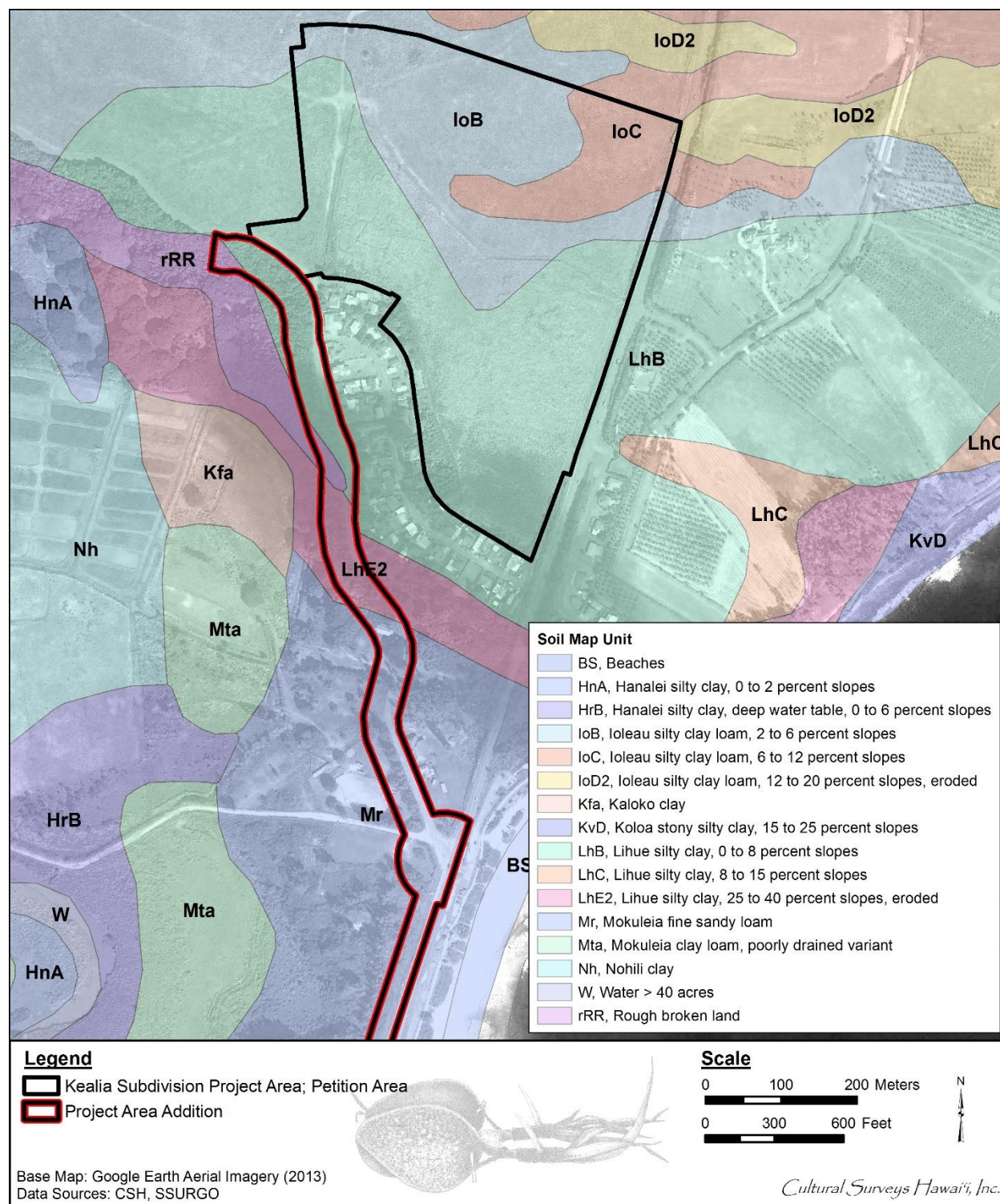


Figure 5. Overlay of *Soil Survey of the State of Hawaii* (Foote et al. 1972), indicating soil types within the Petition Area and sewer line installation project area (U.S. Department of Agriculture Soils Survey Geographic Database [USDA SSURGO] 2001)



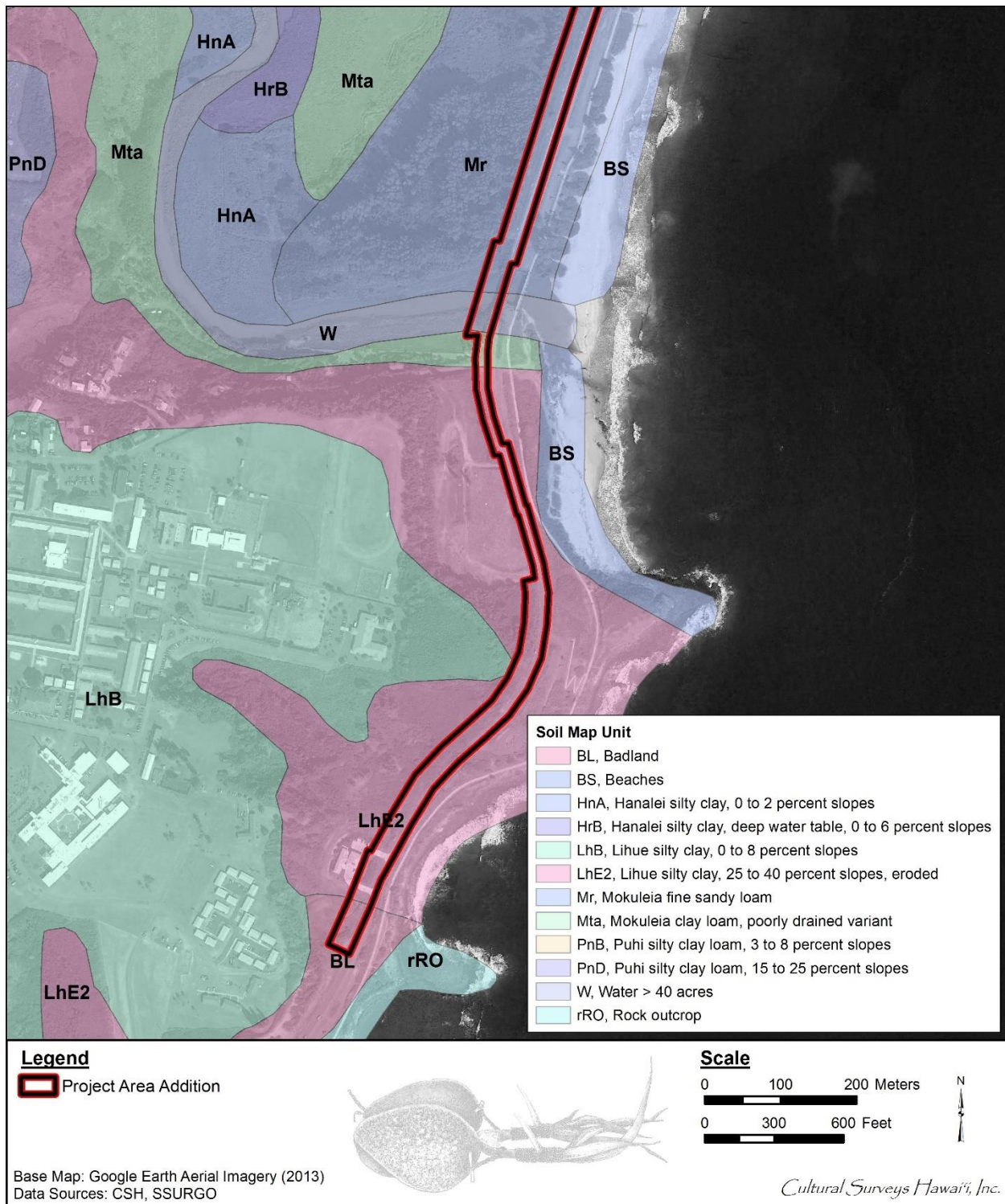


Figure 6. Overlay of *Soil Survey of the State of Hawaii* (Foote et al. 1972), indicating soil types within the central and southern portion of the sewer line installation project area (U.S. Department of Agriculture Soils Survey Geographic Database [USDA SSURGO] 2001)

The soils are used for sugarcane, truck crops, and pasture. The natural vegetation consists of kiawe, klu, koa haole, and Bermuda grass in the drier areas and napier grass, guava, and joe in the wetter areas. [Foote et al. 1972:95]

Rough Broken Land is described as follows:

Rough broken land (rRR) consists of very steep land broken by numerous intermittent drainage channels. In most places it is not, stony. It occurs in gulches and on mountainsides on all the Islands except Oahu. The slope is 40 to 70 percent. Elevations range from nearly sea level to about 8,000 feet. The local relief is generally between 25 and 500 feet. Runoff is rapid, and geologic erosion is active. The annual rainfall amounts to 25 to more than 200 inches. These soils are variable. They are 20 to more than 60 inches deep over soft, weathered rock. In most places some weathered rock fragments are mixed with the soil material. Small areas of rock outcrop, stones, and soil slips are common. [Foote et al. 1972:119]

Badland is described as follows:

Badland consists of steep or very steep, nearly barren land, ordinarily not stony. The soil-forming material is generally soft or hard saprolite. The annual rainfall amounts to 22 to 60 inches. Elevations range from nearly sea level to about 3,000 feet. [Foote et al. 1972:28]

#### 1.4.1.2 *Ka Ua* (Rain)

The project area, located on the windward side of Kaua'i, is exposed to prevailing tradewinds and their associated weather patterns. Rainfall on the coastal plains and plateaus of Kapa'a and Keālia averages approximately 40 inches per year (Juvik and Juvik 1998:56).

Traditionally, the year was divided by two distinct annual seasons. The first, known as *kau* (period of time, especially summer), typically lasted from May to October and is marked by a high-sun period corresponding to warmer temperatures and steady trade winds. The second season, *ho'oilo* (winter, rainy season), continued through the end of the year from November to April and represented a much cooler period. Trade winds were less frequent, and widespread storms and rainfall were common (Giambelluca et al. 1986:17). Typically, the maximum rainfall occurs in January and the minimum in June (Giambelluca et al. 1986:17).

Each small geographic area on Kaua'i had a Hawaiian name for its own rain, wind, and seas. Kapa'a and Keālia were no exception to this naming practice. According to Akana and Gonzalez (2015),

Rain names are a precious legacy from our kūpuna who were keen observers of the world around them and who had a nuanced understanding of the forces of nature. They knew that one place could have several types of rain, each distinct from the other. They knew when a particular rain would fall, its color, its duration, its intensity, its path, its sound, its scent, and its effect on the land and their lives . . . Rain names are a treasure of cultural, historical, and environmental information. [Akana and Gonzalez 2015:n.p.]

The Hā'ao, Kea, and Ho'olua rains have been identified as the rains associated with Kapa'a and the greater Puna District of Kaua'i. The Hā'ao rain is identified in a *mele* entitled "Kawaikini" that

describes the summit of Kaua‘i Island’s highest point, Mount Waialeale:

<i>Aloha ke kapa huki palai</i>	Greetings to the shores that conceal and confuse
---------------------------------	--

<i>I ka lupea e ka ua Hā‘ao</i>	Made attractive by the Hā‘ao rain
---------------------------------	-----------------------------------

[From the song “Kawaikini” in Holstein 2003:121, translated and cited in Akana 2015:30]

In a lament for ‘Emalani Kaleleonālani, the Kea rain of Puna, Kaua‘i is identified:

<i>He ua Kea ko Puna</i>	Puna has a white [Kea] rain
--------------------------	-----------------------------

<i>Ke ua maila i Kuaahiahi</i>	Raining now at Kuaahiahi
--------------------------------	--------------------------

<i>He ua ho‘omālie kai no Makaīwa</i>	A rain that quiets the sea of Makaīwa
---------------------------------------	---------------------------------------

<i>E ana ana i ka laulā o Kapa‘a</i>	Measuring the expanse of Kapa‘a
--------------------------------------	---------------------------------

[From a *makena*, or lament for ‘Emalani Kaleleonālani. Nogelmeier 2001:355 cited in Akana 2015:72-73]

The rains that gather around Mount Wai‘ale‘ale’s summit Kawaikini are sometimes observed in fair weather, however, the broad plain of Kapa‘a is not included in this view due to the mountain ridge of Nounou. This view is described in Hi‘iaka’s chant of Malaeka‘akoa, the lame fisherman chief, and is included in Emerson’s tale, “Pele and Hi‘iaka.” Within this *oli*, Hi‘iaka notes that even in fair weather you cannot see Kapa‘a’s broad upland plain from Ha‘ena. (Emerson 1915:109):

<i>Kunihi ka mauna i ka la‘i, e,</i>	The mountain turns the cold shoulder,
--------------------------------------	---------------------------------------

<i>O Wai-aleale, la, i Wai-lua;</i>	Facing away from Wai-lua,
-------------------------------------	---------------------------

<i>Huki iluna ka popo ua o Ka-wai-kini</i>	Albeit in time of fair weather. Wai-kini flaunts, toplofty, its rain-cap;
--	---

<i>Alai ia a‘e la e Nounou,</i>	And the view is cut off by Nounou,
---------------------------------	------------------------------------

<i>Nalo ka Ipu-ha‘a,</i>	Thus Humility Hill is not seen,
--------------------------	---------------------------------

<i>Ka laula ma uka o Ka-pa‘a, e.</i>	Nor Ka-pa‘a’s broad upland plain.
--------------------------------------	-----------------------------------

<i>I pa‘a i ka leo, he ole e hea mai.</i>	You seal your lips and are voiceless:
---	---------------------------------------

<i>E hea mai ka leo, e!</i>	Best to open your mouth and speak.
-----------------------------	------------------------------------

[Emerson 1915:109]

The Ho‘olua rain has also been identified as the rain for the surf spot known as Makaiwa (Fornander, 1919:5:996 in Anonymous 1987:90). According to Fornander, Makaiwa has also been associated with *mo‘olelo* regarding Mō‘īkeha.

Although rainfall on the windward side of Kaua‘i Island is generally plentiful, only the Nāulu rain is known to be associated with Keālia Ahupua‘a. The Nāulu rain is mentioned in a chant originally composed for Lunalilo and inherited by Kalākaua (Akana and Gonzalez 2015:199). The *mele*, composed by Nāmāhana, speaks of the Nāulu rain and its spring-filling waters:

<i>Hana ua wai Nāulu ‘o Kona</i>	Kona produces the Nāulu rainwater
<i>Hana ua wai Nāulu ‘o Mānā</i>	Mānā produces the Nāulu rainwater
<i>I ho‘onani ‘ia e piha Keālia wai</i>	That enhances and fills the spring of Keālia
<i>Wai Kahelu, ua piha Kalanamaihiki</i>	The waters of Kahelu, Kalanamaihiki is filled
<i>Na ka wai ua Kaunalewa</i>	By the rainwater of Kaunalewa
<i>Maika ‘i iho i ka wai Lolomauna</i>	Beautified by the water of Lolomauna
[Composed by Nāmāhana in <i>Na Mele Aimoku</i> 2001:151 translated and cited in Akana and Gonzalez 2015:199]	

A relative lack of rain names may indicate historic environmental conditions within the *ahupua‘a*; these conditions, in turn, most likely shaped agricultural practices in the area by forcing local inhabitants to modify nearby freshwater resources (see Section 1.4.1.4). Handy and Handy provide further evidence of Keālia’s “dry conditions:”

Two small *ahupua‘a*, Kamalomalo‘o (Dry Kamalo) and Kealia are rather dry, with small streams and gulches and only a few *lo‘i* areas. Where Kealia and Kapa‘a Streams join inland there are wide flats that were terraced. Seaward there were formerly many terraced areas. There are clumps of coconut and mango trees where formerly were *kuleana* with their *lo‘i*. Inland there were a number of small streams which doubtless once had small *lo‘i* developments. [Handy and Handy 1972:423]

#### 1.4.1.3 *Ka Makani* (Wind)

Northeasterly trade winds prevail throughout the year, although their frequency varies from more than 90% during the summer months to 50% in January; the average annual wind velocity is approximately 10 miles per hour (O’Hare et al. 2009:8).

The name of the winds of Kaua‘i are listed in a chant concerning a powerful gourd called *The Wind Gourd of La‘amaomao*. According to Handy and Handy (1972), the gourd is a *kino lau* (embodiment) of Lono, god of agriculture and fertility (Handy and Handy 1972:220). Handy and Handy elaborate, “Lono is the gourd; the cosmic gourd is the heavens whence come winds, clouds, and rain” (Handy and Handy 1972:220). When the gourd was opened, a specific wind could be called to fill the sails of a canoe and take the person in the desired direction. It is within this chant that the wind of Kapa‘a, the Kēhau, and the wind of Keālia, the Mālamalamamaikai, are noted. Kūapāka‘a, the son of Pāka‘a and descendant of La‘amaomao, calls out the winds of the ancient Puna District of Kaua‘i (Nakuina 1990:53):

Ho‘olua is the wind of Makaīwa,  
 Kēhau is of Kapa‘a,  
 Malamalamamaikai is of Keālia,  
 Hulilua is of Homaikawa‘a,  
 Amu is of Anahola,

[Nakuina 1990:53]

Kēhau is the name of a gentle land breeze of Kapa‘a (Nakuina 1990:139). Although, Nakuina identifies Mālamalamamaikai as belonging to Keālia, Pukui and Elbert offer the variation of Mālamalamaiki (1986:232). Pukui and Elbert derive this spelling of the wind from Fornander’s “Legend of Kuapakaa” (Fornander 1919:97). While the Mālamalamamaikai (Mālamalamaiki) wind of Keālia is prominently noted in both Nakuina’s *Wind Gourd of La‘amaomao* and Fornander’s “Legend of Kuapakaa,” an additional reference to this wind is located within *The Epic Tale of Hi‘iakaikapoliopole*.

During a break in the tale, the writer, Ho‘oulumāhie, makes a point to list the winds of “fair Kaua‘i, perfection in the calm” for “the benefit of future generations here in Hawai‘i” (Ho‘oulumāhie 2008:15). The writer notes that these winds are listed in their entirety by the goddess Pele. Pele identifies the Mālamalama (“enlightenment, shining, radiant, clear”) wind in her chant,

<i>A pā a noua ka makani o Kaua‘i</i>	The winds of Kaua‘i blow, urged on
<i>Puhia ka makani a La‘a</i>	The winds of La‘a [La‘amaomao] are sent forth
<i>Ke ahe Ko‘olauwahine, ka makani o lalo</i>	The Ko‘olauwahine breeze, a wind from below
<i>‘O Kaua‘i ka ‘u i ‘ike . . .</i>	Kaua‘i is what I see and know . . .
<i>120. Ua pa‘a i ke Kai‘okia</i>	120. Held fast by the Kai‘okia law
<i>He Kololio ka makani kepue</i>	The wind like hard stone is a Kololio
<i>E ala! E ala!</i>	Arise! Arise!
<i>Ua kani ‘o olokele nui maka onaona</i>	The great olokele [ <i>olokele</i> is the Kaua‘i name for the ‘i‘iwi or scarlet honeycreeper]
<i>He Mālamalama ka makani o Kealia</i>	The wind of Keālia is a Mālamalama

[Ho‘oulumāhie 2006:16–19]

#### 1.4.1.4 *Ka Wai* (Water)

##### 1.4.1.4.1 *Ke Kahawai* (Streams)

Kaua‘i, geologically, is the oldest island within the main Hawaiian archipelago. In comparison, Kaua‘i is nearly five million years older than Hawai‘i Island (Parham 2008). Differences in erosion between the two islands corresponds to differences in their ages (Parham 2008). These differences are observable via stream morphology:

As flowing water cuts down through the lava substrate, streambeds generally become less steep, and the streams have fewer large waterfalls and a greater development of estuaries – sites where fresh waters and the ocean mix. [Parham 2008]

Kapa'a can be characterized as fairly flat, with irregularly shaped gulches and small valleys in the uplands through which small tributary streams run including, Kapahi ("the knife"), Makaleha ("eyes looking about as in wonder and admiration"), and Moalepe ("chicken with comb") (all occurring within the Kapa'a watershed). Some of these streams combine with other tributaries in Keālia to form Kapa'a Stream ("the solid or the closing," often referred to as Keālia River), which empties into the ocean at the boundary of Kapa'a and Keālia Ahupua'a. A portion of the current sewer line installation project area crosses over the Kapa'a Stream. Other smaller drainages flow directly into the lowlands of Kapa'a creating a large (approximately 170-acre) swamp area that has been mostly in-filled in modern times (Handy and Handy 1972:394, 423). Two canals have been constructed to drain the marshy areas behind Kapa'a Town, Waika'ea Canal (known to most local people as Waiakea Canal) and Moikeha Canal. Kapa'a Town is built upon a sand berm which forms the *makai* buffer to the inland swamp.

To the north of Kapa'a, Keālia Ahupua'a shows more characteristics of a typical stream valley with a good-sized alluvial plain dissected by a major stream, the Kapa'a Stream, in addition to a plateau land dissected by a few small drainages. Mimino ("to wither, as blighted fruit") is the next sizeable stream emptying into Keālia, followed by the Hala'ula ("red pandanus") (Handy 1940:68–69). Also intersecting with Kapa'a Stream is Keālia Stream. The headwaters of Keālia include Waipahi, Maiaki'i, and Wai'awa'awa ("bitter water"). *Kula* (upper area) lands within Keālia were also cut by small streams, including the Kumukumu ("stubs") (occurring within the Kumukumu watershed) and Hōmaikawa'a ("give me the canoe").

Although, the twentieth century resulted in waters being taken for sugarcane irrigation projects, human modification to freshwater resources had been ongoing for centuries. "After about 1100 A.D., Hawaiians developed more complex agricultural irrigation systems. Streams were diverted into well-engineered lateral ditches" (State of Hawai'i Commission on Water Resource Management 1993:9). Diverted water was then utilized to irrigate *lo'i kalo* (taro pondfields), as well as various agriculture and aquaculture features. Especially prone to modification were the upper and lower portions of streams. Lower stream valleys were generally converted to *lo'i kalo*, *loko i'a* (fishpond), or *loko i'a kalo* (combined fishpond and taro patch), while stream flats within upper valleys were converted to agricultural terraces (State of Hawai'i Commission on Water Resource Management 1993:9). Within Keālia, terraces were believed to have once existed in the shallow gulches of Hōmaikawa'a and Kumukumu (Handy 1940:68). Handy elaborates on other possible terrace locations within Keālia:

In its upper part Kealia Stream runs through a course too narrow for terraces. Below Kaohe, however, as far as its junction with Kapaa Stream, there is a mile of sizable flats along the meandering watercourse which must have been utilized as terraces. This ground is now all under sugar cane. There are old mango trees here and there indicating *kuleana* [a small area of land, such as were awarded in fee by the Hawaiian monarch about the year 1850, to all Hawaiians who made application thereafter]. Below the junction of Kapaa and Kealia Streams the flatland on either side of the river was formerly all in terraces. A small section below the junction is now in sugar cane. Between this and the broad flats above Kealia Bay old terrace land is now under pasture or planted with bananas, corn, and other crops. The broad flatland above bay and town is now in sugar cane; formerly it must have been in terraces throughout. There were a number of *kuleana* grants here, the location of

some of which are still indicated by clumps of old coconut and mango trees. Halaula is a small stream emptying into these flats from the northwest. In upper Kealia the topography indicates that there were probably small terraces in Waipahi, Maiakii, and Waiawaawa, which are at the headwaters of the Kealia River. [Handy 1940:68–69]

Evidence of a traditional irrigation system within Keālia Ahupua‘a was documented by Wendall Clark Bennett in 1931. Bennett, citing Antonio Perry, notes that most *lo‘i kalo* were watered directly from ditches, with the major exception being those watered by “overflow or percolation from adjoining patches” (Perry 1913 in Bennett 1971:n.p.). South of Keālia Valley, Bennett identified Site 111, an irrigation ditch:

A large, simple dirt ditch about 6 feet in width and of varying depths, which is traditionally referred to -as a Hawaiian ditch. The interesting part is a deep cut about 100 feet long made through a low ridge alongside of which the ditch ran. The lands to be irrigated were on the other side of this ridge and so the cut was made to a depth of 10 or 15 feet through loose rock and subsoil. [Bennett 1971:n.p.]

Handy (1940) commented further on Bennett’s observations, noting that the “inland part of the valley are old terraces and that on the level land at the seaward end of the valley. . . wet taro is still planted” (Handy 1940:69).

The aforementioned agricultural system proved especially vital in the cultivation of the traditional Hawaiian staple crop, *kalo* (taro; *Colocasia esculenta*). For spiritual and dietary reasons, *kalo* was a sacred staple in the Hawaiian diet. According to Hawaiian mythology, man was born from the taro plant.

The *Kumulipo* (“origin, genesis”) details this kinship. Hāloa, “he of the long breath,” is the second son of Wākea and Papa. Wākea and Papa’s first born, Hāloa-naka was born premature and died shortly after his birth (Kanahele 1995:17). After burying Hāloa-naka, a *kalo* plant sprouted at his grave. Shortly after, a second son (Hāloa) was born. A human child, Hāloa symbolizes *kalo* and man. *Kalo* is a metaphor for life, Kanahele explains as follows:

In the mythologies of many cultures, plants have been used to symbolize human spiritual growth. Hawaiians made taro a metaphor for life because, like the taro plant, it needs to be rooted in good soil and to be constantly nourished with the waters of Kāne. As the stalk grows taller with its leaves reaching toward the light of the sun, symbolized by Wākea, so Hawaiians grow aspiring to be closer to their heavenly spirit. Just as every young shoot can become a full-grown plant, so can they become gods as descendants of Hāloa. As every plant must die, however, they too must die. And from the remains a new plant lives again. In this continuity of life, both plant and man repeat the mystery of the unending cycle. [Kanahele 1995:18]

#### 1.4.1.4.2 Ka Luawai (Reservoirs)

Currently, the Hala‘ula Reservoir, located *mauka* (inland, toward the mountains) of the current Petition Area, is an additional source of water. Smaller reservoirs or wells have been observed to the northwest of the current Petition Area (Figure 7).





Figure 7. Overview of small reservoir immediately northwest of the current Petition Area. A group of *nēnē* (Hawaiian goose; *Branta sandvicensis*) are visible in the middle ground, view to northwest

#### 1.4.1.5 *Ka Lihikai me ka Moana* (Seashore and Ocean)

Historically, the *ahupua'a* of Kapa'a contained two prominent landscape features, a coastal plain with sand dunes and a large marsh that was fed by fresh water springs flowing from the upland. In 1793, George Vancouver (1798:221-223) examined the east coast of Kaua'i from his ship, however, he did not anchor or go ashore due to inhospitable ocean conditions, which seemed to have been a pattern for ships passing Kapa'a. In later years, the notorious Kapa'a reef was to become the location of many shipwrecks, particularly once a landing was built there in the 1880s. Beginning in 1959, significant coastal erosion threatened the sand beach fronting Kapa'a town and Kapa'a Beach Park resulting in the narrow beach we see today (Clark 1990:10). Dredging began and took place just offshore of Moikeha Canal, this proved to be further problematic and added to the erosion as the dredged area collected sand that would normally replenish the beach (Clark 1990:10). Though this area is not ideal for leisure swimming, the offshore reef attracts local fishermen who are able to use the reef to their advantage. They are able to spear fish, hunt for octopus, and also gather seaweed. It was here on this shallow reef where *lamalama* (torch fishing) was practiced (Clark 1990:11).

Traditionally, the seashore and ocean areas were vitally important for resource extraction in the early days of settlement. Fishermen along the coast maintained a respected status within traditional Hawaiian society; Kanahale asserts that "early Hawaiians regarded fishing as the oldest, and hence the most prestigious of professions (Kanahale 1995:17). The seashore and ocean also maintained spiritual significance for residents of both *ahupua'a*:

The Ocean (*ka moana nui a Kane*) surrounded the earth. It was made salt by Kane so that its waters should not stink, and to keep it thus in a healthy and uninfested state is the special occupation of Kane. In imitation of Kane, the priests prepare waters of purification, prayer and sanctification (holy water) '*wai hui kala*,' '*wai lupalupa*,' and '*Ke Kai olena*,' wherewith to drive away demons and diseases; it was called '*Ka wai kapu a Kane*.' Women purified themselves after child-birth by bathing naked in the sea and sprinkling their *pa'u*, or skirt, with sea water. If they were too far from the sea, they took a calabash of salted water, and at high noon offered a prayer of blessing and poured it over their bodies. Doses of medicine (taken by fives) were followed by a sea bath. In the Pele legend, Lohiau, after being brought back to life from the dead, is bathed five times in the sea for purification. [Fornander in Green and Beckwith 1926:176]

As Fornander (cited in Green and Beckwith) reveals, in addition to marine animals, the ocean provided another important cultural resource, salt. The literal translation of Keālia, "the salt bed" or "the salt-encrusted area" is a direct reference to the salt ponds and *kai ho'ohulu* (natural salt basins) that once dotted the shoreline. Low-lying, coastal portions of Keālia were often inundated by high surf and high tides, especially during the winter and spring months. Following these flooding events, shallow ponds would form. According to waterman and historian John Clark,

After several days of exposure to the sun, the water that had inundated the flats would evaporate, leaving behind a thin layer or occasionally a pocket of salt. Salt from the deeper pockets was gathered to satisfy a variety of domestic, medicinal, and ceremonial needs. [Clark 1990:11]

In addition to the production of *pa‘akai* (salt), the *makai* (seaward) region of Keālia provided a variety of fish and ocean invertebrates for consumption. According to Charles Howard Edmondson, the east coast of Kaua‘i was once replete with “varied fauna of molluscs, crustaceans, and echinoderms” (Edmondson 1946:7). Animals of these phyla would have included species such as ‘*opihi* (*Cellana exarata*), *pipipi* (snails; *Neritidae*), *he‘e* (octopus; *Octopus cyanea*), *ula* (Hawaiian spiny lobster; *Panulirus marginatus*), *wana* (sea urchin; *Echinothrix* spp.), or *loli* (black sea cucumber; *Holothuria atra*).

The bounty of the sea is further described in one man’s chant for the ancient Puna District of Kaua‘i. The man is asked by his companion why he has love for Puna; filled with *aloha* (love) for both land and sea, he responds with poetic descriptions of the fishing grounds at Kalualihilihi, the sea urchins of Kapuka, and the breakers at Niau:

<i>I ke ao hookanunu i luna o Pohakupili</i>	For the clouds that gather on Pohakupili,
<i>I na puawa ona o Maiakii. . .</i>	For the potent awa of Maiakii. . .
<i>I na Uhi moe lehu Makialo</i>	For the yams that lie in the ashes at Makialo,
<i>I na Kawalo pahee o Waipahee. . .</i>	For the shrimps of the mossy waters of Waipahee. . .
<i>I na Manienie hawanawana o ka loko o Kupalii</i>	For the rustling <i>manienie</i> grass of the pond of Kupalii,
<i>I na Ko ia o Kalualihilihi</i>	For the fishing grounds at Kalualihilihi,
<i>I na Ohia wai maka nui o Puuhoeko</i>	For the large juicy mountain apple of Puuhoeko,
<i>I na ai kahea i ka lau o Koki</i>	For the food plants that call to those multitudes of Koki,
<i>I na kalo palakai o Lapanui</i>	For the stunted taro of Lapanui,
<i>I na ia hoai nahanaha o Haumea</i>	For the wide-backed edible fish of Haumea,
<i>I na kalo pahi laho o Keahapana</i>	For the taro that pelts the scrotum at Keahapana,
<i>I na Ia ina mai o Kapuka</i>	For the sea urchin of Kapuka,
<i>I na nalu hai muku o Niau</i>	For the short breaking surf of Niau,
<i>I ka uliuli o ke kai o ka hee</i>	For the dark fluid ( <i>kai</i> ) in the squid dish,

<i>I ka uliuli o ke kai o ka ina</i>	For the dark fluid in the sea urchin,
<i>I ka uliuli o ke kai o ka Limu kala</i>	For the dark fluid in the <i>kala</i> seaweed,
<i>O ka mai o ka ‘u wahine,</i>	For the dark color of my wife’s private,
<i>A, aloha ai no au ia Puna nei</i> [HEN 1885:I:215]	That is why I love Puna.

In more recent times, the seashore at Keālia has been utilized for surfing and bodyboarding. There exist two “surfing spots” within Keālia Ahupua‘a. The first is located at the shorebreak beach of Keālia. This beach, contained between two rocky points, is approximately 150 ft wide and half a mile long (Figure 8). Ocean conditions within the area are succinctly described by Clark:

The nearshore bottom is a long sand bar whose depth constantly changes. Surf breaks on the sand bar throughout year, attracting a constant flow of bodyboarders and surfers. Most of these wave riders tend to congregate at the north end of the beach, where the best waves are usually found. High surf during the winter and spring on Kaua‘i’s north shore wraps around the island and breaks at Kealia. It often undermines the sand bar, exposing the bedrock below. During these periods of high surf, nearshore rip currents are very powerful and dangerous. Over the years many drownings and near-drownings have occurred here. At the north end of the beach, a small jetty offers swimmers some protection from the surf. The jetty is all that remains of the former Kealia Landing. [Clark 1990:11]

Keālia Landing (Figure 9) is located at Niau; Niau is the traditional name of the northern side of Keālia Bay (see chant above). This *wahi pana* (storied place) of the ancient Puna district was famed for its breaking surf (HEN 1885:I:215). Currently, vegetation along this stretch of Keālia Beach consists of *naupaka kahakai* (*Scaevola taccada*), *kauna‘oa* (dodder; *Cuscuta sandwichiana*), *pōhuehue* (beach morning glory; *Ipomea pes-caprae*), *koa haole* (lead tree; *Leucaena leucocephala*), and *niu* (coconut; *Cocos nucifera*) (Figure 10 and Figure 11).

The second of these two “surf spots,” is an area traditionally known as Kuna (a variety of freshwater eel), located approximately one and a half miles northeast of Keālia Beach. Today, this coastal area is also known as Palikū (“vertical cliff”) or Donkey Beach. Palikū is the name of a seaside cliff on the southern end of Kuna Bay, which is noted for fishing (Bushnell et al. 2002:37). The nickname “Donkey Beach,” was given in the plantation era, inspired by a large herd of mules and donkeys from the Lihue Plantation Company that grazed in the shoreline pastures. As of his 1990 publication of *Beaches of Kaua‘i and Ni‘ihau*, John Clark noted that only a few mules remained in the pastures immediately behind the Palikū beach area (Clark 1990:13).





Figure 8. General view of Keālia Beach, view to southwest



Figure 9. General view of Keālia Landing (visible in middle ground), view to southeast





Figure 10. Close-up of *pōhuehue* and *kauna 'oa*, view to southwest





Figure 11. Close-up of vegetation within *makai* portion of Keālia Ahupua‘a; *niu*, *pōhuehue*, and *kauna‘oa* are pictured, view to southwest

### 1.4.2 Built Environment

Utilizing aerial photographs of the project area from 1982 (Figure 12) and 2013 (see Figure 3), changes to the built environment were analyzed and summarized below. The project area's built environment includes a large portion of former cane lands and the "New Kumukumu Camp." Within the last 30 years, visual evidence of this camp has been removed from the landscape (see Figure 3). At present, the current project area is leased for cattle raising. A very small portion of Route 56 (Kūhiō Highway) and Hōpoe Road are also located within the project area. Residential housing along Ka'ao Road abuts the southern portion of the project area.



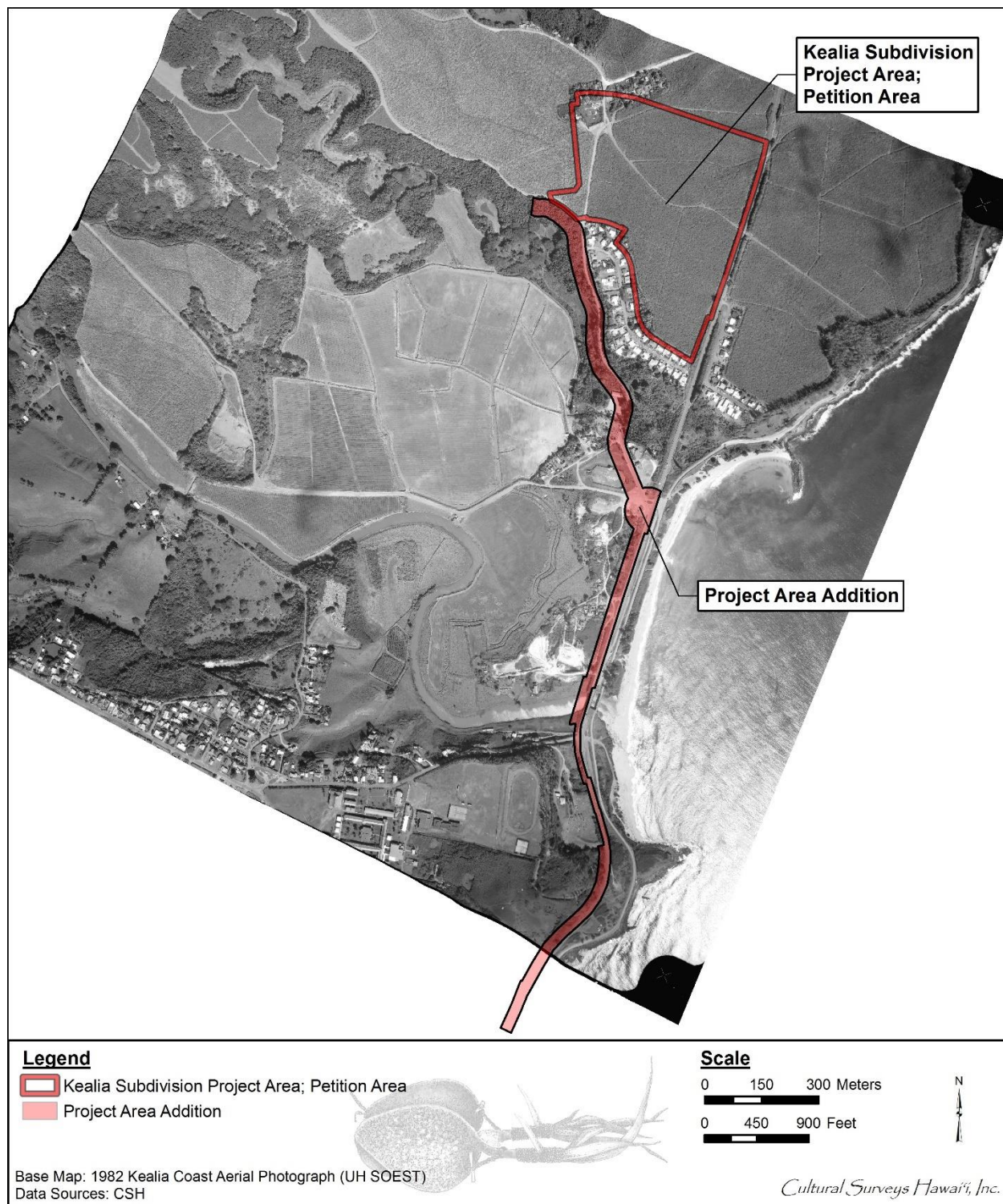


Figure 12. 1982 area photo (UH SOEST) showing cane lands in the majority of the Petition Area, “New Kumukumu Camp” in the north corner, residential housing along Ka‘ao and Hōpoe roads to the south, and Kūhiō Highway to the east

## Section 2 Methods

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Through archival research and community consultation, this report provides information compiled to date pertinent to the assessment of the proposed project’s potential impacts to cultural resources, practices, and beliefs (pursuant to the Office of Environmental Quality Control’s *Guidelines for Assessing Cultural Impacts*; OEQC 2012).

### 2.1 Archival Research

Research centers on Hawaiian activities including *ka ‘ao* (legends), *wahi pana* (storied places), *‘ōlelo no ‘eau* (proverbs), *oli*, *mele*, traditional *mo‘olelo*, traditional subsistence and gathering methods, ritual and ceremonial practices, and more. Background research focuses on land transformation, development, and population changes beginning with the early post-Contact era to the present day.

Cultural documents, primary and secondary cultural and historical sources, historic maps, and photographs were reviewed for information pertaining to the study area. Research was primarily conducted at the CSH library. Other archives and libraries including the Hawai‘i State Archives, the Bishop Museum Archives, the University of Hawai‘i at Mānoa’s Hamilton Library, Ulukau, The Hawaiian Electronic Library (Ulukau.org 2014), the State Historic Preservation Division (SHPD) Library, the State of Hawai‘i Land Survey Division, the Hawaiian Historical Society, the Kaua‘i Historical Society, the Kaua‘i Museum, and the Hawaiian Mission Houses Historic Site and Archives are also repositories where CSH cultural researchers gather information. Information on Land Commission Awards (LCAs) were accessed via Waihona ‘Aina Corporation’s Māhele database (Waihona ‘Aina 2000), the Office of Hawaiian Affairs (OHA) Papakilo Database (Office of Hawaiian Affairs 2015), and the Ava Konohiki Ancestral Visions of ‘Āina website (Ava Konohiki 2015).

### 2.2 Community Consultation

#### 2.2.1 Scoping for Participants

The cultural department commences our consultation efforts by utilizing our previous community contact list to facilitate the interview process. We then review an in-house database of *kūpuna* (elders), *kama ‘āina* (native born), cultural practitioners, lineal and cultural descendants, Native Hawaiian Organizations (NHOs; includes Hawaiian Civic Clubs and those listed on the Department of Interior’s NHO list), and community groups. CSH also contacts agencies such as SHPD, OHA, and the appropriate Island Burial Council where the proposed project is located for their response to the project and to identify lineal and cultural descendants, individuals and/or NHO with cultural expertise and/or knowledge of the study area. CSH is also open to referrals and new contacts.

#### 2.2.2 “Talk Story” Sessions

Prior to the interview, CSH cultural researchers explain the role of a CIA, how the consent process works, the project purpose, the intent of the study, and how their *‘ike* (knowledge) and *mana‘o* (thought, opinion) will be used in the report. The interviewee is given an Authorization and Release Form to read and sign (see Appendix G).

“Talk Story” sessions range from the formal (e.g., sit down and *kūkā* [consultation, discussion] in the participant’s place of choice over set interview questions) to the informal (e.g., hiking to cultural sites near the study area and asking questions based on findings during the field outing). In some cases, CSH also conducts group interviews, which range in size. Group interviews usually begin with set, formal questions. As the group interview progresses, questions are based on interviewees’ answers. Group interviews are always transcribed and notes are taken. Recorded interviews assist the cultural researcher in 1) conveying accurate information for interview summaries, 2) reducing misinterpretation, and 3) adding missing details to *mo‘olelo*.

CSH seeks *kōkua* (assistance) and guidance in identifying past and current traditional cultural practices of the study area. Those aspects include general history of the *ahupua‘a*; past and present land use of the study area; knowledge of cultural sites (for example, *wahi pana*, archaeological sites, and burials); knowledge of traditional gathering practices (past and present) within the study area; cultural associations (*ka‘ao* and *mo‘olelo*); referrals; and any other cultural concerns the community might have related to Hawaiian cultural practices within or in the vicinity of the study area.

### 2.2.3 Interview Completion

After an interview, CSH cultural researchers create an interview summary based on information provided by the interviewee. Cultural researchers give a copy of the interview summary to the interviewee for review and ask that they make any necessary edits. Once the interviewee has made those edits, CSH incorporates their *‘ike* and *mana‘o* into the report. When the draft report is submitted to the client, cultural researchers then prepare a finalized packet of the participant’s interview summary, and any photos taken during the interview. We also include a thank you card and honoraria.

It is important that CSH cultural researchers cultivate and maintain community relationships. The CIA report may be completed, but CSH researchers continuously keep in touch with the community and interviewees throughout the year—such as checking in to say hello via email or by phone, volunteering with past interviewees on community service projects, and sending holiday cards to them and their *‘ohana* (family). CSH researchers feel this is an important component to building relationships and being part of an *‘ohana* and community.

“*I ulu no ka lālā i ke kumu*—the branches grow because of the trunk,” is an *‘ōlelo no‘eau* (#1261) shared by Mary Kawena Pukui with the simple explanation: “Without our ancestors we would not be here” (Pukui 1983:137). As cultural researchers, we often lose our *kūpuna* but we do not lose their wisdom and words. We routinely check obituaries and gather information from other community contacts if we have lost our *kūpuna*. CSH makes it a point to reach out to the *‘ohana* of our *kūpuna* who have passed on and pay our respects including sending all past transcriptions, interview summaries, and photos for families to have on file for genealogical and historical reference. All field activities are performed in a manner so as to minimize impact to the natural and cultural environment in the project area. Where appropriate, Hawaiian protocol may be used before going on to the study area and may include the *ho‘okupu* (offering) of *pule* (blessing), and *oli*. All participants on field visits are asked to respect the integrity of natural and cultural features of the landscape and not remove any cultural artifacts or other resources from the area.

## Section 3 *Ka‘ao and Mo‘olelo of Keālia and Kapa‘a*

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Hawaiian storytellers of old were greatly honored; they were a major source of entertainment and their stories contained teachings while interweaving elements of Hawaiian lifestyles, genealogy, history, relationships, arts, and the natural environment (Pukui and Green 1995:IX). According to Pukui and Green (1995), storytelling is better heard rather than read for much is lost in the transfer from the spoken to the written word and *ka‘ao* (legends) are often full of *kaona* or double meanings.

*Ka‘ao* are defined by Pukui and Elbert as a “legend, tale [...], romance, [and/or], fiction” (1986:108). *Ka‘ao* may be thought of as oral literature or legends, often fictional or mythic in origin, and have been “consciously composed to tickle the fancy rather than to inform the mind as to supposed events” (Beckwith 1970:1). Conversely, Pukui and Elbert define *mo‘olelo* as a “story, tale, myth, history, [and/or] tradition” (1986:254). The *mo‘olelo* are generally traditional stories about the gods, historic figures or stories which cover historic events and locate the events with known places. *Mo‘olelo* are often intimately connected to a tangible place or space (*wahi pana*) (see Section 3.2 *Wahi Pana*).

In differentiating *ka‘ao* and *mo‘olelo* it may be useful to think of *ka‘ao* as expressly delving into the *wao akua* (realm of the gods), discussing the exploits of *akua* (gods) in a primordial time. *Mo‘olelo* on the other hand, reference a host of characters from *ali‘i* (royalty), to *akua* (gods) and *kupua* (supernatural beings), to finally *maka‘āinana* (commoners), and discuss their varied and complex interactions within the *wao kānaka* (realm of man). Beckwith elaborates, “In reality, the distinction between *ka‘ao* as fiction and *mo‘olelo* as fact cannot be pressed too closely. It is rather in the intention than in the fact” (Beckwith 1970:1). Thus a so-called *mo‘olelo*, which may be enlivened by fantastic adventures of *kupua*, “nevertheless corresponds with the Hawaiian view of the relation between nature and man” (Beckwith 1970:1).

Both *ka‘ao* and *mo‘olelo* provide important insight into a specific geographical area, adding to a rich fabric of traditional knowledge. The preservation and passing on of these stories through oration remains a highly valued tradition. Additionally, oral traditions associated with the study area communicate the intrinsic value and meaning of a place, specifically its meaning to both *kama‘āina* as well as others who also value that place.

The following section presents traditional accounts of ancient Hawaiians living in the vicinity of the project area. Many relate an age of mythical characters whose epic adventures inadvertently lead to the Hawaiian race of *ali‘i* (chief) and *maka‘āinana*. The *ka‘ao* in and around the project area shared below are some of the oldest Hawaiian stories that have survived; they still speak to the characteristics and environment of the area and its people.

### 3.1 *Ka‘ao and Mo‘olelo*

#### 3.1.1 *Hi‘iaka’s Arrival in Kapa‘a*

In the *ka‘ao* of Hi‘iakaikapoliopole, Hi‘iaka, the younger sister of Pele, engages in a quest to retrieve her sister’s lover, Lohi‘auipo, from Kaua‘i and bring him back to Halema‘uma‘u Crater. Hi‘iaka does not attempt the quest alone, and is joined by her *aikāne* (friend), Wahine‘ōma‘o. Their journey was to be a perilous one, requiring them to travel across the island chain. As Hi‘iaka

and her companions arrived near Kaua‘i Island and came ashore in the vicinity of the project area, this is what they witnessed.

*Pane akula ‘o Hi‘iaka, “‘A‘ohe ia he ao āu, e ke aikāne, e ‘ike akula. ‘O Wai‘ale‘ale kēnā, he kuahiwi.” A i ia wā I paeaea a‘e ai ‘o Hi‘iaka i kēia kau.*

*KAU KANAWALUKUMAMĀLUA O KA MO‘OLELO HI‘IAKA*

*Kūnihi ka mauna i ka la‘i ē*

*‘O Wai‘ale‘ale lā ē, i Wailua*

*Huki a‘ela i luna ka papa*

*o Anokawailani*

*Ālai ‘ia a‘ela e Nounou*

*5. Nalowale Kaipuha‘a*

*Ha‘a i ka laulā*

*Ha‘a ka ipu, ha‘a ma kai*

*o Kapa‘a ē*

*Ha‘a ka ipu, ha‘a ma uka*

*o Kapa‘a ē*

*Mai pa‘a ka leo*

*10. He‘ole ka heahea mai.*

[Ho‘oulumāhiehie 2008a:177–178]

Translation:

Just then Wahine‘ōma‘o raised a cry of surprise, “Hey! What is that thing soaring so high over the sea? Is it a cloud?”

Hi‘iaka responded, “That is no cloud you see, my friend. That is Wai‘ale‘ale, a mountain.” And then Hi‘iaka intoned this chant.

CHANT EIGHTY-TWO

Steep is the mountain in the calm

Wai‘ale‘ale rises there, at Wailua

Pulled up heavenward is the bridge of Anokawailani

Blocked from view by Nounou Hill

5. Kaipuha‘a disappears completely

Low-lying in its expanse

Shallow is the gourd, low-lying at the shore of Kapa‘a

Shallow is the gourd, low-lying in the uplands of Kapa‘a

Do not restrain the voice

10. Leaving no beckoning call of welcome.

[Ho'oulu māhiehie 2008b:166–167]

Hi'iaka was called to from the top of the slopes of Wai'ale'ale, "Come ashore!!! Come land ashore!!!" (Ho'oulu māhiehie 2008b: 167). The following section notes her arrival to Kapa'a, and the chant which she recites as she reaches the shore:

*KAU KANAWALUKUMAMĀLIMA O KA MO'OLELO O HI'IKA*

*E koa wa'a! E koa wa'a*

*E ka wa'a o ku'u mau kaikunāne*

*Mau kunāne 'ōpū loko 'ino,*

*aloha 'ole ē*

*Aloha 'ole ana ia'u ka pōki'i*

5. *Ō ho'i, a pāpā ia leo aku*

*Aia Hi'i(aka) i ka pali o Kē'ē*

*I Honopū, i Waialoha*

*Aloha mai ana ka ipo*

*'O Lohi'auipo i nā hala*

*o Naue i ke kai.*

*Pau nō nei kau a ua Hi'iaka nei, pai akula nō kēia i ke aikāne, "Inā kākou. Ua lawe 'o Lehua i ka la."*

[Ho'oulu māhiehie 2008a:179]

Translation:

CHANT EIGHTY-FIVE

O canoe-hewn koa! O koa tree made as a canoe

O canoe of my brothers

Those hard-hearted brothers, without compassion

With no concern for me, their little sister

5. Return now, and carry the message

Hi'iaka is at the cliffs of Kē'ē

At Honopū, at Waialoha

The lover shall offer welcome

Lohi'auipo amid the hala of Naue by the sea.

When Hi‘iaka’s chant was finished, she urged her friend, saying, “We should go. Lehua Island has snatched away the sun.” [Ho‘oulumāhie 2008b:167–168]

After coming ashore Hi‘iaka and her companions continued on their journey toward Kaua‘i’s northern shores.

### 3.1.2 Hi‘iaka and Wahine‘ōma‘o in Keālia

On their way to Ha‘ena, on Kaua‘i’s northern shore, Hi‘iaka, Wahine‘ōma‘o, and their traveling companion Pā‘ūopala‘ā stopped near Keālia to rest. While debating where to spend the night, their companion, Pā‘ūopala‘ā pointed out a small house within a grove of *hala* (screw pine; *Pandanus*) trees near Keālia Beach. According to Wichman (2001), as the party neared the home, they saw an old man sitting outside, attempting to light his cooking fires. From within the home, Hi‘iaka overheard a *kahuna lapa‘au* (healer) attempt a chant. The traveling party immediately recognized that both the man and the *kahuna lapa‘au* were failing to accomplish their tasks. Hi‘iaka soon captured the man’s attention, inquiring into the situation at hand. The man, identifying himself as Kalalea, informed the party that he was attempting to cook *lū‘au* (young taro tops, especially as baked with coconut cream and chicken or octopus) for his sick wife Ko‘anawai:

‘My wife is Ko‘ana-wai. She is sick. The kahuna lapa‘au says she has angered one of the gods but I do not see how. She has always followed their way. Perhaps, he says, she has angered someone and that person has called upon a kahuna ‘ana‘ana who is praying her to death. But I do not think so. She has been ill too long. Black magic is swift, is it not?’

‘Yes, it is,’ Pā‘ū-o-pala‘e answered.

‘Perhaps your kahuna isn’t very knowledgeable,’ Wahine-‘ōma‘o said.

‘Be careful.’ The words came from the doorway to the house. An old man with long white hair stuck his head out the door. ‘I am no amateur. I tell you this woman is very sick. Only by offering the proper sacrifices can she recover.’

‘What must I offer as sacrifice?’ Kalalea asked.

The kahuna stroked his chin, considering. ‘I shall need some lipoa seaweed from the reef of Molo-a‘a,’ he said, holding out his hand and pulling one finger flat against his palm. ‘Then some awa root from Wai-pahe‘e.’ Another finger went down. ‘Some leaves from the hau [*Hibiscus tiliaceus*] trees at Ho-mai-ka-wa‘a, a gourd of water from Uluoma, and last, forty kukui [candlenut; *Aleurites moluccana*] blossoms from Kahiki-kolo.’

The palm of his hand was gone. Only a fist remained which the old man shook in Kalalea’s face. ‘Get them and we shall see what we can do for your wife.’

‘It will take time,’ Kalalea said. ‘Already it is night. I must wait until dawn.’

‘Will she last the night?’ Wahine-‘ōma‘o demanded.

‘Perhaps,’ the kahuna replied.

‘Perhaps?’ Wahine-‘ōma‘o’s voice rose questioningly. She brushed past the kahuna and went into the house. In a few minutes she returned and said to Hi‘iaka, ‘She

will not last the night. She needs something nourishing to eat, like those *lū'au* leaves Kalalea is trying to cook. It is only a fever that this stupid kahuna has only made worse. This is something you can easily make right.'

'You must go,' the kahuna shouted. 'You are only making trouble.' His words and his tone of voice angered Hi'iaka. She gestured and the kahuna fell silent, although his lips continued to form words there was no sound. He clutched his throat.

'Leave us,' Hi'iaka ordered. 'From now on, only when you speak the truth will your voice be heard. The lies shall remain silent. Go!'

[Wichman 2001:94]

The three then set forth to help cook *lū'au*, and heal the sick woman. Hi'iaka offered a chant prior to giving Ko'anawai food and water:

Come, gods, enter, possess and inspire me,  
First you, Kāne-kapolei, god of wildwood,  
Hi'iaka calls you,  
For she calls for the power to heal.  
Pray enter, and heal, and let live  
Ko'ana-wai, the ailing woman of Ke-ālia.  
Give her life!

[Wichman 2001:95]

In the Rice version of the story, Hi'iaka and Wahine'ōma'o help a man cook his *lū'au* to eat with his *poi* (Hawaiian staff of life made from cooked taro corms). Noticing an ailing woman in the man's house, Hi'iaka said a prayer which brought the woman back to health. All the *kahuna* (priests) in the region had been unable to help the woman previously (Rice 1977:10).

In the Ho'oulumāhiehie version of the Hi'iakaikapoliopole tale, Hi'iaka and Wahine'ōma'o's connection to Keālia is discussed rather obliquely. Their connection to the area is not explicitly established, however, Keālia is referenced by the author when imagining the beautiful physiques of Wahine'ōma'o, Papanuioleka, Hi'iaka, and Pā'ūopala'ā as they swam uncovered across the Wailoa River (on Hawai'i Island). Ho'oulumāhiehie, "imagining their fine physiques uncovered" (2008:70) recalled the following lines,

I wish to sip of the waters below  
Enhanced by the Ko'apu'ai'a showers  
Mānā shudders and clamors in haste  
Rushing to the sheltered strands of Nohomalu, yes, there  
There was I, where Kaunalewa sways side to side  
While Kawaili'ulā, the land of mirages, relaxes peacefully  
Perhaps rejoicing over Limaloa



Who crafted fantasies at Keālia, yes, there.

[Ho'oulumāhie 2008:70]

Limaloa, the *kupua* (demi-god) mentioned in line seven of the above stanza, was said to have been able to “make grand mirages of whole villages along the western coast of Kaua'i, which would then disappear” (Ho'oulumāhie 2008b:70).

### 3.1.3 Palila and His Banana Grove Called Ka'ea

In the *mauka* region of Kapa'a, high in the Makaleha Mountains, is a place called Ka'ea, reported to be the supernatural banana grove of the Kaua'i *kupua*, Palila (Handy and Handy 1972:424). Raised by his grandmother Hina, Palila was renowned for his athletic prowess and his skill at the art of war. According to legend, “. . . as soon as [Palila] had reached the age when he could take solid food, he was given nothing but bananas for nourishment” (Wichman 1991:95). Joseph Akina, writing for *Kuokoa* newspaper in 1913, describes Palila's sacred banana grove:

The stalk could hardly be surrounded by two men, and was about 35 feet high from the soil to the lowest petiole. The length of the cluster from stem to lowest end of the bunch of bananas was about 1 3/4 fathoms long (one anana and one muku). There were only two bananas on each about 4 inches around the middle. There were just two bananas, one on the east side and one on the west, each about a foot or more in length. The one on the east side was tartish, like a waiawi (Spanish guava) in taste and the one on the west was practically tasteless. The diameter of the end of the fruit stem of this banana seemed to be about 1 foot. This kind of banana plant and its fruit seemed almost supernatural.

[Akina 1913]

### 3.1.4 Pāka'a and the Wind Gourd of La'amaomao (Keahiahi)

Kapa'a also figures prominently in the famous story of Pāka'a and the Wind Gourd of La'amaomao. Pāka'a was the son of Kūanu'uanu, a high-ranking retainer of the Big Island ruling chief Keawenuia'umi (the son and heir to the legendary chief 'Umi), and La'amaomao was the most beautiful woman of Kapa'a and member of a family of high status *kahuna*. Kūanu'uanu left the island of Hawai'i, traveled throughout the other islands and finally settled on Kaua'i at Kapa'a.

It was there that he met and married La'amaomao, although he never revealed his background or high rank to her until the day a messenger arrived, calling Kūanu'uanu back to the court of Keawenuia'umi. By that time, La'amaomao was with child but Kūanu'uanu could not take her with him. He instructed her to name the child Pāka'a if it turned out to be a boy. Pāka'a was raised on the beach at Kapa'a by La'amaomao and her brother Ma'ilou, a bird snarer. Frederick Wichman (1998:84) writes that Pāka'a grew up on a headland named Keahiahi (located between Kapa'a and Keālia). He grew to be an intelligent young man and it is said he was the first to adapt the use of a sail to small fishing canoes. Although Pāka'a was told by his mother from a very young age that his father was Ma'ilou, he suspected otherwise and after constant questioning, La'amaomao told her son the truth about Kūanu'uanu.

Determined to seek out his real father and make himself known to him, Pāka'a prepared for the journey to the Big Island. His mother presented to him a tightly covered gourd containing the bones of her grandmother, also named La'amaomao, the goddess of the winds. With the gourd and

chants taught to him by his mother, Pāka‘a could command the forces of all the winds in Hawai‘i. While this story continues on at length about Pāka‘a and his exploits on the Big Island and later on Moloka‘i, it will not be dwelt upon further here. It is important to note that several versions of this story do include the chants that give the traditional names of all of the winds at all the districts on all the islands, preserving them for this and future generations (Beckwith 1970:86–87; Fornander 1918-1919:5:78–128; Nakuina 1990; Rice 1923:69–89; Thrum 1923:53–67).

### 3.1.5 Ka Lulu O Mō‘ikeha

Kapa‘a was the home of the legendary *ali‘i* (chief), Mō‘ikeha. Born at Waipi‘o on the island of Hawai‘i, Mō‘ikeha sailed to Kahiki (Tahiti), the home of his grandfather Maweke, after a disastrous flood. On his return to Hawai‘i, he settled at Kapa‘a, Kaua‘i. Kila, Mō‘ikeha’s favorite of three sons by the Kaua‘i chiefess, Ho‘oipoikamalani, was born at Kapa‘a and was said to be the most handsome man on the island. It was Kila who was sent by his father back to Kahiki to slay his old enemies and retrieve a foster son, the high chief La‘amaikahiki (Beckwith 1970:352–358; Fornander 1916:160; Handy and Handy 1972:424; Kalākaua 1888:130–135). Mō‘ikeha’s love for Kapa‘a is recalled in the *‘ōlelo no‘eau*: “*Ka lulu o Moikeha i ka laulā o Kapa‘a*.” “The calm of Moikeha in the breadth of Kapa‘a” (Pukui 1983:157).

“Lulu-o-Moikeha” is described as being situated “near the landing and the school of Waimahanalua” (Akina 1913:5). The landing in Kapa‘a was known as the Makee Landing and was probably constructed in the late 1870s, along with the Makee Sugar Mill. Today, in place of the old Makee Landing is part of a breakwater located on the north side of Mō‘ikeha Canal near the present day Hotel Coral Reef Resort.

### 3.1.6 Ka‘ililauokekoa

Kapa‘a is also mentioned in traditions concerning Ka‘ililauokekoa (Mō‘ikeha’s daughter, or granddaughter, dependent on differing versions of the tale), the *mo‘o* (lizard, water spirit) Kalamainu‘u and the origins of the *hīna‘i hīnālea* or the fish trap used to catch the *hīnālea* (small to moderate sized wrasse; *Labridae*) fish.

Kaili-lau-o-kekoa as told by William Hyde Rice:

Kaili-lau-o-kekoa, The-Covering-of-the-Koa-Leaf, was the only daughter of Moikeha and Hooipo, two very high chiefs of Kauai. Her parents loved the child greatly, and gave her every care, engaging a nurse, or kahu, to be with her always. As Kaili-lau-o-kekoa grew, her beauty increased. After she had ridden the surf at Maka‘iwa, near Waipouli, or had played konane, a complicated game resembling chess, her cheeks glowed like the rising sun.

One day, when her parents had gone to cultivate taro in Kapahi, Kaili-lau-o-kekoa was alone, playing konane with her nurse. Suddenly a strange man stood before the door. He asked the girl if she enjoyed konane very much. When she answered that she did, he suggested that she play a game with him. Kaili-lau-o-kekoa won the game by a score of nine to four. She said to the stranger, “You have been defeated by the daughter of Moikeha.”

The man asked, “Is Moikeha still living?” “Yes,” answered Kaili-lau-o-kekoa. “He has gone to the taro patches now. Moikeha loves surf-riding and my mother. He will stay on Kauai till he dies.”

After the stranger had heard these words, he said, "I believed that he was dead. I regret not being able to take him back to Molokai with me. When he returns, tell him that the high chief of Molokai has been here, and has been defeated by Moikeha's daughter in a game. Give your father and mother the aloha of Heaakekoa."

When the chief from Molokai had spoken these words, he got into his canoe, and started for his island.

Now, at Pihanakalani, where all good things abounded, a legendary spot on Kauai above the Wailua river, that cannot be found nowadays there lived two very high chiefs: Kaua-kahi-alii, The-Battle-of-the-Lone Chief, and his sister Ka-hale-lehua, The-House-of-Lehua. In this garden spot of Pihanakalani was the far-famed fountain of Wai-o-ke-ola, Water-of Life, which could restore the dead to life, and renew the youth of the aged. Kaua-kahi-alii owned a very loud-sounding flute called Kanika'wi, which could be heard as far away as Kapaa.

One night Kaili-lau-o-kekoa had been playing konane with her nurse until midnight. That night, while the girl slept, the nurse heard the flute crying, "Kaili-lau-o-kekoa, do you sleep?"

When the girl awoke in the morning her nurse told her the words she had heard. Kaili-lau-o-kekoa was greatly excited and said, "Today we shall sleep all day so that I may be awake at midnight, for I must hear this voice from the hills when it calls me."

So they slept until evening. Then they played konane to keep themselves awake. At midnight they heard the flute voice calling, "Kaililau-o-kekoa, do you sleep in Puna? Is not the surf high?"

"I do not sleep. I shall search for you until I find you," answered the breathless Kaili-lau-o-kekoa.

Then she and her nurse started on their search. They climbed up the mountain side and at daylight reached Kuamoo.

When the sister of the flute player saw these two women coming, she sent the heavy mist and the blinding rain to delay their journey. They found shelter in a hollow tree and when the rain had ceased they went on. Kaili-lau-o-kekoa soon saw a house where a bright fire was burning. As the two women approached the house of Ka-hale-lehua, the sister of the flute-player, she took pity on them, and welcomed them. She took off their wet clothes, and gave them each a dry pa'u [skirt]. Then she prepared a meal for her unbidden guests. She placed before them a platter of lipoa limu, choice sea-weed, and little striped manini [convict tang; *Acanthurus triostegus*] fish, still alive. Kaili-lau-o-kekoa was greatly surprised to see the live fish, and said to her nurse, "We live near the sea yet we never have live fish. This place is far from the sea. How is it that the fish are still alive?"

Her hostess answered her by saying that she and her brother had a fish pond near their house.

After the meal was finished Kaili-lau-o-kekoa went in search of the flute that had called her away from home. She came to the room of Kaua-kahi-alii and found the flute hidden in his breast. At once a great love for this chief filled the heart of the girl, and she forgot her fond parents and stayed with him.

When the parents of Kaili-lau-o-kekoa found that their daughter was gone, they began to search for her. At last they came to the house where she was living with the young chief, and carried them both to Kapaa. There they tied the chief to a post in a house.

The first day he was given nothing to eat. On the second day a boy passed by, and, seeing the prisoner, asked if he had been given any food or water. When he heard that he had received none, he returned to his parents and made known to them the chief's condition. They ordered their son to put water in a coconut shell, and to get another one for food, so that he could throw them to the prisoner. With these he crawled through the rushes so that no one would see him. The boy carried out his parents' instructions on that day, and on many following days. The chief began to look well again.

When the father of Kaili-lau-o-kekoa had recovered from his anger he called his daughter to him and asked her to explain how she came to be in the mountains. She told him that she had heard the flute calling to her, and had wanted to make of the man who played it either a husband or a friend.

Her parents decided to allow the kahuna to settle the matter. When they were called together, and had heard the story they all agreed that Kaili-lau-o-kekoa should marry the chief if he could give his genealogy. As soon as Kaua-kahi-alii was called before them, he proved that he was a very high chief, and so the beautiful chiefess was given to him in marriage.

The boy who had carried food and water to the chief in prison became his great friend and was made luna, or head-man, over all his lands.

[Rice 1923:106-108]

### **3.1.7 Ka'ao no Kaipalaoa, ke Keiki Hoopapa (Legend of Kaipalaoa, the Hoopapa Youngster)**

There exist several versions of the Kaipalaoa story, however, they all remain centered upon the art of *ho'opa'apa'a* (to argue, riddle). The Fornander version of the tale is set in the days of Pueo-nui-o-Kona, ruling chief of Kaua'i (Beckwith 1970:460). It is during these ancient days that the father of Kaipalaoa, Hale-pa-ki, is killed in a riddling contest with the Kaua'i chief Ka-lani-ali'iloa (Beckwith 1970:460). The stakes were high for those who dared to challenge Kalaniali'iloa in a riddling game, a loss resulted in death. The chief had the bones of losing challengers used to build a fence around his home. Kaipalaoa, a skilled riddler himself, intended to avenge his father's death. Beckwith, in summarizing the Fornander version of the legend, describes the character of Kaipalaoa:

Kaipalaoa lives at Waiakea in Hilo with his mother Wailea who is skilled in the art of riddling, but who sends him to her sister Kalena-i-haleauau, wife of Kukui-pahu the ruling chief of Kohala, to complete his education. He then journeys to Wailua, Kauai, and challenges the chief to a riddling contest, invoking his own god Kane-

pa-iki against the god Kane-ulu-po (god who presides over the cock crow) invoked by the Kauai chief's instructors. [Beckwith 1970:460]

Fornander provides details about Kaipalaoa's journey to Kaua'i, and it is within these details that the *ahupua'a* of Keālia is briefly mentioned:

*Haalele iho la keia ia Hanalei, hele aku la ma Koolau a hiki i Waiakalua, hoomaha; hele aku la a Anahola a Kealia, hiki i Wailua; ilaila o Kalanialiiloa kahi i noho ai. Ilaila ka pa iwiw a Kalanialiiloa, e ku ana, ua kokoke e puni i ka iwi kanaka. Nana aku la keia e ku ana na iwi Halepaki, ka makuakane, e koko ana no, aole I maloo; uwe iho la keia me ke kulu o na waimaka. Hele aku la keia a ka pahu lepa, kulai iho la keia I ka lepa, kukulu ae la I ka oililepa; lalau aku la keia I ka pahu kapu kulai, kukulu ae la keia I ke kikakapu. Ma keia mau hana a ke keiki, he hoopapa kea no. Ike mai la o Kalanialiiloa a me na kumu hoopapa I nei mau hana a ke keiki, maopopo ia lakou he keiki hoopapa keia, hoouna mai la I elele e olelo I ke keiki.* [Fornander 1917:577]

Soon after this the boy left Hanalei and proceeded on his way, going by way of Koolau until he arrived at Waiakalua where he rested. From this place he continued on to Anahola; thence on to Kealia and then on to Wailua where Kalanialiiloa resided, where was his bone fence, almost completed, built from human bones. When he arrived at the place he looked and saw the bones of Halepaki his father; they were still fresh, the bones not yet being bleached. At sight of this the boy bowed in sorrow and wept. After his weeping he approached the flagstaff and pushed it down and put up the oililepa, one of the fish brought along by him. He then next took the kapu stick and pushed it down and put up in its place the other fish, the kikakapu. By this action of the boy, it was meant as a challenge to the people that he was come to meet them in a wrangling contest. When Kalanialiiloa and his instructors saw the action of the boy, they knew at once that he was challenging them to a contest of wits, so a messenger was dispatched to meet the boy showing the challenge was accepted. [Fornander 1917:577]

Although ridiculed because of his age, Kaipalaoa successfully outwits the chief and his *kumu*. As death was the wager, Kaipalaoa had the losers cooked in an oven and the flesh stripped from their bones (Beckwith 1970:460).

### 3.1.8 Kaweloleimakua and Kauahoa in Waipahe'e

In the *mauka* areas of Keālia is a place called Waipahe'e, a slippery slide used for recreation up until recent times. This *wahi pana* is associated with Kaweloleimakua and Kauahoa, who one day traveled to this place with their companion 'Aikanaka (Wichman 1998:86). Here the two boys engaged in a contest of who could make the best *lei* (garland) for their chief. Kauahoa won this contest by making his *lei* of *liko lehua* (the young leaves of 'ōhi'a lehua) while Kaweloleimakua made his of fern. The boys then held a *na'ina'i mimi* (urination contest), to see who could urinate the longest, but because Kauahoa was much bigger than Kawelo, he also won this contest. Later, when the two were men engaged in war, Kawelo reminded Kauahoa of this boyhood excursion in an attempt to avoid bloodshed between them, however, he was unsuccessful.

### 3.1.9 Kawelomahamahaia, the Shark Man of Kaua'i

Although sharing similarities in name, the Kawelo of this legend is not the fierce fighter of Kaua'i and opponent of Kauahoa; he is in fact Kawelomahamahaia, the shark man of Kaua'i. Kawelomahamahaia (Kawelo) carried the mark of a shark's mouth on his back and had a tail on the lower part of his body. According to Beckwith,

Many local legends are told of shark-men, always to be known by the mark of a shark's mouth upon the back, who can change form from man to shark and who for a long time go undetected until it is noticed that an apparently disinterested warning to swimmers is always followed by a fatal attack by a man-eating shark. [Beckwith 1970:140]

As *kupua*, Kawelo was able to evade capture for quite some time. Gifted with supernatural powers, he could not only take the form of a shark, but could also transform into a worm, a moth, a caterpillar, and a butterfly (Beckwith 1970:141). Able to move between worlds, he maintained homes on land as well as underwater. He was said to have a home within the Wailua River and another home below the cave of Mamaaku-a-Lono; Beckwith notes these represent his two houses as a shark and as a man (1970:141). Kawelo hunted along the coast between Keālia and Wailua.

[He] would eat up the children who ventured to swim out between those two places. Finally he was discovered and a long line of men formed who stoned him to death. He is identified with the famous chief Kawelomahamahaia (Kawelo with fins like a fish), a grandfather of Kawelo and descended from Mano-ka-lani-po, who was believed to become a shark god (*akua mano*) at death. [Beckwith 1970:141]

The shark was one of the many animal forms (*kinolau*) that '*aumākua*, or ancestor gods, could take. However, on the Island of Kaua'i, this was not the case; according to Pukui and Elbert (1986):

Family or personal gods, deified ancestors who might assume the shape of sharks (all islands except Kaua'i), owls (as at Mānoa, O'ahu and Ka'ū and Puna, Hawai'i), hawks (Hawai'i), '*elepaio*, '*iwi*, mudhens, octopuses, eels, mice, rats, dogs, caterpillars, rocks, cowries, clouds, or plants. A symbiotic relationship existed; mortals did not harm or eat '*aumākua* (they fed sharks), and '*aumākua* warned and reprimanded mortals in dreams, visions, and calls. [Beckwith 1970:124-43, 559; Pukui et al. 1972:37-38; cited in Pukui and Elbert 1986:32]

### 3.1.10 'A'aka at 'Ahihi Point

In Kamalomalo'o, what some consider to be the northernmost *ahupua'a* of the ancient Puna District (now Kawaihau), is the *wahi pana* of 'Ahihi. 'Ahihi is a headland that juts out into the ocean in between what is now known as Keālia and Anahola. Wichman (1998:87) retells a *mo'olelo* about 'A'aka, a *menehune* (legendary race of small people). This *mo'olelo* is also understood to be associated with Hōmaikawa'a, the valley adjacent to 'A'aka, and 'Ahihi, a plant with long runners.

One of 'A'aka's favorite pastimes was to throw a stone into the ocean from 'Ahihi Point and then jump in after it. On one occasion, upon plunging into the sea, 'A'aka encountered a *niuhi* (a man-eater; great white shark); the *niuhi* almost swallowed him whole, 'A'aka, devised a plan to fabricate a net made from '*ahihi* to catch the shark. After ordering the canoe, "Hōmaikawa'a," he

and his companions were able to catch the shark and tow it to the reef at ‘Aliomanu (“where the water is made still by the oil from the shark”), near Anahola.

In the Rice version of the tale, it is noted that the *menehune* never again dare to jump into the sea at Hōmaikawa‘a, however, they construct a large *heiau* (temple) nearby. Kawelo worships his shark god at this *heiau* (Rice 1977:44). It is also noted that they erected a pile of stones, known as Kahuaaliko, at ‘Aliomanu “in memory of their delivery from the shark” (Rice 1977:44).

### 3.2 *Wahi Pana*

*Wahi pana* are legendary or storied places of an area. These legendary or storied places may include a variety of natural or human-made structures. Oftentimes dating to the pre-Contact period, most *wahi pana* are in some way connected to a particular *mo‘olelo*, however, a *wahi pana* may exist without a connection to any particular story. Davianna McGregor outlines the types of natural and human-made structures that may constitute *wahi pana*:

Natural places have mana, and are sacred because of the presence of the gods, the akua, and the ancestral guardian spirits, the ‘aumakua. Human-made structures for the Hawaiian religion and family religious practices are also sacred. These structures and places include temples, and shrines, or heiau, for war, peace, agriculture, fishing, healing, and the like; pu‘uhonua, places of refuge and sanctuaries for healing and rebirth; agricultural sites and sites of food production such as the lo‘i pond fields and terraces slopes, ‘auwai irrigation ditches, and the fishponds; and special function sites such as trails, salt pans, holua slides, quarries, petroglyphs, gaming sites, and canoe landings. [McGregor 1996:22]

As McGregor makes clear, *wahi pana* can refer to natural geographic locations such as streams, peaks, rock formations, ridges, offshore islands and reefs, or they can refer to Hawaiian land divisions such as *ahupua‘a* or *‘ili* (land division smaller than an *ahupua‘a*), and man-made structures such as fishponds. In this way, the *wahi pana* of Keālia and Kapa‘a tangibly link the *kama‘āina* of these areas to their past. It is common for places and landscape features to have multiple names, some of which may only be known to certain *‘ohana* or even certain individuals within an *‘ohana*, and many have been lost, forgotten or kept secret through time. Place names also convey *kaona* (hidden meanings) and *huna* (secret) information that may even have political or subversive undertones. Before the introduction of writing to the Hawaiian Islands, cultural information was exclusively preserved and perpetuated orally. Hawaiians gave names to literally everything in their environment, including individual garden plots and *‘auwai* (water courses), house sites, intangible phenomena such as meteorological and atmospheric effects, *pōhaku* (rock, stone), *pūnāwai* (freshwater springs), and many others. According to Landgraf (1994), Hawaiian *wahi pana* “physically and poetically describes an area while revealing its historical or legendary significance” (Landgraf 1994:v).

#### 3.2.1 Keālia Ahupua‘a

Keālia Ahupua‘a belongs to the ancient district of Puna, one of five ancient districts on Kaua‘i (King 1935:228). Puna was the second largest district on Kaua‘i, behind Kona, and extended from Kīpū, south of Līhu‘e to Kamalomalo‘o, just north of Keālia. For taxation, educational, and judicial reasons, new districts were created in the 1840s. The Puna District, with the same boundaries, became the Līhue District, named for an important town in that district. In 1878, King Kalākaua

in securing a future and name for the new Hui Kawaihau, created the new district of Kawaihau. This new district encompassed the *ahupua‘a* ranging from Olohena on the south to Kīlauea on the north. Subsequent alterations to district boundaries in the 1920s left Kawaihau with Olohena as its southernmost boundary and Moloa‘a as its northernmost boundary (King 1935:222). Although the legendary accounts and celebrated places (*wahi pana*) of Keālia are not as numerous as nearby Wailua, there are still several accounts that refer to the area.

The land division of Keālia lies between the *ahupua‘a* of Kapa‘a, Kalihiwai (“Kalihi with a stream”), Anahola, and Kamalomalo‘o (“the dry loincloth”) (Figure 13). The *mauka* border extends from the Makaleha Mountains in the south to the Anahola Mountains in the north, and includes the prominent peaks of Makaleha, Pu‘u ‘Eu (“rascal hill”), and Anahola. The western border of Keālia abuts the eastern boundary of Kalihiwai Ahupua‘a and the southeastern boundary of Anahola Ahupua‘a. Both Keiwa Ridge and Kapa‘a Stream form portions of Keālia’s southern boundary, while the northern boundary generally follows the path of Kamalomalo‘o Stream. The ocean constituted the *makai* border, as it does today.

Natural features often served as boundaries within the *moku* and *ahupua‘a*. The *ahupua‘a* themselves were often entire valleys (Kamehameha Schools 1994:VI). Man-made features could also mark the boundaries of an *ahupua‘a*. However, these established boundaries were not always observed. Only during the time of ‘Umi, son of the great chief Līloa, were the Hawaiian Islands divided into taxable districts: “The four *mokupuni* (larger islands) of Kaua‘i, O‘ahu, Maui, and Hawai‘i were divided into *moku* (districts). . . For ease in collecting annual tribute the *moku* were subdivided into *ahupua‘a*. . .” (Kamehameha Schools 1994:VI).

*Ahupua‘a* were often further sub-divided into ‘*ili*. ‘*Ili* could consist of a single tract, be divided, or be divided and cross over *ahupua‘a* boundaries (Kamehameha Schools 1994:VI). Contained within the natural limits of Keālia Ahupua‘a were several ‘*ili*. The ‘*ili* of Keālia, as identified within Land Commission Awards (LCA) claims, were Akiana (LCA 10907), Awikiwili (LCA 10907), Haleki (LCA 7966), Haulei (LCA 8060, 1980), Hawaipaea (LCA 8060, 1980), Ka‘ele‘ele (LCA 10473, 1980), Kahue (LCA 8834), Kapuna (LCA 8061), Kapunakai (LCA 3413), Kauaha (also Kanaha or Kaha) (LCA 8842), Kaukuolono (LCA 10906), Kaunakakai (LCA 10628), Kealohipaa (LCA 10149, 8060), Kuaiula (LCA 10628), Kuakahi (also Kuahaki or Makuahaki) (LCA 10473), Kulehaole (also Kulehale or Kulihale) (LCA 8833), Mahuaku (Mahuali) (LCA 7966), Makapono (Makahono) (LCA 8842), Pauahi (LCA 10473), Puhokea (LCA 10473), and Waipunaula (LCA 08833). Waipunaula was also identified as a fishpond within Keālia. Not explicitly designated within Keālia, but identified within nearby localities were Kapuahola (Kapuaahole) possibly an ‘*ili* in Hōmaikawa‘a (LCA 10689) and Naapakukui an ‘*ili* in Kumukumu (LCA 10660).

Several *wahi pana* are identified within the *ka‘ao* and *mo‘olelo* of Keālia. Within the *mo‘olelo* of ‘A‘aka the *menehune*, ‘Āhihi Point and Hōmaikawa‘a figure prominently. It is at ‘Āhihi Point that the daring *menehune*, ‘A‘aka, has a nearly fatal encounter with a man-eating shark (Wichman 1998; see (Section 3.1.10 for the Wichman version of the tale). In the Rice (1977) version of the story, ‘A‘aka goes swimming with other *menehune* at Hōmaikawa‘a. While bathing, they are nearly caught by the shark. The *menehune* swim ashore, and continue fleeing inland toward the plain known as ‘A‘aka. Led by the *menehune* ‘A‘aka, the group devises a plan to catch the shark. Utilizing the ‘*āhihi* plant, ‘A‘aka and his companions weave a basket and fill it with bait. With the trap set, they capture the shark, dragging it to the reef at ‘Aliomanu, near Anahola. According to



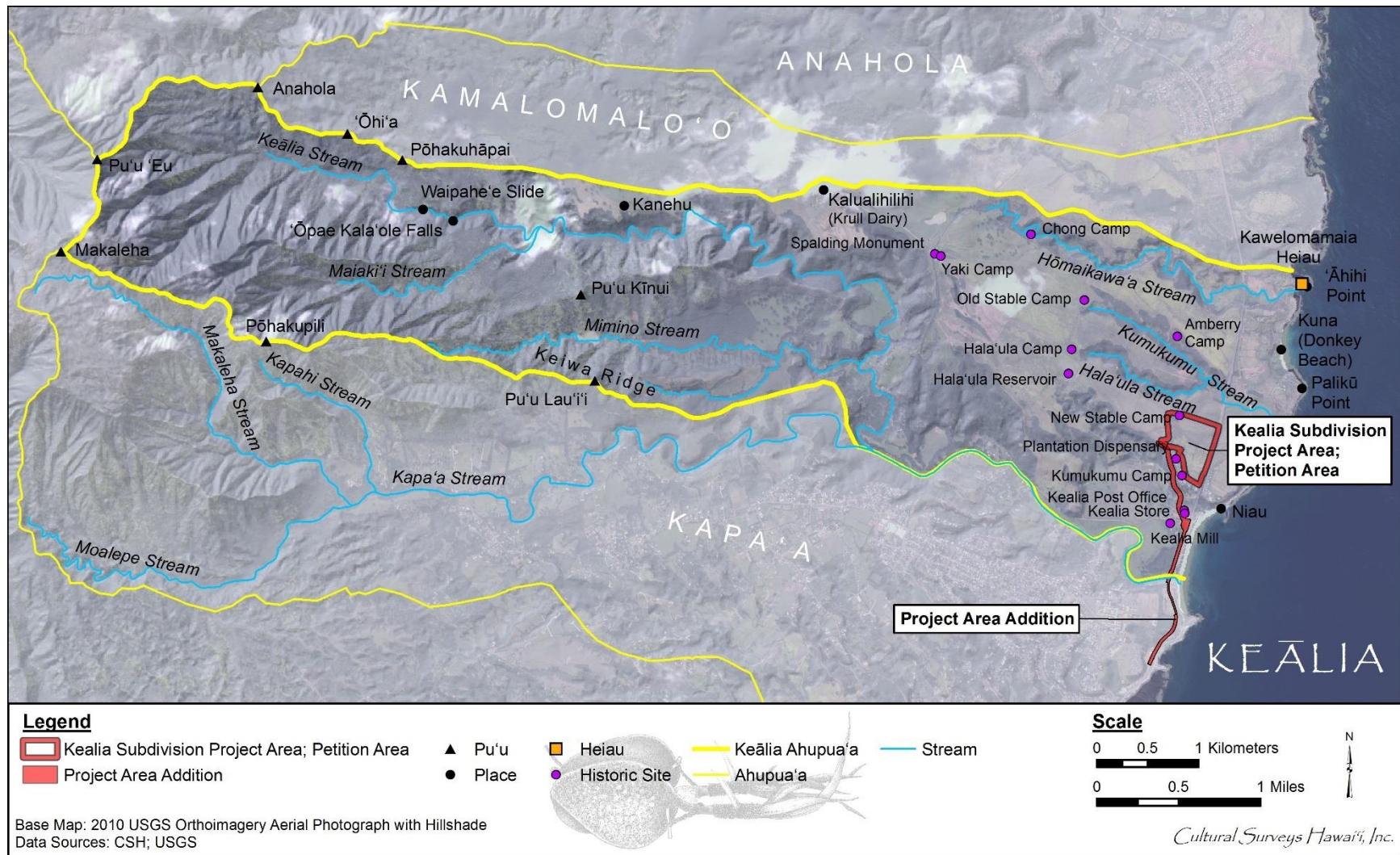


Figure 13. Locations of *wahi pana* and historic sites, including plantation camps and plantation related infrastructure within context of the larger Keālia Ahupua'a (Drennan et al. 2006:15; USGS Orthoimagery 2010)

Rice, “The odor of the shark soon brought so many land and sea birds to feast upon the flesh that the reef was called A-li-o-ma-nu, Where-the-Water-is-made-still-by-the-Oil-from-the Shark, and is still known by this name. . .” (Rice 1977:44).

The *wahi pana* of Waipahe‘e, located in the *mauka* portion of Keālia, is associated with Kaweloleimākua and Kauahoa (Wichman 1998:86). Kaweloleimākua is the fierce fighter of Kaua‘i and the opponent of Kauahoa, the handsome youthful hero of Hanalei (*Hoku o Hawaii* 1908). Kaweloleimākua’s connection to the ancient Puna District is expressed in an article published in the Hilo newspaper, *Hoku o Hawaii* on 31 December 1908,

<i>E Kawelo-lei-makua, e pae,</i>	O Kaweloleimakua, land,
<i>E Kamahana a ka lapa o Puna,</i>	O Kamahana of the ridges of Puna
<i>Na maka o Halona iluna,</i>	The eyes of Halona above,
<i>Kuu haku, kuu lawaia alii o Kauai.</i>	My lord, my fishing chief of Kauai.

[*Hoku o Hawaii* 31 December 1908]

Often contained within *oli* and *mele* are valuable descriptions of *wahi pana*. The *wahi pana* of Keālia Ahupua‘a and Kawaihau Moku are identified within a famous *oli* for the ancient Puna District. This *oli* (see Section 1.4.1.5) was originally recorded by Lahainaluna students conducting ethnological research in the late nineteenth century. The descriptions of Kalualihilihi, Kapalua, Kapuka, Niau, and Keahapana are particularly salient (see Section 1.4.1.5).

Keahapana was famed for its “heavy taro” (HEN: *Kuokoa*, May 1913). In an interview conducted by CSH in 2002 (Bushnell et al. 2002), Keahapana was identified as an area located up the Keālia River, where Hawaiians continue to live, and where taro was grown until the late 1990s.

Natural geological features were also considered *wahi pana*. These natural features served as markers on the landscape but also functioned as psychic anchors, providing a “lifeline to a continuous sense of identity” (Andrade 2014:8; Relph 1976:231). In many ways, these *wahi pana* are signs of identity and signs of memory, they are “markers and makers of cultural identity” (Cipolla 2008:196). There exist notable natural features within both the *mauka* and *makai* portions of Keālia Ahupua‘a.

Among the notable natural features of Keālia Uka are the various hills and peaks that dot the uppermost reaches of the *ahupua‘a*. Included among the hills and hillocks are Pohakuomanu, Pukahulu, Moalepi (Moalepe), and Pu‘u Kinui. Pohakuomanu is the name of a low hillock in Keālia (Hawai‘i State Archives, Interior Department, Land, 23 June 1862). Pukahulu and Moalepi (Moalepe) are the names of *pu‘u* (hills) in the *mauka* region of Keālia (Hawai‘i State Archives, Interior Department, Land, 23 June 1862).

The cloudy peaks of Pualani, Pohakupili, and ‘Ōhi‘a belong to the *wao akua* (a distant mountain region, believed inhabited only by spirits). Sam ‘Ohukani‘ohi‘a Gon III elaborates further on the significance of high elevation places within an *ahupua‘a*,

And when you think about high elevation places in the Hawaiian Islands, of course you have to talk about that basic dichotomy between the lower elevation places where people live.

And in old times, that would have been called the Wao Kanaka. Wao being a word that means ‘zone’ and ‘Kanaka’ being a person. So the Wao Kanaka is a zone in which people belong.

When you rise above that zone, you enter into a realm in which all of the living things there are not there because of human activity. They flourish as the result of the activity of the gods, or the Akua. And so that zone is called the Wao Akua. And the transition from Wao Kanaka to Wao Akua is not taken lightly. [Sam ‘Ohukani‘ohi‘a Gon III in *Na Maka o ka Aina* 2017]

Pualani, Pohakupili, and ‘Ōhi‘a are the names of mountain peaks in Keālia (Hawai‘i State Archives, Interior Department, Land, 23 June 1862). The place name Pohakupili, however, is also the name of a mountain in the larger Puna (Kawaihau) District. This peak is famed in chant as a place where clouds gather (HEN I:211–216). Pohakupili is also utilized as a landmark, “when it appears to be on the hill of Nounou,” by those fishing at the fishing ground of Limawela (HEN 1885:I:211).

Found within these mountainous regions were the *kumuwai* (headwaters of streams). As *kahawai*, they cut their path *makai*, “carving gulches, gullies, and narrow canyons, tumbling over rocky cliffs in misty waterfalls, and plucking boulders and trees from their banks during storms” (State of Hawai‘i Commission on Water Resource Management 1993:7). The Keālia Stream, in following the topography of the land, feeds ‘Ōpae Kala‘ole, a *wailele* (waterfall) located within Keālia.

The streams (including tributaries) feeding the *ahupua‘a* of Keālia included the Kapa‘a (also identified as Keālia River), the Mimino, the Hala‘ula, the Kapahi, the Makaleha, the Moalepe (also Moalepi), the Keālia, the Waipahi, the Maiaki‘i, the Wai‘awa‘awa, the Kumukumu, and the Hōmaikawa‘a (see Section 1.4.1.4.1). An additional tributary within Keālia Uka was the Opeka (Hawai‘i State Archives, Interior Department, Land, 23 June 1862).

Fresh water was an important component of ancient Hawaiian culture and lifestyle. Besides the role it played in irrigating taro terraces (and thus feeding the people), streams were understood to be the physical representation of Kāne on earth. Additionally, streams were often associated with historic sites, people, events, and/or family lineages (State of Hawai‘i Commission on Water Resource Management 1993:5). Thus, streams and their associated features also constituted *wahi pana*.

The connection between land and sea was well understood by those living within the *ahupua‘a*. The boundaries of the *ahupua‘a* also included inshore fisheries, shore-side salt sources (see Section 1.4.1.5), and potable springs (Hommon 2013:13). Both seashore and ocean provided physical and spiritual sustenance (NOAA 2017) for the people of Keālia. According to Malo, the ocean was divided into smaller divisions, stretching from *ae kai* (strip of the beach over which waves ran after they had broken) to *moana* (pelagic zone) (Malo 1951:25–26).

Resources were extracted by the people of Keālia within these various zones. Within Keālia Kai, salt was gathered (see Section 1.4.1.5). Moving out into the *poina kai* (area where waves break), were the localities known as Kuna (“a variety of freshwater eel”) and Niau (“moving smoothly, swiftly, silently, peacefully”). Kuna is the Hawaiian name to a place referred to as “Donkey Beach” (Bushnell et al. 2002:36). Niau is the name of the northern side of Keālia Bay and location of Keālia Landing; it is also the name of a place in Puna district famed in chant for

its short, breaking surf (see Section 1.4.1.5). On the southern end of Kuna Bay is a *pali* (seaside cliff) known as Palikū, which is noted for fishing (Bushnell et al. 2002:37). The name Palikū is also utilized to identify “Donkey Beach.” While natural geographic locations such as streams, peaks, ridges, and seas were inherently sacred, particular man-made structures were also imbued with *mana* (supernatural or divine power).

Human-made structures utilized for religious purposes were also considered sacred sites or *wahi kapu*. During their expeditions around Hawai'i in the 1880s collecting stories from *ka po'e kahiko* (elders), Lahainaluna students stopped in Keālia and gathered information regarding *heiau* of the region (HEN 1885). Ten *heiau* were named, suggesting Keālia as well as Kapa'a Ahupua'a were probably more politically significant in ancient times. These *heiau* (spelt *haiau* by the Lahainaluna students) were identified as Pahua, Kumalae, Waiehumalama, Napuupaakai, Noemakalii, Puukoa, Piouka, Una, Mano, and Makanalimu:

3. *O Kahua ka haiau, o Kiha no ke alii, o Lukahakona no ke Kahuna.*
  4. *O Kumalae ka haiau, o Kiha no ke alii, o Lukahakona ke Kahuna.*
  5. *O Waiehuomalama ka haiau, o Kiha no ke alii, o Lukahakona no ke Kahuna.*
  6. *O Napuupaakai ka haiau, o Kiha no ke alii, o Lukahakona no ke Kahuna.*
  7. *O Naemakalii ka haiau, o keia kekahi kumu alii o Kauai nei, alike me Holoholoku.*
  8. *O Puukoa kekahi haiau [He mau unu liilii]*
  9. *O Piouka kekahi haiau [He mau unu liilii]*
- I ka wa kahiko, oiai keia mau heiau e ku ana, hoopaapa na alii nona keia mau haiau no ka wai e kahe ana i loko o keia mau haiau, aka hoi, i ka wa i hiki mai ai ka papaa la o ka aina, pio ka wai o Piouka, nolaila, nele ia i ka wai.*
10. *O Una Kekahi haiau, o Kiha no ke alii, o Lukahakona no ke Kahuna.*
  11. *O Mano kekahi haiau, o Kiha no ke alii, o Lukahakona no ke Kahuna.*

Translation (by Mary Kawena Pukui):

3. Pahua was the heiau, Kiha was the chief, Lukahakona, the priest.
4. Kumalae was the heiau, Kiha was the chief, Lukahakona, the priest.
5. Waiehuomalama was the heiau, Kiha was the chief, Lukahakona, the priest.
6. Napuupaakai was the heiau, Kiha was the chief, Lukahakona, the priest.
7. Noeamakalii was the heiau, This pne was one of the heiaus for the birth of the chiefs of Kauai, like Holoholoku.
8. Puukoa was a heiau and, 9, Piouka was a heiau; they were of the small unu type. In the olden days, when these heiaus were standing the chiefs who owned heiaus quarreled over the stream that flowed through them. When drought came the water at Piouka dried up and so it had none.
10. Una was a heiau; Kiha was the chief and Lukahakona the priest.

11. Mano was a heiau, kiha was the chief, Lukahakona the priest.

[HEN 1885:214–216]

Table 1 lists the names of the *heiau*, their location if known, their type, associated chief and priest, any comments, and the reference. The exact locations of these *heiau* remain unknown, and thus location is identified as either Kapa‘a or Keālia.

Table 1. List of *heiau* in Keālia (source: Bushnell, Shideler, and Hammatt 2003)

Name	Location	Type	Associated Chief/Priest
Pahua	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Kumalae	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Waiehumalama	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Napuupaakai	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Noemakalii	Kapa‘a/Keālia	“Heiau for birth of Kauai Chiefs, like Holoholokū”	Unknown
Puukoa	Kapa‘a/Keālia	“Unu” ( <i>heiau</i> for fishermen or an agricultural <i>heiau</i> )	Unknown
Piouka	Kapa‘a/Keālia	“Unu-type heiau”	Unknown
Una	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Mano	Kapa‘a/Keālia	Unknown	Kiha/ Lukahakona
Makanalimu	Upland of Kawaihau	Unknown	Kaumuali‘i

Besides the *heiau* identified by Lahainaluna students in the late nineteenth century, an additional religious site is known to exist within Keālia. Kawelomamaia Heiau, identified by Bennett as Site 112, was believed to have been located where the Kawelomamaia Stream runs into the sea north of Keālia (Bennett 1976:129) (see Figure 13). Thrum placed Kawelomamaia within Hōmaikawa‘a, and described the site as, “Kawalo’s [*sic*] heiau dedicated to his shark god; of pookanaka class. Foundations traceable” (Thrum 1907:41; see Section 3.1.10).

*Heiau* of *po‘okanaka* (sacrificial) classification were used ceremoniously for human sacrifices (Stokes 1991:24). Kawelo, the champion associated with this *heiau*, was also known as the “water-tailed child of Wailua,” and said to descend from a “shark family” (Green and Pukui 1936:11).

The *ali‘i* (royal) lineage of Kaua‘i is said to come from the Kawelo ‘*ohana*. While there exist many versions of the Kawelo story, the Green and Pukui version of the *mo‘olelo* (as dictated to them in Hawaiian by Kaululaau) recounts this royal lineage in part,

Mano-ka-lani-po, ruling chief of Kauai, has by his wife Ka-wai-kini a tiny son of extraordinary rank and beauty Maihuna-li‘i-iki-o-ka-poko (The little chief Maihuna) who is brought up a foster child of the high chief Holoholoku. When the boy reaches the age to marry, a wife is sought for him over all Kauai, but since none is found of sufficient beauty, the foster father, directed by a dream, launches his wife’s magic canoe transformed out of a hibiscus blossom and is carried by favorable breezes invoked from the wind gourd of his ancestor Nahiukaka to Oahu,

where he obtains the hand of Malei-a-ka-lani, a high chiefess descended from Paoa, daughter of Ihiihi-lau-akea and his wife Manana and brought up by her grandmother Olomana in the Koolau mountains, and is borne back with the bride that same day, to find that his wife has already, with the help of the little Mu and Menehune people, prepared a sumptuous feast for the marriage celebration.

Three sons are born to the two at Wailua, each birth preceded by a pregnancy craving satisfied only by the little Menehune people, who bring ice from the mountains of Hawaii, awa planted by the birds at Panaewa, honey from the mingled blossoms of lehua and pandanus to be found only on Hawaii. Kawelo is the eldest born, Kamalama the second, Ka-lau-maki the third. The boys are brought up under tapu and not allowed to play with other boys. . . [Green and Pukui in Beckwith 1970:405]

Several older, traditional place names were repurposed in the historic period; among these were Hala‘ula, Kalualihilihi, and Kumukumu. Hala‘ula (“the red pandanus”) is a place name often associated with the Hanalei and Kawaihau Districts (Soehren 2002:12; Pukui et al. 1974:36). This traditional name was given to a historic plantation camp associated with Makee Sugar Company at Keālia. Hala‘ula (see Figure 1) is also the name of the reservoir located north of the current Petition Area.

Kalualihilihi, originally understood as the name of a fishing ground in Puna district (HEN 1885:215), was later used to identify the area where Krull Dairy was once located. The Krull Dairy, established in Keālia Uka in the mid-1800s, “extended westward from the area where the Spalding Monument would later be built to nearly the vicinity of the Waipahee Slippery Slide” (Kapa‘a Elementary School 1983; Soboleski 2014).

Kumukumu is currently associated with the Kawaihau district, but may have possibly been an old *ahupua‘a* name in the ancient Puna District. According to a ten-page reminiscence of Keālia, Kumukumu means “to cut short roots or a stump” (Kaua‘i Historical Society n.d.). The name “Kumukumu” was also given to a historic plantation camp associated with Makee Sugar Company at Keālia, located in the northwest corner of the Petition Area (see Figure 1 and Figure 12). As seen in Figure 1, Kumukumu is also the name of a stream north of the Petition Area.

### 3.2.2 Kapa‘a Ahupua‘a

Kapa‘a is the name of a land section, town, ditch, elementary school, weir, and beach park in the Kawaihau District. Kapa‘a literally translates as “the solid or the closing” (Pukui et al. 1974:86). Kapa‘a was a navigational center of the Pacific during the period of voyagers, starting with Mō‘īkeha. Kapa‘a is where the famous navigator chief and first *ali‘i ai moku* (paramount chief) of Kaua‘i ended his days. This is also where his son Kilo was born, who would sail to Tahiti to fetch La‘amaikahiki, another son of Maweke so his father could see him again. Kapa‘a was also home of the legendary inventor of the crab-claw sail, Pāka‘a. Young Pāka‘a’s uncle, Mailou was a renowned bird catcher of Kapa‘a, and his mother La‘amaomao possessed the magic wind gourd, in which all the winds of the islands were kept. This was also the home of Kaililauokekoa, the daughter of Mō‘īkeha who married the flute-playing chief.

Despite being north of the religious center of Wailua, Kapa‘a was enlivened by the exploits of *akua* and early navigators. Additionally, the “remoteness” of the *ahupua‘a*, set on the fringes of a religious and political center, allowed *maka‘āinana* to enjoy a “modicum of freedom from war and



*ali‘i* authority” (Hulsman et al. 2015:7). The land division of Kapa‘a lies between the *ahupua‘a* of Keālia, Kalihiwai, Wailua (“two waters”), and Waipouli (“dark water”) (Figure 14). The *mauka* border forms along the Makaleha Mountains and includes the Lihue-Koloa Forest Reserve and Kealia Forest Reserve. This western border of Kapa‘a abuts the eastern boundary of Wailua Ahupua‘a and the northern boundary of North Oloheha Ahupua‘a. Prominent peaks include Pōhakupili (“joined stone”), Makaleha, and Kapehu‘a‘ala (a boundary point generally associated with Wailua). Two long narrow ranges, Kuilau (Misspelt by the USGS, should be Kuhilau; divides Wailua and Kapa‘a) and Kamali‘i are also contained within the upper reaches of the *ahupua‘a*. Proceeding southeast from the uppermost reaches of the Makaleha Mountains are the peaks of Pōhāki‘iki‘i (“tilted stone”) and Kamahuna (a peak on the Kamali‘i Ridge). Kapa‘a Stream forms a portion of Kapa‘a’s northern boundary, while the southern boundary abuts the *ahupua‘a* of Waipouli. The ocean comprises the entirety of Kapa‘a’s eastern border.

Kapa‘a is a relatively large *ahupua‘a*, however Māhele records show that Kapa‘a was retained as crown lands and that only nine individuals, outside of the ruling or chiefly class were awarded land parcels. From these records the names of the following *‘ili* were identified: Paikahawai (retained as government lands), Ulukiu (retained as government lands; LCA 8837), Puhi (LCA 3554, 3599), Kahanui (LCA 3554, 3599), Maele‘ele (LCA 3638), Kalolo (also Kaloko or Kaulolo) (LCA 3638, 8843), Kupanihi (also Makahaikupanihi) (LCA 3971, 3243), Kahana (LCA 3971, 3243), Awawaloa (LCA 8837), and Apopo (LCA 8843).

Several *wahi pana* are identified within the *ka‘ao* and *mo‘olelo* of Kapa‘a. Within *ka‘ao* relating Hi‘iaka’s arrival in Kapa‘a, Nounou is identified. Nounou is a *pu‘u* or mountain, known commonly as “Sleeping Giant,” with an elevation of 1241 ft. (Soehren 2016; Gay 1872a; USGS 1910). It is also a trail and a forest reserve. In *mo‘olelo* it is recalled how Kawelo’s parents taught him the “art of stone fighting (*nounou*)” so that in the second battle (fought on the mountain called Nounou) he is victorious over ‘Aikanaka” (Beckwith 1970:409). The tyrant ‘Aikanaka made his last stand on Nonou against his cousin Kaweloleimakua or Kawelo. As a fortress or *pu‘u kaua*, ‘Aikanaka was able to direct his forces while atop Nonou (Akina 1913). According to Wichman:

When ‘Aikanaka was the *ali‘i nui* of Kaua‘i, he lived in a *heiau* on top of Nounou. From here he directed the battles against his cousin Kaweloleimakua. One by one ‘Aikanaka’s fiercest warriors were overthrown and killed until finally Kawelo stood outside the *heiau* and called to ‘Aikanaka to surrender. ‘Aiakna replied that Kawelo was only a *moa* (chicken) since he was the grandson of Chied Moa and therefore a servant of the king. This so shamed Kawelo that he almost threw himself over the cliff, but his wife pulled him back. She reminded him that the small *kāhili* whose feathers brushed ‘Aikanaka’s back were made of *moa* feathers and therefore a rooster was higher than a king. When ‘Aikanaka heard this, he was so chagrined that he abandoned the kingdom and went to live in Wahiawa. Kawelo burned the *heiau* to signal that he had won the war and was the new ruler of Kaua‘i. [Wichman 1998:74-75]

The *wahi pana* of Ka‘ea is also enlivened through its association with a mythic character. This *wahi pana* is the banana grove of Palila and was believed to be located in the *mauka* region of the Kapa‘a. Ka‘ea is also identified in a boast by Makakuikalani, a chief of Maui,

*O ka lila maia ia o Kaea,  
Aole e pala i ke anahulu.*

He is the shriveled banana of Kaea,  
Which will not ripen in ten days.

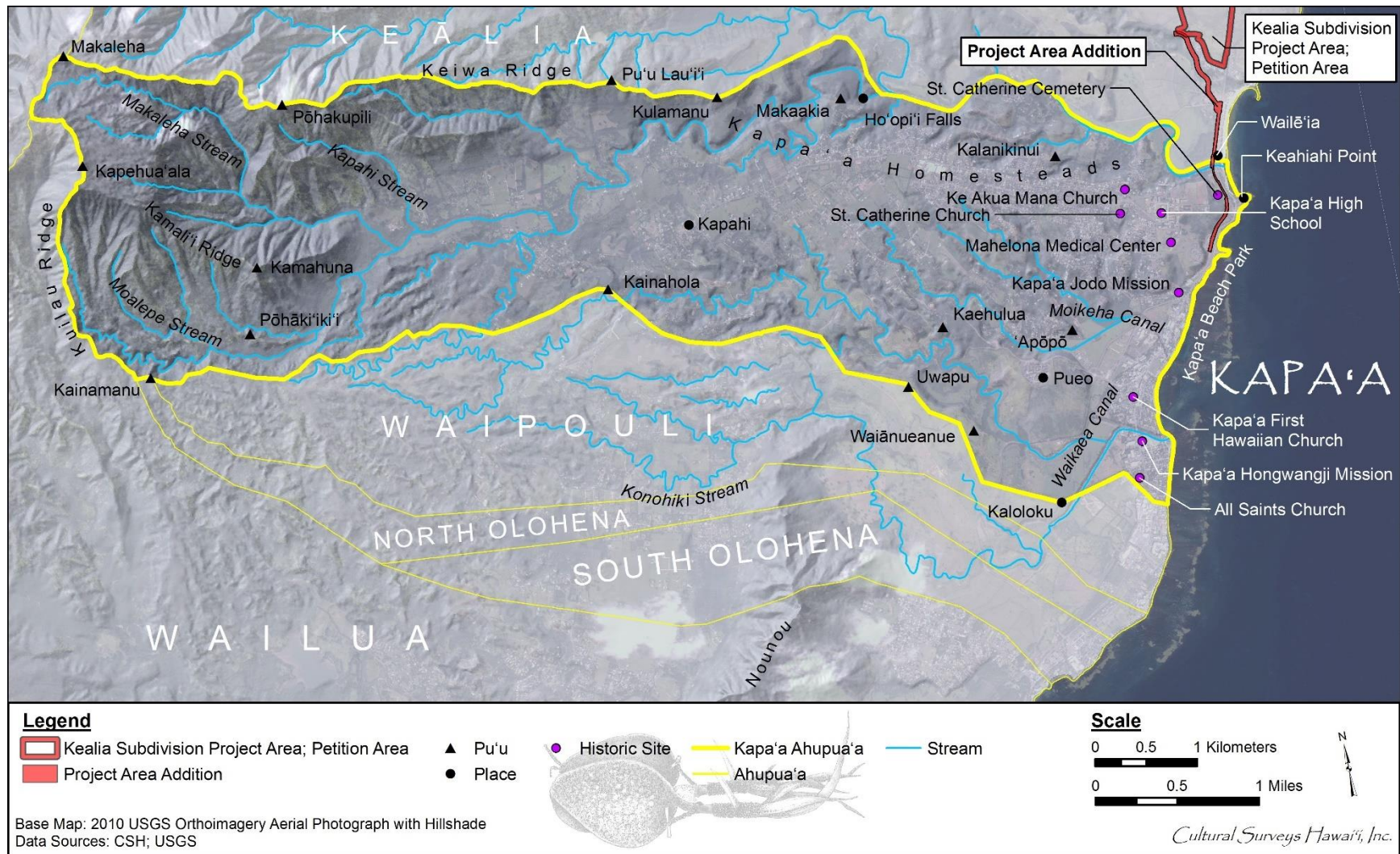


Figure 14. Locations of *wahi pana* and historic sites, including churches, within context of the larger Kapa'a Ahupua'a (USGS Orthoimagery 2010)



[Fornander 1917:334–335]

Handy and Handy have recorded the words of a *kama‘āina* who wrote to the newspaper *Ku‘oko‘a* (19 May 1913); he described the waterfalls of Makaleha, billowing clouds on Pōhakupili, and a banana grove at Ka‘ea.

As my eyes traveled on the left of the waterfall of Makaleha, I saw a billowing cloud on Pohaku-pili but could not see Palila’s banana grove, the grove spoken of in olden days,

A banana grove at Kaea,  
[where] the bananas were fully ripe.  
They did not ripen in ten days  
But were fetched from the pit  
[where they were buried for ripening].

[Handy and Handy 1972:424]

Ka‘ea is also identified as a ridge, “Where bodies of those slain in battle were buried (Boundary Commission Testimony 1:33:35); it is also described as a “survey reference point on Nounou mountain, a small open spot surrounded by hau & koa trees, [an] old burying ground” (Gay 1872a; Commission of Boundaries 1872:33). John Papa ‘Ī‘ī also commented that “Left at Kaea are the bones of the traveler” (‘Ī‘ī 1959:157). Utilizing the variant of Ka‘ea, Waihoikaea, ‘Ī‘ī states, “So it is that the bones of the traveler are at Waihoikaea, which lies above Nounou, on the east side of the hill (‘Ī‘ī 1959:83). *Iwi* (ancestral remains) are also mentioned again by Pukui and Elbert, who, in referencing Ka‘ea cite, “A waiho i ka ‘ea nā iwi o kama hele, the traveler’s bones are left in the air [said of one dying in a foreign land]” (Pukui and Elbert 1986:36).

In the *mo‘olelo* of Pāka‘a and the Wind Gourd of La‘amaomao, Keahiahi Point is identified. Keahiahi Point is the rocky headland at the north end of Kapa‘a, where the legendary Paka‘a (who is said to have designed the crab-claw sail for fishing canoes) was brought up with his mother La‘maomao, possessor of the Wind Gourd, and his uncle Mailou, a bird catcher. This is where the first Kapa‘a School was once located. It is also near LCA 8837, identified in records as the *‘ili* of Awawaloa.

Stands or groves of natural resources, as evidenced by Palila’s banana grove, could also acquire legendary status. Within Kapa‘a, one such famed natural resource was *kalukalu* (sedge grass). *Kūmoena kalukalu Kapa‘a*,” or “Kapa‘a is like the *kalukalu* mats,” is a line from a chant recited by Lonoikamakahiki. *Kalukalu* is a sedge grass, used for weaving mats (Fornander 1917:4(2):318–19). Pukui (1983:187) associates the *kalukalu* with lovers in “Ke *kalukalu* moe ipo o Kapa‘a: *The kalukalu of Kapa‘a that sleeps with the lover.*” According to Wichman (1998:84), “a *kalukalu* mat was laid on the ground under a tree, covered with a thick pile of grass, and a second mat was thrown over that for a comfortable bed,” thus the association with lovers. Kaua‘i was famous for this particular grass, and it probably grew around the marshlands of Kapa‘a. It is thought to be extinct now, but an old-time resident of the area recalled that it had edible roots, “somewhat like peanuts.” Such ethnographic data indexes the possible use of *kalukalu* as a famine food (Kapa‘a Elementary School 1933: vi). (See Section 3.4.2).

In traditional Hawaiian society, natural resources were also utilized for religious practice (e.g. *‘ōhi‘a lehua* (*Metrosideros*) and *olonā* (*Touchardia latifolia*) for temple images; *pua‘a* (pig), *‘ilio*

(dog), and *moa* (chicken) as *mōhai* (offerings) ). According to ethnobiologist Beatrice H. Krauss,

Religion was part of every phase of life of ancient Hawaiians. They had many gods to whom they called for help in their individual endeavors and guidance in their activities. *Ali‘i*, warriors, craftsmen, and commoners all had their particular gods. . . . The numbers of gods that presided over the activities of mortal Hawaiians, and over one place or another, were countless. Besides the gods that the Polynesians brought with them, other gods were created locally by the Hawaiians themselves. Ancestors were deified; chiefs were deified immediately after death. Spirits (*‘uhane*) were recalled from the other world by means of prayers and offerings and became special kinds of gods, *‘unihipili*. The personal or family gods were called *‘aumākua*. . . Those were the invisible gods. Other gods were represented by material objects: idols made of stone, wood, or feathers. [Krauss 1993:112-114]

Carved wooden images, such as those with supporting props or the larger temple images, could be placed in the ground or in front of the oracle tower of a *heiau*. As discussed in Section 3.2.1, ten *heiau* were located within either Kapa‘a or Keālia, however, the exact locations of these *heiau* remain unknown. The general locations of two of the *heiau* correlate with *wahi pana* of Kaluluomoikeha (see Section 3.1.5) and Kuahiahi (see discussion of Keahiahi above). Kaluluomoikeha is thought to be the general area near the Mō‘ikeha Canal and the present day Hotel Coral Reef Resort. *Heiau* that can be definitively associated with Kapa‘a are listed in Table 2.

Table 2. List of *heiau* in Kapa‘a (source: Bushnell et al. 2003)

Name	Location	Type	Associated Chief/Priest
Kaluluomoikeha	Kapa‘a	Unknown	Mō‘ikeha
Kuahiahi	Kapa‘a (where government school stands now)	Unknown	Kiha/ Lukahakona
Mailehuna	Kapa‘a (Mailehuna is the area of the present day Kapa‘a School)	Unknown	Kiha, Kaumuali‘i/ Lukahakona
Pueo	Kapa‘a	Unknown	Kiha, Kaumuali‘i/ Lukahakona

With the introduction of Christianity by foreign missionaries, traditional Hawaiian religious practices were either replaced or hybridized. Christianity was introduced to Kaua‘i in the “1820s by Congregational missionaries from New England and the conversion of the Hawaiian monarchs (Hulsman et al. 2015:71). Queen Deborah Kapule was among the early converts, establishing the first Christian Church in Kapa‘a in 1836 (Hulsman et al. 2015:71). The expansion of sugar cane production and the demand for workers led to an influx of immigrants to the Kapa‘a area:

With the arrival of the immigrants came a diversity of religious practices. The Portuguese and Filipino brought Catholicism. The Chinese, Koreans, and Japanese introduced Buddhism and Taoism. Like the early Christians, early services were

held in camps and in the houses of the faithful, until the congregation could afford more permanent sites. [Hulsman et al. 2015:71]

As a town built upon an ethnically diverse community, many of the storied places of Kapa'a Town have no traditional Hawaiian associations. These locations have become storied due to their association with religious practices and for the ways that they have figured largely within the community's collective memories and identity. Culturally significant sites include churches, schools, hospitals, and parks. Religious institutions and/or religious sites within Kapa'a include, Ke Akua Mana Church, St. Catherine's Church and cemetery, Kapa'a Jodo Mission, Kapa'a Hongwanji Mission, Church of Jesus Christ of Latter-day Saints, All Saints Church, and Kapa'a First Hawaiian Church and cemetery (see Figure 14).

Among the earliest churches in the area was the Kapa'a First Hawaiian Church:

Kauai's Queen Deborah Kapule, wife of Kaumuali'i, King of Kaua'i, established the Kapa'a First Hawaiian Church in 1836 on the grounds of the former Coco Palms Hotel in Wailua. Known as Luakini O Mo'ikeha after a chief, the church was initially built for the ali'i, with the commoners not allowed inside. This was the first Christian church in the area. The original grass-hut church was replaced with a wooden building, and in 1880 it was dismantled and moved two and a half miles to its present site in the middle of Kapa'a town. In 1948, a new building was dedicated and a multipurpose center completed in 1967. [Hulsman et al. 2015:72]

Immigrants who arrived to Kapa'a to work the sugar cane plantations, such as the Portuguese, the Filipino, and the Puerto Ricans, hailed from predominantly Catholic countries. As such, many were devout Catholics, spurring forward the establishment of St. Catherine's Catholic Church in Keālia:

The church was built and dedicated in 1887 on scenic property overlooking Kealia Bay. The land and materials were donated by the Makee Sugar Company, with plantation workers providing labor. Father Emmeran Schulte designed the Gothic wooden structure with three abutments on each side supporting the high-aalted interior. . . The landscape lacked vegetation, a result of cutting trees for firewood, overgrazing, and the limited amount of plant life at the time. The original church has undergone major changes in its 71-year history. [Hulsman et al. 2015:77]

Although the Church of England had maintained a presence within Hawai'i since 1862, it wasn't until 1924 that the first Anglican church on Kaua'i was established at Kealia:

It was an interracial church, whose congregation voted on the name All Saints. The church struggled for months to find a location until Reverend [Juelle J.] Willey accepted a gift of approximately five acres in Kapa'a town from Mr. and Mrs. Henry Digby Sloggett. All Saints Episcopal Church and the adjacent Memorial Church School building were designed by architect Guy N. Rothwell and built in December 1925. [Hulsman et al. 2015:80]

In addition to the numerous Christian institutions, Buddhist temples were also established in the Keālia and Kapa'a area:

In 1910, Hongwanji Buddhist Temple was established in Kealia for Japanese immigrants. The minister initially held services in various homes in the

Kealia/Kapaa area. By 1922, a temple was built in Kapa‘a on land leased from the County of Kaua‘i. The temple was destroyed by a fire in 1929. In 1938, three parcels of land were purchased from the Territory of Hawai‘i. . . In 1972, celebrating the 50<sup>th</sup> anniversary, a new temple was built by local contractors Kaori Kano, Ichiji Matsumoto, and Hideo Tanaka. . . During the annual O bon season for commemorating the deceased, the temple hosts traditional dances. [Hulsman et al. 2015:81]

In addition to churches, schools such as Kapa‘a School (in the vicinity of today’s Kapa‘a Elementary and High School) were subsequently established. Japanese language schools were established on plantation lands and the St. Catherine’s Catholic School was opened on the corner of Kawaihau and Hauaala Road in 1946 (Hulsman et al. 2015:83). As students gathered in the classrooms, health issues became a significant concern. As Hulsman et al. points out, “In the early 20<sup>th</sup> century, tuberculosis was the major health problem in the islands for students and their families” (2015:90). Due to the nature of the bacterial disease, it was necessary to isolate the infected in order to provide proper care and control transmission:

The territorial legislature set aside 120 acres on a bluff above Kapa‘a [for a treatment facility], and the Kaua‘i Sugar Planter’s Association, Albert and Emma Kauikeolani Wilcox, and the County of Kaua‘i provided funds for its construction. Samuel Mahelona Memorial Hospital was built in 1917 as a memorial to Samuel Mahelona, son of Emma Mahelona Wilcox, who died of tuberculosis as a young man. [Hulsman et al. 2015:90]

Today, the Mahelona Medical Center is Kaua‘i’s Eastside Critical Access Hospital and provides a wide range of services for the community (see Figure 14).

### 3.3 ‘Ōlelo No‘eau (Proverbs)

Hawaiian knowledge was shared by way of oral histories. Indeed, one’s *leo* (voice) is oftentimes presented as *ho‘okupu* (“to cause growth,” a gift given to convey appreciation, to strengthen bonds); the high valuation of the spoken word underscores the importance of the oral tradition (in this case, Hawaiian sayings or expressions), and its ability to impart traditional Hawaiian “aesthetic, historic, and educational values” (Pukui 1983:vii). Thus, in many ways these expressions may be understood as inspiring growth within reader or between speaker and listener:

They reveal with each new reading ever deeper layers of meaning, giving understanding not only of Hawai‘i and its people but of all humanity. Since the sayings carry the immediacy of the spoken word, considered to be the highest form of cultural expression in old Hawai‘i, they bring us closer to the everyday thoughts and lives of the Hawaiians who created them. Taken together, the sayings offer a basis for an understanding of the essence and origins of traditional Hawaiian values. The sayings may be categorized, in Western terms, as proverbs, aphorisms, didactic adages, jokes, riddles, epithets, lines from chants, etc., and they present a variety of literary techniques such as metaphor, analogy, allegory, personification, irony, pun, and repetition. It is worth noting, however, that the sayings were spoken, and that their meanings and purposes should not be assessed by the Western concepts of literary types and techniques. [Pukui 1983:vii]

Simply, *‘ōlelo no‘eau* may be understood as proverbs. The Webster dictionary notes it as “a phrase which is often repeated; especially, a sentence which briefly and forcibly expresses some practical truth, or the result of experience and observation.” It is a pithy or short form of folk wisdom. Pukui equates proverbs as a treasury of Hawaiian expressions (Pukui 1995:xii). Oftentimes within these Hawaiian expressions or proverbs are references to places. This section draws from the collection of author and historian Mary Kawena Pukui and her knowledge of Hawaiian proverbs describing *‘āina* (land), chiefs, plants, and places. The following proverbs concerning Keālia and Kapa‘a come from Mary Kawena Pukui’s *‘Ōlelo No‘eau* (Pukui 1983).

### 3.3.1 *‘Ōlelo No‘eau* #645

*He ‘iwa ho‘ohaehae nāulu.*

An *‘iwa* that teases the rain clouds.

A beautiful maiden or handsome youth who rouses jealous envy in others. [Pukui 1983:73]

The Nāulu rain, as referenced in the above *‘ōlelo no‘eau*, is a known rain of Keālia, Kaua‘i.

### 3.3.2 *‘Ōlelo No‘eau* #744

*Hele ka ho‘i a hiki i Kealia, ua napo‘o ka lā.*

When one reaches Kealia at last, the sun is set.

Said of one who procrastinates. A play on *alia* (to wait). [Pukui 1983:82]

### 3.3.3 *‘Ōlelo No‘eau* #1121

*Hu‘e a kaua, moe i ke awakea.*

A battle attack, then sleep at midday.

The sleep of death. When Kawelo fought Kauahoa, the latter uttered this meaning that he would fight back until his opponent was dead. [Pukui 1983:120]

As Kawelo fought Kauahoa, he implored him to recall fond memories shared together at the *wahi pana* of Waipahe‘e in Keālia. Kawelo’s attempts to recall their boyhood excursions together were futile, however, as Kauahoa swore to fight to the death.

### 3.3.4 *‘Ōlelo No‘eau* #1347

*Ka i‘a ka‘a poepoe o Kalapana, ‘īna‘i ‘uala o Kaimū.*

The round, rolling fish of Kalapana, to be eaten with sweet potato of Kaimū.

The *kukui* nut, cooked and eaten as a relish. This is from a *ho‘opāpā* riddling chant in the story of Kaipalaoa, a boy of Puna, Hawai‘i, who went to Kaua‘i to riddle with the experts there and won. [Pukui 1983:147]

This *‘ōlelo no‘eau* recalls the *ka‘ao* of Kaipalaoa, *ke Keiki Hoopapa*. On his way to battle wits with the *ho‘opāpā* experts of Kaua‘i, Kaipalaoa passes through the *ahupua‘a* of Keālia.

### 3.3.5 *‘Ōlelo No‘eau* #1450

*Ka lulu o Moikeha i ka laulā o Kapa‘a.*

The calm of Moikeha in the breadth of Kapa‘a.

The chief Moikeha enjoyed the peace of Kapa‘a, Kaua‘i, the place he chose as his permanent home. [Pukui 1983:157]

Kapa‘a was the home of the *ali‘i*, Mo‘ikeha. Although born on Hawai‘i Island, Mo‘ikeha sailed back to Kahiki (Tahiti), the home of his grandfather Maweke. After a period, Mo‘ikeha sailed back to Hawai‘i, establishing his permanent home at Kapa‘a. Some time later, Kila, the son of Mo‘ikeha travels back to Kahiki, seeking out his grandfather Maweke. When Maweke inquires as to how Mo‘ikeha is enjoying his new home, Kila offers a chant. Kila’s *oli* describes the lands of Keālia, including the heavy taros of Keahapana and the crooked surf of Makaiwa (see Section 3.4.1).

### 3.3.6 ‘Ōlelo No‘eau #1488

*Ka moku kā‘ili lā o Manokalanipo.*

The sun-snatching island of Manokalanipo.

Kaua‘i, the northwesternmost island of the group, beyond which the sun vanishes at dusk. Manokalanipo was an ancient ruler of Kaua‘i. [Pukui 1983:161]

Begotten from the union of Manokalanipo and Kawaikini, was chief Maihuna. When the young chief was of age to marry, the hand of Maleiakalani, descendant of Pa‘ao, was sought. From the union of Maihuna and Maleiakalani, Kawelo was born. Various *mo‘olelo* illuminate Kawelo’s connection to both Kapa‘a and Keālia.

### 3.3.7 ‘Ōlelo No‘eau #1523

*Kāpae ke kaua e ka hoahānau.*

Let kinsman cease fighting each other.

Said by Kawelo to his opponent and kinsman, Kauahoa. [Pukui 1983:164]

This ‘*olelo no‘eau* once again recalls the *mo‘olelo* of Kawelo and Kauahoa at Waipahe‘e Falls. Kawelo’s attempts to cease battle with his kinsman, Kauahoa (see Section 3.1.8) is evidenced within the proverb above.

## 3.4 Oli (Chant)

*Oli*, according to Mary Kawena Pukui (Pukui 1995:xvi–xvii), are often grouped according to content. Chants often were imbued with *mana* (spiritual power); such *mana* was made manifest through the use of themes and *kaona*. According to Pukui, chants for the gods (prayers) came first, and chants for the *ali‘i*, “the descendants of the gods,” came second in significance. Chants “concerning the activities of the earth peopled by common humans,” were last in this hierarchy (Pukui 1995:xvi–xvii). Emerson conversely states,

In its most familiar form the Hawaiians—many of whom [were lyrical masters]—used the *oli* not only for the songful expression of joy and affection, but as the vehicle of humorous or sarcastic narrative in the entertainment of their comrades. The dividing line, then, between the *oli* and those other weightier forms of the *mele*, the *ino*, the *kanikau* (threnody), the *pule*, and that unnamed variety of *mele* in which the poet dealt with historic or mythologic subjects, is to be found almost wholly in the mood of the singer. [Emerson 1965:254]



While *oli* may vary thematically, subject to the perspective of the *ho‘opa‘a* (chanter), it was undoubtedly a valued art form used to preserve oral histories, genealogies, and traditions, to recall special places and events, and to offer prayers to *akua* (gods) and *‘aumākua* (family gods) alike. Although *oli* often underpins religious practice, it also “. . . created a mystic beauty . . . confirming the special feeling for the environment among Hawaiians: their *one hānau* (birthplace), their *kula iwi* (land of their ancestors) (Alameida 1993:26)”

### 3.4.1 Chant of Puna

Adjacent to Keālia was the *ahupua‘a* of Kapa‘a. Both Kapa‘a and Keālia belonged to the ancient Puna District. Kapa‘a was also the home of the legendary *ali‘i*, Mo‘ikeha. Mo‘ikeha’s love for Kapa‘a Ahupua‘a and the greater Puna Moku is recalled in *‘ōlelo no‘eau* #1450, “*Ka lulu o Moikeha i ka laulā o Kapa‘a* (The calm of Moikeha in the breadth of Kapa‘a).”

Born at Waipi‘o on the island of Hawai‘i, Mo‘ikeha sailed to Kahiki (Tahiti), the home of his grandfather Maweke, after a disastrous flood. On his return to Hawai‘i, he settled at Kapa‘a, Kaua‘i. Mo‘ikeha’s subsequent union with the Kaua‘i chiefess Ho‘oipoikamalani, begot three sons. Of these three boys, Kila was his favorite. Inevitably, Kila was sent back to Kahiki by his father Mo‘ikeha. His mission was to slay his father’s old enemies and retrieve a foster son, the high chief La‘amaikahiki (Handy and Handy 1972:424; Beckwith 1970:352–358; Kalakaua 1888:130–135; Fornander 1916:4(1):160).

Akina (1913) elaborates further on this favorite son, telling the story of how Kila stocked the islands with *akule* (big-eye scad; *Selar crumenophthalmus*), *kawakawa* (mackerel tuna; *Euthynnus affinis*) and *‘opelu* (mackerel scad; *Decapterus macarellus*) fish. When Kila finally reached Kahiki, he sought out Maweke. He reveals to Maweke that he is in fact the child of Mo‘ikeha, and thus the great-grandchild of Maweke. When Maweke asks Kila if Mo‘ikeha is enjoying himself, Kila answers with the following chant of Puna:

My father enjoys the billowing clouds over Pohaku-pili,  
 The sticky and delicious poi,  
 With the fish brought from Puna,  
 The broad-backed shrimp of Kapalua,  
 The dark-backed shrimp of Pohakuhapai,  
 The potent awa root of Maiakii,  
 The breadfruit laid in the embers at Makialo,  
 The large heavy taros of Keahapana  
 The crooked surf of Makaiwa too  
 The bending hither and thither of the reed and rush blossoms,  
 The swaying of the kalukalu grasses of Puna  
 The large, plump, private parts of my mothers,  
 Of Hooipoikamalani and Hinau-u,  
 The sun that rises and sets,

He enjoys himself on Kauai,  
All of Kauai is Moikeha’s.

[Akina 1913:6]

Maweke is delighted, and when the boy is questioned as to his purpose, Kila tells his great-grandfather he is seeking fish for his family. Maweke tells Kila to lead the fish back to his homeland. This is how Kila led the *akule*, *kawakawa*, and ‘*opelu* to Hawai‘i.

This chant shares many similarities to the *oli* recounted to Lahainaluna students in the late 1800s (see Section 1.4.1.5). The Lahainaluna students, however, do not attribute this chant to Prince Kila, nor do they relate any *mo ‘olelo* connected to Maweke, Mo‘ikeha, and/or Kila.

### 3.4.2 *Kalukalu* Grass of Kapa‘a from Lonoikamakahiki

The following chant is taken from “How Lonoikamakahiki Revealed the Bones of the Chiefs Killed by Keawenuiaumi.” Within this *oli*, there is a reference to the *kalukalu* grass of Kapa‘a. In Fornander’s version, Hauna produces the bones of another chief from a gourd (the chief of Kau) and says to Lonoikamakahiki: “Here is another chief, that of Kau. He has also lived with us, and seeing how few we were, deserted, and at the battle of Puumane was slain by Keawenuiaumi.” He secured the bones in his hands, and he chanted:

<i>Aloha Kahalemilo o ka la la,</i>	Dear is the house of Milo in the sun,
<i>Hale pakaiaulu o Moanauli.</i>	The elevated house of Moanauli.
<i>Uli hewa ka ili</i>	Your skin is bruised without cause,
<i>Mehe mea i moe a ipo la.</i>	Bruised as though by a lover.
<i>No Hanalei nei aloha,</i>	This lover is from Hanalei,
<i>No kuu kane lau awa o Puna.</i>	My lover of the awa leaf of Puna.
<i>Kumoena kalukalu Kapaa,</i>	Kapaa is like the kalukalu mats,
<i>Ohai huli Papiohuli</i>	Where the ohai turns at Papiohuli
<i>Eia mai ua mea la!</i>	Here are some more!

[Fornander 1916-1919:318-319].

## 3.5 *Mele* (Song)

There exist a few *mele* that concern or mention either Keālia, Kapa‘a, and/or Kawaihau (Puna) Moku. These particular *mele* may also be classified as *mele wahi pana* (songs for legendary or historic places). *Mele wahi pana* such as those presented here may or may not be accompanied by *hula* (dance) or *hula wahi pana* (dance for legendary or historic places). As the Hula Preservation Society notes,

Hula Wahi Pana comprise a large class of dances that honor places of such emotional, spiritual, historical, or cultural significance that chants were composed for them. Only the composers of the chants could know the deepest meanings, as they would be reflections of their feelings and experiences . . . Since the subjects of Wahi Pana compositions are extremely varied, their implementation through

hula are as well. Coupled with the differences from one hula style and tradition to the next, Hula Wahi Pana can be exceptionally diverse. They can be done sitting or standing, with limited body movement or wide free movement; with or without the use of implements or instruments; with the dancers themselves chanting and/or playing an implement or being accompanied by the *ho‘opa‘a* [drummer and *hula* chanter (memorizer)]. Beyond the particular hula tradition, what ultimately determines the manner in which a Hula Wahi Pana is performed are the specific place involved, why it is significant, the story being shared about it, and its importance in the composer’s view. [Hula Preservation Society 2014]

### 3.5.1 Waipahe‘e (Slippery Water)

This *mele* was composed by James Von Ekekela. Inspired by a bass voice within a (unnamed) quartet, the *haku mele* (composer), Von Ekekela wrote this song specifically for the group (Huapala n.d.). The *mele* speaks of the lovely freshness of Keālia, its slippery slide, as well as the freshwater shrimps or *ōpae* known to populate its *mauka* streams.

<i>Ho‘oihihi kani mana ‘o</i>	One’s mind is fascinated
<i>I ka u‘i nohea o Kealia</i>	By the lovely freshness of Kealia
<i>Ia u‘i e walea ana</i>	Loveliness to enjoy
<i>I ka nani a ‘o Waipahe‘e</i>	In the beauty of Waipahe‘e
<i>Hui:</i>	Chorus:
<i>E he he he he he</i>	A ha ha ha ha ha
<i>E pakika, e pahe‘e</i>	Slip, slide
<i>Kahi wai kili ‘opu</i>	That waterfall for diving feet first
<i>Kahi wai kili ‘opu</i>	That waterfall for diving feet first
<i>A ‘o Waipahe‘e</i>	Waipahe‘e
<i>Na ‘opae kua hāuli</i>	The black freshwater shrimp
<i>‘O‘o pohaku no Hapai</i>	Stone digging tools from Hapai
<i>Me na uhi mālelehu</i>	With the twilight mist
<i>‘Thi ‘ihi a ‘o Makiala</i>	Reverenced is Makiala
[Huapala n.d.]	

### 3.5.2 Lanakila Kawaihau

This *mele*, composed in 1903 by Mekia Kealaka‘i, celebrated the political victory of Colonel Samuel Parker and Prince Jonah Kūhiō Kalaniana‘ole. The district of Kawaihau is mentioned metaphorically throughout the song. There have been different interpretations of the song over the years. Mary Kawena Pukui details the origination of “Kawaihau,” explaining that during the reign of King David Kalākaua, a *haole* (foreign) woman would often visit the court. During her visits, she was offered refreshment, usually an alcoholic beverage. Refusing the “strong beverage,” she

would then request ice water (Huapala n.d.). As a result, she was given the nickname Ka Wahine Kawaihau (Huapala n.d.):

The ice water, “Kawaihau,” became an inside joke and was used as the name of the club of young men who supported the King. There were 15 members of this choral club of which Prince Leleiohoku, the King’s younger brother, was also a member. The hui refers to the singing landshells whose song is most beautiful just before dawn. [Huapala n.d.]

The *hui* (group), with the help of Captain James Makee, would later attempt to establish a large scale sugar corporation on the east side of Kaua‘i. Makee’s son-in-law, Colonel Zephaniah Swift Spalding would later take on operations and establish a sugar mill at Keālia.

<i>Ke lei nei ko lei nani</i>	Your beautiful lei adorns you
<i>A ke onaona e hea mai nei</i>	Whose sweetness beckons
<i>Walea ana i ka inu wai</i>	Delighting in a sip of water
<i>A he ‘ai ha ‘aheo no Kawaihau</i>	And it’s a proud win for Kawaihau
<i>Hui:</i>	Chorus:
<i>Inu i ka wai māpuna</i>	Drink of the spring water
<i>Ha ‘aheo i ko lei lehua</i>	Proud in your lehua lei
<i>A he leo no pūpū kani oe</i>	Land shells trill the refrain
<i>Ua lanakila ‘o Kawaihau</i>	Kawaihau is victorious
<i>Nohenohea ia mau pua</i>	Those blossoms are so handsome
<i>A he kumu o ke ‘ala</i>	And a source of sweet perfume
<i>A na ‘u na ke onaona</i>	And it was I, the charming one
<i>I ho ‘okani ke kaula kia</i>	Who made the reins sing

[Wilcox et al. 2003:145]

Other explanations of the *mele* have focused heavily upon the political victory of Prince Jonah Kūhiō. Prince Kūhiō’s victory is compared to the sweetness of Kawaihau, Kaua‘i. Just as Kawaihau is the source for the sweet fragrance, Jonah Kūhiō (“the charming one”) is the reason for the accolades, he is the source, the individual responsible for the great political victory (Huapala n.d.).

### 3.5.3 Hula o Makee

According to Wilcox et al. (2003), the following *mele* tells “the true story of the foundering of the ship *Makee* (pronounced “Makī”) in the waters off of Keālia. The wreck was soon discovered by another ship, the *Malulani*. Alerted by a whistle from the *Malulani*, *kama‘āina* within this portion of coastal Kawaihau reacted quickly, launching a full-scale rescue mission. The wreck of the *Makee* was steered off the reef by Hailama, a well-known steersman and fisherman from

Ha'ena (Wilcox et al. 2003:79). However, damages to the ship were so severe that it sank soon after its removal from the reef.

This *mele* is also believed to be rich with *kaona* (hidden meanings), more specifically, there may be suggestions of love, illicit love, and love lost within the lyrics (Wilcox et al. 2003:79).

According to Wilcox et al. (2003),

An event like this would inspire composers, and indeed several versions and attributions exist, providing a good example of oral tradition and its influence on Hawaiian song as a collaborative process. Two versions were published in 1903, one attributed to James Ka'opuiki and the other, longer version, unattributed. A slightly different version in *Nā Mele o Hawai'i Nei*, in which the Makee founders off Kapa'a, is not attributed, but the Huapala website credits that version to William S. Ellis. Linda Sproat was told by her grandmother, Julia Akana, that Amy Hobbs Mahikoa from Kalihiwai wrote this song. [Wilcox et al. 2003:79]

Historical accounts, however, place the sinking of the *Makee* near Kapa'a Beach Park. According to an article published in the *Ka Maka'āinana* on 4 January 1897, the *Malulani* accompanied the *Makee* (damaged but still sailable) into Kapa'a:

*Po Poakolu iho la, i ka mokumahu Kimo Maki ma Kapaa, Kauai, i ka wa a ka makani oolea e pa ana i o kakou nei a me Laila pu, ua puhiia aku oia no kula oiai pae oia e hoao ana o hoopuka iwaho. No elua ona hora i paa ai a iloko o ia manawa, ua pau kona ukaua i ka hue ia a ua hiki aku ka Malulani e kokua iaia. I ka nanaia ana o lalo ae, ua ikeia ua lilo aku kahi wahi o ke kila, elua kuli a me kekahi kua o mua i owa, a ua puka ae o lalo ona he ekolu paha kapuai malalo aku o ka ilikai i ke kumu o ka heleuma. Ua ukali mai ka Malulani iaia a hoea mai la lanei i kakahiaka Poalima iho nei. E hookauia aku ana oia iluna o ke ala hukimoku.* [Ka Maka'āinana, 4 January 1897:8]

Tuesday Night past, when the steamship James Makee was in Kapa'a, Kaua'i, while the strong winds were blowing upon us and there as well, it was blown towards land while it attempted to head out to sea. It was stuck for two hours, and during this time, its cargo was unloaded, and the *Malulani* arrived to give assistance. Looking from the underside, it was seen that part of its keel [kila] was lost, two knees [kuli] and one beam [kua] at the stem were split, and there was a hole underneath, perhaps three feet below sea level at the base of the anchor. The *Malulani* accompanied it until arriving here in the morning of this past Friday. It will be placed atop the marine railway. [Translation by Huapala n.d.]

The *Ka Maka'āinana* article may have also influenced the *mele*, *Hula o Makee*. The *mele* below, however, places the foundering of the *Makee* in the waters off of Keālia.

<i>'Auhea iho nei lā 'o Makee?</i>	Where has the Makee gone?
<i>A ka Malulani lā e huli hele nei</i>	The Malulani looks everywhere
<i>Eia 'o Makee kaha i ka pa'a</i>	Here's the Makee, sweeping in to become stuck
<i>Ka waiho kapakahi i ka 'āpapa</i>	Left keeled over on the reef

<i>‘O ke kani honehona a ke oeo</i>	Softly sounds the alarm
<i>A e ha ‘i mai ana lā i ka lono</i>	Telling the news to be heard
<i>‘O ka hola ‘umi ia o ke aumoe</i>	It’s ten o’clock at night
<i>Kā‘alo Malulani ma waho pono</i>	The Malulani passes by, just outside
<i>Kū mai Hailama pa‘a i ka hoe</i>	Hailama stands and grasps the paddle
<i>I mua a i hope ke kūlana nei</i>	The ship rocks forward and back
<i>A he e‘e kakeke mai nei au</i>	And I’m a slip-sliding passenger
<i>No nēia ‘oneki nui ākea</i>	On this great, wide deck
<i>Ākea ka moana nou e Makee</i>	The ocean is too broad for you, Makee
<i>Ma ke kai holuholu o ka ‘Ie‘ie</i>	And the rolling seas of ‘Ie‘ie channel
<i>Ha‘ina ‘ia mai ana ka puana</i>	Tell the refrain
<i>‘Auhea iho nei lā ‘o Makee</i>	Where has the Makee gone?

[Wilcox et al. 2003:79]

### 3.5.4 Kealia

Composed by Patrick Cockett, this *mele* ‘auana (modern song) recalls Keālia’s plantation days. A brief description of the song is contained within the liner notes for Keola Beamer’s *Wooden Boat* album (1994). Beamer identifies Keālia as a “small valley on the outskirts of Kapa‘a” (Beamer 1994). The notes explain that a visitor to Keālia might see only a peaceful, rural community and quickly assume the locality has been such for generations. However, Beamer points out that “a hundred years ago, the valley was exploding with the industrial revolution and sugar cane” (Beamer 1994). The *mele* serves as a reflection on the passage of time and the many changes that Keālia Ahupua‘a has witnessed over the years. As a reflection of the past, Beamer’s arrangement of the composition is sweet and tender; he further notes the “dream quality pervades like ‘leaves blowing softly in the wind’” (Beamer 1994).

Kealia. . . all the years are passing by and now you’re sleeping  
you lay dreaming.

Kealia. . . all the people that you knew, almost forgotten

In your lullaby of hill and winding stream

Memories like leaves will drift away

and I will feel your soft caress. . . all of my days

Far away, it seems so far away

far away. . .

Can you hear the voices calling your name

from the time the century turned to sugar cane.

Kealia. . . all the years are passing by and now you’re sleeping you lay dreaming

Kealia. . . all the people that you knew, almost forgotten  
in your lullaby of hill and winding stream  
Memories like leaves will drift away  
and I will feel your soft caress. . . all of my days  
Far away, it seems so far away  
Far away, it seems so far away  
far away. . .  
(repeat)

[Beamer 1994]

### 3.5.5 Waipahe'e Falls

The following jubilant ditty, recorded by Israel Kamakawiwo'ole and The Makaha Sons of Ni'ihau, was included within their *Unforgettable* album (2008). This *mele* fondly recalls a day spent at the *wahi pana* known as Waipahe'e Falls. The falls, also known as Kaua'i's slippery slide, are located within Keālia Uka.

Hike a trail along the mountainside,  
There you'll find Kauai's slippery slide,  
Waipahe'e, Waipahe'e Falls,  
Can you hear rushing waters?  
Near the valley down below,  
Does the sky see the clouds?  
In Waipahe'e Falls

Chorus:

There she stood with the sun shining up on her,  
Children laughing all day as they slide all the way,  
Hear the laughter in the air,  
Birds sing everywhere,  
Waipahe'e, Waipahe'e Falls  
Feel the breeze of the wind,  
And your heart it starts to sing,  
Touch the leaves wet with dew,  
Rain falling through,  
As I leave behind this precious land,  
I'll remember how she stood so grand,



Waipahe'e, Waipahe'e Falls

(Repeat Chorus)

Waipahe'e, Waipahe'e Falls.

[Kamakawiwo'ole and The Makaha Sons of Ni'ihau 2008]

## Section 4 Traditional and Historical Accounts

### 4.1 Pre-Contact to Early 1800s

Although Kapa‘a and Keālia pale in comparison to their neighbor to the south, Wailua, the religious center in early Kaua‘i history, Kapa‘a was the center of the voyaging chiefs in the Pan-Pacific traveling era (11<sup>th</sup> and 12<sup>th</sup> centuries). Kapa‘a also was a more secular center during those early times.

The coming of Maweke and his sons to the Hawaiian Archipelago dates back to approximately the 10th and 11th centuries (Fornander 1996:3). Maweke and his kin are believed to have initially occupied the whole of O‘ahu, however, they eventually voyaged to and subsequently occupied the islands of Kaua‘i, Maui, and Moloka‘i shortly after. The bloodline of Maweke has been noted as among the highest of Hawaiian *ali‘i*; it was from his line that Mō‘ikeha, the future *ali‘i nui*, of Kaua‘i would spring forth:

As a northern O‘ahu chief, Māweke was a lineal descendent of the Nanaulu line, which Fornander considers to be the more reliable genealogy being least affected by interpretation compared with the Ulu lineage. Although both the Nanaulu and Ulu lines are descended from Wākea and Papa, the Nanaulu lineage is most often referred to by the Kaua‘i and O‘ahu chiefs but less so by Maui chiefs and hardly ever with Hawai‘i chiefs.

According to Fornander, the son of high chief Kekuapahikala and Maihikea, Māweke is 29 generations after the time of the gods, Wākea and Papa, and the first recorded chief of O‘ahu. In these stories we see Māweke as the ruler of O‘ahu during an era when Polynesian people are constantly travelling between various island groups across the Pacific and beyond.

According to newspapers and other sources, Prince Māweke was from Tahiti and a contemporary of ‘Aikanaka, the father of Hema. Māweke married the two sisters of Nu‘uhiwa, the grandson of Paumakua. Māweke had 3 sons with Naiolaukea. These were Mulieleali‘i, Keaunui, and Kalehenui who resided in Ko‘olau, O‘ahu. The stories of Mō‘ikeha, Māweke’s celebrated grandson have been recorded by Fornander, Kamakau, and Kalākaua [Kamehameha Schools 2016].

Proceeding Mō‘ikeha were the following *ali‘i ‘ai moku* (chief who rules a *moku*) of Kaua‘i (in chronological order): Haulanuiaiakea, (son of Mō‘ikeha, born on Kaua‘i), La‘amaikahiki (ca. 951-1011, son of Mō‘ikeha, born in Tahiti and returns to Tahiti), Ahukinialaa (son of La‘amaikahiki, born on Kaua‘i), and Kamahano (son of Ahukinialaa, born on Kaua‘i).

#### 4.1.1 Observations of Early Explorers and Westerners

Captain George Vancouver, sailing off the east coast of Kaua‘i during his third voyage to the Hawaiian Islands in 1793, proclaimed it the “most fertile and pleasant district of the island.” Vancouver only confirmed the qualities that must have much earlier attracted the Hawaiians living within the *ahupua‘a* of that coast. Wailua Ahupua‘a, where its river enters the sea, was home to the island’s high chiefs. Kapa‘a Ahupua‘a, north of Wailua, “in legendary history . . . is famous as the home of the great *ali‘i* Moikeha who lived there in his later years” (Handy and Handy

1972:424). Hanalei Ahupua‘a, further northwest, was celebrated in numerous legends. The *ahupua‘a* of Keālia, though located amidst these residences of the *ali‘i* and legendary places, did not attain a similar repute.

While traditional sources record little about Keālia Ahupua‘a during the years preceding Western Contact in the late eighteenth century, the presence of *lo‘i* and terraces on wide flats suggest it could have supported a stable population. Further south, the swamp like conditions within the interior of Kapa‘a, forced settlement within a “cigar-shaped sliver of land,” “the only arable hard ground by the shoreline” (Hulsman et al. 2015:7) (Figure 15).

The earliest written documentation of life in the *ahupua‘a* appears in the 1830s when missionary censuses recorded a total population of 283, comprising 265 adults and 18 children within Keālia (Schmitt 1973:25). Other Protestant missionary records focused more specifically on areas where mission stations were established. An 1847 census of 23 land divisions in the Hanalei and Kawaihau districts gives population figures for Keālia (Schmitt 1969). Most notable is the decline in population in Keālia, from 283 in the 1830s to 143, a reduction of almost half (Schmitt 1969:229). Accounting for the high death toll caused by the introduction of foreign disease, this still seems like an extremely high death rate. Kapa‘a’s population during this time period is unknown. A population distribution map by Coulter (1931) (Figure 16) indicates the population of Kaua‘i ca. 1853 “was concentrated chiefly on the lower flood plains and delta plains of rivers where wet land taro was raised on the rich alluvial soil” (Coulter 1971:14).

Although most of the historic documents for Kaua‘i in this period revolve around missionary activities and the missions themselves, there was indication the Kapa‘a area was being considered for new sugarcane experiments, similar to those occurring in Kōloa. In a historic move, Ladd and Company received a 50-year lease on land in Kōloa from Kamehameha III and Kaua‘i Governor Kaikio‘ewa of Kaua‘i. The terms of the lease gave the new sugar company “the right of someone other than a chief to control land” and had profound effects on “traditional notions of land tenure dominated by the chiefly hierarchy” (Donohugh 2001:88). In 1837, a very similar lease with similar terms was granted to Wilama Ferani, a merchant and U.S. citizen based in Honolulu (Hawai‘i State Archives, Interior Department, Letters, August 1837). The lease was granted by Kaikeaouli (Kamehameha III) for the lands of Kapa‘a, Keālia, and Waipouli for 20 years for the following purpose:

[F]or the cultivation of sugar cane and anything else that may grow on said land, with all of the right for some place to graze animals, and the forest land above to the top of the mountains and the people who are living on said lands, it is to them whether they stay or not, and if they stay, it shall be as follows: They may cultivate the land according to the instructions of Wilama Ferani and his heirs and those he may designate under him. [Hawai‘i State Archives, Interior Department, Letters, August 1837]

Unlike Ladd & Company, which eventually became the Koloa Sugar Company, there is no further reference to Wilama Ferani and his lease for lands in Kapa‘a, Keālia, and Waipouli. In a brief search for information on Honolulu merchant Wilama Ferani, nothing was found. It is thought that perhaps Wilama Ferani may be another name for William French, a well-known Honolulu merchant who is documented as having experimented with grinding sugarcane in Waimea, Kaua‘i

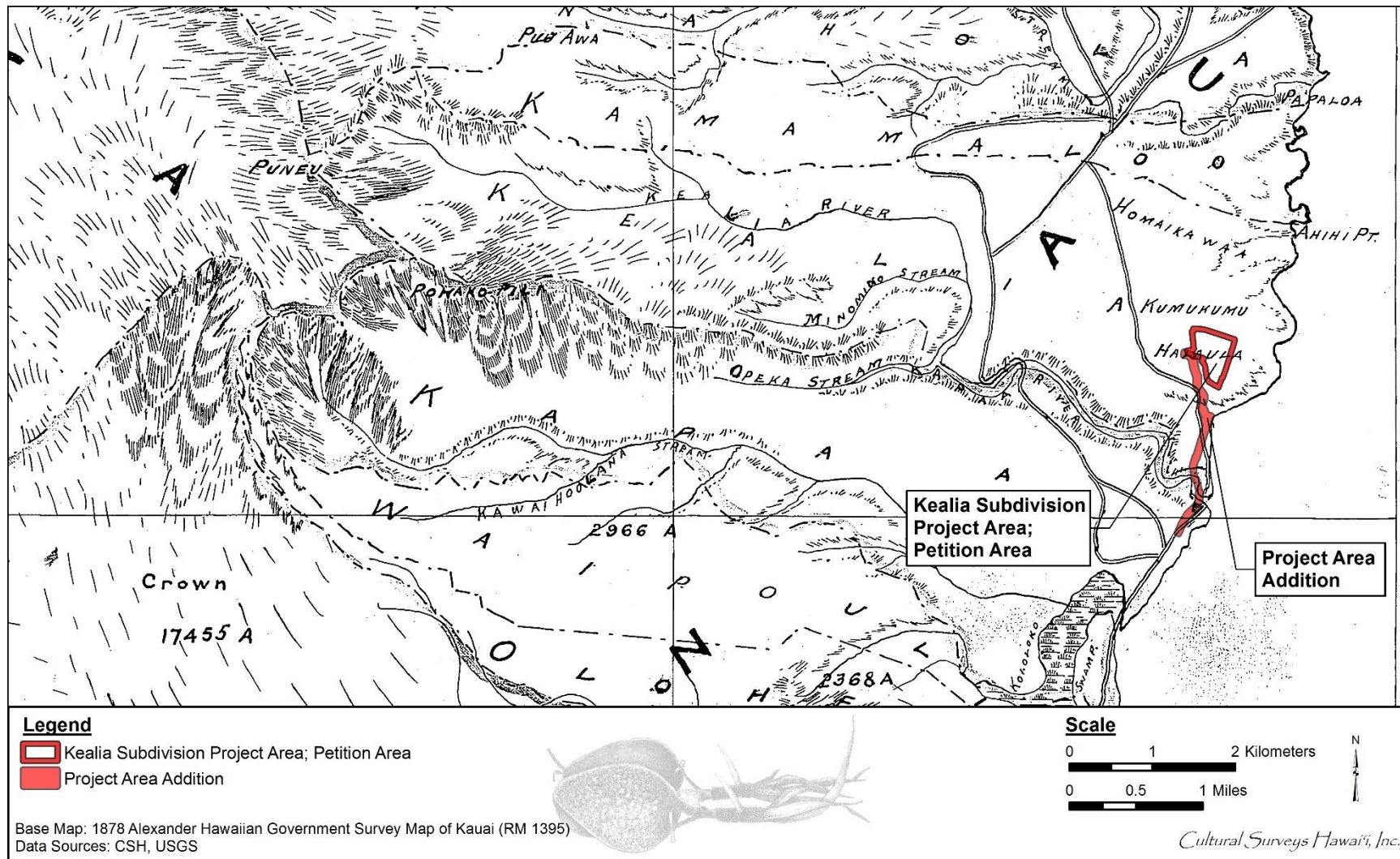


Figure 15. A portion of an 1878 Alexander Hawaiian Government Survey Map identifying swamp land in the northern end of Kapa'a Ahupua'a

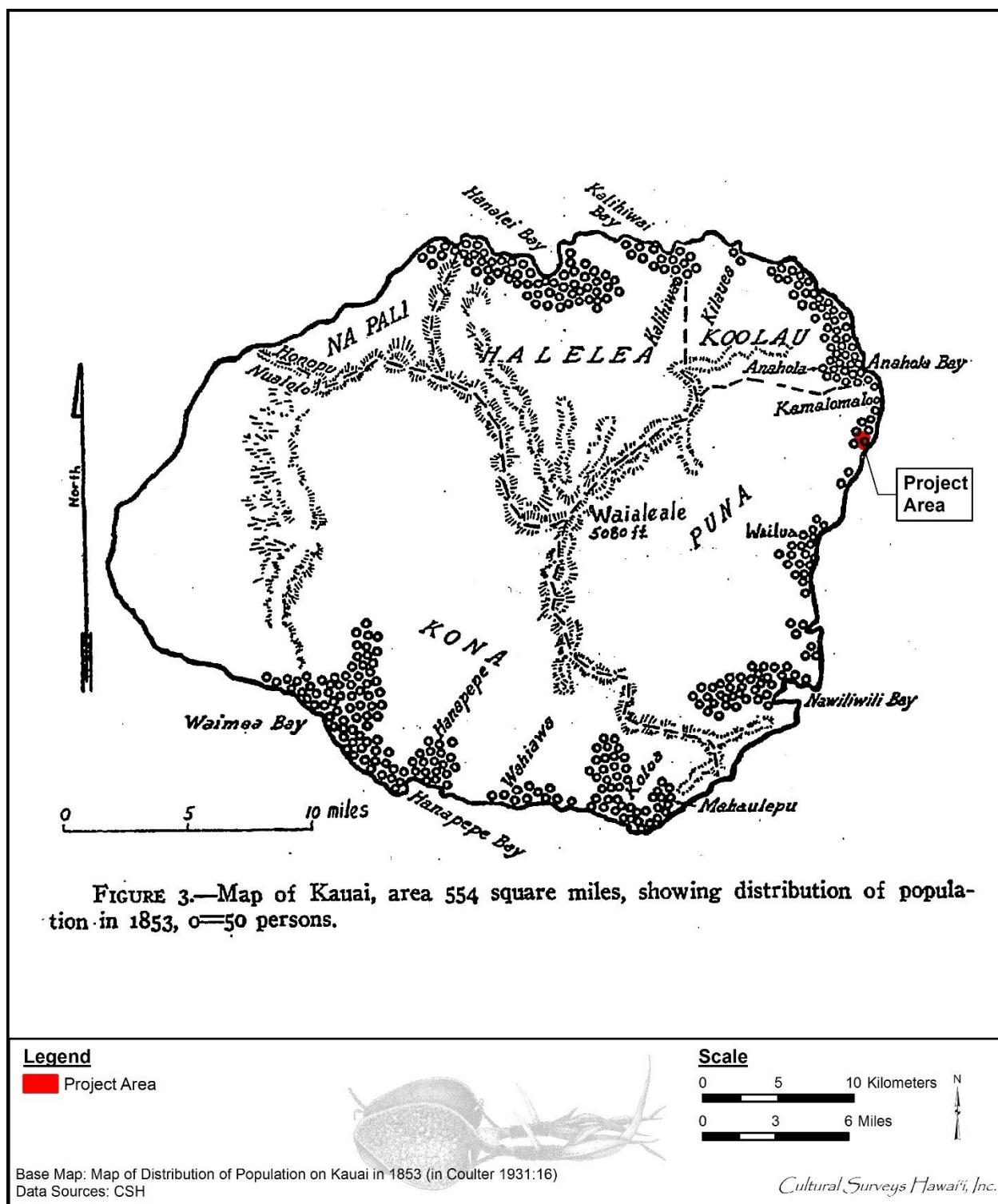


Figure 16. Map showing population estimate for Kaua'i in 1853 (Coulter 1931:16) and the general location of the project area (including Petition Area and sewer line installation project area)

at about the same time the 1837 lease for lands in Kapa‘a, Keālia, and Waipouli was signed (Joesting 1984:152).

In 1849, William P. Alexander, son of a Wai‘oli missionary, recorded a trip he took around Kaua‘i. Although, he focuses on the larger mission settlements like Kōloa and Hanalei, he does mention Kapa‘a and Keālia

A few miles from Wailua, near Kapaa we passed the wreck of a schooner on the beach, which once belonged to Capt. Bernard. It was driven in a gale over the reef, and up on the beach, where it now lies. A few miles further we arrived at Keālia. We had some difficulty crossing the river at this place, owing to the restiveness of our horses. The country here near the shore was rather uninviting, except the valley which always contained streams of water. [Alexander 1991:123]

One of the first people to succeed in business in the Keālia area was a German by the name of Ernest Krull. In 1854, a government survey was prepared for Kumukumu, Kaua‘i (Hawai‘i State Survey, Registered Map [RM] 141). In handwritten notes of the map, it is indicated that Mr. Krull desired to buy government interest to the land for \$200.00. Apparently, Mr. Krull was successful in obtaining Kumukumu because by the early 1860s, he was running a thriving business supplying whaling ships with beef and dairy products (Joesting 1984:171). Mr. Krull’s ranch and dairy were located in the Waipahe‘e area of Kumukumu in a place called Kalualihilihi (Kapa‘a Elementary School 1983:4). His residence also served as a rest stop for travelers during the 1860s (Lydgate 1991:142).

By 1870, Krull apparently had purchased the entire *ahupua‘a* of Keālia. In a 22 July 1870 petition to the Commissioner of Boundaries for the Fourth Judicial District, Island of Kaua‘i, Krull states “he is the owner and in possession of the ahupuaas of lands called Kealia Halaaula & Komaikawaa” (Boundary Commission, Kauai:1:11). The *ahupua‘a* boundaries were decided by the Commissioner on 5 December 1870. The only man-made features noted in the decision were along the Keālia/Kamalomalo‘o boundary—the “Kealia auwai” and the “old mountain road into the forest.” Mr. Krull continued to lease a portion of the tablelands above Keālia until 1876 when he sold his ranch to Colonel Z.S. Spalding and Captain James Makee (Hawai‘i State Archives, Interior Department, Letters, 1879; Kapa‘a Elementary School 1983:4).

Krull was one of a growing number of Germans settling on Kaua‘i in the nineteenth century. (“Of the approximately 1,200 German immigrants to come to the Islands by 1897, all but about 290 went to Kauai” [Joesting 1984:226]). In the 1850s, Hoffschlaeger and Company, a Honolulu firm established by German entrepreneurs, began ranching operations at Wailua (see Figure 19). The company also installed a cotton mill at Hanamā‘ulu and, in 1864, sent August Conradt to Keālia to set up a cotton plantation and mill there. The venture was short-lived:

... the absence of marked seasonal changes in the climate and the prodigal hand of Nature in this mid-ocean paradise produced a wealth of blossoms simultaneously mingled with ripe cotton bolls themselves. Picking the mature crop involved destruction to these young blossoms, and harvesting became, therefore, an exceedingly expensive process. The southern states, moreover, were not long in recovering their position as cotton producers after the Civil War, and the market price dropped too low to make it profitable at this geographical distance. [Damon 1931:376]

## 4.2 Mid-to Late 1800s and the Māhele

The Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848, the crown and the *ali‘i* received their land titles. The *maka‘āinana* began to receive their *kuleana* awards (individual land parcels) in 1850. Although many Hawaiians did not submit or follow through or were not granted the claims for their lands, the distribution of LCAs can provide insight into patterns of residence and agriculture. Many of these patterns of residence and agriculture probably had existed for centuries past. By examining the patterns of *kuleana* (commoner) LCA parcels in the vicinity of the survey area, insight can be gained to the likely intensity and nature of Hawaiian activity in the area (Chinen 1958:8–12).

Keālia was granted to the *ali‘i* Miriam Ke‘ahikuni Kekau‘onohi (LCA 11216; Royal Patent 6071). Kekau‘onohi was a granddaughter of Kamehameha, one of Liholiho’s wives, and served as Kaua‘i governor from 1842 to 1844.

Eighteen *kuleana* land claims were made (Table 3 and Figure 17). One claimant, Lono (LCA 09973) relinquished his Keālia land to the *konohiki* (land supervisor) and went to live in Wai‘oli. Of the 17 claims registered, 15 were awarded. The great majority of claims were made on lands adjacent to Kapa‘a Stream (also called Keālia River), a good-sized stream capable of supporting large-scale irrigation projects. Other *kuleana* lands were situated adjacent to smaller streams or ‘*auwai* (ditch) north of Kapa‘a Stream. Sixty-seven cultivated *lo‘i* (taro terrace) are claimed in the *kuleana*, with reference to numerous uncultivated *lo‘i* and boundaries of other cultivated *lo‘i* that were not claimed. In the Māhele documents, individual *lo‘i* are referred to with their personal names in ten instances. Two ditches or ‘*auwai* are recorded, Kaauwaelalo (LCA 01980) and Kahaukua (LCA 10148). Keālia River and Keahapuna (Keahapana; also Keapana) River were also named as boundaries, although they may refer to the same river. This information suggests taro farming continued to be central to Keālia. In addition, four *kō‘ele* (land cultivated by the tenant for a local chief) are named in the Keālia documents. This suggests the *konohiki* of Keālia maintained a fair amount of power and played an active role in land and water distribution even as population was declining and foreign powers were beginning to trickle in.

The depopulation of Keālia, however, was not total and the *ahupua‘a* continued to sustain Hawaiians living traditionally into the mid-nineteenth century. Many of these families continued to carry out traditional agricultural and aquacultural practices. Land Commission Award records associated with the Māhele show that awardees continued to maintain fishponds and irrigated and dryland agricultural plots, though on a greatly reduced scale than had been possible previously with adequate manpower.

Land Commission Award records indicate the presence of four ponds or *loko wai* within Keālia, though no specific reference to location is given for two. Akiana Pond (LCA 8060) is thought to be in the ‘*ili* of Akiana, while Loko Waipunaula (LCA 8833) is thought to be in Waipunaula ‘*Ili*. In addition to the fishponds, the Keālia records indicate freshwater fish were also caught in the rivers and streams. One individual claims a *kahe ‘o‘opu* or ‘*o‘opu* fish trap (LCA 2381). Māhele documents for Keālia also indicate people were raising turkeys, goats, and pigs. One individual (LCA 8061) claimed a *mauka* parcel of land with *noni*, a useful medicinal plant and *wauke*, a plant used in making *kapa* and cordage. *Noni* traditionally was used for the treatment of abrasions, lacerations, broken bones, and concussions. *Wauke* was also used as a medicinal plant, useful in



Table 3. Keālia Ahupua‘a Land Commission Awards

LCA	Claimant	‘Ili	Claims	Award
01980	Puali	Haulei, Kaeleele	House lot, four <i>lo ‘i</i> , <i>kula</i> (land used for pasture or dryland agriculture)	One parcel
02381	Kekoowai		Five <i>lo ‘i</i> , two ponds, two orange trees, one <i>kahe ‘o ‘opu</i> (fish trap), <i>kula</i>	Not awarded
03413	Kaaki	Kapunakai	House lot, <i>kula</i> , 11 <i>lo ‘i</i> , two orange trees	One parcel
07966	Keaonui and Paekaia	Mahuaku, Haleki	Five <i>lo ‘i</i> , <i>kula</i> , house lot	One parcel
08060	Hulialo	Haulei, Kalohipa	House lot, two <i>lo ‘i</i> , <i>kula</i>	One parcel
08833	Kiaipa	Waipunaula, Kiohale	Five <i>lo ‘i</i> , <i>kula</i> , house lot	Two parcels
08834	Kalawaia	Lapanui, Kahue	House lot, two <i>lo ‘i</i> , <i>kula</i>	Two parcels
08842	Kaawapupuole	Kauaha, Makapono	House lot, four <i>lo ‘i</i> , <i>kula</i>	Two parcels
08061	Hainau	Kapuna	House lot, four <i>lo ‘i</i> , <i>kula</i>	One parcel
09973	Lono		<i>Lo ‘i</i> and <i>kula</i>	Relinquished land to <i>konohiki</i>
10148	Mamaki	Lapanui	House lot, two <i>lo ‘i</i> , <i>kula</i>	Two parcels
10149	Makuahine	Kealohipaa	Three <i>lo ‘i</i> , <i>kula</i>	One parcel
10451	Naawa		Ten <i>kihapai</i> (garden), goat enclosure	not awarded
10473	Nahi	Pauahi, Kuakahi, Kaeleele	House lot, 15 <i>lo ‘i</i> , <i>kula</i> , orange trees	Three parcels
10628	Puhi	Kaunakakai, Kuaiula	House lot, one <i>lo ‘i</i>	Two parcels
10906	Umiuni	Kaukuolono	House lot, two <i>lo ‘i</i> , <i>kula</i>	Two parcels
10907	Umiuni	Akiana, Hawaipaea, Awikiwili	Two <i>lo ‘i</i> , one <i>kula</i> , house lot	Two parcels
11216 K	Kekauonohi	Keālia Ahupua‘a		6,500 acres

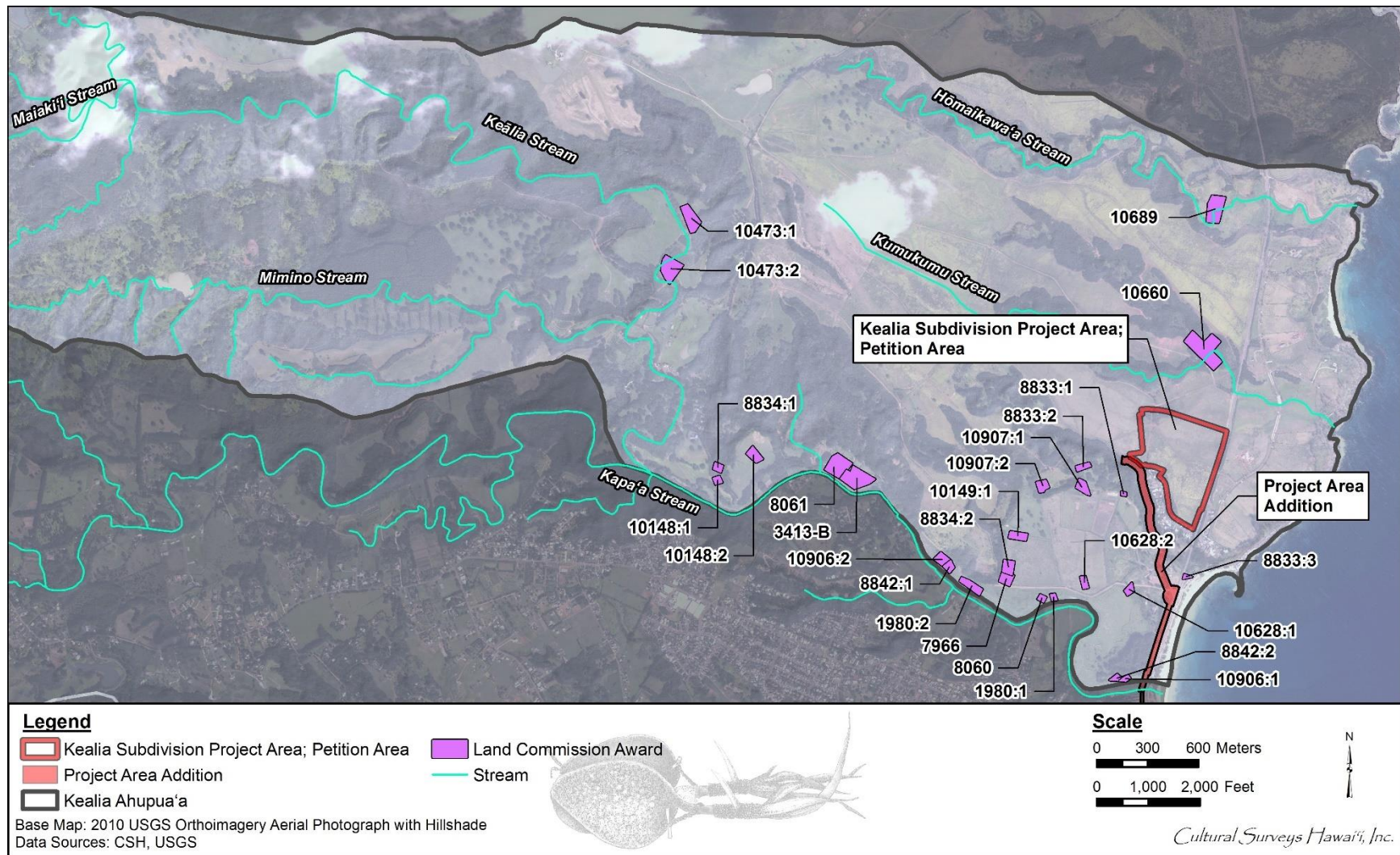


Figure 17. 2010 aerial photo (USGS Orthoimagery) showing LCA parcels in the *ahupua'a* of Keālia

treating respiratory illnesses and general ailments. There were several disputes over orange trees (LCAs 3413B, 2381, 10473). In one case, the *konohiki* affirmed he himself had taken away two orange trees belonging to a claimant.

During the Māhele, Kapa'a was designated as Crown Lands (Commissioner of Public Lands 1929). The *'ili* (land division smaller than an *ahupua'a*) of Paikahawai and Ulukiu in Kapa'a Ahupua'a were retained as Government Lands. The *'ili* of Paikahawai and Ulukiu in Kapa'a Ahupua'a were retained as Government Lands. The land claims during this period show that only six individuals were awarded land parcels in the relatively large *ahupua'a* of Kapa'a (Table 4; Figure 18). No individual Kuleana were awarded within or near the sewer line installation project area. The following LCA discussion is provided as an overview of mid 1800's land use within Kapa'a. The overall pattern of mid-1800's land use indicates intensive utilization well seaward (*makai*) and south of the project area, near the coast and the fringes of the backshore swamp.

Interestingly, the residential "village" of Kapa'a did not exist as a single entity, but was a series of probably small settlements or compounds, perhaps even individual house lots that stretched along the shoreline of the *ahupua'a* and included (south to north) Kupanihi (Makahaikupanihi), Kalolo (Kaloko or Kaulolo), Puhi, and Ulukiu.

Table 4. Kapa'a Ahupua'a Land Commission Awards

LCA	Claimant	'Ili	Claims	AWARD
03554 & 03599	Keo	Kahanui; Puhi	15 <i>lo'i</i> ; house lot in Puhi Village	Two parcels
03638	Huluili, Kahoii (Kadaio)	Maele'ele; Kaloko (Kalolo)	15 <i>lo'i</i> and <i>kula</i> ; house lot in Kaloko (Kalolo) Village	Two parcels
03971 & 03243	Honolii, Ioane	Kahana; Kupanihi	6 uncultivated <i>lo'i</i> ; house lot in Kupanihi Village	Two parcels
08247	Ehu	Moalepe	Approx. 20 <i>lo'i</i> lying waste, some orange trees	One parcel
08837	Kamapa'a	Ulukiu; Awawaloa	3 <i>lo'i</i> in Ulukiu 'Ili; 2 <i>lo'i</i> in Awawaloa 'Ili; house lot in Ulukiu Village	Three parcels
08843	Kiau and son, Apahu	Apopo; Kalolo	6 <i>lo'i</i> ; house lot in Kalolo Village	Two parcels

The six awardees are Keo (LCA 3554/3599), Huluili (LCA 3638), Ioane Honolii (LCA 3971/3243), Ehu (LCA 8247), Kamapaa (LCA 8837), and Kiau (LCA 8843). Five of the six awardees received multiple parcels, which show similarities. All five had *lo'i*, or irrigated *kalo* fields on the *mauka* side of the lowland swampy area, sometimes extending a short distance up into small, shallow gulches and valleys. Many of these *lo'i* parcels name *pali*, or hills/cliffs, as boundaries. Each LCA also had a separate house lot located on the *makai* side of the swamp, near the beach. Two of the land claims name ponds on their lands: Puhi Pond (LCA 3554) and fishponds in Kupanihi 'Ili (LCA 3971). The two *loko* are associated with house lots, situated on the *makai*



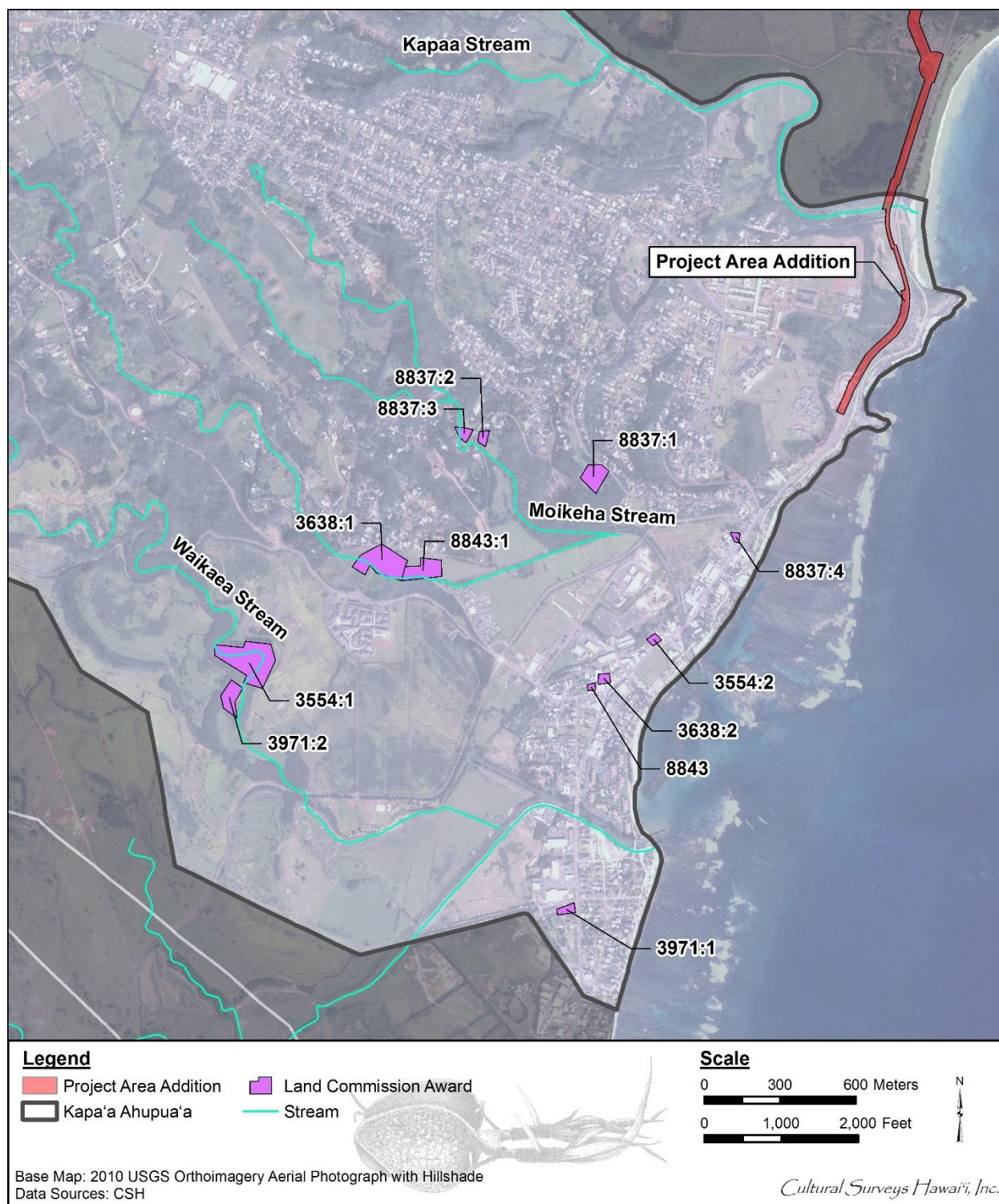


Figure 18. 2010 aerial photo (USGS Orthoimagery) showing LCA parcels in the *ahupua'a* of Kapa'a

edge of the Kapa‘a swamps, suggesting modification of the natural swamplands. Other natural and cultural resources mentioned in the LCAs include freshwater springs, pigpens, *hau* bushes, *hala* clumps, streams, *‘auwai*, and *kula*.

#### 4.2.1 Sugar Cultivation

As the numbers of *malihini* (foreign-born) increased on Kaua‘i Island, an array of diversified agricultural enterprises were begun in earnest. The first large-scale agricultural enterprise in the Kapa‘a and Keālia areas was begun in 1877 by the Makee Sugar Plantation and the Hui Kawaihau (Dole 1916:8). The Hui Kawaihau was originally a choral society begun in Honolulu whose membership consisted of many prominent names, both Hawaiian and *haole*. It was Kalākaua’s thought that the Hui members could join forces with Makee, who had previous sugar plantation experience on Maui, to establish a successful sugar corporation on the east side of Kaua‘i. Captain Makee was given land in Kapa‘a to build a mill and he agreed to grind cane grown by Hui members. Kalākaua declared the land between Wailua and Moloa‘a a fifth district called Kawaihau and for four years the Hui attempted to grow sugarcane at Kapahi, on the plateau lands above Kapa‘a. After a fire destroyed almost one half of the Hui’s second crop of cane and the untimely death of Captain James Makee, one of their principal advocates, the Hui began to disperse and property and leasehold rights passed on to Makee’s son-in-law and the new Makee Plantation owner, Colonel Z.S. Spalding (Dole 1916:14).

As part of the infrastructure of the new plantation, a sugar mill was erected and the Makee Landing was built in Kapa‘a. Following Captain Makee’s death, Colonel Spalding took control of the plantation and in 1885 moved the mill to Keālia (Cook 1999:51) (Figure 19 through Figure 23). The deteriorating stone smokestack and landing were still there well into the 1900s (Damon 1931:359; Figure 24). Soil prepping was required for all sugar operations around the islands, including Keālia. Soil was tilled by plowing to a depth of 18 to 24 inches, this would then be followed by discing (CTAHR 2001). In some instances, “subsoiling” (tilling soil at depths below the levels worked by a regular plow) was required to break up “hardpans that [had] form[ed] at the bottom of the plow layer” (CTAHR 2001). Keālia’s sugar fields were watered by an elaborate water catchment system (Drennan and Dega 2007:10). The Hōmaikawa‘a Valley figured largely in this system; Drennan and Dega identify Hōmaikawa‘a Valley as part of “a larger, historic plantation ditch system that led from the mountain watershed and emptied into Hōmaikawa‘a Stream” (2007:4).

Condé and Best (1973:180) suggest railroad construction for the Makee Plantation started just prior to the mid-1890s. There is one reference to a railroad line leading from the Kapa‘a landing to Keālia in 1891. During Queen Lili‘uokalani’s visit to Kaua‘i in the summer of 1891, the royal party was treated to music by a band, probably shipped in from O‘ahu. “The band came by ship to Kapa‘a and then by train to Keālia” (Joesting 1984:252). This line is depicted on a 1910 USGS map that shows it heading south from Keālia Mill and splitting near the present Hotel Coral Reef Resort, one finger going to the old Kapa‘a Landing (Makee Landing) and another line heading *mauka*, crossing the present Moikeha Canal, traveling southwest up Lehua Street and through what is now goat pasture, along a plateau and into the *mauka* area behind Kapa‘a swamp lands (Figure 25). This railroad line was part of a 20-mile network of plantation railroads with some portable track and included a portion of Keālia Valley and the *mauka* regions of the plateau lands north of Keālia (Condé and Best 1973:180).



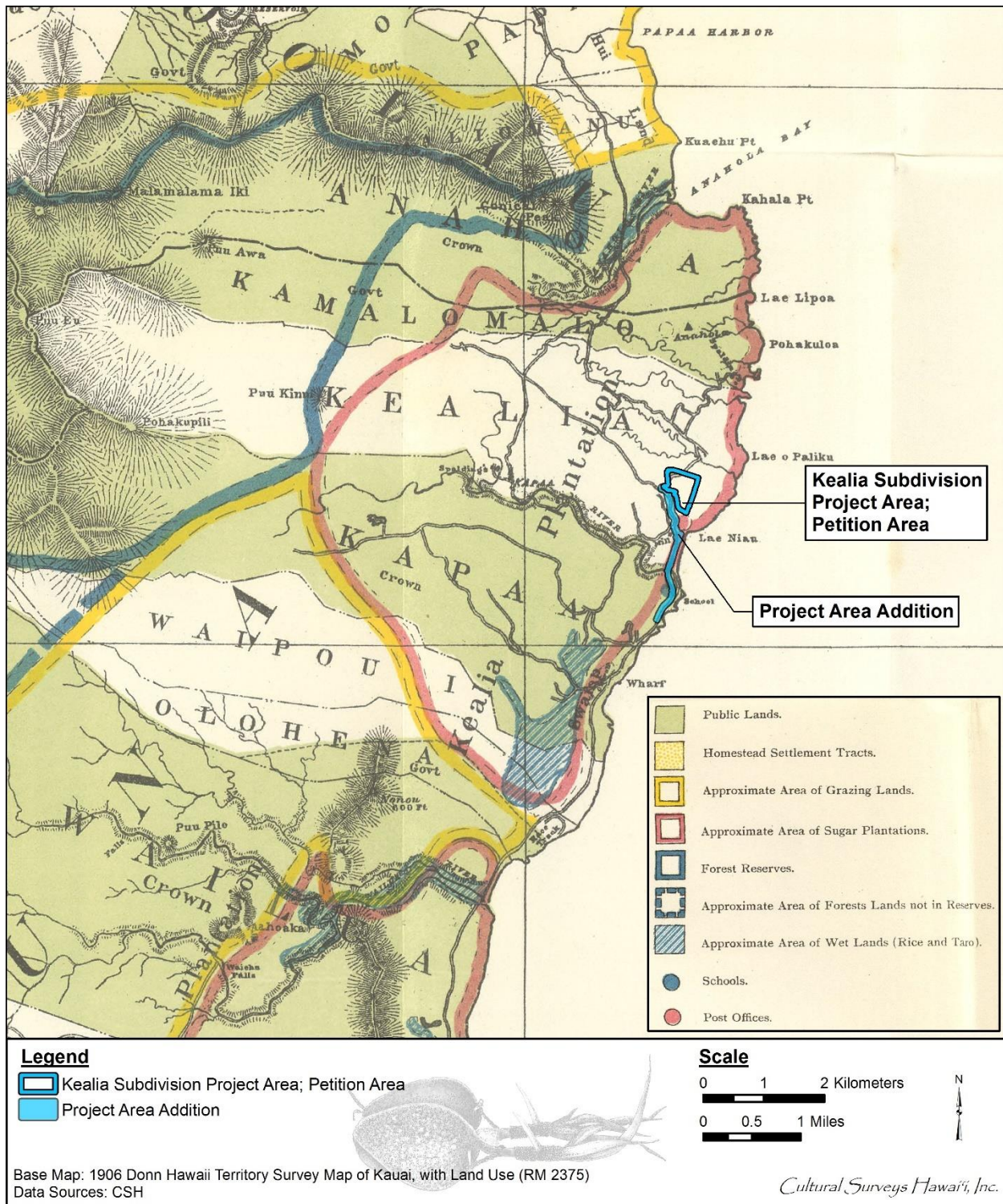


Figure 19. 1906 Donn map showing project area and land use from Wailua at the south to Anahola to the north

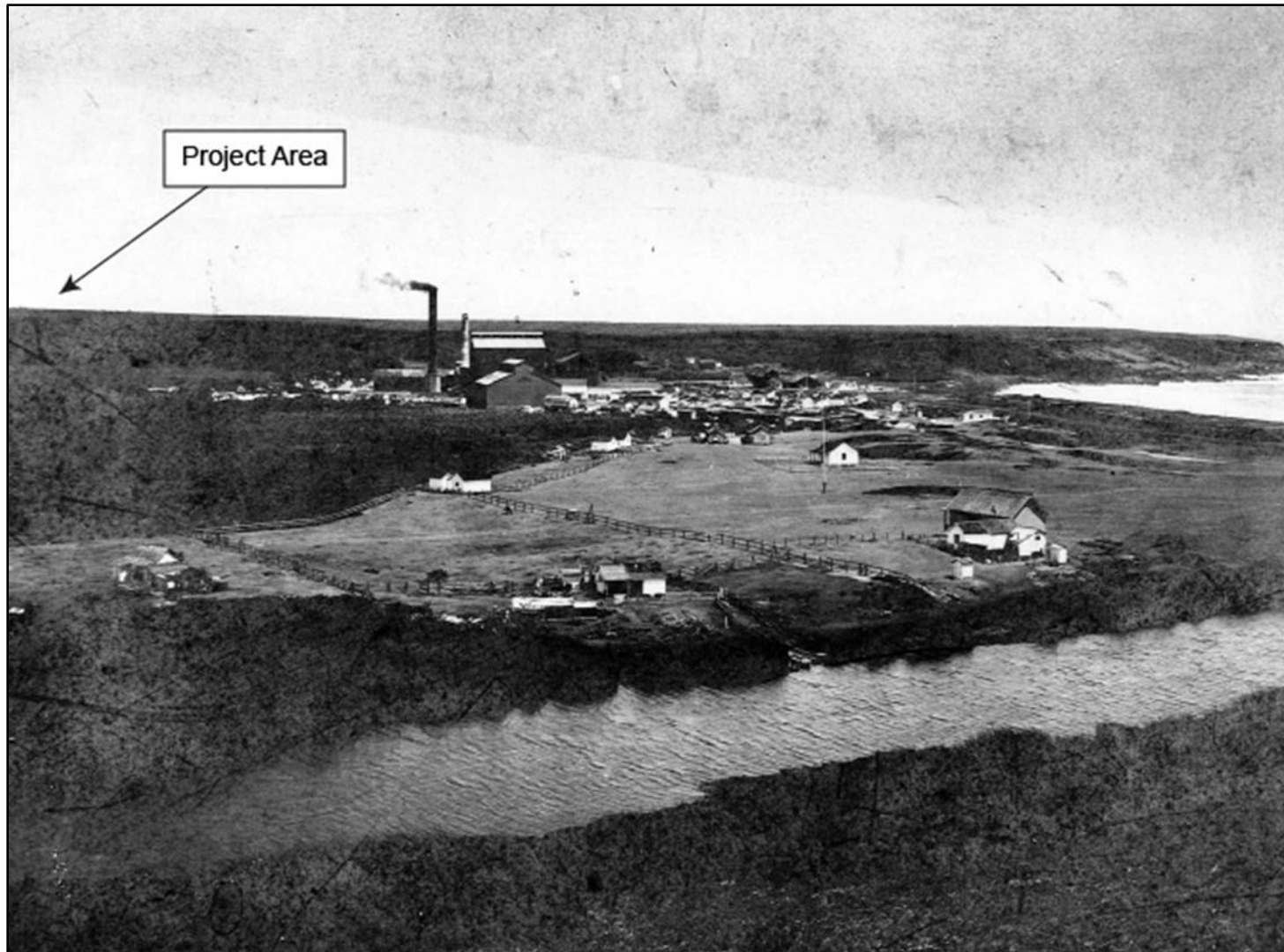


Figure 20. Makee Sugar Company Mill and Camp at Keālia, ca. 1894 (taken from Hammatt and Chiogi 1998:14) showing project area location



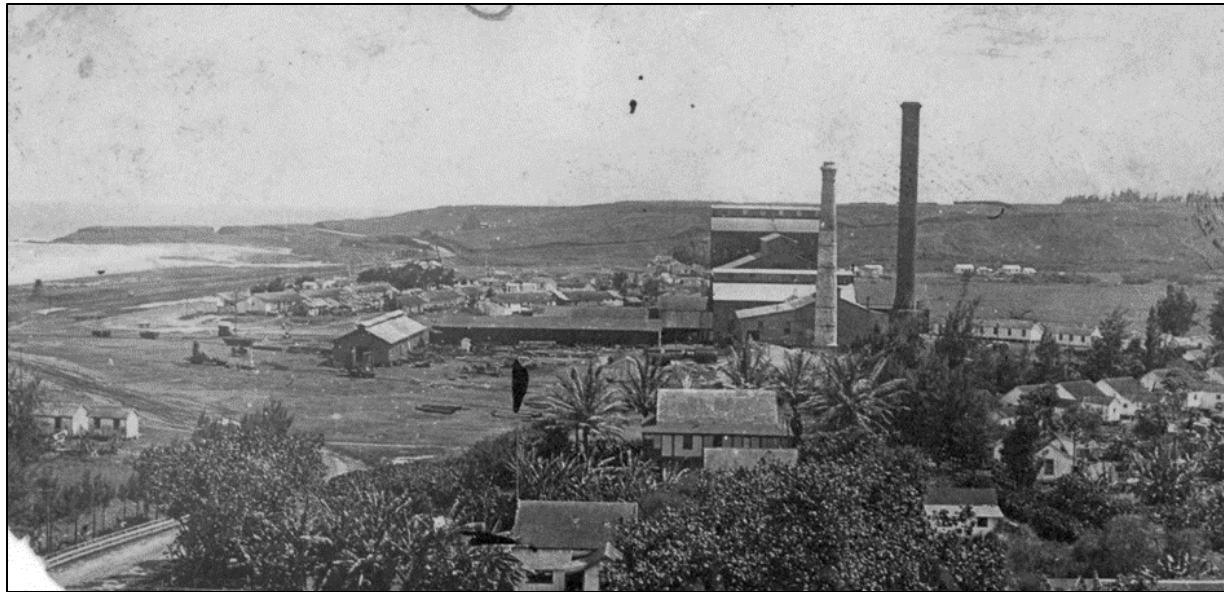


Figure 21. Photograph (date unknown) of Keālia Sugar Mill area (from the collections of Kaua'i Historical Society)

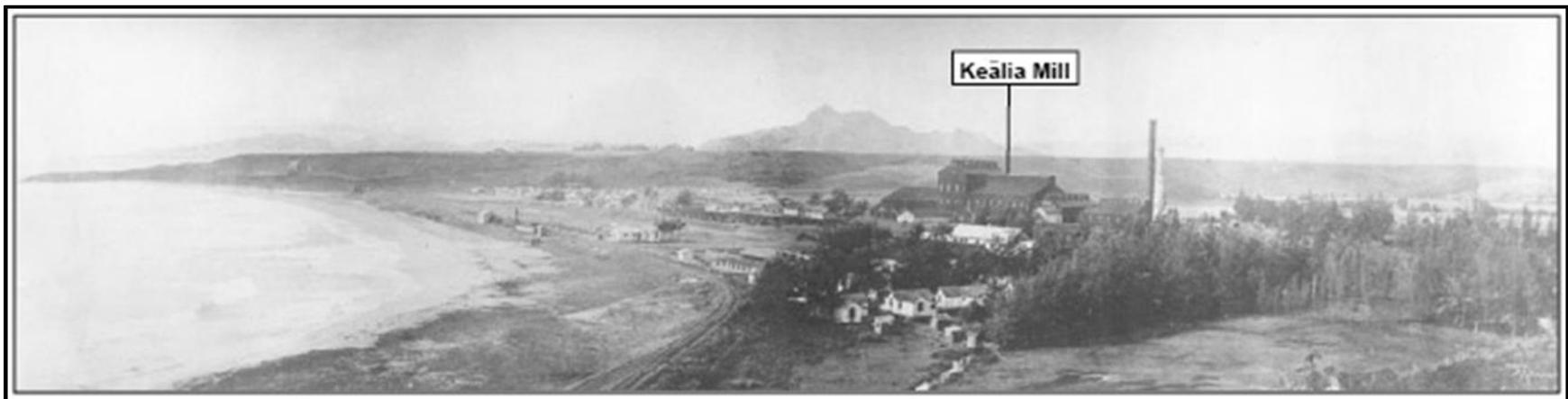


Figure 22. L.E. Edgeworth photo (October 1919) of Makee Sugar Company Mill in Keālia (taken from O'Hare et al. 2003:13)

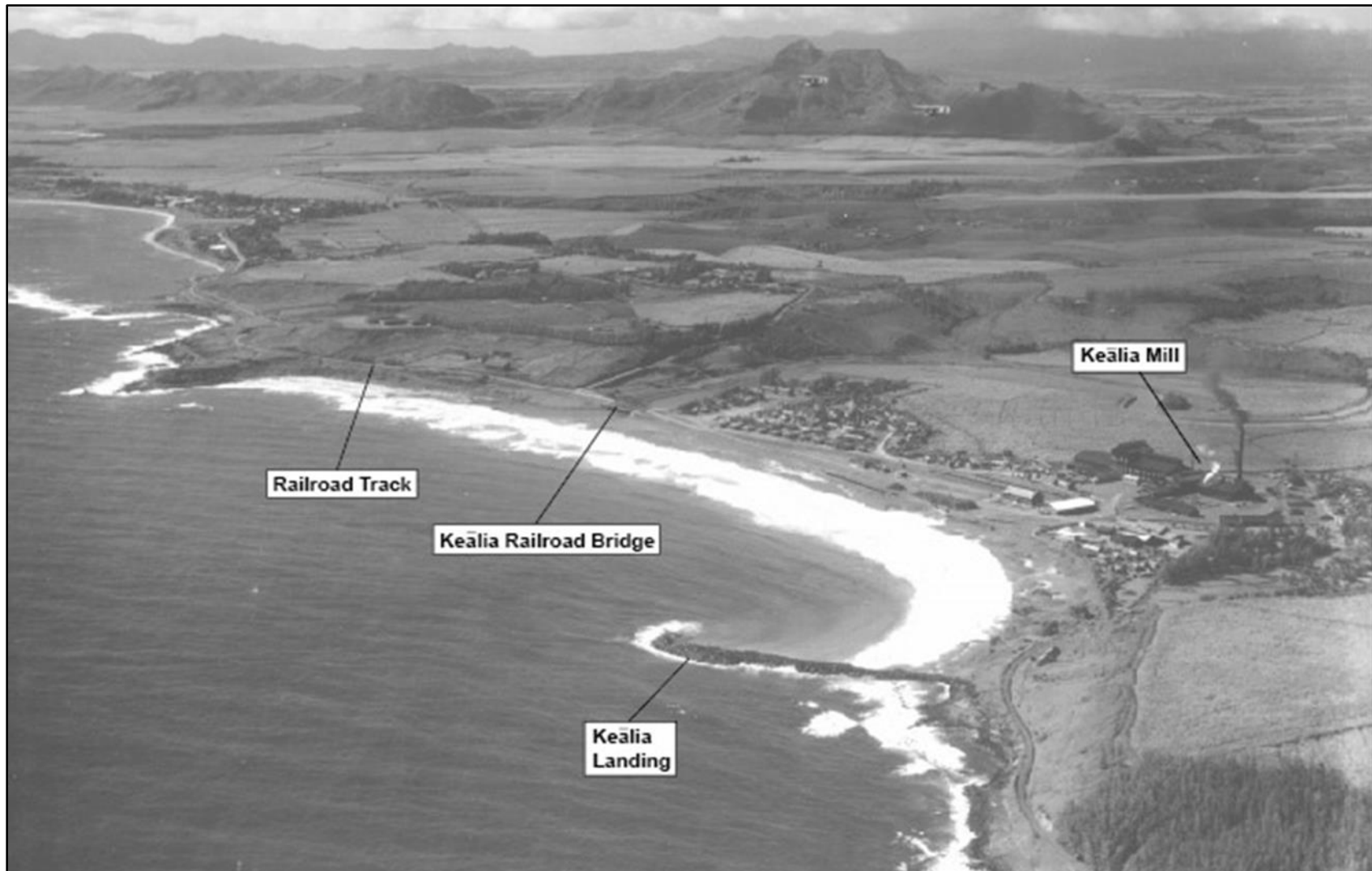


Figure 23. 1933 aerial view of Keālia (taken from O'Hare et al. 2003:14)



Figure 24. “Kapa‘a Wharf Remains, Kapa‘a, Kauai, Hawaii” (ca. 1934) also known as the Old Makee Landing (top photo). Today there is a breakwater associated with the Moikeha Canal in the general location (bottom photo) (Bushnell et al. 2003)



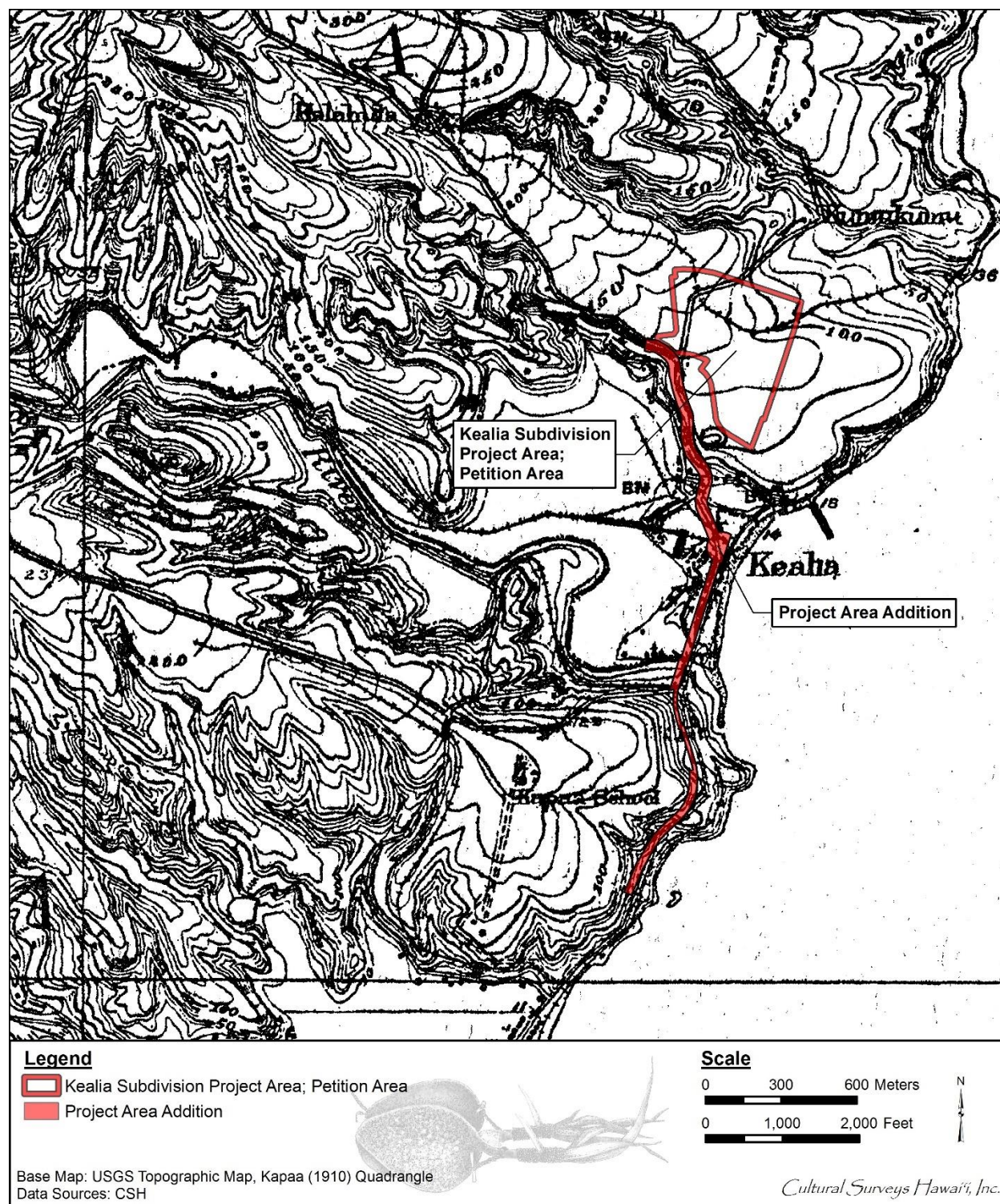


Figure 25. Portion of the 1910 Kapaa USGS topographic map depicting historic road and railroad alignment in the current project area

By the late 1800s, Makee Plantation was a thriving business with more than 1,000 workers employed (Cook 1999:51). Hundreds of Portuguese and Japanese immigrants found work on Makee Plantation and the new influx of immigrants required more infrastructure. In 1883, a lease for a school lot was signed between Makee Sugar Company and the Board of Education (Kapa‘a School 1983:9). Stipulations found in the Portuguese immigrant contracts with Makee Sugar Company stated that “children shall be properly instructed in the public schools” (Garden Island 1983). The original Kapa‘a School was constructed in 1883 on a rocky point adjacent to the Makee Sugar Company railroad (Figure 26). Traditionally, this point was known as Kaahiahi (Kapa‘a School 1983:10). In 1908, Kapa‘a School was moved to its present site directly *mauka* on Mailihune Hill (Figure 27).

Workers employed by the Makee Plantation soon established a vibrant community concentrated along the coast and around plantation facilities (see Figure 13):

... it included a post office, church, school, and theater. The Plantation constructed a new reservoir and transportation infrastructure to include a roadway system, a commercial boat landing, and railway connections to nearby Anahola and to Līhu‘e, and several plantation camps.

The majority of the plantation camps were established in the Kumukumu ‘ili. The camps were given meaningful names that distinguished immigrant groups or site locations: Yaki Camp was for Japanese immigrants, Chong for the Chinese; Mimino Camp for the Russians; New Stable Camp, Old Stable Camp, Amberry Camp, and Halaula Camp were other camps that were on the Makee Plantation. [Drennan and Dega 2007:10]

As in much of the rest of Hawai‘i, Chinese rice farmers began cultivating the lowlands of Kapa‘a with increasing success in the latter half of the 1800s. Several Hawaiian *kuleana* owners leased or sold their parcels *mauka* of the swamp land to Chinese rice cultivators. Other Chinese rice cultivators appealed to the government for swamp lands, first leasing and later buying. As a result of the growing rice and sugar industries, the economic activity displaced the house lot *kuleana* on the *makai* side of the marsh for increasing commercial and residential development (Lai 1985:148–161)

Narrow wagon roads gave way to macadamized roads in the early part of the twentieth century. This new road was called the Kaua‘i Belt Road and parts of it are thought to have followed the “Old Government Road” (Cook 1999). In Kapa‘a, the present day Kūhiō Highway probably follows the same route as the original Government Road and subsequent Kaua‘i Belt Road.

In Keālia, however, there is evidence of numerous traditional trails leading to Anahola with possibly two principal routes, a *makai* (seaward) route and a *mauka* route. In 1881, Z.S. Spalding, proprietor of the Makee Sugar Plantation, appealed to the Department of the Interior with a formal petition to have the *makai* road (in Keālia) officially closed stating that the natives were breaking through his fences to take short cuts between Keālia and Anahola (Hawai‘i State Archives, Letter: Z.S. Spalding, 16 May 1881). The exact location of the *makai* road is unknown although it is thought to have been on the plateau lands, somewhat removed from the coastline, in areas fit for sugarcane production. The route of the Old Government Road, also known as the “Mauka road” is described as such, “crossing the Kealia River above the Rice Plantation and passing over the hill near Mr. Spalding’s residence” (Hawai‘i State Archives, Letter: Z.S. Spalding, 21 April 1882).

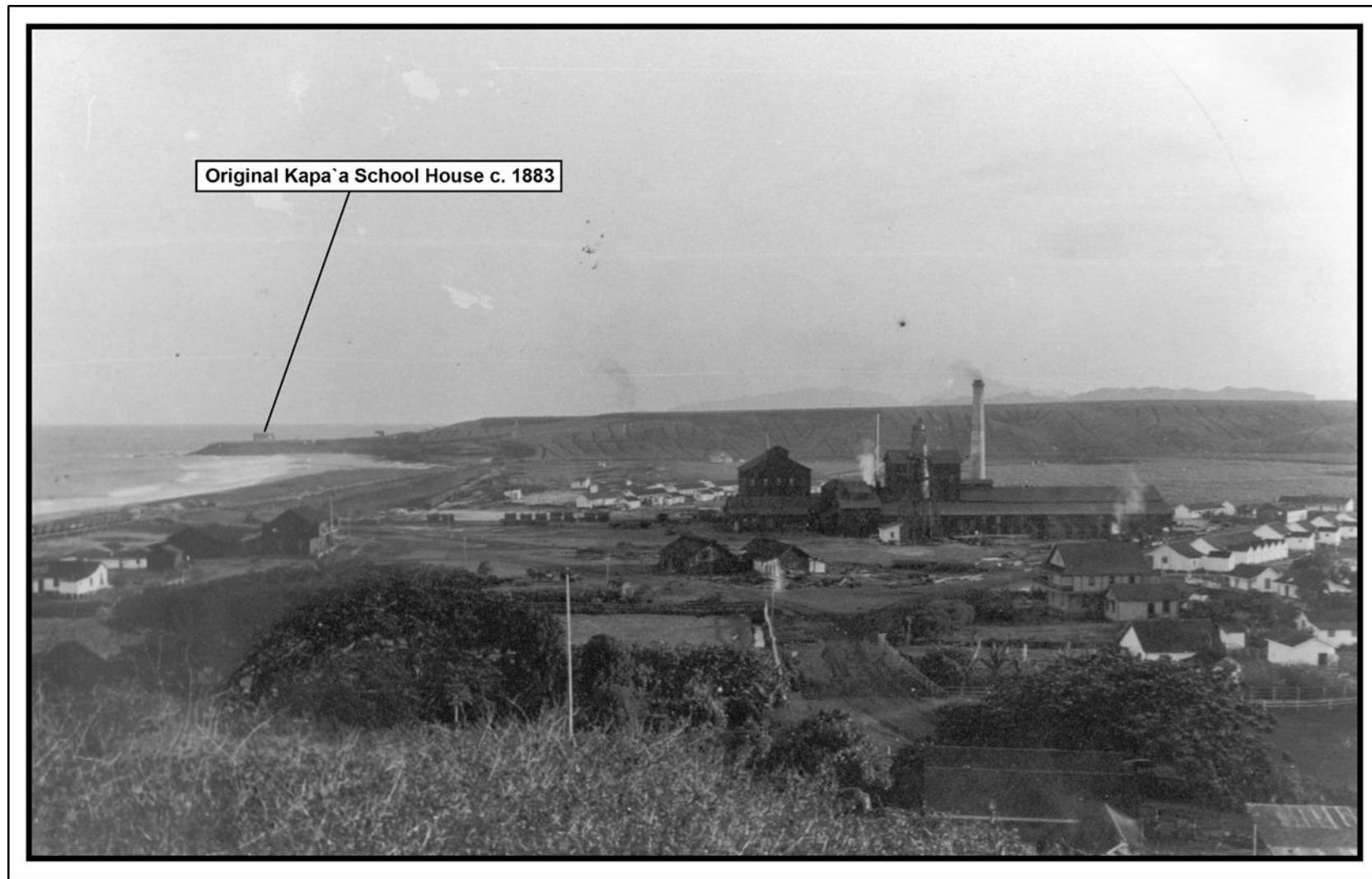


Figure 26. Historic photograph of Keālia Mill and town with the original Kapa'a School visible at Kaahiahi (courtesy of the Kaua'i Historical Society)



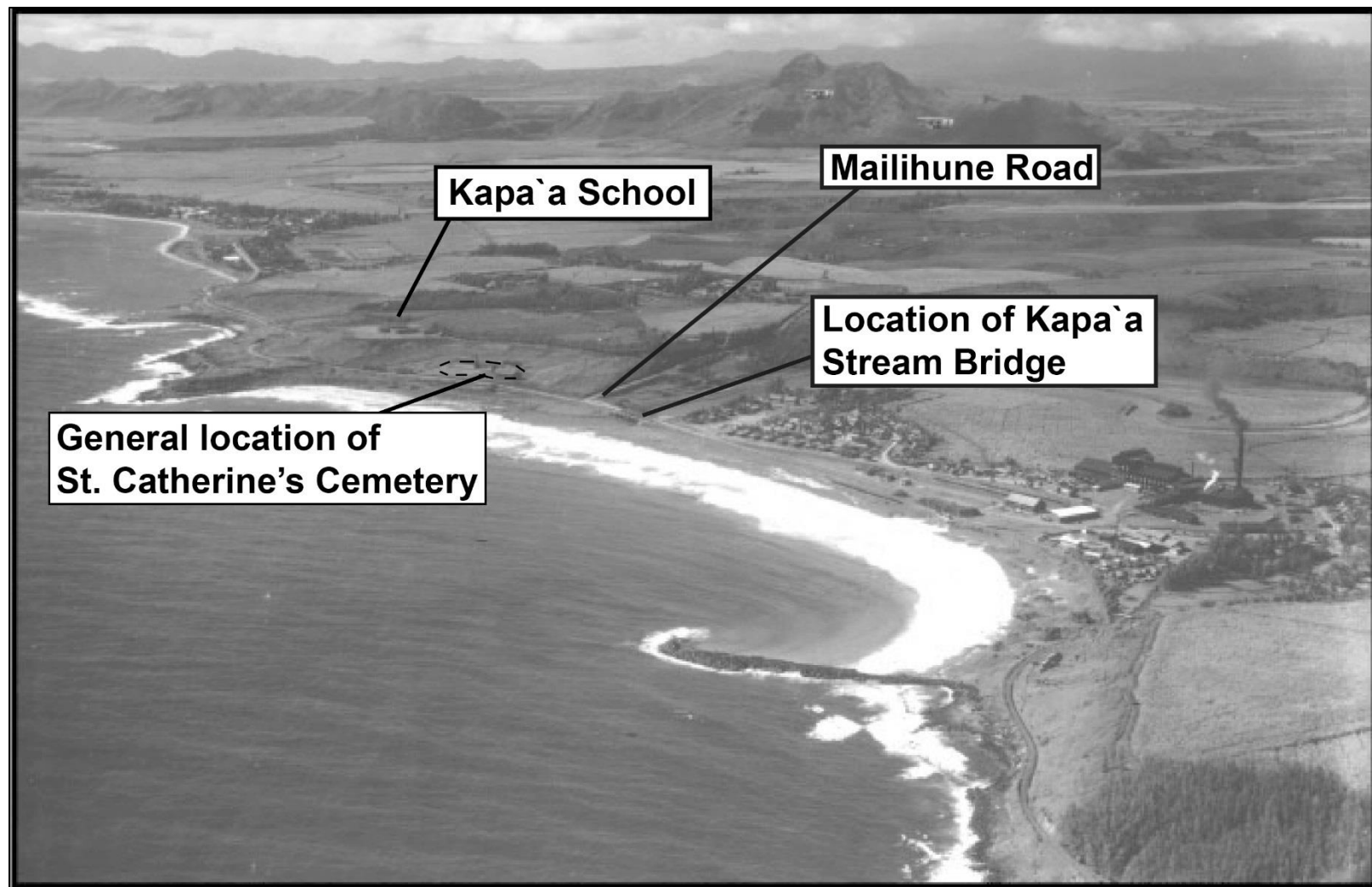


Figure 27. “Aerial View of Kealia, Kauai, Hawaii, Looking Landward” ca. 1933 (Bushnell et. al 2003) (note Mailihuna Road is identified as “Mailihune”)



When the Kaua‘i Belt Road was constructed in the first two decades of the twentieth century, a portion of the old Government Road route was abandoned. The new route crossed the river at the *makai* end of Keālia Stream, paralleled the ocean and the railroad track, and then turned *mauka* passing through Keālia town and went up the hill to meet up with the “Old Government Road” (see Figure 25). The Keālia Bridge built for the Kaua‘i Belt Road is thought to date to ca. 1912. A traveler writing about their travels in 1913, mentions the bridge: “In the twinkling of an eye we passed on the steel bridge of Kealia. This new bridge is beautiful” (Akina 1913).

### 4.3 1900s

In the early 1900s, government lands were auctioned off as town lots in Kapa‘a to help with the burgeoning plantation population. An oral account mentioned that in the 1930s and 1940s, the area north of Moikeha Canal in Kapa‘a was mostly settled by Portuguese families (Bushnell et al. 2003). Another oral account mentioned that the Japanese were very prominent in the 1920s and 1930s, largely replacing the Chinese merchants of the turn of the century in the Kapa‘a business sector (Bushnell et al. 2003). Several territorial government structures were once situated adjacent to the coastal areas of Kapa‘a. The Board of Health, Territory of Hawaii ran a dispensary in Kapa‘a starting in 1926. This was located at the *makai* edge of Niu Street near the Kapa‘a Beach Park parking lot. A fire station was once located in the area now occupied by the Hotel Coral Reef Resort and a courthouse and jail cell once stood at the location of the present Kapa‘a Neighborhood Center. It is not known when these structures were removed or abandoned.

#### 4.3.1 Land Grants, (1908-present) and Hawaiian Homesteading (1922-present)

Land grants were issued for Kapa‘a starting in 1908 with the Town Lots, these were later followed by grants for Hawaiian Homestead lands (1921). Following the passing of the Hawaiian Homes Commission Act of 1920, homestead leases for residential, agricultural, or pastoral purposes were then issued. The intent of the homesteading program was (and still remains) to provide for economic self-sufficiency of Native Hawaiians through the provision of land. Kapa‘a Homesteads first issued grants in 1922. In Kapa‘a there are at least 169 land grants (waihona.com). The first series of homesteads were the farthest inland, successive series of homestead lands were awarded closer to the shore (see Figure 14).

#### 4.3.2 Ahukini Terminal & Railway Company

The Ahukini Terminal & Railway Company was formed in 1920 to establish a railroad to connect Anahola, Keālia, and Kapa‘a to Ahukini Landing and “provide relatively cheap freight rates for the carriage of plantation sugar to a terminal outlet” (Condé and Best 1973:185). This company was responsible for extending the railroad line from the Makee Landing, which was no longer in use, to Ahukini Landing, and constructing the original Waika‘ea Railroad Bridge and the Moikeha Makai Railroad Bridge. In an annual report written in December 1921, the line between Ahukini and Keālia was opened by 7 May 1921 stating, “can run trains from Ahukini to Kealia on twenty-four hours notice” (Condé and Best 1973:185) (see Figure 25 and Figure 28). The report also specifically mentions a bridge near the Hawaiian Canneries Company which cost \$12,000.00 to build and was washed away in a “freshet” in January 1921 and needed to be rebuilt. The Keālia River Railroad Bridge was described as “an old wooden bridge” and was recommended to be replaced with concrete as soon as “finances permitted” (Condé and Best 1973:186).

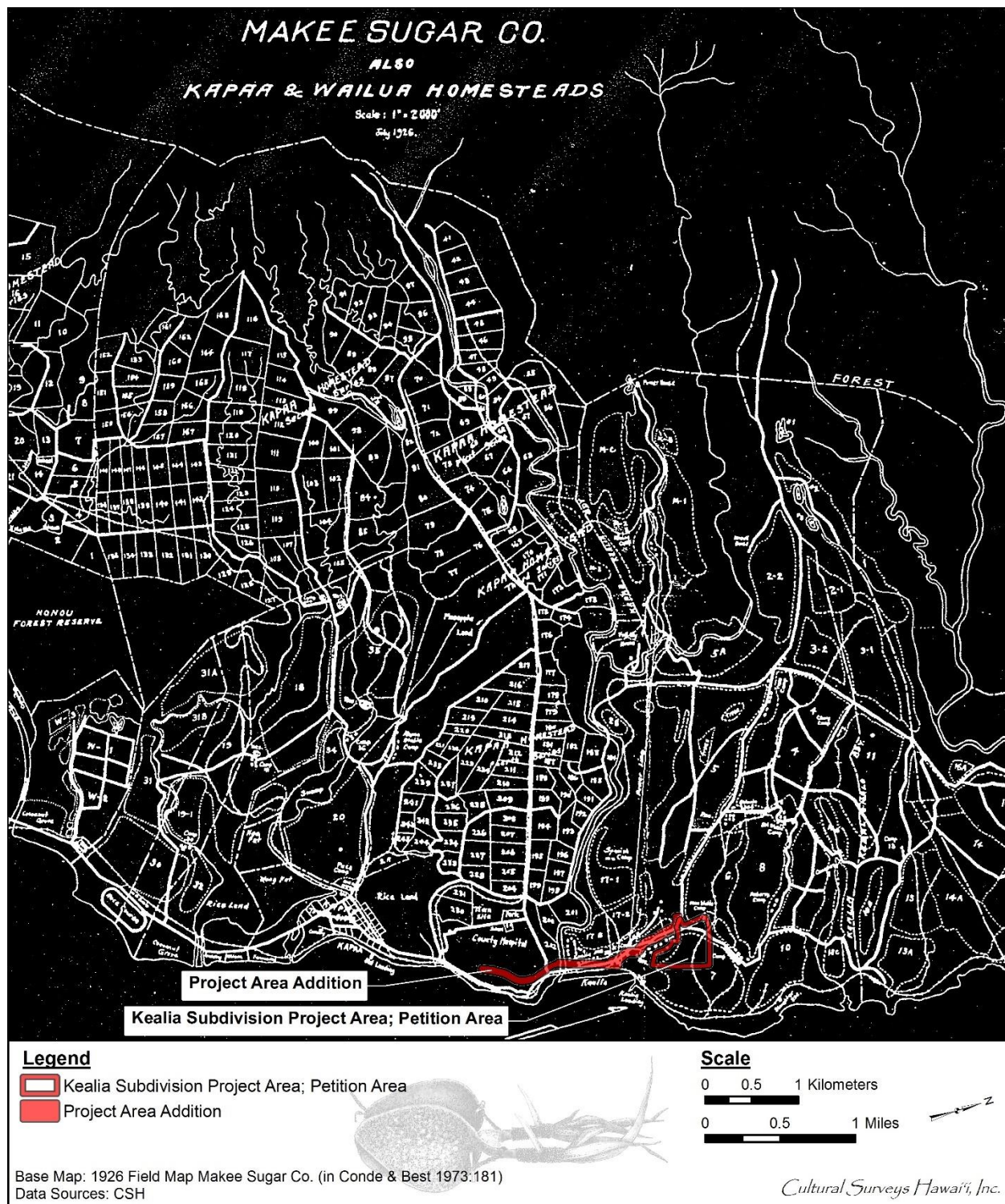


Figure 28. A 1926 field map for Makee Sugar Company (in Condé and Best 1973:181) showing the railroad system running through the western portion of the Petition Area to Anahola