2. BACKGROUND

To provide an understanding of the types of archaeological remains or historic properties that are anticipated within the current APE, a brief culture-historical context is provided below along with a presentation of relevant prior studies.

BRIEF CULTURE-HISTORICAL CONTEXT

Pukui et al. (1974:224) defines Wailua as "two waters," most likely referring to the two main forks—north and south—of the Wailua River. The saying "Ka wai hālau o Wailua" translates to "the expansive waters of Wailua" as it is the largest river in the Hawaiian Islands (Pukui 1983:178). An alternative suggestion is "water pit" which refers to the various waterfalls and pools dotted along the river's course (Damon 1931:360). Hawaiian author and historian, Samuel Kamakau (1976:7) suggests that Wailua Ahupua'a was most likely named after the 14th-Century chief, Wailuanuiaho'āno:

Wailuanui-a-Ho'ano was born in 'Ewa, O'ahu, and his descendants went to Kaua'i and to Maui, and wherever they settled they called the land after the name of their ancestor. Wailua was a song of La'akona, ancestor of the 'Ewa family by Ka-ho'ano-o-Kalani. His name, Wailuanui-a-Ho'ano, came from adding the name of his mother.

And, while the literal translation of "two waters" (Pukui et al. 1974:224) is the most commonly used definition for Wailua, Dickey offers his commentary of this interpretation:

Though "Two Waters" is the white man's natural translation of "Wailua" and this name and Waialua on Oahu are generally said to refer to the two main branches of the principal rivers of these districts, yet this explanation never seems to occur to a native Hawaiian. (Dickey 1917:15)

The word *wailua* has also been translated by Pukui and Elbert (1986:379) as "spirit, ghost; remains of the dead," suggesting this place to be metaphysically associated with Hawaiian beliefs surrounding the mysteries of transfiguration and the afterlife. This concept is elaborated by Fredrick Wichman (1998:67-68), who explained:

Spirits of the dead indeed gathered together on the upland plains and on certain moonlit nights marched in great procession accompanied with drums and nose flutes down to the river. These night marchers entered waiting canoes and paddled down the river into the sea and around the coast until they reached Polihale at Mānā. Here they leaped from the cliffs into Pō, the land of the dead, which lay beneath the sea.

Nonetheless, the Wailua area was and continues to be abundant in freshwater and ocean resources. The upper reaches of the ahupua'a (land division spanning from the mountain to the ocean) consist of Mount Wai'ale'ale, the highest mountain on Kaua'i. Pukui et al. (1974:220) translates Wai'ale'ale as "rippling water or overflowing water," exhibiting the abundance of waters that emanate from this source. As a result of the various natural resources available, Wailua became a desirable area for habitation and was a residence of ali'i nui (high chiefs) and a political center. Historical accounts discuss the many caves in Wailua associated with stories of legendary characters. This includes Anahulu Cave associated with Kamalau who stayed there prior to looting Poli'ahu Heiau; Hauma, where the sister of Kamalau slept before looting the heiau (place of worship) with her brother; and Kaluamōkila, a cave associated with a mo 'o (lizard, water spirit) and the mother of ali'i (chief) Kaumuali'i (Dickey 1917:30). The underwater cave known as Kauela was where the shark with the same name resided near the mouth of the Wailua River. Wichman (1998:72) shares that the present-day cement bridge was built over Kauela's home, forcing the manō (general name for shark) to find a new home. The cave known as Kawelowai is located behind Wai'ehu Falls and was a place where Wailua chiefesses hid during war (Dickey 1917:23). Keoniewa was a cave where the giant Kauahoa Kame'eui spent the evening when he was en route to visit the ali i 'Aikanaka who was at Nounou (ibid.). Māmā 'akualono is the traditional name for the "Fern Grotto," which is one of the most famous caves in Wailua located at the junction of the North and South forks of the Wailua River (Dickey 1917:33). Manu'ena is a cave associated with the demi-god Māui and is the location where the secret of making fire was withheld (Dickey 1917:73).

In addition to the various caves located throughout Wailua, at least seven major *heiau* were recorded in a concentrated area in the *ahupua* 'a and were declared a National Historic Landmark in 1962 (Dunbar 1988). These *heiau* include Pōhaku 'ele' ele, Hikini-a-ka-lā, Holo-holo-kū and Pōhaku Ho'ohānau, Ka-lei-o-Manu, Mālae (also known as Mālaeha 'akoa), Maka 'ukiu, Poli 'ahu, and Pōhaku kani (also known as the Bellstone).

A mythical site known as Malohua is reported to the north side of Wailua Bay (Dickey 1917:20). The site consists of a footprint on a rock with a second footprint said to be nearby on a rock in the water. An account relates a magician from Hawai'i Island who came to Kaua'i searching for the deity Kamapua'a, the mythological half-hog and half-man

associated with agriculture. Here the magician stepped onto the rock, making a footprint during his search but failed to locate the creature only stumbling on a small pig who was Kamapua'a in disguise. When the magician returned to Wailua, he was told that he was tricked by the creature and therefore killed all the pigs in the *ahupua'a*, vowing to never eat pork again (ibid.).

Early historical accounts from Captain George Vancouver, who arrived in 1793, describe the landscape of eastern Kaua'i below:

This portion of Attowai [Kaua'i], the most fertile and pleasant district of the island, is the principal residence of the king, or, in his absence, of the superior chief, who generally takes up his abode in an extensive village, about a league to the southward of the north-east point of the island. Here Enemo [Inamo'o] the regent, with the young prince Tamooerrie [Kaumuali'i], were now living;... (Vancouver 1967:221-222)

Following the death of Kaʻeokūlani in 1794 and the subsequent passing of his mother high chiefess Kamakahelei their son Kaumualiʻi assumed the sovereign reign over Kauaʻi and Niʻihau (Kamakau 1992). While Kaumualiʻi ruled over his island kingdom, Hawaiʻi Island chief, Kamehameha had already embarked on a major quest to consolidate all of the islands under his rule—a destiny that was prophesized in his earlier years when he managed to overturn the famed Pōhaku Naha (Naha Stone) in Hilo (Desha 2000). Although this amazing feat occurred in Hilo, Desha points to Wailua as the stone's place of origin when he noted:

This stone, called Pōhaku Naha, had been brought from Kaua'i, from a place close to that great *heiau* which was situated near the estuary of the Wailua River. This royal birthstone has been brought by a certain chief named Makali'inuikuakawaiea, and it was the mark of the chiefly *naha* line. (Desha 2000:78)

In 1840, the United States Exploring Expedition lead by Charles Wilkes, traversed the coastline from Wailua to the north by horseback. Below is an excerpt from Wilkes travels:

The country on the way is of the same character as that already seen. They passed the small villages of Kupau [Kapa'a], Kealia [Keālia], Anehola [Anahola], Mowaa [Moloa'a], and Kauharaki, situated at the mouths of the mountain streams, which were closed with similar sand-bars to those already described. These bars afforded places to cross at, though requiring great precaution when on horseback. The streams above the bars were in most cases, deep, wide, and navigable a few miles for canoes. Besides the sugarcane, taro, etc., some good fields of rice were seen. The country may be called open; it is covered with grass forming excellent pasture-grounds, and abounds in plover and turnstones, scattered in small flocks. (Wilkes 1856:69)

By the mid-19th century, the Hawaiian Kingdom was an established center of commerce and trade in the Pacific, recognized internationally by the United States and other nations in the Pacific and Europe (Sai 2011). The increasing population of Westerners in the Hawaiian Islands forced socioeconomic and demographic changes that promoted the establishment of a Euro-American style of land ownership. By 1840 the first Hawaiian constitution had been drafted and the Hawaiian Kingdom shifted from an absolute monarchy into a constitutional government. Convinced that the feudal system of land tenure previously practiced was not compatible with a constitutional government, the $M\bar{o}$ 'T Kauikeaouli and his high-ranking chiefs decided to separate and define the ownership of all lands in the Kingdom (King n.d.). The change in land tenure was further endorsed by missionaries and Western businessmen in the islands who were generally hesitant to enter business deals on leasehold lands that could be revoked from them at any time. After much consideration, it was decided that three classes of people each had one-third vested rights to the lands of Hawai'i: the $M\bar{o}$ 'T (monarch), the ali 'i (chiefs) and konohiki (land agents), and the maka 'ainana (common people or native tenants).

In 1845 the legislature created the Board of Commissioners to Quiet Land Titles (more commonly known as the Land Commission), first to adopt guiding principles and procedures for dividing the lands and granting land titles, and then to act as a court of record to investigate and ultimately award or reject all claims brought before them. All land claims, whether by chiefs for entire *ahupua* 'a or by tenants for their house lots and gardens, had to be filed with the Land Commission within two years of the effective date of the Act (February 14, 1848) to be considered. This deadline was extended several times for the *ali* 'i and *konohiki*, but not for commoners (Alexander 1920; Soehren 2003)

The $M\bar{o}$ ' $\bar{\tau}$ and some 245 ali'i (Kuykendall 1938) spent nearly two years trying unsuccessfully to divide all the lands of Hawai'i amongst themselves before the whole matter was referred to the Privy Council on December 18, 1847 (King n.d.). Once the $M\bar{o}$ ' $\bar{\tau}$ and his ali'i accepted the principles of the Privy Council, the $M\bar{a}$ hele ' \bar{A} ina (Land Division) was completed in just forty days (on March 7, 1848), and the names of all of the ahupua'a and 'ili $k\bar{u}$ pono (nearly independent 'ili land division within an ahupua'a) of the Hawaiian Islands and the chiefs who claimed them,

were recorded in the *Buke Mahele* (also known as the *Māhele* Book). As this process unfolded the *Mō'ī*, who received roughly one-third of the lands of Hawai'i, realized the importance of setting aside public lands that could be sold to raise money for the government and also purchased by his subjects to live on. Accordingly, the day after the division when the last chief was recorded in the *Buke Māhele* (*Māhele* Book), the *Mō'ī* commuted about two-thirds of the lands awarded to him to the government (King n.d.). Unlike the *Mō'ī*, the *ali'i* and *konohiki* were required to present their claims to the Land Commission to receive their Land Commission Award (LCAw.). The chiefs who participated in the *Māhele* were also required to provide commutations of a portion of their lands to the government to receive a Royal Patent that gave them title to their remaining lands. The lands surrendered to the government by the *Mō'ī* and *ali'i* became known as "Government Land," while the lands that were personally retained by the *Mō'ī* became known as "Crown Land," and the lands received by the *ali'i* became known as "Konohiki Land" (Chinen 1958:vii, 1961:13). Most importantly, all lands (Crown, Government, and Konohiki lands) identified and claimed during the *Māhele* were "subject to the rights of the native tenants" therein (Garavoy 2005:524). Finally, all lands awarded during the *Māhele* were identified by name only, with the understanding that the ancient boundaries would prevail until the land could be formally surveyed. This process expedited the work of the Land Commission.

According to the Buke Māhele (1848), the *ali'i wahine* (chiefess), Victoria Kamāmalu relinquished Wailua Ahupua'a to the Crown, thereby establishing Wailua as Crown Lands. To help clarify the exclusive nature of Crown Lands, in 1864 the Supreme Court established that all lands with such designation were inalienable and shall pass to the successor of the Hawaiian Kingdom for his or her lifetime and subject only to the rights of the tenants (Office of the Commissioner of Public Lands 1929; Van Dyke 2008). Lands selected by the Crown held special cultural and spiritual significance (ibid.)—characteristics that are exemplified in the vast cultural landscape and the many legendary accounts associated with Wailua Ahupua'a. Van Dyke (ibid.:111) further explains that "[t]he Commissioner of the Crown Lands managed the land, leased the most productive lands (usually to sugar plantations), and conveyed the revenues to the *Mō'ī*." Wailua was one of only seven *ahupua'a* on Kaua'i that was given the designation of Crown lands.

As the Mō'7 and ali'i made claims to large tracts of land during the Māhele, questions arose regarding the protection of rights for the native tenants. To address this matter, on August 6, 1850, the Kuleana Act or Enabling Act was passed, allowing native tenants to claim a fee simple title to any portion of lands which they physically occupied, actively cultivated, or had improved (Garavoy 2005). Additionally, the Kuleana Act clarified rights to gather natural resources, as well as access rights to kuleana parcels, which were typically landlocked. Lands awarded through the Kuleana Act were, and still are, referred to as kuleana awards or kuleana lands. The Land Commission oversaw the program and administered the kuleana as Land Commission Awards (Chinen 1958). Native tenants wishing to make a claim to their lands were required to submit a Native Register to the Land Commission, followed by Native Testimony given by at least two individuals (typically neighbors) to confirm their claim to the land. Upon successful submittal of the required documents, the Land Commission rendered their decision, and if successful, the tenant was issued the Land Commission Award (LCAw.). Unlike the Māhele between the chiefs, native tenants claiming land through the Kuleana Act were required to pay for a Government surveyor to survey and map the boundaries of the awarded parcels. The kuleana awards in the vicinity of the current APE are listed in Table 1 and shown on Figure 9.

Table 1. LCAw. in the vicinity of the APE from north to south.

LCAw.	Claimant	Parcels Awarded	ʻIli	Uses in Vicinity of APE
3111/3559	Debora Kapule	3	Kawaiiki/Pakoli/Pohoula	Fishponds
3406	Pula	2	Kapuaiomolohua/Waioo	Residential
3303	Makaiki	2	Kapalai/Kapuaiomolohua	Residential
3346	Nawai	2	Kulaakapueo/Makunapanone	Residential
3568	Kelani	2	Kawaiiki/Waioo	Residential
3302	Maawe	2	Kauhakoa/Puhauula	Residential
3282	Sera Wahapuu	2	Halepuolo/Kauhakoa	Residential
3345	Nakai	2	Kahakoa/Kapalai	Residential
3367	Noi	2	Hapuupuu/Kahakoa	Residential
3238	Hawea	2	Kahakoa/Kahihei	Residential
3281	Wahineai	2	Kahakoa/Luaiokama	Residential
3405	Poka	1	Kaiwaiki	Residential
3557	Kaniwi	2	Kahakoa/Lanipaa	Residential

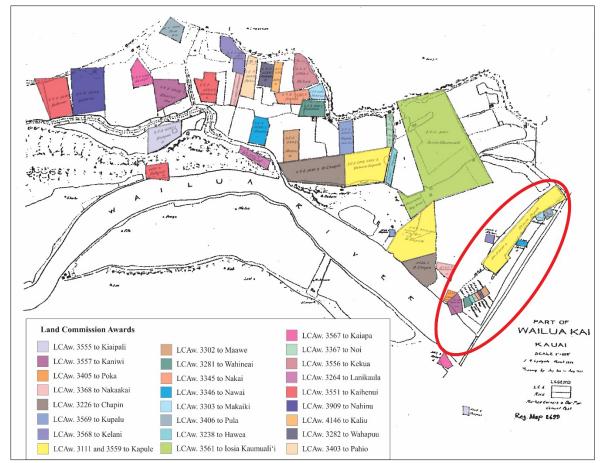


Figure 9. *Kuleana* LCAw. in Wailua Kai with area of focus in the vicinity of the APE encircled in red (base map is Hawai'i Registered Map 2699 prepared by Lydgate in 1920).

As illustrated on Figure 9, the majority of the *kuleana* LCAw. within Wailua were within one mile of the shore along the northern bank of Wailua River. All of these awards are *mauka* of the current APE, and the Land Commission records indicate that the more makai awards were for house lots with the more mauka awards for irrigated taro fields (*lo 'i*). In the vicinity of the current APE, all but one of the awards were for house lots (see Figure 9 and Table 1), with the larger award (portion of LCAw. 3111 and 3559) to Debora Kapule (a *wahine ali 'i*) consisting of a former fishpond. Bushnell et al. (2004) reported that "Queen Debora Kapule" had claimed Akaimiki fishpond, which was located within the parcel located *mauka* of the old Government road and was of the *loko pu 'uone* type, which is characterized by Apple and Kikuchi (1975:8) as "an isolated shore fishpond usually formed by the development of a barrier beach." For a more detailed discussion of the immediate area of these *kuleana* LCAw. the reader is directed to Hammatt and Shideler (2015).

Following the *Māhele 'Āina* of 1848, new commercial enterprises were begun mostly by Westerners including Elard Hoffschlaeger and Florens Stapenhorst, who together formed Hoffschlaeger & Co. Their interest was in creating a ranch to supply whaling ships that arrived in Hawaiian waters during the winter months with provisions. While their primary business was cattle ranching, they also made butter, barreled salted beef, and raised fresh produce.

A group of native Hawaiians also attempted to create new agricultural ventures in Wailua through what appears to be a cooperative type of farming that utilized the overgrown *lo 'i*. In 1855, this faction took up a lease in the amount of \$300 per year for former *konohiki* lands within Wailua Kai (Flores 1999). The article titled *Na Mea Hou Ma Wailua Kauai* (The New Things at Wailua Kauai) printed in a November 1856 edition of the Hawaiian language newspaper *Ka Hae Hawai'i*. Written by Baniamina Holi, the article described the efforts of this group who referred to themselves as the Hui Mahiku. A portion of the article reads thusly:

Aloha oe—Ua lana koʻu manao e hai aku i ke ano o keia mea hou. O ka holo mua ana o ka Hui Mahiku ma Wailua nei, "E ninau paha auanei oukou," He aha la ka Mahiku? (Eia, o ka aina nahelehele i mahi ia me ka ike ole aku o ka maka i ka hua o ka aina, a hua mai ka ai o ka aina i

hooikaika aku ai, alaila e loaa auanei kona inoa hope) he mahiai, no ka mea, ua ai i ka hua o ka aina i hooikaika ai.

Penei ka mua o ka holo ana o ka mahiai ma Wailua nei. Ua hui kekahi poe umi, ma ke ano hui Mahiku, a oi aku no hoi kekahi poe Hui Mahiai, na lakou e hoomakaukau mua i mau oo, a me ka pahiolo, a me ka pahi. I ka makaukau ana o keia mau hana, hooko koke lakou ma ka mea a lakou i kuko ai, oia ka Mahiai Pualu.

E hana mua i ka loi nahelehele o kekahi i ka la mua, a pau like, ua poe Hui nei, alaila hoomaka hou i ko ka mea mua i hana ia, alaila ua maikai ka aina o keia Poe Hui. Ua loihi ka waiho ana o keia mau poe loi nahele, 7 paha makahiki 3 paha; aka, i keia mau malama elua, ua maikai maoli keia poe loi nui 8...

Penei ke ano o ka mahiai ana i keia poe i kumu hoohalike no ka poe makemake mai, e okioki mua i ka "neki" me ka pahi, alaila, hookaawale ka opala "neki," ma kahi e ae, alaila e olo me ka pahiolo ma ke loa, a hiki ma kekahi aoao o ka loi, alaila, e olo ma ka laula, i kapuai ka manoanoa o luna, alaila, hehi ka wawae malalo o ka eka i oleloia, alaila e kiola maluna i ka eka, ma ke kuaauna o ka loi; alaila, ua maikai ua loi nei, no ka mea ua pau ka eka maluna, o ka pahiolo oia ka mea i holo ai ka hana, a oia ka mea e holo ai ka Hui Hana ana.

Translation: Greetings—My thoughts have surfaced to share the nature of these new things. First, the arrival of Hui Mahiku here at Wailua. You folks may be asking, what is the Mahiku? (Here, it is the clearing of land for farming without seeing the fruit of the land, and when the fruits are finally seen, then we know what to call these lands) a farming because we have reaped the fruit of the land that we have improved.

This is how this farming was done here at Wailua. A group of ten people came together and formed the group Mahiku, and there are more people in the Hui Mahiai and they prepare the ' \bar{o} ' \bar{o} [digging sticks], the saws, and the knives. When these tools are prepared, which they do quickly because they have a strong desire to farm cooperatively.

Clearing the overgrown lo'i that belongs to a person is done on the first day, until they are all cleared by the group. Work then starts on the first lo'i that was cleared by the group. The lo'i have been abandoned for a long time, seven years and some three. But over the past two moons, some eight lo'i have been prepared and are ready...

Here is the nature of this farming that is being done by these role models for those that want to follow: cut the "neki" [bulrush] with a knife, then separate the waste matter elsewhere, then using a saw, saw the length until the other side of the *lo'i* is reached, then saw the width of the *lo'i* leaving a foot of bulrush standing, then using the feet, stomp it down into the soil, then spread the soil on the tops and embankments of the *lo'i*, then the *lo'i* is prepared. The saw is what makes the work quick and that what keeps the work of this group moving forward.

The lease to these lands was later acquired by Ernest Lindemann who arrived in Wailua from Germany in 1864 to manage Wailua Ranch. Lindemann devoted the Wailua Kai lands for sheep ranching, and later added cattle and horses. Lindemann also attempted to grow cotton on ten acres of land in the 'ili of Konolea.

Since most of these early ranching businesses were established to supply food and goods to whaling ships, the demise of the whaling industry during the 1870s had a crippling effect on the ranching industry and other associated enterprises. Nonetheless, this gave way to an increase in rice production and lands within Wailua were leased to Chinese rice planters who also took over much of the taro cultivation. In her book, *He Was A Ram: Wong Aloiau of Hawaii*, Violet Lai (1985) wrote that the rice industry prospered during the 1880s when the Hawaiian Kingdom Government heavily taxed imported rice, a demand that came primarily from Chinese laborers. These Chinese laborers had also gained control over taro production throughout much of Kaua'i and established Chan Chip, the largest taro business, which was established in Wailua.

In a newspaper article published in the March 30, 1920 edition of *The Garden Isle*, Lydgate reported that roughly 115 acres of Wailua lands were used for taro and rice production, with one-third being planted in the taro and the remaining in rice. Lydgate (1920) also told that Chan Chip operated a *poi* factory near the fork of the Wailua River's northern branch, producing sixty bags of taro weekly. By the 1890s, Lindemann who held the lease for Wailua Kai also took possession of nine *kuleana* parcels which were used either for rice cultivation or pastures (Flores 1995). However, by the 1930s, the increased production cost coupled with large-scale national competitors, the rice industry

slowly declined. During this time, Lindeman attempted to establish a copra business in Wailua when some two thousand coconut trees were reportedly planted in the vicinity of the Coco Palms Hotel (ibid.).

Tax assessment records located at the Hawai'i State Archives for the years 1857, 1870, and 1890 show a dramatic decline in the number of residents within Wailua—a trend that is grimily mirrored throughout other parts of the islands. Tax records from 1857 show 107 residents within Wailua Ahupua'a, which included elderly males, females, and school-aged children. The tax records from 1870 and 1890 are separated into Wailua Uka and Wailua Kai. In 1870, 46 males and females are listed for Wailua Kai and another 41 individuals are listed for Wailua Uka, for a combined total of 87 people—a 19% decline from 1857. By 1890, only 14 people were listed for Wailua Kai and another 9 individuals for Wailua Uka for a combined total of 23—a 79% decline from 1857. In associating the drastic population decline within Wailua following western contact, Bushnell et al. in their Cultural Impact Assessment for the Kapa'a highway relief project remarked:

Within decades of western contact, Wailua lost its ancient importance, and likely its population also. The *ali'i* who enjoyed and benefitted from their contact with westerners spent more time in Waimea—the preferred anchorage for visiting ships. Also the complex of *heiau* at Wailua lost its significance after the abolishment of the *kapu system*. By the mid-1800s, only a small population, decimated in part by disease, existed in the Wailua River Valley within a mile of the sea. Indigenous farmers would be displaced within decades by larger scale commercial agriculture and associated immigrant laborers. (Bushnell et al. 2004:44-45)

Ultimately, the reformation of the traditional land tenure system compounded by a shifting political economy backed by Euro-Americans effectively paved the way for the upsurge of large-scale industrial agriculture. The introduction of commercial sugar cultivation to Kaua'i in 1830 brought about sweeping changes to the landscape and added to the cultural tapestry of the islands. The 1894 *Biennial Report of the Commissioner of Crown Lands* compiled by the Agent of Crown Lands, Curtis Iaukea describes some of the agricultural endeavors within Wailua Uka and Wailua Kai:

WAILUA—The Wailua lands in the district of Puna, comprise a total area of 20,255 acres in two sections: Wailua-kai and Wailua-uka. Wailua-uka is very fertile containing several hundred acres of good cane land besides an immense forest land, a large portion of which might be available for coffee. Taro is now grown in some parts of the valley, and for a long distance on either side may be seen indications of extensive taro cultivation in years past. This land is well watered and could support a large population. Waiehu Falls situated at the head of the valley and which is also the source of the Wailua river, irrigates about 600 acres of the Lihue and Hanamaulu lands. Wailua-uka has 17,455 acres. Wailua-kai 2800 acres, consists for the most part of pasture land. A large portion of the rice land found here is mostly on kuleanas. There is about 75 acres of cane on the lower part of the land. (Iaukea 1894:39)

A table presented in Iaukea's 1894 report shows that Lihue Plantation Company held 30-year government lease (lease number 108b) for lands in Wailua Uka with an annual rent of \$1,200 (Iaukea 1894:78), while Wailua Kai was in the possession of Lindemann (lease number 171) with a 30-year term and an annual rent of \$800 (ibid.:81). A note written in Iaukea's (ibid.:73) report stated "cane land. Has valu'ble water rights, several hundr'd acres cane land in the upper portion might be made available. At Wailua-kai there are several acres of rice land. Good grazing."

Although sugarcane was a stable crop in traditional agricultural practices and described by early westerns to be growing along the banks of Wailua River, it never dominated the landscape. Commercial cultivation of cane in Hawai'i has its origins in Kōloa Kaua'i, when William Hooper, Peter Allen Brinsmade, and William Ladd secured a 50-year lease from the reigning monarch, Kauikeaouli, for 980 acres of land in Kōloa. However, by 1849, in the midst of the *Māhele 'Āina*, the Lihue Plantation Company began operations for commercial sugar cultivation in Hanamā'ulu and later expanded to include the lands of Wailua (Dorrence and Morgan 2000).

The Lihue Plantation Company was organized in 1849 by Henry A. Peirce and other distinguished American businessmen including Charles Reed Bishop and Judge William L. Lee, and was the second commercial sugar plantation established in Nāwiliwili, Kaua'i (Saito and Campbell 2004). In 1854, Peirce sold his interest in the company to partners, including William Rice and moved back to Boston. In 1869 Peirce moved back to the islands and took a position as United States Minister to Hawai'i and served until 1878, three years after the passing of the Reciprocity Treaty—a free trade agreement that lifted import taxes for the United States. The passing of this treaty allowed for products produced in the Hawaiian Kingdom to be imported to the United States duty-free. This subsequently led to a mass expansion of Hawai'i's sugarcane industry and as a result an increase in production and exportation of raw sugarcane to processing facilities in California.

In 1870, Lihue Plantation purchased 17,000 acres of land in Hanamā'ulu Ahupua'a and utilized water runoff to irrigate the fields in both Hanamā'ulu and the Līhu'e area. Following this purchase, Hanamaulu Plantation was opened and operated by Albert Spencer Wilcox, the son of a missionary. By 1898, Hanamaulu Plantation had merged with Lihue Plantation and it was soon realized that the cane growing in Hanamā'ulu needed more water. As early as 1870 water was drawn from the south fork of Wailua River for irrigation purposes. The river was tapped a second time in 1877 to increase water flow and in 1895 another irrigation ditch was built to the north branch of the river which funneled water across the south branch and into Lihue Ditch (Flores 1995). By 1878, Lihue Plantation continued to expand, and leased 30,000 acres of land in Wailua (Saito and Campbell 2004). In 1895, Eric Knudsen visited Wailua and described the sight that lay before him:

We rode through the Lihue Plantation cane fields, passed through Hanamaulu and came to the Wailua River. What a sight! The great river lay clear and placid—winding away up toward the mountains with rice fields and taro patches filling all the low lands. (Knudsen 1991:152)

By the early 1900s, additional ditch system and reservoirs were built in Wailua for irrigation and hydroelectric power (Saito and Campbell 2004). Flores (1995:II-29) reported that "during the 1920s, the East Kauai Water Company (EKWC) was established with jurisdiction over those waters that arise in and across government lands such as Wailua." To facilitate the movement of cane, labor, and other goods, from Lihue Plantation and Makee Sugar Company, Ahukini Terminal & Railway Company built a railroad which serviced east Kaua'i from Puhi to Kealia. Between 1920 and 1921, a railroad system was laid in the Wailua area. This rail line, situated just *mauka* of existing Kuhio Highway, was in operation in the vicinity of the current APE and serviced this area until 1959.

By 1933, the Lihue Plantation Company had purchased Makee Sugar Company and by 1935 had owned all or portions of the Ahukini Railway, Nawiliwili Transportation Company, East Kauai Water Company, Princeville Ranch, Waiahi Electric Company as well as pineapple lands leased to Hawaiian Canneries (Saito and Campbell 2004). The plantation managed to survive through labor shortages caused by World War II and other social and economic changes throughout the remainder of the twentieth century. After 151 years of operation, the Lihue Plantation Company closed its doors in December of 2000, leaving behind scattered remnants of Wailua's plantation era (Sommer 2002).

Public improvement projects along Kuhio Highway and commercial development within coastal Wailua during the recent times have continued to transform this area. These projects have also led to the completion of several archaeological, historical, and cultural studies that shed light on Wailua's Pre- and Post-contact history. The details of the relevant studies conducted within the current APE vicinity are presented in the following section of this report.

RELEVANT PRIOR STUDIES

There have been several relevant prior studies conducted in the vicinity of the current APE, four of which have been conducted within the APE. Collectively, these studies provide a general understanding of the cultural resources and historic properties that may be present within the APE. Table 2 lists these studies with findings, while Figure 10 depicts their locations relative to the current APE.

Table 2. Prior studies conducted within and in the vicinity of the current APE

Year	Author	Type of Study
1931	Bennett	Survey of <i>heiau</i>
1973	Kikuchi	Burial study
1995	Hammatt et al.	Archaeological Inventory Survey
2000	Elmore and Kennedy	Inadvertent Discovery of Human Remains
2002	Buffum and Dega	Archaeological Monitoring
2003	Dega and Powell	Archaeological Monitoring
2005	Hoffman et al.	Archaeological Inventory Survey
2006	O'Leary and Hammatt	Archaeological Inventory Survey Addendum
2007	Hammatt and Shideler	Archaeological Assessment with Substantial Subsurface Testing
2011	Yucha and Hammatt	Archaeological Assessment
2013	MKE and Fung	State Historic Bridge Inventory & Evaluation
2014	Kamai and Hammatt	Archaeological Monitoring
2020	Westfall	National Register of Historic Places Nomination

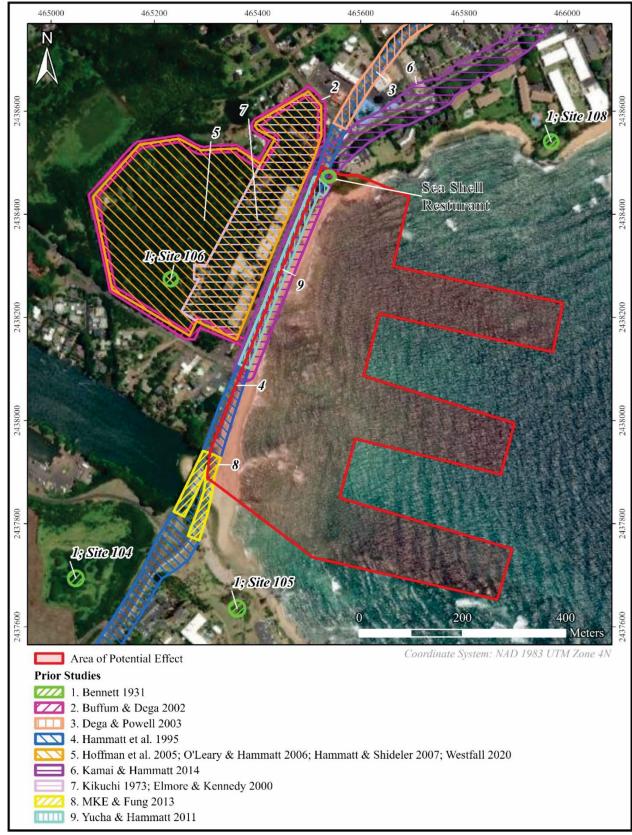


Figure 10. Prior studies conducted within and in the vicinity of the current APE.

Prior Studies Conducted in the Vicinity of the Current APE

Prior archaeological research in the area of Wailua began in the early twentieth century with an archaeological reconnaissance survey of *heiau* and places of refuge by Wendell Clark Bennett for Bishop Museum (Bennett 1931). In his book *Archaeology of Kauai*, Bennett describes four sites within vicinity of the APE, recorded by the Bishop Museum as Sites 104-106 and Site 108. Mālae Heiau (SIHP Site 50-30-08-0104) was located near the south end of Wailua River and only its outer walls remain. SIHP Site 50-30-08-0105 is documented as Hikina'akalā Heiau, situated on the shores of the south bank of the Wailua River. The *heiau* has three distinct divisions with stones dividing the front and middle portions and a number of graves mark the middle and outer sections. Subsequently, a place of refuge (Pu'uhonua o Hauola) and associated petroglyphs were added to Site 0105. SIHP Site 50-30-08-0106 is a royal coconut grove and the traditional birthplace of *ali'i* on the north bank of the Wailua River. Finally, SIHP Site 50-30-08-0108, Kukui Heiau, is located along the shore to the northeast side of the bay. Collectively, Sites 0104 through 0106 comprise the National and State Register of Historic Places nomination of the Wailua Complex of Heiau (SIHP Site 50-30-08-0502). Site 0502 is a group of five discontinuous *heiau*, in addition to Poliahu Heiau, Kalaeokamanu Heiau, and the royal birth site at Holoholokū and the bellstone (Dunbar 1988; Flores 1995).

Construction of the Coco Palms Hotel in Wailua began in the mid-twentieth century (Kikuchi 1973). An unknown number of burials were encountered while building the hotel and were later reburied at the front of the property. As a new wing was being added to the hotel in 1973, more human skeletal remains were encountered in sand deposits. William Kikuchi (1973) carried out a burial study to document the findings and, as a result, 34 sets of human skeletal remains were documented. Along with the burials, the study identified several pieces of logs and a large, modified helmet shell (*Cassis cornuta*). The human skeletal remains were reinterred at the site of the previous reburials and marked with a plaque attached to a boulder. Kikuchi (1973) does not document the precise location of the burials within the study area, so it is unclear where the burials were located (see Figure 10).

In 1995, Cultural Surveys Hawai'i (CSH) conducted an archaeological inventory survey (AIS) for three alternative road corridors that would traverse the lands of Hanamā'ulu, Wailua, North and South Olohena, Waipouli, and Kapa'a (Hammatt et al. 1995). This study documented two archaeological sites, SIHP Site 50-30-08-0756, a possible historic terrace, and SIHP Site 50-30-08-0634, the Wailua wetland, a major *lo'i* complex, which was subsequently converted into rice patches in the Historic Period. Both sites are situated along the north side and upstream of the mouth of the Wailua River.

Excavations of contaminated soil near a diesel tank at the Coco Palms Hotel property conducted by Elmore and Kennedy (2000) discovered another burial which was designated SIHP Site 50-30-08-0660. The burial was discovered with glass beads, which date to the early Historic Period. The individual was determined to be Native Hawaiian due to the presence of a coral abrader within a sand matrix (ibid.). The human skeletal remains were reburied in a boulder platform reinterment site at the north edge of the Coco Palms Hotel property.

In 2002, during a monitoring project at Coco Palms for the installation of a perimeter fence around the property, Scientific Consultant Services (SCS) encountered a buried cultural layer (SIHP Site 50-30-08-1711), which included an adze preform (Buffum and Dega 2002). During a subsequent monitoring project for the installation of a fiber optic cable along the *mauka* side of Kuhio Highway, Dega and Powell (2003) encountered an *imu* (rock filled earth oven) which they associated with the previously identified Site 1711.

In 2004, an AIS was carried out by CSH at the former Coco Palms Hotel Resort, during which eighty-six trenches were excavated and three sites were documented including the previously identified Site 1711 and two newly identified sites, SIHP Site 50-30-08-0680 and -0681 (Hoffman et al. 2005). A modified fishpond known as Weuweu-Kawai-Iki (Site 0680) was identified and subsequently nominated to the National Register of Historic Places. Site 0681 was a historic burial ground. The intermittent buried cultural layer, Site 1711, first recorded by Buffum and Dega (2002), was re-encountered in nine of the trenches in the western central portion and along the southern boundary. Subsequently, an addendum to the AIS documented an additional thirteen trenches in the northwestern portion of Coco Palms for a total of ninety-nine trenches (O'Leary and Hammatt 2006). No additional archaeological features were encountered.

In 2007, CSH carried out subsurface testing for an archaeological survey at TMK: (4) 4-1-003-039, which is situated along portions of the former railroad corridor situated between the Coco Palms Hotel and Kuhio Highway (Hammatt and Shideler 2007). Ten backhoe trenches were excavated, and a sparse cultural layer was discovered in one trench. The cultural layer included charcoal flecks, fire-affected rock, and *Nerita picea* (*pipipi*) shells. The cultural layer was interpreted to be an extension of Site 1711, the intermittent burial cultural layer that was initially recorded by Buffum and Dega (2002).