

KĀNEIOLOUMA HEIAU COMPLEX

MASTER PLAN

prepared by

HUI MĀLAMA O KĀNEIOLOUMA

Rupert Rowe, Po'o and President



V.1.1 May 21, 2012





"What you have here is more important than a heiau...."

- Kenneth Emory, 1951

"Let this great work begin at Koloa."

- Henry Kekahuna, 1959

"...and this particular place, *Kāneiolouma*, is a very special spiritual sacred place here on our island... As Mayor I made a commitment to this place to preserve it and to encourage others on our island to come and support this effort."

- Mayor Bernard Carvalho, 2010



EXECUTIVE SUMMARY

Kahua O Kāneiolouma (Kāneiolouma Complex) is a cultural site containing the remnants of an ancient Hawaiian village at Poʻipū, Kōloa, Kauaʻi. The 13-acre complex, presently under the jurisdiction of the County of Kauaʻi and designated as the Poʻipū Beach Mauka Preserve, contains numerous habitation, cultivation, sporting or assembly, and religious structures dating to at least the mid-1400's.

Kāneiolouma is wahi pana, a storied place. It is considered sacred to the Hawaiian culture as well as an important historic landmark for the residents of Kaua'i. Within the complex, an intricate system of walls and terraces trace the architecture of an ancient way of life. Remnants of house sites, fishponds, taro fields, above ground irrigation channels, shrines, altars, and idol sites lie relatively undisturbed near the scene of epic battles and legends in history spanning a millennium. Near its center, the complex contains what may be the only intact makahiki sporting arena in the state. The site also contains the sacred spring of Waiohai.

Largely intact but in need of rehabilitation, surrounded on all sides by roads and encroaching development, the ancient *kahua* (site) has suffered instances of flooding, disturbance, and theft of sacred rocks. These incidents were part of the impetus for formal stewardship protection. The complex has also succumbed to dense vegetation overgrowth, and its rock walls are undergoing slow deterioration and collapse with time. Without efforts for preservation and repair, this rare and remarkable heritage site would undoubtedly be lost.

Members of the Native Hawaiian group *Hui Mālama O Kāneiolouma* have unofficially cared for *Kahua O Kāneiolouma* for more than a decade. The group has an enduring vision and mission to protect, restore, interpret, and share *Kāneiolouma* as a public cultural preserve. Under a Stewardship Agreement signed in August 2010, the County of Kaua'i has granted formal custodianship of the *Kāneiolouma* complex to the group. The importance of this work to all of Kaua'i has been recognized by inclusion of this project in Mayor Bernard Carvalho's *Holo Holo* 2020 Plan.

This Master Plan describes the vision and work plan for *Kāneiolouma*. In this project, *Hui Mālama O Kāneiolouma* is taking the lead in the preservation, authentic restoration or rehabilitation, and interpretation of the *Kāneiolouma* complex, following the outline provided by Native Hawaiian archaeological expert, Henry E.P. Kekahuna. Kekahuna, the gifted and prolific surveyor of Hawaiian *heiau*, envisioned a restoration at *Kāneiolouma* that would create a "genuine Hawaiian village" to serve education, cultural, and tourism needs, while preserving and perpetuating ancient Hawaiian culture and history. In partnership with Kaua'i County and the local community, this project will develop a public cultural preserve integrated within the popular visitor destination of Po'ipū Beach Park. Kekahuna's detailed maps and descriptions provide an authentic blueprint to guide the work.



EXECUTIVE SUMMARY (Cont.)

The goals of the project are:

- △ To honor and respect the sacred places of *Kāneiolouma* while enhancing educational and recreational opportunities at Po' ipū.
- △ To provide a living link to Hawaiian traditions and heritage through expanded knowledge and experience of cultural practices.

The specific objectives are:

- 1- Establish and maintain site security.
- 2- Prevent further degradation.
- 3- Clear invasive overgrowth.
- 4- Reestablish appropriate native vegetation.
- 5- Restore or rebuild rock walls and terraces.
- 6- Restore fish ponds and selected cultivation areas.
- 7- Restore selected habitation areas.
- 8- Create informative interpretive signage.
- 9- Create an interpretive visitor center.
- 10- Open the site to the public.
- 11- Maximize access while safeguarding respect for sacred areas
- 12- Integrate as part of the visitor experience at Po' ipū Beach Park.
- 13- Showcase local history and traditional Hawaiian art forms.
- Provide valuable educational opportunities for students and visitors; ensure a cultural experience that is respectful and accurate.
- 15- Serve as venue for local cultural activities.
- 16- Be host for annual traditional Makahiki ceremonies.

The guiding principles for the project are:

- All actions are grounded in respect for Hawaiian culture and its traditions, language, and life in balance with the land.
- △ All restoration is strictly authentic and performed in accord with ancient protocols.
- △ To the greatest degree possible, a Hawaiian atmosphere prevails. That means no metal or anything that did not exist in ancient Hawaii. Use only native Hawaiian and traditional Polynesian (canoe) plants.
- △ Care of the site is paramount. Work vigilantly to prevent damage or deterioration.
- △ This is a cultural ceremonial preserve. Dance and sports have a place, Island champions are determined. *Kāneiolouma* can resume a traditional role in hosting larger groups and inter-island visitors for *Makahiki* ceremonies.
- △ Cultural experts are engaged to ensure correct protocols are followed.
- △ Community participation and volunteers are involved to share in the experience of restoring *Kāneiolouma*.
- \triangle The site is preserved for the access and benefit of all peoples.



EXECUTIVE SUMMARY (Cont.)

Under the Stewardship Agreement, all work is subject to approval by the County, through the Parks Department, in consultation where appropriate with the Kaua'i Historic Preservation Review Commission and the state Department of Land and Natural Resources State Historic Preservation Division.

The Master Plan addresses a seven year horizon, with work in four overlapping phases. Priorities for each Phase are as follows.

Phase I: (one year time-frame)

- Perimeter security wall and protective signage.
- Adjacent parcel acquisition.
- Removal of hurricane debris.
- □ 3-D site survey and documentation.
- Assembly of cultural stone masons and volunteers.

Phase II: (three year time-frame)

- ☼ Rock wall restoration.
- Drainage plan and flood mitigation.
- □ Interpretive signage development.
- ☼ Traffic plan.

Phase III: (five year time-frame)

- Fishpond restoration.
- Taro field restoration.
- Selected house site restoration.
- Pathways and viewing points.
- Grounds open to public.

Phase IV: (seven year time-frame)

- □ Interpretive center construction/remodel.
- ☼ Interpretive displays install.
- Facilities integration with Poʻipū Beach Park.
- Cultural activities begin.
- Interpretive visitor center open to public.

In Year 1, the work of the project involves establishing site security, clearing vegetation, planning for rock wall rehabilitation, and increasing public awareness, knowledge and respect for the site. Acquisition of funding and in-kind donations, and procurement of an adjacent land parcel, as well as continued assistance from the County, are crucial to progression through succeeding phases. However, much of the work throughout the project, and ongoing, will be accomplished by volunteer labor and donated services, under the guidance of cultural practitioners.



EXECUTIVE SUMMARY (Cont.)

The *Kāneiolouma* restoration project is a volunteer-driven, knowledge-rich, partnership-based endeavor which honors the values, traditions, and achievements of Hawaiian ancestors in southern Kōloa. The work is informed and guided by Hawaiian culture, and strengthened by County and community support. The intent is to preserve in perpetuity, for all people, the sacred site at *Kāneiolouma* and ensure that its irreplaceable knowledge and heritage are passed on, to the future.



Volunteers work at Kāneiolouma, 2010

"The Past will become the Future, and the Future will become the Present."

- Rupert Rowe



TABLE OF CONTENTS

EXECU 1	ΓIVE SU	MMARY	iii
List of F	igures .		ix
List of M	1aps		ix
List of T	ables		ix
SECTIO	N 1.	INTRODUCTION	1
1.1.	Overv	iew	1
1.2.	Locati	on	1
1.3.	Histor	ical and cultural significance	3
_	1.3.1.	Description	3
	1.3.2.	Sporting complex	3
	1.3.3.	Heiau location	4
	1.3.4.	Fishponds	
	1.3.5.		_
	1.3.6.	3	=
1.4.		eological inventory survey	
1.5.		ng condition	
1.6.	•	t background	
	1.6.1.	9	
	1.6.2.		_
	1.6.3.	1 3	
		Goals and objectives	
SECTIO		HISTORY	
2.1.	Pre-co	ontact	
	2.1.1.		
	2.1.2.	J / I	
	2.1.3.	, 3,	
	2.1.4.		
2.2.	-	entury	
	2.2.1. 2.2.2.	Commercial development	
	2.2.3.	,	_
2.3.		rn Use	_
		MASTER PLAN	
3.1.		nble	
	3.1.1.	Definition and purpose	
	3.1.2.	ComponentsGuiding principles	
2.2	3.1.3.		
3.2.	3.2.1.	vation PlanGuidelines	
	3.2.1.	Restoration definitions	
	3.2.2.	Security wall	
	3.2.4.	Clearing	_
	3.2.5.		_
		Rock wall repair	· ·
	_	1	7-

*	
ñ	

	3.2.7.	Fishpond restoration	44
	3.2.8.	Taro restoration	
	3.2.9.	Other restoration	46
	3.2.10.	Replanting	47
	3.2.11.	Organization of restoration work	48
	3.2.12.	National Historic Register re-submittal	49
	3.2.13.	YMCA property acquisition	50
3.3.	Interpre	etive Plan	51
	3.3.1.	Purpose	51
	3.3.2.	Themes	
	3.3.3.	Intended audience	_
	3.3.4.	External signage	
	3.3.5.	Internal signage	
	3.3.6.	Ancillary information	
	3.3.7.	Publications	
	3.3.8.	Interpretive center	
	3.3.9.	Pathways	
		Accessibility	_
		Integration with Poʻipū Beach Park	_
		Balancing use and preservation	_
		Plan Revision	_
3.4.		ement Plan	•
	3.4.1.	Purpose	
	3.4.2.	Key Principles	-
	3.4.3.	Organizational Structure	
	3.4.4. 3.4.5.	Food production	
	3·4·5· 3.4.6.	Hawaiian arts and cultural activities	
	3.4.7.	Educational events	
	3.4.8.	Interpretive center	
	3.4.9.	Revenue from operations	
		Operating sustainability	
	.	Plan revision	_
3.5.	• .	Plan	_
		ge Plange	
SECTIO	N . II	MPLEMENTATION	7°
4.1.		e and phasing	
•		le and phasing	
4.2.	_		
4.3.	•	assistance	
4.4.		n	
SECTIO	-	EFFERENCES CITED	-
		PPENDICES	
		Board of Directors, Hui Mālama O Kāneiolouma	
		Stewardship Agreement	
	_	Letters of Support	
APPE	NDIX 4:	Language Glossary	83



LIST OF MAPS

MAP 1.	Kaua'i County Tax Map Key (TMK) map showing Kaneiolouma parcels	2
MAP 2.	Idol sites mapped within the Kāneiolouma Complex	6
MAP 3.	Henry Kekahuna's Map of Kāneiolouma	7
MAP 4.	Archaeological inventory survey map of Kāneiolouma Complex	17
MAP 5.	1923 map showing LCA parcels	29
MAP 6.	Security wall location	37
MAP 7.	Grove Farm map overlay showing location of taro field	
MAP 8.	Nukumoi parcel	
MAP 9.	Proposed public pathways.	
	LIST OF TABLES	
TABLE 1.	Chronology of Archaeological Observations	5
TABLE 2.	Historic Significance Criteria Definition	16
TABLE 3.	Key Historical Events	31
TABLE 4.	Kaua'i Tourism Strategic Plan: Vision statement	52
TABLE 5.	Project Timeline	72
TABLE 6.	Detail of Project Phases and Resources	73
	LIST OF FIGURES	
FIGURE 1.	Aerial view of Kōloa region	2
FIGURE 2.	Aerial view of Kāneiolouma Complex.	4
FIGURE 3.	Walls, terraces, and other features	18
FIGURE 4.	Aerial view showing Kōloa Fields and Waiohai Hotel	30
FIGURE 5.	Schematic cross-section of security wall	37
FIGURE 6.	Schematic structure of gates through security wall	37
FIGURE 7.	Community volunteers clearing overgrowth	39
FIGURE 8.	Clearing completed since 2008	40
	Detail of rock wall	
FIGURE 10.	Stone masons and volunteers at work, Nu'alolo Kai	43
	Draft Landscaping Plan	
	Security Sign Examples	
FIGURE 13.	Organizational Structure	65



Section 1. INTRODUCTION

1.1. Overview

Within the footprint of Poʻipū Beach Park, less than a hundred yards from the beach, bounded on three sides by public roads and surrounded by modern development, an ancient Hawaiian site of rare and remarkable importance – $K\bar{a}neiolouma$ – has remained hidden for generations.

The *Kāneiolouma* complex is *wahi pana*, a storied place. It is considered sacred to the Hawaiian culture as well as an important historic landmark for the residents of Kauaʻi.^[1]

Here an intricate system of walls and terraces trace the architecture of an ancient way of life. Remnants of habitation, cultivation, and religious sites lie relatively undisturbed near the scene of epic battles and legends in history spanning a millennium.

The 13-acre complex is under jurisdiction of the County of Kaua'i (the County), which designates it as the *Po'ipū Beach Mauka Preserve*. In August 2010, the County signed a stewardship agreement^[2] with the native Hawaiian group, *Hui Mālama O Kāneiolouma* (the *Hui*), whose members have cared for the complex for more than a decade.

The Hui has an enduring vision and mission of protecting, rehabilitating, maintaining, interpreting, and sharing $K\bar{a}$ neiolouma as a public cultural preserve. The importance of this effort to all of Kaua'i has been recognized by inclusion of this project in Mayor Carvalho's $Holo\ 2020\ Plan.$

This Master Plan describes the *Hui* vision and work plan for *Kāneiolouma*. This is a volunteer-driven, knowledge-rich, partnership-based endeavor. The project is informed and guided by Hawaiian culture, and strengthened by County and community support. The goal is to preserve in perpetuity, for all people, the sacred site at *Kāneiolouma* and the cultural knowledge and heritage it embodies.

1.2. Location

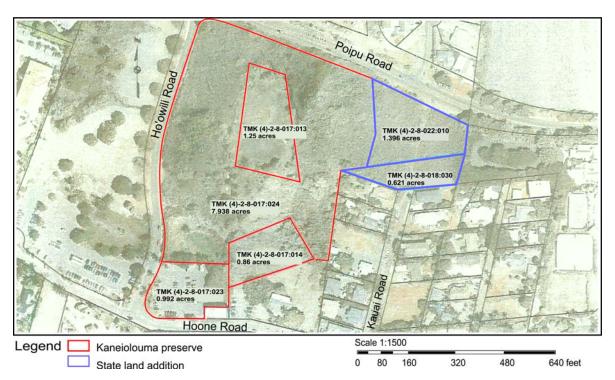
The *Kāneiolouma Heiau* complex is located on the south shore of Kaua'i, Kona district, in the *ahupua'a* of Kōloa, adjacent to the border of the *ahupua'a* of Weliweli (FIGURE 1).

The Poʻipū Beach Mauka Preserve is comprised of 11.04 acres (TMK 2-8-17: 13, 14, 23, 24) designated from county land. An additional 1.99 acres of state land (TMK 2-8-22:10 and 2-8-18:30) were added in September 2011. The added parcels were set aside by the State of Hawaii for county park purposes at county request, in light of their proximity to the *Kāneiolouma* complex (MAP 1).





FIGURE 1: Aerial view of Kōloa region looking north-northwest, showing the location of Poʻipū Beach Park and *Kahua O Kāneioluma*. Photo by Jaime Valdez.



MAP 1: Kaua'i TMK map showing Kāneiolouma complex. Red lines: County-owned parcels in Poipu Beach Mauka Preserve. Blue lines: State parcel added in 2011. County of Kaua'i image.



1.3. Historical and cultural significance

1.3.1. Description

There are multiple components to this complex, including religion, agriculture, and aquaculture (fish ponds). This site also contains the sacred spring of *Waiohai*.^[1]

By some estimates among the richest historical and cultural resources on the island, the complex contains the remnants of a pre-contact Hawaiian village.

Elements include extensive walled enclosures, taro patches, irrigation channels, a series of large fishponds, house platforms, cooking areas, house sites for *ali'i*, altars, shrines, *pōhaku* idols, numerous bases for temple images, and terracing throughout (see FIGURE 2 below).

At the eastern boundary lie remnants of a rock wall that ran for miles from the ocean toward the mountains, demarcating the historic *ahupua'a* boundary between Kōloa and Weliweli.

1.3.2. Sporting complex

Near its center, the complex contains what may be the only intact makahiki sporting arena in the state. Kekahuna described it as "a large sports arena where Hawaiian games such as forearm wrestling, or uma, wrestling, or $h\bar{a}k\bar{o}k\bar{o}$, and deadly grappling, or lua, were carried on." [5] This large arena is believed to be where chiefs of the region gathered for competition and celebration. Structural similarity has been pointed out [6] between $K\bar{a}neiolouma$ and the Marquesan stadium at Nanauhi, the kahua (Marquesan word tohua) described by Linton (1925):

"The practice of reserving an open space in or near each village as an assembly place was practically universal in Polynesia and was probably a feature of the culture of the original settlers of the region... The Marquesans applied the name tohua or taka ko'ina to the tribal assembly place at which feasts were given and certain classes of ceremonies performed...The essential and only constant feature of the tohua was the dance floor, a piece of level ground large enough to accommodate the assembled tribe... The low platforms surrounding the dance floor were almost entirely built over so that the structure, at the time of the fête, must have given the effect of a plaza surrounded by houses." [7]

Local stories and $k\bar{u}puna$ memory support the notion.

Brenneke's parking lot is the area where the canoes would come in for *makahiki*. *Makahiki* was a time of games when the islands' athletes would come to compete in tests of strength and skill. (R. Rowe, pers. comm.) The first appearance of the constellation *Na Huihui o Makali'l* (the Pleiades) in the eastern sky at sunset marks the beginning of the festival. This is a time of peace in which Hawaiians honor the god *Lono*, god of agriculture, peace, and fertility. Storytelling, hula and athletic competitions fill the *Makahiki* season. (R. Wichman, pers. comm.)

Makahiki was an ancient festival beginning in mid-October and lasting about four months, with sports competitions and religious festivities and a *kapu* on war. This was a time in which ancient Hawaiians honored the earth for giving them plenty to eat. It was a period of resting and feasting, during which no wars or conflicts were allowed.





FIGURE 2: Aerial view of the Kāneiolouma complex, looking south, September 9, 2011. Selected cultural features are indicated. Aerial photo by Randy Wichman.

1.3.3. Heiau location

Existence of a *heiau* at *Kāneiolouma* was first mentioned in 1885 in the *Lahainaluna* compositions^[8] (see TABLE 1, next page). The most detailed mapping of the complex to date was produced in 1959 by the accomplished archaeological expert, Henry Kekahuna,^[9] who mapped and described over 68 *heiau* throughout Hawaii. Kekahuna's work provides an invaluable roadmap for site restoration.

Over the course of a century and a quarter of scholarship, some ambiguity has arisen over precise location of the heiau at $K\bar{a}neiolouma$ (TABLE 1).





DATE AUTHOR SUMMARY QUOTED TEXT	DATE	AUTHOR	SUMMARY	QUOTED TEXT
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1885	Lahainaluna Comp. No. 17	Described a heiau "Louma" on the mauka side of a fish pond named Ho'oleina-ka-puaa, the pond itself being located "mauka of the houses."	"Louma was another heiau, which also stood in southern Koloa on the mountainward side of Ho'oleina-ka-puaa (Place-to-throw-in-the-pig), a pond on the mountainward side of the houses. The heiau was close by. It was a small heiau in which hogs, red fishes etc. were offered. Lonoikaoualii was the chief and Wakea was the priest who brought the stones from Oahu. The menehune built the heiau." [8]
1907	Thrum	Used name "Kaneiolouma heiau" and described a thick-walled, internally compartmentalized structure in a more makai location "close to the beach." [Note: Thrum also described a "walled enclosure and house sites" located "just to the northeast" of the above site.]	"Near Poipu beach, at Koloa, are two walled heiau but a short distance apart. The larger one named Kaneiolouma, contains features all its own in the stone enclosed unconnected rooms which extends across its eastern end" "Kaneiolouma - Size 102x180 feet, lying nearly east and west along shore close to the beach; of three terraces, with two prominent and other room divisions at east or inner end: west end open; side walls 3 to 5 feet high; seaward wall 9 feet thick; east end wall very crooked, 11 feet thick, 6 feet high. Inner terrace is stone paved, middle terrace partly so, with flat slabs of coral or lime stone." [10]
1931	Bennett	Like Thrum, Bennett placed <i>Kaneiolouma Heiau</i> in a <i>makai</i> location. He provided a similar description to, and drawing based partly on, that of Thrum.	"This structure consists of three large sections and four rooms in the back wall. The front wall is now missing but stones embedded in the ground indicate its original position. The outer or front section is unpaved and it is divided from the midsection by a line of stones on edge as well as by a dirt terrace. The middle section still show a few slabs of the limestone with which it was once paved The wall towards the sea is 9 feet wide and 5 feet high The wall facing inland is 5 feet wide, 3 to 5 feet high, and has been somewhat restored. Room divisions with or without connection either between themselves or to the heiau proper. Thrum's measurements have been followed drawing the room divisions. "[11]
1950	Moir	Moir mapped and described Kaneiolouma Heiau as a large walled enclosure within the terraced complex located mauka of the fishponds. [Note: The place name Ho'oleina-ka-puaa referenced by Lahainaluna (1885) is also associated with the pond drawn by Moir.]	"To the left of the causeway is a low area about 100 feet wide and over 300 feet long. There is a line of stones running from the SE to the NW a hundred feet from the causeway. About 50 feet beyond the line of stones are the entrances to two large banked areas which seem to have been fishpondsTo the right of the causeway is a wet oval shaped area about 90 ft x 200 ft. Along the north and east edge of the oval is a stone wall about 6 ft high. Nearly 100 feet from the left end of this wall and 10 ft out from it is a spring about 10 ft in diameter edged with a 3 foot coping of flat rocks. This is the spring of Waiohai Judging by comparisons of other Heiaus, this would appear to have been a very powerful and ancient place of worship dedicated to Kane" [12]
1951	Emory	In a letter to Hector Moir, Dr. Emory recognized the resemblance of the <i>Kaneioloum</i> a complex to the Marquesan <i>tohua</i> or place of assembly.	"What I think you have found here in this site is something much more important than a heiau, namely, a kahua for sports and games, for the chiefs of this part of Kaua'i." [6]
1959	Kekahuna	Kekahuna intricately mapped details of the same large mauka complex identified by Moir; including fishponds, taro fields, 'auwai, house sites, sporting arena, idol sites, and other features associated with the Kaneiolouma Heiau.	"It is planned that someday the sizeable tract in Wai-ohai, Poipu, Koloa, Kaua'i, that contains the remnants of the heiau, or ancient temple, of Kaneiolouma, especially dedicated to tournaments of sports and combat, and also to the replenishment of vegetable food (hoolu 'ai) and of fish (hoolu i'a) shall be made a State Park." [13]
1963	Kikuchi	Kikuchi placed Kāne-i-olo-uma heiau in the mauka position corresponding with the Moir and Kekahuna maps; but noted discrepancies among heiau drawings, and reprinted both the Bennett and Moir diagrams.	"The heiau of Kāne-i-olo-uma was located to be in the area just back of the YMCA building at Poʻipū Beach. There are at least three different maps of this temple all a varient (sic) of each other." (124)
1967	Soehren	Based mainly on the notes of Thrum and Bennett, Soehren opined that <i>Kaneiolouma Heiau</i> was located on Nukumoi Point.	"The site presently identified as that of Kaneiolouma heiau on maps drawn by Hector Moir in November, 1950, by Henry Kekahuna in September, 1959, on the State tax maps,is erroneous." [ref]
2005	Dockall et al.	Noted contemporary use of the name <i>Kaneiolouma Heiau</i> for the large walled structure ("3888E") inside the <i>mauka</i> complex. Due to its lack of structural conformity with descriptions of Thrum and Bennett, Dockall concluded that the <i>heiau</i> label should not be placed on Feature 3888E.	"Kāne-i-olo-uma Heiau is located at the edge of Kōloa village behind the old YMCA building that is now a surf shop." [125, page 5] (cited in section: "Mythological and Traditional Accounts") "Evidence indicates that the application of the name Kaneiolouma Heiau to [Feature] 3888E is in error." [125, page 50]

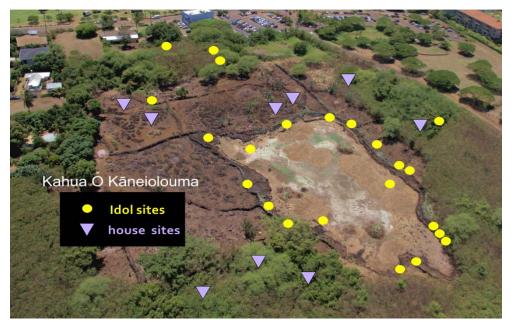
Such uncertainty is not uncommon; see for example the discussion on locating *heiau* by Beckett and Singer (1999) in the preface to *Pana Oʻahu*:

"Ambiguity surrounds *heiau* locations, names, and interpretations; those interested in them must develop a sort of ambiguity tolerance." "It is easy...to understand the reason for the absence of solid information. The imprecise, sometimes conflicting primary sources...all of these hurdles make writing about *heiau* difficult..." "Of special concern are the modest sites of the *maka'āinana* (the common people) which are often more vulnerable to vandalism and demolition than the large *heiau*. Their sites include fishing, agricultural, family, and craft shrines, all of which may be harder to recognize than the more elaborate sites of their *ali'i*." ^[16]

In a related vein, Mulrooney and Ladefoged (2005) discuss diversity of *heiau*. They note that Hawaiian religion contained a continuum of deities controlling all aspects of Hawaiian life. Forms of worship included productivity rituals at small local *heiau* by priests, chiefs and commoners. The authors write:

"In these rituals, heiau functioned in various ways and their significance did not necessarily correlate with their material form. The term "heiau" describes any place of worship and can thus refer to a natural or built structure or a location that is considered sacred (Valeri 1985:173). Personal shrines found in residential structures, upright stones and temples built for specific purposes, such as fishing shrines and agricultural temples, are all considered heiau. The great diversity of these structures reflects the complex nature of Hawaiian religion and the fact that the domains of the deities to which these structures were dedicated encompassed most aspects of Hawaiian life (Cachola-Abad 2000)." [17, 18, 19]

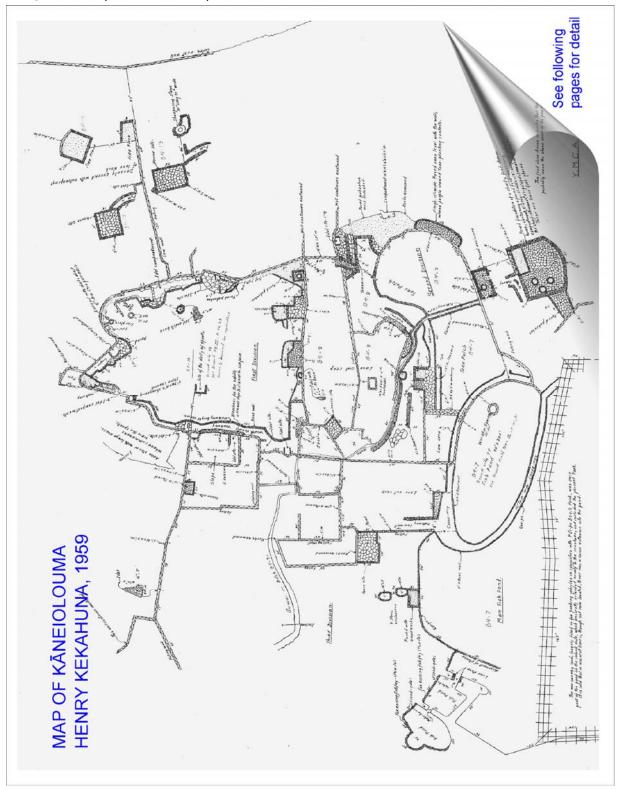
Despite the range of opinion on *heiau* locations, no authority has disagreed on the richness and cultural importance of the *Kāneiolouma* site. We use the term *Kāneiolouma Heiau Complex* or *Kahua O Kāneiolouma* to denote the *mauka*-located complex as described by Kekahuna. The presence of 23 *ki'i* (religious idol) sites within the *kahua* (MAP 2 below) clearly establishes the sacred nature of the site according to traditional cultural understanding (Rupert Rowe, pers. comm.).

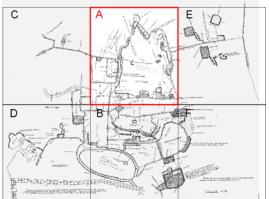


MAP 2: Location of ki'i (idol) sites within Kahua O Kāneiolouma.

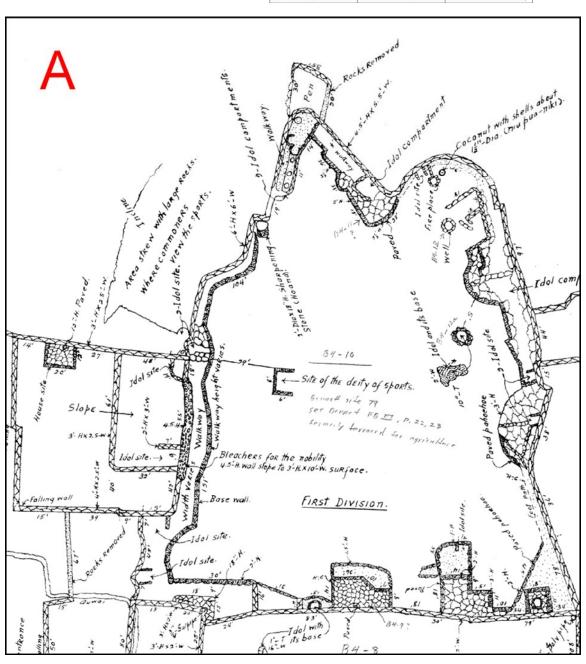
Kekahuna's map of $K\bar{a}$ neiolouma, which will guide the restoration, is reproduced below (MAP 3). Parts A-H show magnified views of the indicated areas from the detailed drawing.

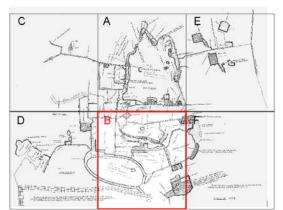
MAP 3. Henry Kekahuna's Map of Kāneiolouma



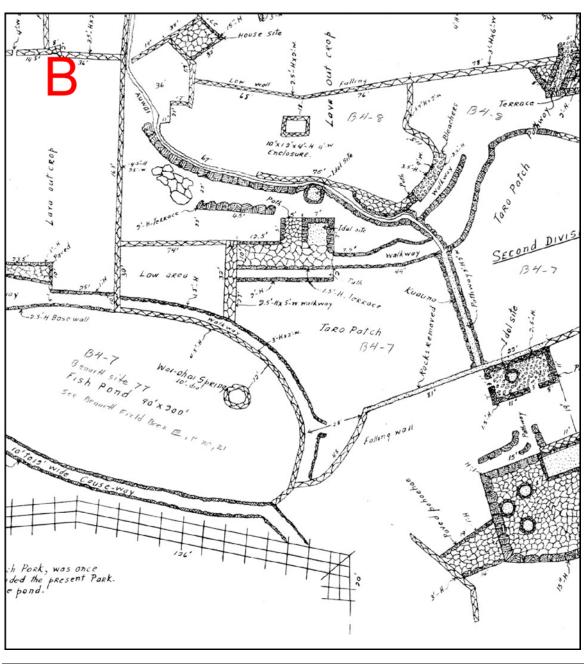


Map 3A. Detail of Kekahuna's Map of Kāneiolouma (part 1 of 6)

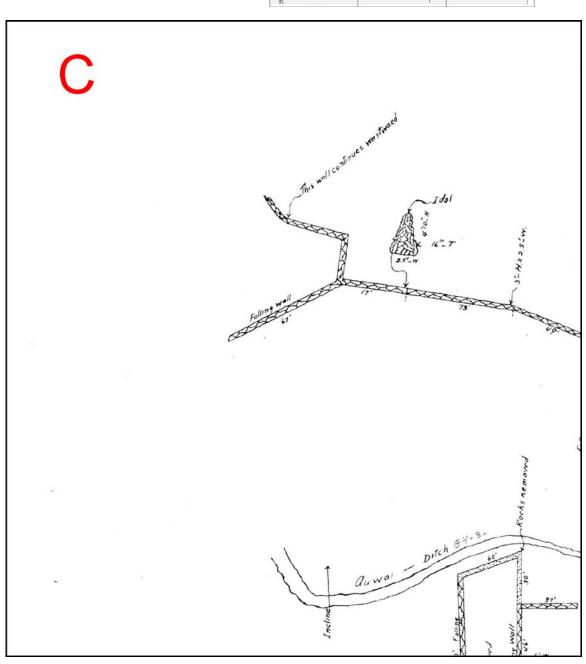




Map 3B. Detail of Kekahuna's Map of Kāneiolouma (part 2 of 6)



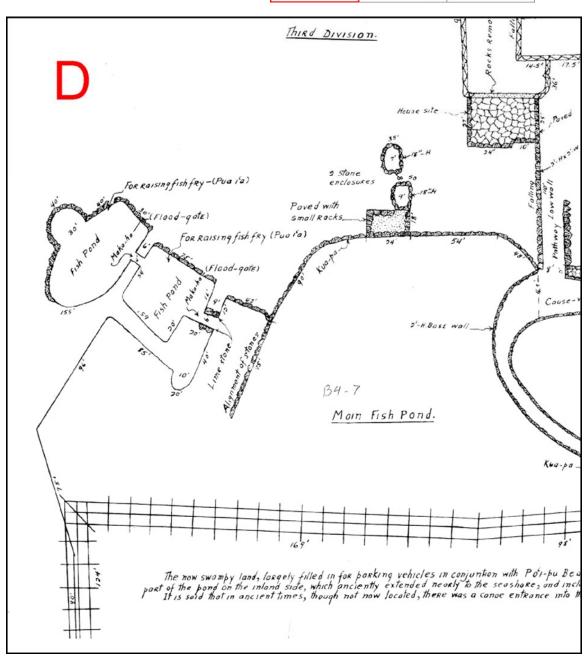
Map 3C. Detail of Kekahuna's Map of Kāneiolouma (part 3 of 6)

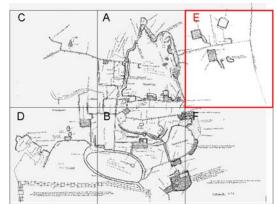


D B

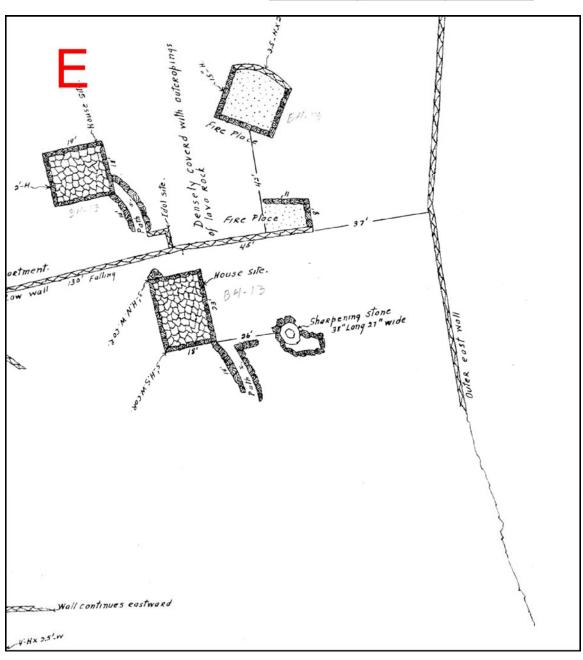
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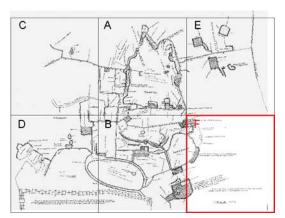
Map 3D. Detail of Kekahuna's Map of Kāneiolouma (part 4 of 6)



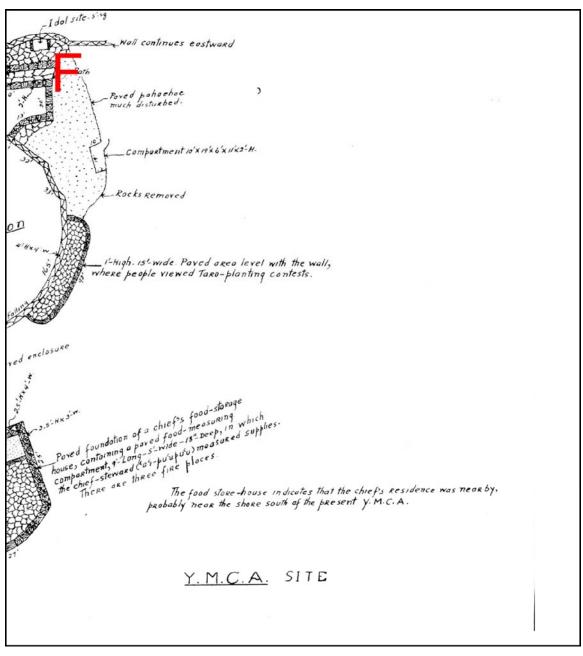


Map 3E. Detail of Kekahuna's Map of Kāneiolouma (part 5 of 6)





Map 3F. Detail of Kekahuna's Map of Kāneiolouma (part 6 of 6)



1.3.4. Fishponds

As part of a continuum of irrigated agriculture-aquaculture production^[20], the ancient fishponds of Hawai'i were a significant technological achievement and reflected deep understanding and synchrony with the natural environment. Fishponds, used for raising and holding selected fish, were integral to the *ahupua'a* system. They provided an important food source and were also a symbol of chiefly power. In a culture that honored the earth's abundance, these ponds emblemized the connection Hawaiians forged between themselves, the *'āina* (land), and the *akua* (gods).^[21]

Hawaiians built four kinds of fishpond^[20] taking advantage of natural water sources, tides, and shoreline configuration, ranging from large walled ocean pens to upland ponds. Of these, two kinds were likely important at *Kāneiolouma*:

- Loko i'a kalo were the simplest fishponds: irrigated agricultural plots fed and drained through a system of ditches. Ancient farmers often grew 'o'opu (gobies) and 'ōpae (shrimp) along with their taro.
- Loko wai were natural ponds and lakes, usually found close to the shore, in which fish were placed and allowed to fatten. They most often had natural connections to the sea by way of ditches or streams and thus would have been



partially brackish because of tidal action. The rich pond habitat was ideal for growing young fish. 'O'opu (gobies), 'ama'ama (striped mullet), awa'aua (milkfish), and āholehole (Hawaiian flagtail), all tolerant of both fresh and brackish water, were some of the fish raised in loko wai. [20]

The location of a fishpond was not by chance: Characteristically a fresh water source such as a spring or stream would feed the pond. The fresh water percolating through the ground brought minerals and trace nutrients that entered the pond and acted as fertilizer for phytoplankton and algae, on which herbivorous fish like 'ama'ama (mullet) and awa'aua (milkfish) feed. [22] Harvesting these fish for direct human use meant a short food chain and energetically efficient use of resources.

A ki'o was a small pond used for stocking fish fry, usually attached to larger ponds. Fry and fingerlings were kept in the smaller ponds until they were big enough to survive in the large loko (pond). A defining feature of Hawaiian fishponds was use of $m\bar{a}k\bar{a}h\bar{a}$ (sluice gates) used to regulate fish movement and aid in harvesting. [23]

At *Kāneiolouma*, Kekahuna's map depicts an 18,000 sq ft (0.4 acre) main fish pond fed by the Waiohai spring, with several connected fry-rearing ponds and structures including *mākāhā*. A previous larger extent and possible salt water access are noted.

"The now swampy land largely filled in for parking vehicles in conjunction with Poʻipū Beach Park was once part of the pond on the inland side, which anciently extended nearly to the seashore, and included the present Park. It is said that in ancient times, though not now located, there was a canoe entrance into the pond." $^{[9]}$ (MAP $_3$ D above).

1.3.5. Taro fields

Kahua O Kāneiolouma also includes several areas that were dedicated to kalo (taro) production. The life of the Hawaiian people is linked closely with the taro plant. The staple of the Hawaiian diet, kalo is regarded as a divine ancestor. White (1994) describes:

"Taro (kalo) is believed to have the greatest life force of all foods. According to the Kumulipo, the creation chant, kalo grew from the first-born son of Wakea (sky father) and Papa (earth mother), through Wakea's relationship with his and Papa's daughter, Ho'ohokulani. Haloa-naka, as the son was named, was stillborn and buried. Out of his body grew the kalo plant, also called Haloa, which means everlasting breath. Kalo and poi (pounded taro) are a means of survival for the Hawai'i people. By eating kalo as poi, one at a time as a ritual around the poi bowl ('umeke) at the center of the diners, the protocol of Hawai'i is maintained. This is a ceremony of life that brings people together and supports a relationship of 'ohana (family) and of appreciation with the 'aumakua (ancestors)." [24]

From Cho et al. (2007):

"The next child [after Haloa-naka], named $H\bar{a}loa$, became the first human to live in the islands, and from him the Hawaiian people descended. Thus, some believe that the kalo plant, arising from the prior-born child, is older and more sacred than man. The younger $H\bar{a}loa$ would respect and care for the elder brother and in return would receive sustenance and nourishment. ... Certain kalo cultivars had ceremonial significance and were used as offerings to the gods; others, such as the red cultivars Lehua and Pi'i ali'i, were reserved to be eaten only by the chiefs. ... The Hawaiian concept of family, 'ohana, is derived from the word 'ohā, the axillary shoots of kalo that sprout from the main corm, the makua." [25]

Taro cannot grow in stagnant water; the plants require fresh, cool, flowing water. At *Kāneiolouma*, the taro patches were irrigated via the 'auwai (irrigation channel) carrying wai (fresh water) from a stream to the west. Water flow leaving the lo'i (taro plots) was directed to the fish ponds, thus carrying further nutrition to the fish. Other food grown in the complex around the banks of the lo'i likely included 'ulu (breadfruit), 'uala (sweet potato), and mai'a (banana).

The Hawaiians called freshwater wai, and considered it to be sacred. People using wai from streams took only what was necessary. They were expected to share the wai with others. This was done without greed or selfishness. Such practices gave Hawaiians their word for law which is $k\bar{a}n\bar{a}wai$, or the "equal sharing of water." Water was so valuable to Hawaiians that they used the word "wai" to indicate wealth, and to signify abundance and prosperity, waiwai. The presence of a freshwater stream was the core of the ahupua'a land division. Taro cultivation was integral to ancient Hawaiian life.

1.3.6. Surrounding area

Kāneiolouma is in the coastal fringe of the advanced agricultural zone, Kōloa Fields, which extended inland all the way to Kōloa town. As documented extensively by the work of Hammatt *et al.*, this system presented nearly continuous, highly integrated agricultural and habitation features, including long 'auwai (irrigation channels) originating from Waikomo Stream.^[15]

Believed to be among the earliest pre-contact agricultural systems in the state, Kōloa Fields "at its apex in the early 19th century represented one of the most intensive cultural landscapes in Hawai'i." [27]

Adjacent and just south of the $K\bar{a}neiolouma$ complex, Poʻipū Beach itself is the site of extensive archaeological findings, including an historic cemetery in Poʻipū Beach Park. [15]

The earliest radiocarbon dates from a 1993 survey at Poʻipū Beach Park showed a range AD₁₂₈₂ to AD₁₄₁₄. ^[28]

1.4. Archaeological inventory survey

An archaeological inventory survey of *Po'ipū Beach Mauka Preserve* was conducted by Cultural Surveys HI, Inc., in 2005. [15]

Habitation, agricultural, animal husbandry, and irrigation features were described.

Findings evidence use of the $K\bar{a}neiolouma$ complex dating from the mid-1400's. The authors note:

"The current inventory survey and previous research has documented the continual use of the Kōloa area from the mid-1400's to the post-contact historic period. Sites within the current project area also document this history of use from initial traditional agriculture to the later addition of historic functions such as animal husbandry and sugarcane agriculture."

Eight sites consisting of 68 component features were documented in the survey and recommended for preservation.

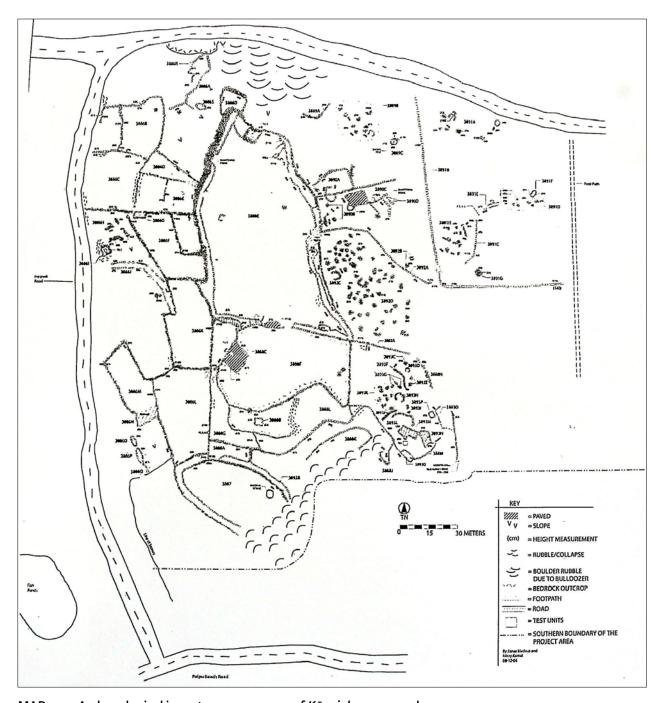
The authors state:

"All of the identified sites and their component features retain the potential to yield important information concerning the prehistory and history of Kaua'i, and are recommended for passive preservation by the county of Kaua'i." [15]

Six of the eight recommended sites were classified by the survey as significant under National Register of Historic Places Criterion D; one site under Criteria C and D; and one site under D and $E^{[15]}$ (definitions below, TABLE 2).

TABLE 2. Historic Significance Criteria: Definitions

С	Site is an excellent or unique example of a particular site type, period of occupation, or method of construction.
D	Site has yielded or has the potential to yield information important in prehistory or history.
Е	Site has cultural significance, probable religious structures or burials present.



MAP 4: Archaeological inventory survey map of *Kāneiolouma* complex (Dockall *et al.*, 2005, Revision No. 1 page 92.)

1.5. Existing condition

The Kāneiolouma complex is presently shrouded at the perimeter by dense screens of vegetation including haole koa and guinea grass. The surrounding area displays new roads and expanding development since the early maps of Moir and Kekahuna. However, inside the protected perimeter, the complex has remained hidden from view and largely undisturbed.

The wealth of pre-historic structures within the *kahua* is remarkably intact – deteriorated by time but for the most part untrammeled by modern occupation. The archaeological record exhibits notably little imprint from modern use and the site offers continuing potential for discovery.

Of concern, however, are recent instances of theft of sacred rocks. Although isolated, these incidents highlighted the need and were part of the impetus for formal stewardship and protection. Flooding and drainage issues have also posed problems in modern times (see Section 3.6, page 70).



Examples of features at *Kāneiolouma*, September 2011. Clockwise from top left:
(1) Rock wall and terrace, backed by tall cactus and other vegetation still to be cleared;
(2) Sharpening stone at house site; (3) C-shaped structure in sporting arena has corners aligned with the sun's rays at sunset on the solstice; (4) Partially collapsed rock wall to be repaired. Randy Wichman photos.

1.6. Project background

1.6.1. A genuine Hawaiian village

Henry Kekahuna, the gifted and prolific surveyor, wrote extensively about preserving Hawaiian culture. In a 1959 monograph^[30] entitled "A Genuinely Authentic Hawaiian Village for Kaua'i," he laid out a descriptive blueprint for restoration of Kāneiolouma.

"It is planned that someday the sizable tract in Waiohai, Poʻipū, Kōloa, Kauaʻi, that contains the remnants of the *heiau*, or ancient temple, of *Kāneiolouma*, especially dedicated to tournaments of sports and combat, and also to the replenishment of vegetable food (*hoolu ʻai*) and of fish (*hoolu iʻa*), shall be made a State Park." [30]

Kekahuna envisioned such a restoration to serve educational, cultural, and tourism needs while preserving and perpetuating ancient Hawaiian life and knowledge.

"Thus might be saved much more of Hawaii's ancient language, of her culture of the ages, and of the fine points of that culture... Today such knowledge is possessed only by a few old Hawaiians, whom we allow to pass little heeded year after year."

"Such an uncomparable attraction, accomplishing a far greater purpose that that of merely a park for recreation and the preservation of an ancient *heiau*, would be a genuine Hawaiian village..."^[30]

The manuscript's detailed advice ranges from types of native flora to food-crops, construction methods to custodianship, ceremonial usage to financial support.

Sixty years later, Kekahuna's vision remains presciently relevant, the imperatives now even more clearly understood, and the practical directions invaluable. Now, *Hui Mālama O Kāneiolouma*, and supporters, have begun this work.

1.6.2. Hui Mālama O Kāneiolouma

For more than a decade, Rupert Rowe and Billy Kaohelauli'i have been working on stabilizing the *Kāneiolouma* complex, with the support of many Kōloa residents. ^[1] They founded the stewardship group *Hui Mālama O Kāneiolouma*, which was reestablished in 2009 as an independent 501(c)3 non-profit organization.

The mission of *Hui Mālama O Kāneiolouma* is:

- to perpetuate the Hawaiian culture by preserving, protecting, and rehabilitating the Kāneiolouma complex, otherwise known as Poʻipū Beach Mauka Preserve; and
- to provide cultural education by perpetuating the Hawaiian cultural traditions practiced at southern Kōloa.

The *Hui* is assisted by numerous subject matter experts and overseen by a ninemember Board (APPENDIX 1). Augmented by the volunteer energy of such groups as the high school football team^[ref], the *Hui* has already devoted thousands of person-hours to cleaning the site and clearing overgrown vegetation. *Hui* members work at the site daily.

In their 2005 archaeological survey report^[15], Dockall *et al.* made note of the preservation goals of, and contributions made by, the *Hui*:

"The treatment and preservation recommendations for sites identified during this inventory survey would be incomplete if they did not include mention of the preservation work that has already been conducted by the members of [Ka] [H]ui mālama o Kāneiolouma. This group has been instrumental in preservation efforts for cultural sites within the current inventory survey area and adjacent areas. Part of the state's effort of passive preservation for these sites should include a formal recognition and support of the efforts of Ka hui mālama o Kāneiolouma. These efforts can be formalized through the development of an instrument that serves as a curatorial agreement between the County of Kaua'i and the group." [15]

1.6.3. Stewardship Agreement

In July 2010, Rupert Rowe, president of *Hui Mālama O Kāneiolouma*, and Mayor Bernard Carvalho signed an agreement transferring stewardship of *Kaneiolouma Heiau* complex to the *Hui*, under the County's Adopt-a-Park program. The agreement addresses the *mālama*, or care, preservation, protection and enhancement of the complex. [31, 32]

Under the agreement, the *Hui* will maintain the grounds within the boundaries of *Po'ipu Beach Park Mauka Preserve*, including security, landscaping, sign maintenance, and coordination of volunteer efforts by other organizations; and may sponsor volunteer projects and educational tours. Restoration, interpretive work, archaeological excavation and any construction will be subject to approval by the County of Kaua'i, with consultation from the Kaua'i Historic Preservation Review Commission and the state Department of Land and Natural Resources State Historic Preservation Division as required.

A copy of the Agreement is attached (APPENDIX 2).

1.6.4. Goals and objectives

1.6.4.1. Project goals

The goals of the project are:

- 1- To preserve and perpetuate Hawaiian culture through protection and restoration of *Kahua O Kāneiolouma*.
- 2- To honor and respect the sacred places of *Kāneiolouma* while enhancing educational and recreational opportunities at Poʻipū.
- 3- To provide a living link to Hawaiian traditions and heritage through expanded knowledge and experience of cultural experience.

A statement from Donald Cataluna, Trustee, Kaua'i and Ni'ihau, Office of Hawaiian Affairs, sums up the end reward of the project:

"When the $K\bar{a}neiolouma$ complex is repaired, our experience at Poʻipū Beach will be enriched culturally and spiritually beyond measure." [33]

(letter attached, Appendix 4)

1.6.4.2. Specific objectives

Specific objectives of the project are:

- 1- Establish and maintain security.
- 2- Prevent further degradation.
- 3- Clear invasive overgrowth.
- 4- Reestablish appropriate native vegetation.
- 5- Restore or rebuild rock walls and terraces.
- 6- Restore fish ponds and selected cultivation areas.
- 7- Restore selected habitation areas.
- 8- Create informative interpretive signage.
- 9- Create an interpretive visitor center.
- 10- Open the site to the public.
- 11- Maximize access while safeguarding respect for sacred areas
- 12- Integrate as part of the visitor experience at Poʻipū Beach Park.
- 13- Showcase local history and traditional Hawaiian art forms.
- 14- Provide a valuable educational experience for students and visitors.
- 15- Serve as venue for local cultural activities.
- 16- Be host to neighbor islands and Polynesian voyagers for annual traditional *Makahiki* ceremonies.

Section 2. HISTORY

"The historical chronology of events at Kōloa spans more than a millennium. The layers of time...show us great battles, powerful sorceresses, a dynasty of rulers, the birth place of the patron god of warriors, a stronghold for the fishing gods, agriculture on an amazing scale with above ground irrigation ditches, the advent of Western contact, a Kingdom port of call, massive expansion of the Kōloa field system, and the first sugar plantation in Hawai'i." [1]

So begins the historical description of *Kāneiolouma* written by Randy Wichman, former president of the Kaua'i Historical Society, and member of the *Hui Mālama O Kāneiolouma* Board of Directors. As part of this project, Mr. Wichman is researching a detailed history of the region focusing on *Kāneiolouma* and the *heiau* of Po'ipū. The planned product, an illustrated monograph, is anticipated within the duration of this project.

Some illustrative examples are provided below. The timeline below (following page 31) depicts the approximate timeline of events described.

2.1. Pre-contact history

2.1.1. A center of royal activity

With regard to Kaua'i's rulers: Nanaulu, a descendant in the fourteenth generation from Wakea (sky father), was the ancestor of Moikeha, the 1st ali'i 'aimoku (sovereign of the island) of Kaua'i. His dynasty was supplanted after two generations. The second, or Puna, dynasty was established by La'amaikahiki, eleventh in descent from Puna. In 1810, King Kaumuali'i, the 23rd and last ali'i 'aimoku of Kauai, ceded his unconquered kingdom to King Kamehameha I of Hawaii, in an effort to avoid bloodshed. For a number of these rulers, associations with Kōloa-Po'ipū are still known.

Ancient Poʻipū was the center of Royal activity for the southern shoreline of Kauaʻi. On these grounds resided high chiefs *Kukona* (7th *aliʻi ʻaimoku*) and *Manokalanipo* (8th) when on the south-side; and they were kept in paramount chiefly control until the last Prince *Kelijahonui*, son of *Kaumualʻi* (23rd) in the 1830's. [35]

Kāneiolouma was the primary assembly grounds for the population. All the events described in this section take place in the immediate vicinity, within two miles; thus their victory celebration would have occurred upon the royal grounds at Kāneiolouma. This royal center has also hosted famous travelers, as with Kapo'ulakina'u from Tahiti, and is known to the southern Polynesians. [35]

In their draft preservation plan for $K\bar{a}$ neiolouma Complex, Altizer and Hammatt (2010)^[36] make note of the record of association of the rulers Kawelo-aikanaka (18th ali'i 'aimoku) and Kawelo-a-Maihunali'i (19th) with Kōloa heiau. They summarize:

Clearly Kōloa was a particularly important ahupua \acute{a} in traditional Hawaiian times. That at least fourteen heiau of varying sizes and functions have been documented in the Kōloa area...and the association of legendary historic figures such as Kawelo and Aikana with the heiau, indicates a heightened cultural richness of the ahupua \acute{a} . [36]

2.1.2. Legendary heroes and epic battles

The history of Kōloa is replete with heroes who have changed the course of history; likewise the Kōloa-Poʻipū area is renowned as the scene of epic battles.

2.1.2.1. Kukona

The gracious hero *Kukona* (7th a*li'i 'aimoku* of Kaua'i), whose name in Hawai'i became a symbol of the very highest ideals of chivalry in battle, fought his defining battle at Po'ipū. His year of birth is estimated at around 1405.^[37]

In the first part of the 15th century, *Kalaunuiohua*, the ambitious chief of Hawai'i who had already conquered three other islands, tried to seize Kaua'i. He was accompanied into battle by the combined armies and chiefs of Maui, Molokai, and Oahu. The war is known as the War of *Ka-welewele*. The much smaller forces defending Kaua'i, led by *Kukona* and his son *Manokalanipo*, soundly defeated the invaders after leading them inland and then surrounding them at the shore.

Kukona captured all four chiefs, of Hawaiʻi, Oahu, Maui, and Molokai. He had the opportunity to kill them all and assume leadership over the islands. However, he preferred peace and allowed them to return safely home with a promise that they never again make war on Kauai. This peace lasted for four hundred years, until Kamehameha I made his conquest attempts at the turn of the nineteenth century. This peace was called ka lai loa ia Kamaluohua (The Long Peace of Kamaluohua). As noted by Fornander (1880):

"The war with the Hawaii chief, and the terrible defeat and capture of the latter, as well as *Kukona's* generous conduct towards the four chiefs who fell into his hands after the battle, brought Kauai back into the family circle of the other islands, and with an *eclat* and superiority which it maintained to the last of its independence." [39]

2.1.2.2. Manokalanipo

Kukona married his son Manokalanipo to the daughter of a west-side chiefess, thus ending a long-standing war between East and West Kaua'i and ushering in the era of great peace on Kauai. The wife of Manokalanipo was Naekapulani. One legend calls her Naekapulani-a-Makalii, indicating that Makalii was her father; and other legends speak of Makalii as a chief of Waimea. [39]

Manokalanipo was noted for the energy and wisdom with which he encouraged agriculture and industry, executed long and difficult works of irrigation, and thus brought fields of wilderness under cultivation. No foreign wars disturbed his reign, and it is remembered in the legends as the golden age of the island. [39]

2.1.2.3. Kawelo

When Kawelo-makualua (17th ali'i 'aimoku of Kaua'i) died, he was followed by his son Kawelo-aikanaka as (18th) ruler of Kaua'i. Kawelo-a-Maihunalii, a cousin of Aikanaka, "for some reason became obnoxious to Kawelo-aikanaka and was driven out of the

island."[39] After a sojourn on Oahu, he obtained men and canoes to invade Kaua'i and make a terrible war on *Kawelo-aikanaka*.

"The legends and chants of this war are lengthy... The result was the overthrow and death of *Kawelo-aikanaka* and transfer of supremacy of Kaua'i to *Kawelo-a-Maihunali'i*, or as he is called in some legends, *Kawelo-leimakua*." [39]

The battle took place nearby in Kōloa. As noted by Altizer^[36] with regard to $K\bar{a}$ neiolouma, Lahainaluna text #17 provides:

"Maulili was the first heiau of south Kōloa. ... This heiau was also famous for this reason – it was the first heiau to which Kawelo was carried after he had swooned in Wahiawa [in Kōloa], in the battle where stones were used as missiles." [8]

2.1.3. Mythology

Kōloa *ahupua'a* is rich in mythology, beyond the scope of this document. A few examples illustrate the nature and wealth of stories.

2.1.3.1. Kāne

In the coastal areas of Kōloa ahupua'a there are other heiau associated with the god $K\bar{a}ne$, one of the four main deities in traditional Hawaiian belief. "Kāne is a principle god in the pantheon and associated with fresh water, and it is his relationship with the other gods that brings forth life. Lono, the god of agriculture, along with Kāne's help, ensures a life cycle and abundance to all animal husbandry and crops. Kanaloa, the god of the sea, also needs Kāne's help in order to ensure a life cycle for the fish. This is significant as these three components are represented together at Kāneiolouma." [1]

Every month, the 27th and 28th night of the moon is traditionally reserved for $K\bar{a}ne$. On these nights, a kapv was placed on all beaches and everyone gathered on the inside of the heiau to drink 'awa. A Kōloa story^[40] tells us that the people stayed off the beaches for fear of disturbing $K\bar{a}ne$'s retinue, half-men half-fish, who congregated on the shore during this period. [8]

Farley (1907)^[41], quoted by Altizer, ^[36] describes mythical stories connecting $K\bar{a}ne$, $K\bar{o}loa$, heiau at $Po'ip\bar{u}$, and the pool of Maulili:

"The pool of Maulili, on Waikomo Stream...is a few hundred feet south of the Maulili Road bridge. The gods *Kāne* and his brother *Kanola* are said to have once slept above it. ... On the nights of *Kāne* the drums are heard to beat there, and also at the sacred rocks, or *unu*, of Opuokahaku and Kānemilohae near the beach of Poʻipū ...

To the south of Waihānau is a projecting rock named `Ke elelo o ka Hawaiʻi' – the tongue of Hawaiʻi – said to have been wrested and brought from Hawaiʻi by the Kauaʻi warrior Kawelo, of Wailua.

At the southern end of the Maulili pool started two large 'auwai, that watered the land east and west of $K\bar{o}loa$. [41]

Altizer^[36] observes:

"Thus, this sacred legend-imbued locus was the source that gave life to the lowland taro patches of Kōloa. These special associations would not have been lost on the Hawaiians dependent upon those waters." [36]

2.1.3.2. Palila

Palila, a legendary hero of antiquity, born in Kōloa, is remembered among the greatest of all warriors. Through his exploits he has become entrenched in the mythology of all Hawai'i and his south side heritage is a matter of immense pride. [35]

Palila conducted his famous battle in the area by destroying a forest of trees and killing all his father's enemies using his famous war club *Huliamahi*. Palila goes on to follow his destiny with a series of legendary battles on other islands, eventually settling in Hilo. [35]

According to the legend:

"Palila, son of Kalvapalena, chief over half of Kauai, and of Mahinui, the daughter of Hina, is born at Kamooloa, Kōloa, Kaua'i, in the form of a cord and cast out upon the rubbish heap whence he is rescued by Hina and brought up in the temple of Alanapo among the spirits, where he is fed upon nothing but bananas. The other chief of Kauai, Namakaokalani, is at war with his father. Hina sends Palila to offer his services. With his war club he fells forests as he travels" [thus defeating his father's enemy.]

[Palila subsequently] leaves home to fight monsters. He travels by throwing his club and hanging to one end ...The king of Oahu, Ahuapau, had offered the rule of Oahu to anyone who can slay the shark-man Kamaikaakui. After effecting this, Palila, who has inherited the nature of a spirit from his mother, is carried to the temple and made all human, in order to wed the king's daughter. He slays Olomana, the greatest warrior on Oahu, goes fishing with Kahului, with his war club for paddle and fishhook, then, with his club to aid him, springs to Molokai, Lanai, Maui, and thence to Kaula, Hawaii. Hina's sister Lupea becomes his attendant. She is a hau tree, and where Palila's malo is hung no hau tree grows to this day, through the power of Ku.

The kings of Hilo and Hamakua districts, *Kulukulua* and *Wanua*, are at war. [*Palila* fights at first invisibly.] ...Finally he makes himself known and kills *Moananuikalehua*, whose war club, *Koholalele*, takes 700 men to carry; *Kumunuiaiake*, whose spear of *mamane* wood from *Kawaihae* can be thrown farther than one *ahupua'a*; and *Puupuukaamai*, whose spear of hard *koaie* wood can kill 1,200 at a stroke. The jaw bones of these heroes he hangs on the tree *Kahakaauhae*. Finally *Palila* becomes king of Hilo."^[42]

2.1.3.3. Kapoʻulakinaʻu

According to legend, *Kapoʻulakinaʻu*, sister to *Pele* the fire goddess, arrived at Hanakāʻape (Kōloa Landing) enroute from Tahiti to Hawaiʻi. Here she took spiritual possession of a woman who was being beaten, thereby saving the woman and creating in her the gift of chants and prophesy. This woman then cared for the royal entourage at Poʻipū until they departed for Wailua.^[35]

2.1.4. Ancient life

Few recorded stories document the detail of pre-contact life. However it is clear that a well-organized society flourished at Kōloa. Archeological features illustrate all aspects of ancient society relating to the religious, economic, social, and political life of early Hawaiians.

Religion was the paramount aspect of Hawaiian life, permeating daily activity, secular affairs, and every significant event including birth, death, marriage, construction, fishing, agriculture, and war. Also important were regular calendrical celebrations to ensure well-being and prosperity. All activities were accompanied by the correct rites, ceremonies, and prayers to establish and maintain proper relations with the spirits.^[43]

Sophisticated intensive irrigated-agriculture and aquaculture systems were in use. The Kōloa Field system is thought to have been fully in place by the middle of the 15th century, and expanded and intensified continuously from that time. Impressive descriptions of the Kōloa Fields were provided by the first seafaring Europeans to set eyes on the Kōloa ahupua 'a from Hanaka'ape Bay. [44] In January 1778, Captain Cook wrote:

"What we saw of their agriculture, furnished sufficient proofs that they are not novices in that art. The vale ground has already been mentioned as one continuous plantation of kalo and a few other things, which all have the appearance of being well attended to. The potato fields and spots of sugar cane or plantains on the higher grounds are planted with the same regularity... The greater quantity and goodness of these articles may also perhaps be as attributed to skilful culture as to natural fertility of soil." [45]

Bernice Judd, quoted by Dockall, [15] summarizes most of what was known of the traditional Hawaiian life of Kōloa:

"In the old days two large 'auwai or ditches left the southern end of Ma'ulili pool to supply the taro patches to the east and west. On the kuauna (embankments) the natives grew bananas and sugar cane for convenience in irrigating. Along the coast they had fish ponds and salt pans... Their dry land farming was done on the kula where they raised sweet potatoes, of which both the tubers and the leaves were good to eat. The Hawaiians planted pia (arrowroot) as well as wauke (paper mulberry) in patches in the hills wherever they would grow naturally with but little cultivation. In the uplands they also gathered the leaves of the hala for mats and the nuts of the kukui for light." [46]

In general the Hawaiian *ahupua'a* was self-sufficient. A sustainable community originated in interdependence between the land and the people. Resource use was carefully balanced to sustain the resource, support the chiefs, ensure sufficient for the people, and protect the land and water. By sharing resources and working within the rhythms of their natural environment, Hawaiians enjoyed abundance, with leisure time for recreation especially during the harvest season. This lifestyle also encouraged a high level of artistic achievement. Hawaiians devoted themselves to competitive sport and martial arts as well as expression through dance, chant, and crafts such as kapa (tapa), creating rich traditions that have survived to the present. $^{[47]}$

As elsewhere in Hawai'i, stewardship of the land and its resources was maintained through the *kapu* system, which likewise governed most aspects of social interaction and maintained a strict societal structure. Notably, however, Kaua'i was less restrictive towards women than other localities. [35] For example, Kaua'i women ate foods unrestricted and could participate in *heiau* activities and war. [35]

Private land ownership was unknown, but in general the land tenure of the *maka'āinana* (commoners) was stable. They paid weekly labor taxes and annual taxes to the *konohiki*, or local overseer, who collected goods to support the chief and his court. The *konohiki* supervised communal labor within the *ahupua'a* and also regulated land, water and ocean use. [47] Independent chiefdoms were ruled by a supreme chief, or *ali'i 'ai-moku* (chief possessing an island or district); at times referred to as *ali'i-nui* (great chief) to distinguish him from lesser chiefs. Typically this position was attained by inheritance, as holder of highest rank among the nobility; however it could also be gained by force by a collateral relative or outside invader. The *ali'i-nui* had complete control over his lands and production, as well as the lives of his subjects. He derived these rights from his familial relationship with the Hawaiian gods and was considered one himself. [48]

In a typical village, houses were built close to production fields and were of several types. These include (listing the types likely to have existed at *Kāneiolouma*) in order of importance:

- Hale ali'i, the house of the chief, used as a residence for the high chief and meeting house of the lesser chiefs. It was built on a raised stone foundation to represent high social standing.
- Hale papa'a, the house of royal storage.
- Hale ulana, the house of the weaver, where craftswomen would gather to make baskets, fans, mats and other implements from dried pandanus leaves.
- Hale noho, the living house, sleeping and living quarters for the family unit.
- Imu, the communal earth oven. Dug in the ground, it was used by men to cook the entire village's food including pua'a or pork.

Because life focused on propitiating the gods, Hawaiians built many kinds of temples invoking peace, war, health, or successful fishing and farming. Families worshiped in a family *heiau*, or at small improvised altars or shrines. More formalized worship by chiefs or specific groups such as fishermen took place in larger temples or *heiau*. These structures ranged in complexity from single houses surrounded by a wooden fence, to stone-walled enclosures containing several houses, to massive open-air temples with terraces, extensive stone platforms, and numerous carved idols in which ruling chiefs paid homage to the major Hawaiian gods. [43]

The annual harvest festival of *Makahiki* was the most important Hawaiian festival. During this time, work and war were *kapu*. Initial activities involved paying tribute to the chiefs. During the year each household had produced extra items required for presentation to the chief. At the designated time, representatives of each land division carried those offerings to altars established at the point where the main trail around the island crossed the border of their *ahupua'a*. These were symbolic offerings to *Lono*, god of peace and agriculture, whose image was transported around the islands by the priests and high chief to acknowledge the gifts. When the circuit was completed, a period of feasts and celebrating began, marking the completion of agricultural labors for the year. [49]

2.2. 19th Century

2.2.1. Commercial development

As in the rest of Hawai'i, massive transformations that reshaped the traditional ways of life followed the arrival of Europeans at the beginning of the 19th century.

The missionaries opened their second station at Kōloa in 1834. The first sugar production in Hawai'i began at Kōloa in 1835 with the plantation of Ladd and Co., ushering in political and social transformation for Kaua'i.

Kōloa Landing was a thriving port of call from the 1840's to 1870's. Sheltered from strong winter trade winds, Kōloa was a favored port of call for the whaling and merchant trade in sweet potatoes, beef, pigs, and wood, as well as sugar and molasses.

As cited by Dockall, [15] James Jackson Jarves described Kōloa in 1844:

"Kōloa is now a flourishing village. A number of neat cottages, prettily situated amid shrubbery, have sprung up. The population of the place also has been constantly increasing, by emigration from other parts of the island, It numbers now about two thousand people, including many foreigners, among whom are stationed a missionary preacher, and physician, and their families." [50]

With regard to Kāneiolouma complex, Dockall et al. (2005)^[15] noted:

"Near the coast it appears that the effects of commercial cultivation were minimal. Clearing for cane cultivation occurred only along the banks of Waikomo Stream. Modifications to traditionally used agricultural fields are not clearly apparent, although substantial high walls superimposed on irrigated field walls and across 'auwai channels suggest a change in land utilization from one of strict cultivation to one supporting both cultivation and ranching." [15]

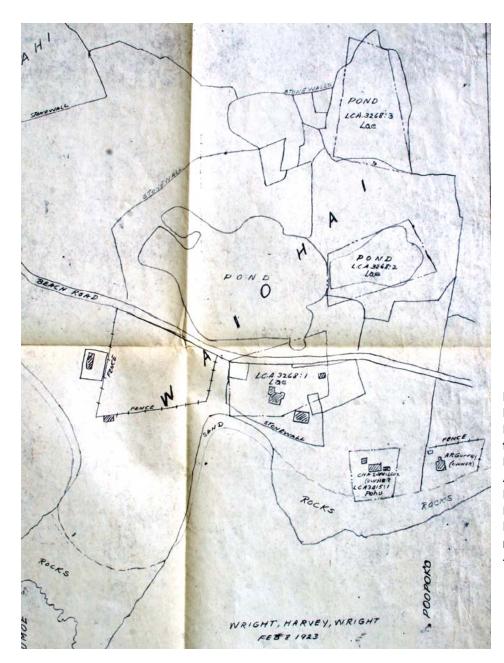
2.2.2. Mahele land division

The Great *Mahele* of 1848 overturned the traditional feudal system and allowed private ownership of land for the fist time. Lands formerly controlled by the king and other *ali'i* were divided and apportioned among the crown, the chiefs, and the people. Commoners were given an opportunity to claim their traditional family (*kuleana*) lands; however due in part to different cultural notions of property and law, many claims were never established.

According to the report of Dockall et al. [15]:

"Mahele records indicate that Kōloa ahupua'a (8,620 acres) was awarded to Moses Kekūāiwa (LCA 7714-B), the brother of Alexander Liholiho (Kamehameha IV), Lot Kapuāiwa (Kamehameha V), and Victoria Kamāmalu. One segment was leased to Ladd and Co. for sugar cane cultivation. At the time of the mahele, a number of kuleana were granted for homesteading and farming (Office of the Commissioner of Public Lands, 1929).

A Hawaiian subject by the name of Lae stated a claim in January 1848 for three Land Commission Awards (LCA) in close proximity to [Kāneiolouma complex] (LCA 3268:1, 3268:2, and 3268:3). The claimant received his lands from Kauhi in the days of Kaahumanu. Lae appears to have been awarded three 'āpana associated with LCA 3268. LCA 3268:2 consisted of three lo'i (taro fields) and a kula ([dry] field). LCA 3268:1 consisted of nine lo'i and a house lot located in the 'ili of Waiohai. Another individual named Walewale was awarded LCA 3286:1 located directly northwest of [Kāneiolouma complex]...comprised of three lo'i....Note the absence of any mention of Section 3."^[15]



MAP 5: Map by Wright, Harvey & Wright from 1923 places Land Commission Awards within the Preserve area. Note LCA 3268 belonging to Lae. Kaua'i Historical Society

Kaua'i Historical Society Archives .

2.2.3. Knudsen family

During the latter decades of the 19th century, the Knudsen family began a long association with the Kōloa-Poʻipū area, starting with Valdemar Knudsen from Norway who came to Kauaʻi in 1852. He married Anne Sinclair, who received as a dowry most of the Kōloa *ahupuaʻa*, which had been purchased by her mother Elizabeth Sinclair in 1870. Anne set up a trust and through it leased her land first to Kōloa Plantation, then to Grove Farm, and finally to McBryde. Anne died in 1920 and Knudsen descendants formed trusts in their own names. Anne Sinclair-Knudsen was instrumental in recognition and preservation of *Kāneiolouma heiau* land.

2.3. Modern Use

McBryde Sugar Co. and Kōloa Sugar Co. (successor to Ladd and Co.) transferred from Kōloa Landing to Port Allen in 1925. Soon after this, the sugar companies ceased use of the *makai* fields, and the Knudsen family converted much of the area to cattle pastureland. ^[36] Kōloa Sugar Co. merged with Grove Farm in 1948, and in 1974, McBryde sugar took over the mill and operation. The last harvest was made in 1996 when the mill was closed.

The Waiohai Hotel opened on the coast in 1962, marking the start of the tourism-based economy, followed by the Sheraton in 1967. By the late 1960's, population movement was trending, following the economy, from Kōloa town back towards the shoreline. Condominium development expanded along the shore in the 1970's and 80's. The Hyatt Regency Hotel and Poʻipū Bay Golf Course opened in 1991. The name Poʻipū Beach now generally denotes the two-mile coastline fronting the Sheraton, Kiahuna, and Waiohai developments and ending at Poʻipū Beach Park. [ref] Poʻipū Beach is regularly named America's Best Beach by the Travel Channel, ranking top among the 10 best beaches nationwide, and remains a premiere tourist destination. [51]

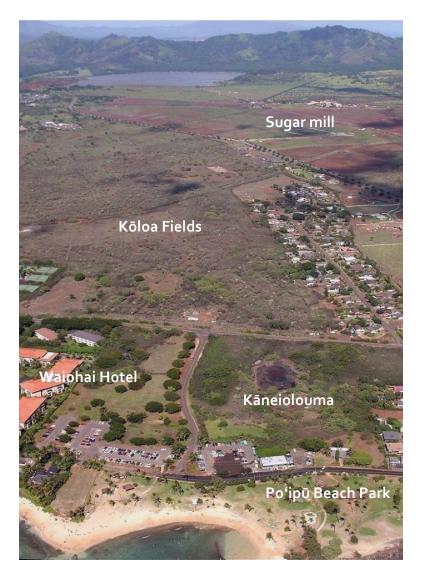
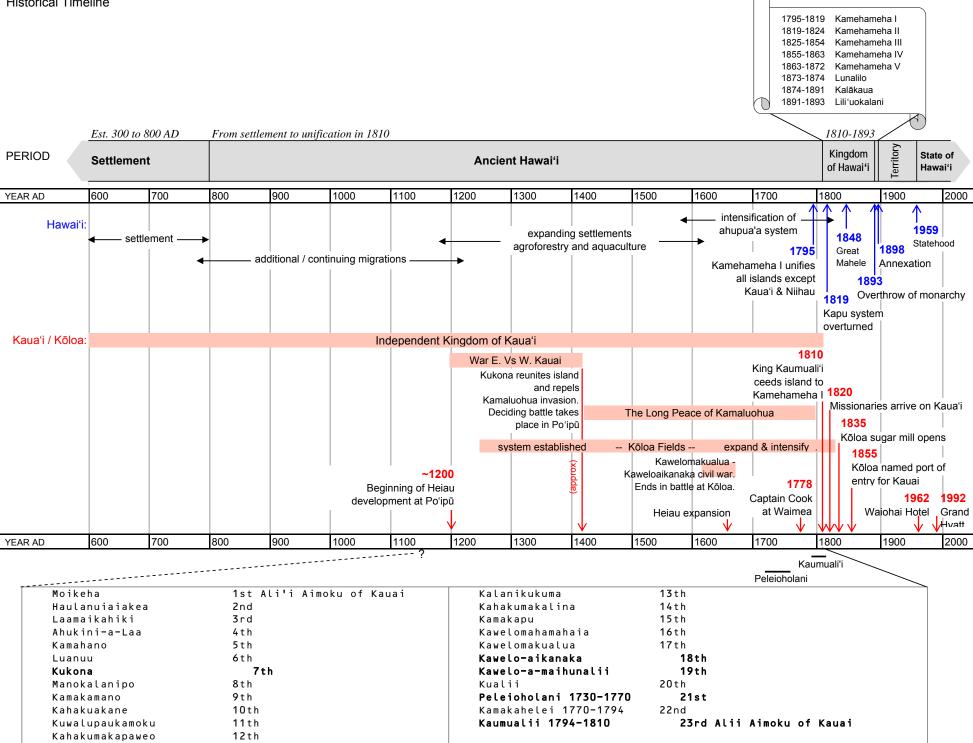


Figure 4: 2008 Aerial view showing Kōloa Fields and Waiohai Hotel. KHS collection.

TABLE 3. Key Historical Events*

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^{*} Note: Exact times for ancient events are difficult to know. Many are debated by scholars and remain subjects of research.



Section 3. MASTER PLAN

3.1. Preamble

3.1.1. Definition and purpose

A Master Plan is a comprehensive document that sets out an overall vision and steps for implementation. It is a long-term outline for a project or function, and typically incorporates related sub-plans. Its use and form varies somewhat by discipline.

- To engineers, a Master Plan means "the orderly planning of a system's future program and the initial step before specific design of parts of the system." [52]
- To architects and landscape architects, a Master Plan is more narrowly
 a concept definition for a space, illustrated by maps, drawings, and
 narrative
- ο To town planners or university leaders, a Master Plan is *α policy document to quide future development*.
- o For conservators of historic properties, a Master Plan has been called "a living document, that sets the parameters for the maintenance, interpretive programs, and management of the property."^[53]

The Kāneiolouma Master Plan incorporates elements from each of the above. It provides an overall vision for the project, sketches a timeline for the next decade, defines steps and methods, sets priorities, and addresses funding. The most immediate components have the most detailed work-plan specifics.

This is a living document, meaning that regular review, update, and further additions are planned. The entire Master Plan will be scheduled for review and updates at 5-year intervals. Additionally, several sub-plans are designated for further development as part of the project itself.

The purpose of this Master Plan is to provide a guiding blueprint for the work of *Hui Mālama Kāneiolouma* and to set parameters for care of *Kahua O Kāneiolouma* into the future.

3.1.2. Components

Components of the Master Plan are organized into the following (sub-plan) chapters:

- Preservation plan
- Interpretive plan
- Management plan
- Traffic plan (to be completed in consultation with County)
- Drainage plan (to be completed in consultation with County)

3.1.3. Guiding principles

Following are the guiding principles for the project:

- All actions are grounded in respect for the Hawaiian culture and its traditions, language, religion, and life in balance with the land.
- All restoration is strictly authentic and performed in accord with ancient protocols.
- To the greatest degree possible, a Hawaiian atmosphere prevails. That means no metal or anything that did not exist in ancient Hawaii.
- Care of the site is paramount. Work vigilantly to prevent damage or deterioration. Consider carrying capacity. No over-use.
- This is a cultural ceremonial preserve. Dance and sports have a place, Island champions are determined. *Kāneiolouma* can resume a traditional role in hosting larger groups and inter-island visitors for *Makahiki* ceremonies.
- Cultural experts are engaged to ensure correct protocols are followed.
- Community participation and volunteers are involved to share in the experience of restoring *Kāneiolouma*.
- The site is preserved for the access and benefit of all peoples.

3.2. Preservation Plan

3.2.1. Guidelines

A draft Preservation Plan prepared for the County of Kaua'i by Cultural Surveys Hawaii, Inc. in 2010^[36] recommended the following preservation/mitigation measures:

- 1. A stewardship agreement between the County of Kaua'i and *Hui Mālama O Kāneiolouma*.
- 2. Vegetation clearing, landscaping, and erosion control.
- 3. Site stabilization and reconstruction.
- 4. Monitoring of vegetation clearing and site stabilization activities.
- 5. Access for the public and cultural practices.
- 6. Barriers to rock theft.
- 7. Signs to advise of the legal consequences of vandalism and rock theft.

The present Master Plan includes measures that address the above recommendations.

3.2.2. Restoration definitions

The Secretary of the Interior's Standards and Guidelines for Preservation, as amended (1995), provide the following definitions: [54]

- <u>Restoration</u> is defined as "the process of accurately recovering the form, features and character of a property as it appeared at a particular period of time, by means of the removal of features from other periods and reconstruction of missing features from the restoration period."
- <u>Rehabilitation</u> is defined as "the process of making possible a compatible [modern] use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, architectural, and cultural values."
- <u>Reconstruction</u> is defined as the process of depicting by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time in its historic location.

In this project, preservation activities are dedicated to authentic restoration of the site to its pre-historic state. This will involve primarily stabilization and repair of deteriorated structures, and in some cases reconstruction of missing elements.

3.2.3. Security wall

3.2.3.1. **Need**

In light of the potential for site disturbance and theft, security is a concern. When the vegetation buffer that currently surrounds the preserve is removed, the entire *Kāneiolouma* complex will be open and clearly visible from Hoʻowili and Poʻipū roads. The view from the road will be a wide open landscape, looking into a natural arena and complicated array of walls, enclosures and terraces.

As a high priority, we are proposing a visually compatible perimeter buffer in the form of a rock wall to delineate and secure the preserve.

3.2.3.2. Appearance

The intent is not to block or spoil the view with fencing. We are committed to preserving a Hawaiian landscape and atmosphere. A stone wall, four feet high, three feet wide at its base and two at the top (**FIGURE 5**), grouted by cement the color of stone (following Kekahuna), will work to delineate the preserve boundary while still allowing visibility of the site. This wall style will be distinguishable from those within the complex.

3.2.3.3. Location

The placement of the perimeter wall is shown in MAP 6.

3.2.3.4. **Entrances**

Three openings through the security wall are proposed.

The eastern gateway is on the two acres recently transferred^[4] from the State to the County. This entry/exit opens onto an undeveloped road corridor (northern extension of Kaua'i Road) which has potential for enhancement for bike and pedestrian traffic (see MAP 6). The other two entrances are located on the western side fronting Ho'owili Road and are approximately 150 feet apart. The western entrances will give access to the main spectator viewing area during cultural performances. An inner recess wall with two gates at each entrance is proposed, as this will give the main wall a seamless continuity from most angles (see **FIGURE 6**). Note that these are pedestrian gates, four feet wide. The main entrance and vehicular access will be from the south side, at the location of the surf shop.



MAP 6: Aerial view of Kāneiolouma looking north-east, showing location of security wall and entrances to the preserve. The adjoining Nukumoi property (former YMCA) is also shown.

Aerial photo by Jim Aickman.

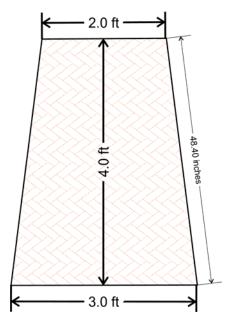


FIGURE 5: Schematic cross-section of proposed security wall.

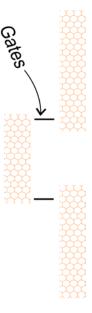


FIGURE 6: Schematic structure of gateways in security wall.

3.2.3.5. Construction

3.2.3.6. Materials and construction

Stone for the security wall is being donated by Alexander & Baldwin, Inc. and can be stockpiled at Manokalanipo during construction. No rocks will be taken from Poʻipū Beach. Concrete is being donated by Glover Ltd.

The County's procurement mechanisms including bid, award, and contracting protocols and insurance requirements will be used for this construction, with due attention to liability.

The total length of the security wall is approximately 1,500 linear feet. The surface area of the front face is approximately 6,000 square feet. The total square footage of wall surface (inner, outer, plus top) is approximately 15,331 square feet, including the three recessed walls.

3.2.3.7. Permits

State and County determinations and permits as required will be obtained.

3.2.4. Clearing

3.2.4.1. Interior

Over past years, *Hui Mālama O Kāneiolouma* members and volunteer workparties (FIGURE 7) have made steady progress clearing overgrown shrubs, trees, exotic grasses, and cacti from the interior of the complex at its center (compare FIGURE 8 parts (A) and (B)).

This clearing work will continue. FIGURE 8 shows the areas still to clear, about 40% of the site remaining. All clearing is done by hand (i.e., using only hand tools, defined to include chainsaws and weed-trimmers^[36]). Plant removal is performed slowly and with utmost care to avoid disturbing rocks or soil.

3.2.4.2. Perimeter

The protective screen at the perimeter will be removed only in coordination with construction of the security wall (Section 3.4.3, above). These are larger trees and dense growth which will take time to remove by hand. It is planned to begin in the southern half of the western boundary and proceed clockwise around the complex, working in tandem with the boundary wall construction. Vegetation removal will proceed slowly and carefully to avoid impacting structures. Where root removal would risk damage to underlying structures, trees will be carefully felled and herbicide applied to the stumps. However to the greatest extent possible, clearing will be done organically.





FIGURE 7: Volunteer work parties clear overgrown vegetation at. Photos by Terrie Hayes.





FIGURE 8: Aerial view of clearing completed by volunteers between December 2008 (A) and September 2011 (B). Red arrow (for reference) points to northeast corner of YMCA building. A: Jaime Valdez photo; B: Randy Wichman photo.

3.2.5. 3-D Survey

3.2.5.1. Technology

Three-dimensional terrestrial laser scanning (TLS) is increasingly used in the fields of cultural heritage and archaeology, with high accuracy in recording geometric information for conservation of historic buildings or excavation sites. ^[55] TLS can be used to document a large variety and scale of objects and structures, from small detailed sculptures to large geo-referenced landscapes.

Laser scanning uses infrared light beams to calculate and record distance to an object, generating a high resolution "point cloud" of measurements in which each point is referenced with x,y,z coordinates. The point cloud can be viewed immediately, providing rapid visualization of the data as a 3-D image. By mapping the points, an accurate 3-D model can be created, which can be rendered to create interactive virtual objects.

These techniques provide an extremely useful way to document the spatial characteristics of cultural heritage sites. ^[56] The spatial information forms not only an accurate record of deteriorating sites, which can be saved for posterity, but also provides a comprehensive base dataset by which site managers, archaeologists, and conservators can monitor sites and perform necessary restoration work to ensure their physical integrity. ^[56]

3.2.5.2. Plan

At Kāneiolouma, as an early priority, three-dimensional laser mapping will be used to record a detailed 3-D survey of the site and its contents. This will provide unequivocal georeferenced mapping and give resolution between older hand-drawn maps and modern maps. The 3-D models obtained will also allow archaeological documentation; precise measurement of distances, angles and alignments; planning and monitoring of reconstruction; and creation of virtual-reality models for education, display, and analysis.

Dave Wellman of Wellman Surveying, LLC is generously leading this undertaking. The complexity of the site will require multiple scans which are combined into a composite dataset. This allows the 3-D model to have a complete scan from many angles, thus covering as many surfaces of the site as possible. Reflective targets or "tie points" are placed at known geo-referenced locations to allow precise registration of the combined scans. Five exterior and three interior control points will be used.

The Work Plan prepared by Mr. Wellman anticipates preliminary work in three steps:

- 1- Selection of control points, such as street centerline monuments and park monuments.
- 2- GPS survey to tie the control points to the Hawai'i State Plane System and hence establish a permanent local coordinate system for the project.
- 3- Demonstration 3D scanning to scan two or three features of interest.

3.2.6. Rock wall repair

3.2.6.1. Approach

Restoration of the walled complex involves repair rather than reconstruction, since the condition of the walls is generally good and their structure still clearly discernible (FIGURE 9). In sections where parts of the wall have collapsed, the fallen rocks remain near the wall base. With all original rocks still present, no outside stone is needed. Repair will involve stabilizing the walls and replacing the fallen stone. Original wall integrity, form, and style will be carefully preserved.



FIGURE 9: Typical rock wall structure at Kāneiolouma. Photo by Randy Wichman.

3.2.6.2. Time required

The factors noted above will help reduce the time required for repair. Two-thirds of the time taken to build a wall is spent gathering and placing the rock piles correctly, one-third in actual building. In this case we are fortunate that no outside stone is needed. Additionally, repair of a wall takes less time than a complete rebuild. We estimate that the wall repair will take about two years, based on experience at other sites.

3.2.6.3. Organization

A team of six professional stone masons, each possessing traditional knowledge and experience, has been selected. Each mason is fluent in Hawaiian, knows and can teach the protocols and chants necessary for each day's undertaking, and can lead group ceremonies, in addition to being highly skilled in the Hawaiian art of *uhau humu pōhaku* (dry stack masonry).

Lead mason Peleke Flores was born in Hilo, Hawai'i and raised in Waimea, Kaua'i. He is a 2001 graduate of Waimea High School and received his B.A. in Hawaiian Studies, focusing on Mālama 'Āina, from the University of Hawai'i at Manoa. His mālama 'āina expertise is in dry stack wall-building at historic sites including Nu'alolo Kai on Kaua'i's Napali coast (FIGURE 10).

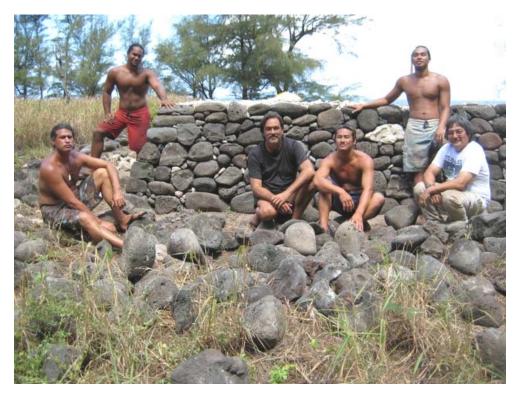


FIGURE 10: Peleke Flores (second from right) photographed with other masons and volunteers during rock wall restoration at Nu'alolo Kai on Kaua'i's north shore. Photo by George Gurniak, courtesy of Victoria Wichman..

The masons will lead the rock wall construction, assisted by teams of volunteers.

The proposed scenario is that two lead masons will be assigned, each to his own side of the wall, to ensure overall continuity and integrity. The third mason will lead the *niho* crew with four volunteers whose sole purpose is to ensure the foundation stones are true. The fourth mason will lead 4-8 volunteers as they build the courses and finish the tops. This allows a continuous forward repair as opposed to blending spot repairs which can change the wall style. Two additional masons will assist and provide backup.

The importance of volunteers cannot be overemphasized. In order to accomplish restoration of this massive heritage site and its reintegration into daily Kaua'i life, volunteers are needed from the community of Po'ipū, the district, and island wide.

Volunteers will dedicate their weekends to repairing pre-historic structures under traditional protocols, much of it in the blazing sun. Their reward is the sense of giving back to something great, the friendships that come from shared work for a goal that benefits all, and the personal pride that comes from preserving heritage. We estimate 8-12 volunteers daily for a fully efficient team. Volunteer labor may be augmented by supervised Community Work Service personnel.

It is anticipated that the masons will be hired for a two year period and will work three days a week, Friday-Saturday-Sunday, 10-hour days, supported by the volunteers. This weekend schedule allows the volunteer work force more flexibility to participate and creates a steady momentum for two years.

3.2.7. Fishpond restoration

Although the fishpond areas remains clearly visible, the ponds have been degraded by excessive sediment deposition and overgrowth of alien vegetation due to discontinuation of traditional water and land management practices. Additionally there has been deliberate filling of the center of the western pond to create a site for tourist weddings. The Waiohai spring, surrounded by an encircling wall, is overgrown with vegetation but water flow is still present.

The restoration goal is to reestablish a working freshwater fish pond. Traditional knowledge of the ways that fishponds were managed historically will inform the restoration. An early task will be to clear silt buildup, vegetation, and debris impeding spring flow, reestablishing flow into the pond. Removal of added fill and excess sediment from the pond, cleaning of foreign vegetation, and reestablishment of native aquatic and periaquatic plants will follow. Āholehole will be the fish of choice to be grown in the fishpond.

Longer term plans to be developed in conjunction with the County include a goal to reestablish connection between the two ponds currently bisected by Ho'owili Road, and ultimately to consider reestablishing an ocean outflow channel. Culverts to accomplish this could also assist with flooding issues of the complex.

Permitting procedures for fishpond restoration in Hawaiʻi have been summarized by Faber^[58] and for coastal ponds are notoriously complex, potentially involving Federal Army Corps of Engineers and EPA (Section 404 Clean Water Act, Dept of Army DA Permit, which requires a Coastal Zone Management Consistency Statement and Water Quality Certification); State (Conservation District Use Application, Environmental Impact Statement); and County (Shoreline Management Area Permit, Grading and Grubbing Permit) agencies in multiple aspects . For this project, experienced professional assistance will be sought to determine the applicable permits, applications, and compliance procedures.

3.2.8. Taro restoration

Kekahuna's vision included restoring part of the *lo'i* or taro fields.

This element is of great importance, due to the singular significance of taro in Hawaiian life and culture.



Taro field restoration at *Kāneiolouma* will depend upon rehabilitation of the ancient 'auwai to carry water. It is part of the long range plan. Water will circulate through the taro and then flow to the fishpond, which is sustained by the sacred spring. Excavation of the well at the north side will provide an additional water source.

Repair and maintenance of the 'auwai will be part of the ongoing work of the complex. Restoration of the *lo'i* will first begin with removal of the bulldozed hurricane debris which presently covers most of the half acre taro field to a depth of 4-5 feet (see section 3.2.13, page 50).

Traditional methods for the *lo'i* will be followed as have been used for centuries:

"Ground selected for a *lo'i* was first cleared of grass and weeds and allowed to absorb the nutrients from rotting *hau* and *kukui* branches and leaves that were worked into the damp soil. *Lo'i* boundaries followed natural land contours. The selected area was flooded for several days after which men with 'o'o sticks threw mud from inside the new *lo'i* up along the proposed border, forming an embankment. Once they hit firm soil and the banks were built up, they stamped down the embankment sides with their feet. Lines were straightened and more leaves – sugar cane and coconut leaves – were beaten into the surface. More layers of fine soil and leaves prevented the new banks from drying and cracking. Where the embankment walls were high, they were reinforced with a stone retaining wall.

The terrace floor also needed to be made water tight. The *lo'i* was filled with water and women and children joined the men in stamping down the bottom surface. The next day, taro cuttings, called *huli*, were planted in the soft mud and the field was flooded. Once the taro plants' first two leaves unfurled, the *lo'i* was drained and left alone for two weeks. The terrace was then flooded again, the slowly circulating water remaining high until the crop was pulled for harvest." [59]



MAP 7: Grove Farm map overlaid with modern aerial photograph showing former location of taro field.

3.2.9. Other restoration

Other areas of restoration to follow the wall repair include houses and house site details, religious areas, and pathways. Pathways are further discussed in Section 3.3.9 below.

Kekahuna's map points to 23 bases for ki'i (temple images) throughout the complex (forming a beautiful royal view plane.) "Then add the house foundations, more than 10, and a seaside Hawaiian village emerges." [30]

One restored *hale pili* (grass house) near the entrance will be designated for a meeting house.

3.2.10. Replanting

We follow the guidance of Kekahuna in planning for re-establishment of native Hawaiian plants within the kahua. This includes use of indigenous species plus the so-called canoe plants, which were carried to the island by Polynesian settlers and depended upon by the ancient Hawaiians. No alien plant species will remain.

"Hawaiian atmosphere in the village would be destroyed by the intrusion of foreign flora!" $^{[3^0]}$

Kekahuna provided a comprehensive list of important plants:

"..., numerous vanishing varieties of taro (kalo), sweet potato ('uala), banana (mai'a), sugarcane ($k\bar{o}$), and 'awa plant,..."

"The Hawaiian greenish coconut (*niu hiwa*), yellowish coconut (*niu lalo*),...small-shelled coconut (*niu puniki*),..."

"Trees such as koa, Hawaiian kamani and Hawaiian hamani breadfruit hamani hamani

and others to be used as guideline in landscaping.

Native Hawaiian plants were an integral part of ancient Hawaiian life, used for everything from food, medicine, and materials to symbolic roles in ceremonies. The planned revegetation will restore the site authentically toward its historic appearance, and will also protect the soil from rain and wind, providing erosion control.

Crop plants important to the ancient planters included *mai'a* (banana), *'ulu* (breadfruit), *kō* (sugarcane), *niu* (coconut), *uhi* (yam). Other plants extensively cultivated were *wauke* (paper mulberry) for tapa-cloth making, *'awa* as a narcotic, *ipu* (gourd) for containers and musical instruments, *hala* for mats, and many other useful and medicinal plants. However, crop tending activities were most focused on *kalo* and *'uala*. Regarding shrubs, Kekahuna recommends the *noni* apple, as well as *wauke* and *poʻahaʻaha*, both used for tapa-cloth. Among highly valued medicinal herbs, he advocates including *kowali pehu* (moon flower) and *kowali maoli* (true *kowali*), *popolo* (black nightshade), *'ihi* (Oxalis spp, a clover-like wood sorrel), *'alaʻala wai-nui* (Peperomia leptostachya), and *uhaloa* (Waltheria indica) for sore throats, coughs and colds.

Plantings at *Kāneiolouma* will be arrayed according to defined zones within the *kahua* based upon cultural practitioners' understanding of sacred and secular boundaries and areas. FIGURE 11, below, shows a preliminary landscaping plan.

Again following Kekahuna's suggestion, trees and plants will be:

"identified by inconspicuous plaques or labels bearing both the Hawaiian and scientific names, also dates of planting and names of donors." [30]

We will depend greatly on donated plants and the $k\bar{o}ku\alpha$ (help) of volunteer gardeners to recreate the original landscape, under guidance of local plant experts.

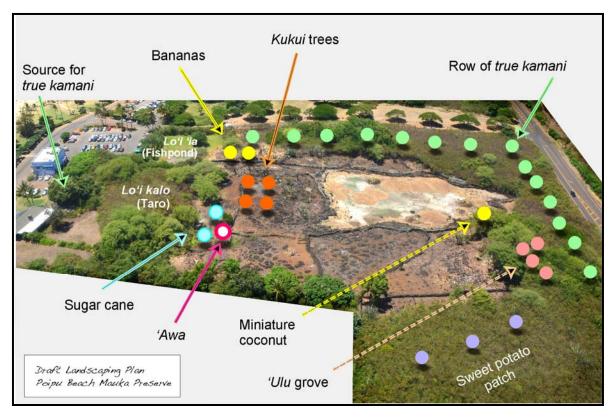


FIGURE 11: Draft Landscaping Plan, view looking west.

3.2.11. Organization of restoration work

Hui Mālama O Kāneiolouma is working with experts in multiple fields, including archaeology, geology, and botany, to guide the work, as well as cultural experts, historians, and local $k\bar{\nu}puna$. All available non-invasive tools and technologies are embraced to improve understanding or assist work at the site.

Under the Stewardship Agreement, [32] (APPENDIX 2) all restoration work is subject to approval by the County, working through the Parks Department, in consultation with the Kaua'i Historic Preservation Review Commission and the state Department of Land and Natural Resources State Historic Preservation Division.

An archaeologist will monitor vegetation clearing, site stabilization and restoration activities by site visits on a regular basis. The archaeologist will also be available to advise where appropriate.

Culturally, the project will be organized following a similar type of model to that used in northern Kaua'i by *Nā Pali Coast 'Ohana*, [60] see below.

3.2.11.1. A cultural model

A restoration project already underway on the $N\bar{a}$ Pali coast provides one possible model for cultural organization of our work, and also gives a basis for time estimates. The $N\bar{a}$ Pali Coast 'Ohana has been repairing a large complex in a remote valley accessible only by boat, in an area overgrown with vegetation where archaeological sites were being degraded. [60] At the Na Pali site, a total of sixty days' work repaired 300 yards of stone walls.

The Nā Pali group is organized into four houses: *Hale Pōhaku* (masons), *Hale Pule* (protocol), *Hale Ku* (workers), and the State of Hawaii. Once the masons decide on the course of action, they communicate this to the *Hale Pule*, who decide the ceremonial protocols necessary and officiate them. The responsibility of the workers is to support and provide labor. The State is there as a partner because numerous permits are required. Under this model, the cultural responsibilities are separated into different houses yet all focused on one goal. This ensures that the discussions and decision-making are made in an appropriate order and participants are able to focus on their own expertise knowing other elements are well attended to.

A similar structure is under consideration for *Kāneiolouma*, with some modifications. For our project, both County and State will have membership in the fourth house for consultation and permitting. A year-round weekend-oriented work schedule is planned to allow the volunteer work force the most flexibility. Final direction and oversight of all cultural aspects will rest with the *Po'o*.

3.2.11.2. Reporting

Restoration progress will be documented by a photographer at frequent intervals throughout the work. Notes on work done, details of new objects or features uncovered, and results of any archaeological consultations will be logged regularly. Together with the 3-D laser scan, which will be repeated after restoration is complete, these informational items will be made available to the public via the web site, and will provide the basis for written reporting as needed to interested parties. County and State partners will be kept informed on a regular basis and are expected to be on site regularly.

3.2.12. National Historic Register re-submittal

An application for registration of *Kāneiolouma* on the National Register of Historic Places was submitted to the State Department of Lands and Natural Resources, State Historic Preservation Division, in 1989. The nomination did not advance due to issues of *heiau* location. Significant additional work has since been completed regarding the shoreline *heiau* at Poʻipū which further adds to knowledge of the complexity and richness of this sacred area. We plan to revise and redevelop the NRHP application for re-submittal.

3.2.13. YMCA property acquisition

A key element to the restoration plan is acquisition of the adjoining (Nukumoi) property (TMK 2-8-17-16), which was formerly a YMCA site and is currently housing a surf shop (MAP 8).



MAP 8: Nukumoi parcel. Pictometry photo, County of Kaua'i.

The Nukumoi parcel is zoned as Open-Public-Culture.

This land is integral to the $K\bar{a}$ neiolouma kahua. The parcel encompasses remnants of two taro fields, cooking platform, and several idol sites. It is critical as the requisite location for the main entrance to the complex and also provides an ideal site for the Interpretive Center.

Behind the surf shop is a large berm of debris from Hurricane *Iniki* which was bulldozed into the Preserve during hurricane cleanup in 1992. This debris needs to be removed in order for restoration of the adjacent former house sites, idol sites, and taro fields to proceed.

These are both matters of urgency and importance for the project.

3.3. Interpretive Plan

3.3.1. Purpose

The *Kāneiolouma* Interpretive Plan serves as a planning, implementation, and reference tool for the site's interpretation program for the public. The plan recognizes goals for visitor experience, and outlines interpretive elements to communicate effectively the spirit and history of the *kahua*.

Interpretation is designed to enhance a visitor's experience by revealing elements of interest, imparting a sense of value, and encouraging preservation.

3.3.2. Themes

Interpretive themes at *Kāneiolouma* may include:

- Feature identification and explanation
- Legends and ancient battles
- Ceremonies, sporting events, competitions
- Kōloa and Poʻipū history
- Ancient Hawaiian life
- Ahupua'a significance
- Native and traditional plants
- Agriculture and aquaculture accomplishments
- Significance, importance, and meaning of the heiau and kahua

Interpretation elements will include text panels, maps and pictorial displays, artist renderings, printed materials, digital displays, self-quided and quided tours.

3.3.3. Intended audience

The audience for interpretive activity includes

- tourist visitors to the island
- school groups
- other youth groups
- local and island-wide residents
- researchers including online readers.

3.3.3.1. Kaua'i visitor profile and economic significance

Hawaiʻi Tourism Authority statistics show that 964,724 visitors arrived by air to Kauaʻi in 2010. An average of 19,716 visitors were on the island daily. Most (83.4%) were in the state for vacation. Through November 2011, visitor arrivals to Kauaʻi increased 6.9% over 2010. The Poʻipū area provides approximately 35% of available visitor accommodations on the island. According to a Poʻipū Beach Resort Association's Visitor Profile Survey, 75% of visitors have college and/or postgraduate degrees. A 2007 survey of Poʻipū vacationers found 49% were between the ages of 45 and 65 years of age; 76% had college degrees and 40% had household incomes of \$125,000 or more.

3.3.3.2. Importance of culture and history to residents and visitors

The vision statement of Kaua'i County's Tourism Strategic Plan (TSP) contains six elements, of which three are related to culture, heritage, and/or visitor experience (TABLE 4, bold elements).

TABLE 4. Kaua'i Tourism Strategic Plan: Vision statement

- Honor the people and heritage of Kaua'i
- Support and enhance the quality of life for residents
- Value and perpetuate the natural and cultural resources on Kaua'i
- Engender mutual respect and partnership among all stakeholders
- Support a vital and sustainable economy
- Provide a unique, memorable and enriching visitor experience.

The Kaua'i County TSP states:

"What distinguishes the state, and Kaua'i, from other places in the world is our indigenous Hawaiian culture. Therefore, it should be everyone's *kuleana*, or responsibility, to understand and respect the culture and help ensure its perpetuation. This is why increasing awareness and perpetuation of the Hawaiian culture was selected as one of the plan's highest priority strategies."^[63]

The TSP lists as an explicit objective:

"To reinforce authentic Hawaiian culture, ensuring the foundation of our unique sense of place and appropriate recognition of this culture." [63]

This sense of the importance of honoring Hawaiian culture, people, and history is shared by many Kaua'i residents, in increasing numbers. In 2005, 43% of Kaua'i residents surveyed replied that preservation of the native Hawaiian culture is a "big problem," versus only 29% in 2002. [63]

Consistent with the above, the goals of our interpretive programs are to honor and perpetuate native Hawaiian culture and history and to expand and enrich the cultural aspects of the visitor experience at Poʻipū.

Interpretive services and materials are targeted towards the educated and thoughtful tourist, who is seeking an opportunity to experience and learn about Hawaiian culture. Equally importantly, the intended audience includes local and island-wide Kaua'i residents and school children. For resident Native Hawaiians, the *Kahua* and Interpretive Center provide a venue for cultural practices and a living site to explore and connect with history and heritage. For residents of all races and ages, *Kāneiolouma* will provide a unique educational opportunity and an awareness-expanding cultural experience.

3.3.4. External signage

Exterior signage refers to posted communications outside the complex walls. This includes site markers, security warnings, and entrance signs.

3.3.4.1. Site markers and security warnings

Coincident with construction of the security wall, security notices will be posted indicating the presence of a sacred site and warning against disturbance or theft. The standard style recommendations of Altizer and Hammatt (2010)^[36] will be followed. These signs will be in place before the complex becomes visible from the road through brush clearing.

(a)

PRESERVE HAWAI'I'S PAST FOR THE FUTURE

Please *kōkua* and do not disturb this historic site. *Mahalo*.

Damage to these historic sites is punishable under Chapter 6E-11 Hawai'i Revised Statutes.

(b)

PRESERVE HAWAI'I'S PAST FOR THE FUTURE

Please *kōkua* and do not disturb this historic site. *Mahalo*.

Removal of rocks from these historic sites is punishable under Chapter 6E-11 Hawai'i Revised Statutes.

FIGURE 12: The sample security signs recommended by Altizer and Hammatt (2010)

3.3.4.2. Site identification

Two larger site-identification signs will be erected after reconstruction is completed, or well advanced, and closer to the time of public opening. The first will be a large way-finding sign visible to passing motorists, located at the northwest corner of the preserve at the intersection of Hoʻowili and Poʻipū roads. The second will be the main entry sign, located at the main entrance on Poʻipū Beach Road. MAP 6 on page 37, shows the placement of these signs.

3.3.5. Internal signage

Internal signage refers to all informational signage within the complex grounds. This includes way-finding, orientation, safety and protocol directions, and interpretive panels.

3.3.5.1. Entrance information and orientation

Signage at the preserve entrance creates the beginning of a sense of transition and an awareness of being on the threshold of a special place. An orientation kiosk at the Interpretive Visitors' Center, located outside the sacred area, will provide maps, brochures, and signage that conveys a general understanding of what to expect within.

3.3.5.2. Self-guided tours

An essential first priority is to establish paths through the complex which delineate sacred from secular areas. The pathways will be as unobtrusive as possible and will follow original walkways. Designated viewing areas for the *heiau* will be established, so as to minimize impacts on the sites.

MAP 9, page 62, shows proposed plans for pathway locations.

A co-essential imperative is to articulate protocols for visitors so that they may be respectful of the *kahua* during their presence here. This will be accomplished by informational/educational signage to clearly communicate the protocols; maps and directional signage to facilitate respectful visits; and printed materials.

3.3.5.3. Interpretive panel displays

A series of as many as 20 interpretive panels will be designed to tell the story of a historical sequence of events that will be of interest to scholars, residents, and visitors.

Panels will follow a style consistent with those used in Hawai'i State Parks. The highest emphasis for design and placement will be on achieving a harmonious appearance within the cultural landscape. For content, visual clarity using maps and story-telling through pictures will be a key focus. Use of the Hawaiian language as well as English is a priority. Panels will be located at key points along the pathway, singly or in thematic groupings.

Content is under development. A draft list of topics and objectives is provided below (Section 3.3.5.4, page 55).

3.3.5.4. Examples and draft outline of interpretive panels

The following paragraphs present a selection of themes suited to display on the interpretive panels, together with explanatory notes describing objectives. While not exhaustive, the list below illustrates the richness and abundance of material available. Additional topics may also be added. Panels and text will be developed by graphic design professionals working in conjunction with cultural practitioners and historians. Illustrations and text in this section are by Randy Wichman.

1. General orientation, place names, and heiαυ



Understanding the cultural landscape and all the locations of the various elements provides the backdrop against which all other stories can be told. The *Lahainaluna* 1885 manuscript provides 23 *heiau* and 20 offshore fishing grounds in Kōloa. Together with taro fields, house sites, salt pans, canoe landings, trails, springs, *ahupua'a* boundaries, etc., the picture that emerges is one of a thriving, well-managed ecosystem with many diverse aspects. The intent here is to acknowledge Poʻipū as an ancient royal center.

2. Legends and history



Further emphasize the cultural aspects by including the stories of the high chiefs *Kukona* and *Manokalanipo* which adds the human elements into the landscape. Many generations of families fought, loved, and died here. Many of them led exemplary lives in pursuit of *mana*.

Then, the introduction of the historical landscape, with the intent to further illustrate the magnitude of the history of Poʻipū, would include Captain Cook, *Kamehameha's* invasion attempts, a Kingdom port of call, ranching, purveyors to the California gold rushes, etc.

3. Poʻipū Beach and Kāneiolouma



This is a closer view into all the various aspects of the park and the pathways that connect them. Protocols can be outlined here.

4. Three Hawaiian Gods



Having an understanding of the symbiotic nature of $K\bar{a}ne$, Kanaloa, and Lono as progenitors of life, each separate yet dependent on each other, gives us spiritual insight into the imagery of their cosmology. Because Poʻipū is the heart of religion for the ancient Kōloa field system, important events have transpired and shaped the landscape. The intent here is to illustrate the ancient association of Poʻipū to the realm of these gods.

5. Kuʻula and offshore fishing grounds



Ku'ula is the patron god to fishermen and his sons disseminated into society the knowledge of fishpond construction and management. It is important to establish Po'ipū as a central base of operation for their canoe fleet and the story of Ku'ula does just that. The presence of extensive fish ponds in the park helps to further emphasize that Po'ipū was an important center for these activities.

6. Palila and Kina'u



The life of *Palila* chronicles his rise from humble mortal beginnings in Kōloa to become the patron god of warriors, as we know today. This is Hawaiian chivalry at its best and the values imparted in his story can be inspirational.

Kina'u is known as a sorceress with incredible powers over life and death, a protector of those mistreated, and the sister of *Pele* who settles for a time on the shores of Kōloa. Her story shows us some of the values that maintain a wise justice system. The intent here is to illustrate how deeply stratified the society of Po'ipū once was.

7. Intensified agriculture and above-ground 'auwai



The knowledge of wise agricultural management at its finest level is valuable. This includes the sophisticated irrigation system as well as many features unique to this area. A staggering amount of food was produced over the centuries, including historic times, and distributed around the island and beyond. The intent here is to establish Poʻipū as a center for trade under royal control.

8. The 1842-1852 Mahele overlay with LCA locations and information



The *Mahele* is an important, complex subject that must be explained to convey the massive changes occurring at this particular time in Poʻipū. Knowing the names of the claimants gives us insight as to where the sources of information where living and why we are conveying their knowledge throughout this interpretive plan. With superb maps available, as well as copies of signed documents by *Kamehameha III* and the Privy Council, the intent is to illustrate the depth of royal control in Poʻipū during this time.

9. Rediscovery of a heiau: Thrum and Bennett



This would include the 1907 and 1928 view of Poʻipū and its surrounding sites, along with a clear indication of the presence of other heiau in the immediate vicinity. This will be a surprise to many people and will significantly enhance realization of the historic importance of Poʻipū.

10. Dr. Kenneth Emory and Bishop Museum



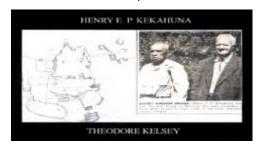
With regard to western science and academia, it is Dr. Emory who gives us important clues as to the true significance of the word kahua and why it should be applied. Emory first suggests that $K\bar{a}neiolouma$ is a large festival ground complete with supporting infrastructure. The intent here is to illustrate an introduction into the archaeological aspects of Poʻipū.

11. Moir and Knudsen family



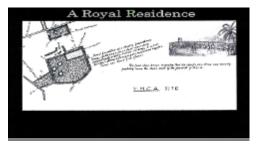
Hector and Iki Moir, as well as the Knudsen family's legacy of protecting $K\bar{a}$ neiolouma lands, is in large measure the reason much of it has been preserved during the twentieth century. Without their intervention, we would not have the tangible link we enjoy today. The intent here is to illustrate the stunning existing state of preservation. The story of Hector Moir introduces the stage for Henry Kekahuna.

12. Kekahuna and Kelsey



We are fortunate that Henry Kekahuna worked on this complex in the 1950's. His map of $K\bar{a}$ neiolouma has significantly enhanced the native perspective in which we should look culturally at its landscape. Theodore Kelsey conducted many oral interviews and background research which will provide much of the scholarly body of work for this panel. Kekahuna and Kelsey's relationship and the work they produced over a lifetime have stood the test of time and still address important revelations we have yet to make. The intent here is to illustrate the importance of preserving Po'ipū for future generations.

13. A Royal Residence



In his map Henry Kekahuna clearly makes the reference to the location of the royal residence. This is supported by literature and outlined in this panel. The intent is to supplement the royal presence and further explain their responsibilities.

14. A Royal Cemetery



One of the cemetery occupants is Captain Beckley and his royal wife who holds a prominent position in Hawaiian history. He was the adopted son of *Kamehameha I*, first commander of the fort in Honolulu, sailed all of *Kamehameha* I trading expeditions to China, west coast and beyond. He is married to the high Chiefess *Ahia*, the foster sister of *Kamehameha I*. Why they are here still remains a mystery. There are other royal occupants yet their descendants must be consulted prior to revealing this information. The intent here is to illustrate the State and National heritage value of Poʻipū.

15. <u>Kūkona and Manokalanipō</u>

In an epic battle fought on the shoreline of Poʻipū in the early -th century, the high chief *Kūkona* decimated a combined invasion force and captured their *Aliʻi*, forcing a treaty that lasted until the invasion attempts by *Kamehameha I*. *Kūkona* then married his son *Manokalanipō* to the last of the west side chiefesses, thereby ending a 250 year war between East and West Kauaʻi and ushering in the Great Peace period of our history.

16. Fishponds and the sacred spring of Waiohai

The significance, function, and use of these components are important in both the religious and secular world. Easily illustrated, the intent here is to demonstrate the concentration of high ranking sites within Poʻipū.

17. Relationships to astronomy

The solstice alignments are easily discerned once the clues are followed. What seems at first glance to be insignificant can take on extraordinary meaning and this panel explores the celestial heavens in detail. The intent is to bring focus to a little known subject.

18. Moʻokūʻauhau and family lineage

The genealogy of the ruling Kaua'i families offer us a royal insight into the names of people who lived and died here. Relating this knowledge is a mandatory endeavor when discussing Hawaiian history and the intent is to reintroduce the names of our ranking *Ali'i* back into society.

19. Art of fishing

It was the fishermen who were the *Ali'i* of this time period as the discoverers of the Polynesian islands and the ones who brought the first famers to work the new lands. In time, as the lands became populated, the emphasis turned toward land-based *Ali'i*, yet they still retained responsibilities over the

management of resources. The intent is to complement the story of Ku'ula and his sons.

20. A kingdom port of call

The harbor of Hanaka'ape (Kōloa Landing) was the scene of intense activity for more than half a century. This panel traces the famous ships who reprovisioned here along with an introduction into the early days of a young Hawaiian Kingdom and follows the rationale for the choice of Kōloa as capital. The intent here is to establish Kōloa as capital of Kaua'i during this time period.

21. Archaeology of Poʻipū

This panel continues on the archaeological efforts already started on panel #9, with the work done by Lloyd Sohrens, Neil Crozier, Pila Kikucchi, Hal Hammatt and Dave Burney. The intent is to demonstrate the vast archaeological potential still remaining in Poʻipū.

22. Geology of Poʻipū

It took three million years to form a great shield volcano. Five million years ago an explosion vaporized tow-thirds of it, continuing with volcanic activity for the next five hundred thousand years in Kōloa before finally becoming extinct. This is still evident with numerous cinder cones in the immediate vicinity. Sea levels fell and rose again leaving us with the landscape we see today. With the research coming out of Maka'uwehi Cave, the Mesozoic forest can now be extrapolated with a degree of certainty, meaning great *koa* and *'ohia* trees extending to the shores of Po'ipū. The intent is to introduce the scientific aspects of Kōloa.

3.3.6. Ancillary information

Important additional routes of information dissemination will include the Preserve website, which will be expanded and updated regularly to reflect current events, new research, and an expanding library of digital experience learning modules. Additionally a heritage map and Preserve DVD are planned.

3.3.7. Publications

The history publication in preparation (see section 2) will be available for purchase at the complex.

3.3.8. Interpretive center

The seven-year plan for this project envisions construction of an Interpretive Visitors' Center to serve as an interpretive hub for the public. The Center will include a gathering area, interpretive exhibits area, space to display Native art and artifacts, and a gift shop or market. Meeting space for scholars and cultural practitioners will be located adjacent.

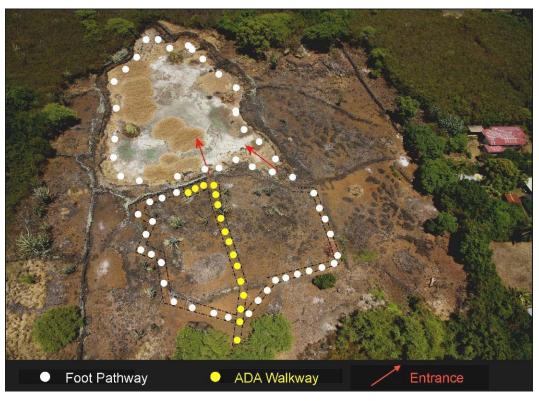
This Interpretive Center is integral to the education and recreation missions of the public cultural preserve. It will house digital interactive displays for visitor use as

well as movies, photographs and written materials. Interpretive panels and exhibits will tell the stories of $K\bar{a}$ neiolouma. The Center will serve as the base for escorted tours, school groups, seminars, and archaeological site visits; in addition to its primary role in providing an interesting focal destination for tourists.

The site for the Center is not finally established. The ideal and desired option is to acquire and remodel the former YMCA building, located at the intended entrance to the Preserve, for this purpose. Architectural professionals will be engaged to assist in developing the plan for the remodel. Planning issues include accessibility, safety, restrooms, pedestrian flow patterns through the building, lighting, signage, exhibit layout, seating, group assembly areas, and exterior landscaping. The external appearance will be consistent with the surrounding landscape, with plantings from appropriate native species.

Operations for the Center are discussed below in the Management Plan (Section 3.4.8., page 68).

3.3.9. Pathways



MAP 9: Proposed public pathways

MAP g above shows the proposed layout of the main public pathways. Additional smaller side paths (not shown) may provide access to interpretation points for restored *hale pili* and planting areas exhibiting native and traditional plants. Interpreted viewing stations around the perimeter path will provide good visibility of fishpond, 'auwai, sporting and competition arena, and some religious sites.

3.3.10. Accessibility

The Interpretive Visitors' Center will be equipped with an ADA-compliant entryway and hallways, and all Interpretive Center exhibits will be fully accessible.

However, not all pathways through the *heiau* complex, and not all areas within the complex, may be fully ADA accessible. Construction required to achieve accessibility will not be performed if changes would disrupt sacred sites or essential historic features or significant ancient attributes of the rocky terrain. ADA access to a central viewing platform and as many viewing sites as possible will be provided. Additionally, a viewing room with holographic reconstruction is planned as part of the Interpretive Center displays. Completion of these features will allow nearequivalent experience for visitors despite mobility challenges.

3.3.11. Integration with Poʻipū Beach Park

The vision of the *Kāneiolouma* Master Plan calls for strong integration between the Cultural Preserve and Poʻipū Beach Park, for the benefit of all visitors and residents. Integration will be served significantly by coordinating signage. Additionally, information about shoreline *heiau* and other beach archaeological sites will be provided at the Interpretive Center.

Poʻipū Beach Park infrastructure will provide restroom amenities for visitors to the cultural preserve. The long range plan calls for supporting and assisting with upgrades to beach park facilities.

3.3.12. Balancing use and preservation

All effort will be taken to maximize the visitor experience and educational benefit of the Cultural Preserve. Visitors will have the rare opportunity to be immersed in the history and mana of this spiritual place. At the same time, we will be vigilant in $m\bar{a}lama$ and safeguarding the kahua. Appropriate measures will be taken if any adverse effects of use are detected. Preservation and safety have the highest priority.

3.3.13. Plan Revision

The next scheduled revision of the Interpretive Plan will occur after draft content authoring and artist conceptual designs are completed. The Plan will be finalized in consultation with the County of Kaua'i Parks Department and the State Historic Preservation Division.

3.4. Management Plan

3.4.1. Purpose

The purpose of the Management Plan is to articulate a framework for:

- Providing ongoing custodial care and stewardship of Kāneiolouma;
- Hosting relevant cultural and educational activities that celebrate local Hawaiian culture and history;
- Developing culturally-appropriate revenue-producing programs with the goal that the Preserve eventually becomes (or approaches) self-sustaining.

3.4.2. Key Principles

- The Stewardship Agreement^[32] provides the governing foundation for managing the complex.
- Management will remain primarily volunteer-based with augmentation in select key operating positions.
- Visitor safety is the highest priority.
- Maintenance is essential to both site preservation and human safety.
- Activities will emphasize Hawaiian values and be developed and conducted to the highest standards of cultural respect and historical accuracy.

3.4.3. Organizational Structure

FIGURE 13 below diagrams the organizational structure of *Hui Mālama O Kaneiolouma*. The organization is overseen by a 9-member Board and directed by its President and *Poʻo* (leader), founder Rupert Rowe.

The County of Kaua'i Department of Parks and Recreation administers the Stewardship Agreement and provides close consultation regarding the Preserve. Interaction and assistance also occurs with and from other County departments, in areas including planning, permitting, capital projects, funding, and community work service programs. The State Historic Preservation Division of the Hawai'i Department of Lands and Natural Resources and the Kaua'i Historic Preservation Commission provide consultation on historic preservation issues.

Internally, a group of cultural practitioners forms the backbone of the organization under the leadership of the *Poʻo*. This group includes *Hui* membership as well as consulting experts from outside the organization. Many of the practitioners are active volunteers. Collectively they provide a deep pool of cultural knowledge and understanding which guides all activities.

It is planned that by the time the seven year plan is completed, the organization will have incrementally expanded as illustrated in FIGURE 13, to cover three functional areas: Operations (maintenance, capital projects, events planning), Communications (web site, video production, outreach, education), and Administration (finance, grants management, development, admin support); and will ideally be staffed by an administrative manager, two full-time caretakers, a gift shop manager, and perhaps a volunteer coordinator (details in Section 3.4.4 below).

Kāneiolouma Project Organization government Information / Resource flow private sector Organizational Structure Hui Mālama o Kāneiolouma Public Other cultural groups Public feedback Cultural exchange County Council Grants/donations in support Local civic groups Informational Hui Mālama O Kāneiolouma & corporations **Board** Informational Foundations & State Historic Granting agencies Preservation Division Mayor President Consultation & Po'o Local schools & Kaua'i Historic Community work svc Preservn. Commission Advise & Consult Parks Dept Manage Stewardship Agreement Other Depts Planning Planning; Permitting Operations **Cultural Advisors** Communications Administration Public works lapital proj assistance **Economic Devt** Development & Fund-raising Caretakers Web Finance Funding assistance Gift shop manager Video Maintenance crew - Finance Work service resources Prosecuting Atty. Grant management Capital projects Outreach Admin support Events organizer Education Volunteer coordinator

FIGURE 13: Organizational Structure

Following is one possible functional framework for management following completion of the 7-year Plan, assuming all aspects of the Preserve, including the Interpretive Center, are completed and running.

3.4.4. Staffing

3.4.4.1. Administrative Manager

The Administrative Manager provides professional administrative support and technical assistance to *Hui Mālama Kāneiolouma*. Responsibilities include technical writing and document preparation; fund-raising; grants management; budgeting and financial tracking; contracts management; records management; annual work plan development; reporting and compliance; and general office and technical support. This is presently a half-time, temporarily-funded position.

3.4.4.2. Custodians

Two resident custodians will be responsible for caretaking, including routine maintenance tasks; security including fire safety and coordinating with local emergency authorities (police and fire); and visitor safety. Custodians will be culturally knowledgeable and able to act as host and guide. At least one custodian will be present at all times. These positions may carry a stipend as well as free access to fruit, vegetables and fish. These positions may be permanent or rotated among senior cultural practitioners.

3.4.4.3. Gift shop manager

A salaried position will be created for a professional gift shop manager. The gift shop will provide visitors with opportunities to purchase books, photographs, DVDs, and other site information and memorabilia, as well as native art and crafts and garden produce, and will generate an important revenue stream. Depending on interests and qualifications this manager may also oversee the Interpretive Center; otherwise it will likely be a half-time position.

3.4.4.4. Volunteer coordinator

Volunteers will be pivotal for staffing the gift shop and Interpretive Center, as well as field activities including clearing and maintenance work parties, taro and fishpond production, landscaping, and gardening. A volunteer coordinator will be essential to train and supervise volunteers and handle scheduling and logistics. Depending on interests and qualifications, this also could be the person who oversees the Interpretive Center; otherwise it will likely be an unpaid part-time position.

3.4.4.5. Unpaid services

It is anticipated that certain services including web, video, and media productions will continue to be donated by the professionals involved, augmented by grantfunded contracts for special projects.

3.4.5. Food production

Functioning *lo'i kalo*, *loko i'a*, fruit orchards, and vegetable plots will yield fish, taro, coconuts, bananas, breadfruit, and sweet potatoes, among others. These agriculture and aquaculture activities will provide valuable educational opportunities regarding traditional Hawaiian production methods, in addition to valuable food supplies. Produce from the rehabilitated fields, ponds, and gardens may be distributed, in order, to the custodians, then to volunteers, then for sale to the public at the Preserve and at local markets; with any surplus donated to the food bank.

3.4.6. Hawaiian arts and cultural activities

Henry Kekahuna's vision for "a real, truly authentic Hawaiian village of ancient type"^[30] calls for restoration not just in appearance but also in activity:

"Not only should it be a village of real Hawaiian houses and surroundings, but especially of genuinely native life, with genuine native Hawaiians preserving and perpetuating the now largely lost fascinating and valuable arts and crafts of their ancestors. Such a project would keep old Hawai'i alive ... as living reality. Thus might be saved much more of Hawai'i's ancient language, of her culture of the ages past, and of the fine points of that culture... Today such knowledge is possessed by only a few old Hawaiians, whom we allow to pass little heeded year after year." [30]

This vision sees gifted Hawaiian artists perpetuating traditional knowledge as well as contributing to a sustaining revenue stream.

"The Hawaiian village should be conducted as a very profitable business."

"Hawaiian feasts, anciently called 'aha'aina should be held in a big hālau or open-sided grass house, as one of the village sources of income. Another large hālau should be especially for exhibitions of ancient hula dances, and be built in an area for dancing known as the Kahua o Māli'o, in commemoration of Mālio, a goddess of lovers. This, too, should be a profitable source of village income."

"A greatest source of income would be exhibitions of revived Hawaiian arts and crafts, and sale of the products thereof." [30]

Consistent with Kekahuna's plan, the restored village at *Kahua O Kāneiolouma* will become a venue for traditional activities including (but not limited to):

- Celebration and displays of Hawaiian art, crafts, music, chants, and dance;
- Farming techniques, food, language, rituals, and stories;
- Athletic displays and sporting competitions;
- Ancient ceremonies, festivals, banquets, and special events.

Some of these activities will generate revenue for the Preserve (see Section 3.4.9, below). All proceeds from sales or activities will be used toward supporting the *Kahua*.

3.4.7. Educational events

Educational opportunities at *Kāneiolouma* will assist Hawaiians, especially youth, to develop a sense of self through strengthening understanding of place and history. Participants will learn about their *ahupua'a* and the cultural, recreational and environmental resources within it. They will also learn about Hawaiian history and the *moʻolelo* (legends) of their ancestors, and engage in cultural activities like *oli* (chants), *mele* (song), and *hula* (dance).

Foreseeable organized educational events include seminars and guest lectures for the community; as well as both informal and organized classes from time to time in the art of stone, dance, language, traditional food production and preparation, mapping, archaeology, astronomy, Hawaiian landscape regeneration, and history.

3.4.8. Interpretive center

As discussed in the Interpretive Plan (Section 3.3.8, page 61) the Interpretive Visitors' Center will provide interpretive displays and educational programs. Organized activities at/from the Center may include guided tours, field programs for school groups, lectures, informal talks, movie screenings, special exhibits and demonstrations.

Staffing will primarily be by trained volunteers, supervised by the Volunteer Coordinator and/or Interpretive Center Manager, with cultural practitioners on call as needed. This working model – use of knowledgeable volunteers as interpretive guides and Visitor Center staff for parks and preserves -- is increasingly used, effectively, in national and state parks across the country.

3.4.9. Revenue from operations

(Offsetting) Operating Expenses	Potential Revenue Sources
paid positions administrative manager on-site custodians gift shop manager volunteer coordinator / interpretive center mgr preserve costs equipment supplies utilities (water) services interpretive center costs building maintenance and repairs equipment supplies utilities services including display creation, printing and publication, advertising, media, legal, financial unpaid volunteer positions preserve maintenance crew interpretive center volunteer staff trained docents donated services from: archaeologists, historians, engineers, accountant, graphic artists, communications, design professionals, local artists, musicians, dancers, craftspeople.	Sale of goods from interpretive center / gift shop books posters DVD's photographs Hawaiian artwork Hawaiian crafts fruit, vegetables, flowers t-shirts other memorabilia Sale of surplus produce, farmers' market Admission charges concerts and special events* Donations in lieu of admission fees Other donations Supporting memberships Corporate sponsorships Operating grants *Admission to tour the complex is always free.

3.4.10. Operating sustainability

The long-range target is that by 10 years the Complex can become self-sustaining, based on a model of

- primarily volunteer staffing,
- · dedicated revenue from operations, and
- donations from the public.

This paradigm has been found viable -- with a level of success that has been surprising to many observers -- in parks and preserves across the country, where it has been implemented in the face of shrinking government budgets. See, for example,

http://baynature.org/articles/jan-mar-2012/a-little-help-from-our-friends

A white paper describing case studies and methods is in preparation.

In the early years, operating subsidies from the County and/or agency and foundation operating grants will be requested, but will be kept to the minimum possible.

3.4.11. Plan revision

The next revision to the Management Plan is due in 12 months and is planned to include budget and proforma.

3.5. Traffic Plan

3.5.1. **Issues**

Traffic flow pattern

Access and entry

Parking

Safety

Emergency exits

Main signage at intersection of Ho'owili and Pō'ipu road

Main entrance into Kāneiolouma complex at Nukumoi.

Potential for pedestrian/bike access via undeveloped road corridor (north Kaua'i Rd.)

3.5.2. Approach

Safety is priority one.

Make the Poʻipū Beach Park experience as pedestrian and bike friendly as possible.

Coordinate with County in development of traffic plan.

3.6. Drainage Plan

3.6.1. **Issues**

- 1- Former fish ponds bisected by road.
- 2- Center of west pond has been filled, causing flooding.
- 3- Water draining from *mauka* subdivision into the park is contributing to flooding problem in the Preserve.

3.6.2. Approach

Coordinate with the County.

Completion of a flood mitigation plan and implementation of drainage recommendations is critical to preservation of the *kahua*.



Flooding at Kāneiolouma

Section 4. IMPLEMENTATION

4.1. Timeline and phasing

This Master Plan addresses a seven year horizon, with work in four overlapping phases.

The broad tasks for each Phase are as follows:

Phase I: (one year time-frame)

- Security wall and protective signage.
- Adjacent parcel acquisition.
- Removal of hurricane debris.
- 3-D site survey and documentation.
- Assemble stone masons and volunteer teams.

Phase II: (three year time-frame)

- Rock wall restoration.
- Drainage plan and flood mitigation.
- Interpretive signage development.
- Traffic plan.

Phase III: (five year time-frame)

- Fishpond restoration.
- Taro field restoration.
- Selected house site restoration.
- Pathways and viewing points.
- Grounds open to public.

Phase IV: (seven year time-frame)

- Interpretive center remodel.
- Interpretive displays install.
- Facilities integration with Poʻipū Beach Park.
- Cultural activities begin.
- Interpretive visitor center open to public.

Table 5, next page, shows a timeline for these activities.

Table 6, following page, summarizes specific objectives, priorities, and resource needs, by Phase.



TABLE 5. Project Timeline (last updated January 2012)

				Project: Timeline* *Tasks in RED are key funding-dependent steps						
		Vork complete			7-Ye			Year Plan		
Activity	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4		Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4			
		l I		one-year		three-year				
		l I	1	}				five-year		seven-year
Care of Kāneiolouma	<< ongoing sinc	: :e 2000		<u> </u>						
Hui Mālama O Kāneiolouma established	C Origonity since	Je 2000								
Stewardship Agreement signed			1							
State land add-in executed										
		l I								
Security wall										
Nukumoi parcel acquisition										
Hurricane debris removal										
Vegetation clearing, perimeter										
Exterior signage develop										
Exterior signage install										
Vegetation clearing, interior										
3-D laser survey										
Rock wall restoration										1
Flood control plan (State/County)										
Flood mitigation measures (County)										1
Fish pond restoration										
Interpretive signage develop										1
Interpretive signage create										
Interpretive signage install										1
Access paths										
Taro field restoration										
Selected house sites										
Interpretive Center building remodel										
Interpretive Center displays develop										
Interpretive Center displays create										
Interpretive Center displays install										
Guided tours, by appointment										
Open to public grounds								\Rightarrow		
Open to public visitor center										\rightarrow
Fund raising										
Kahua maintenance										

TABLE 6. Detail of Project Phases and Resources

PHASE I Time-frame: 1 year

Item	Resources needed*	Estimated Total Cost	Estimated Time		
Vegetation clearing, perimeter	Volunteer labor. County assistance hauling trees.	donated	12 months		
Security wall	Aim: Rocks donated, A&B Inc. Aim: Cement donated, Glover. Labor by contract. Funding from County.	\$500,000	Funds transfer, bids, contract award: 6 months Construction: 6 months Total: 12 months.		
Acquisition of adjacent parcel (YMCA)	Potential grant sources: - Hawaii Land Trust - Community block grant, with County assistance	TBD	Begin immediately, time required TBD.		
Hurricane debris removal	County equipment	TBD	6 months		
Exterior signage for security	In-house design resources in consultation with County. Support requested from HTA.	\$5,000	12 months coordinate with perimeter clearing and security wall.		
Vegetation clearing, interior	Volunteer labor.	donated	12 months		
Site laser survey	Preliminary work donated by Wellman Surveying; additional support requested from HTA.	\$5,000	3 months		
Grant writing	Requests to OHA and others with match by in-kind contributions and County funds.	donated	various due dates for funding FY12 and FY13		
Admin & misc support	Support requested	\$30,000	ongoing		

PHASE II Time-frame: 3 years

ltem	Resources*	Estimated Total Cost	Estimated Time		
Repair rock walls	Hawaiian cultural stone masons Volunteer support labor	\$1,200,000	2 years		
Flood control	County capital project. County/State/Federal funding for flood mitigation planning.	TBD	Planning: 1 year Mitigation measures: 1 year		
Fishpond restoration begin.	Volunteer labor County and State funding for drainage and flood mitigation.	TBD	2 years		
Re-vegetation begin	Volunteer labor & consultation Donated plants	donated	begin as areas of walls are completed, 3 years		
Traffic plan	In consultation with County.	donated	1 year		

/continued

^{*} Volunteer labor includes County work service detail

Table 4: Detail of Phases (continued)

PHASE III Time-frame: 5 years

Item	Resources*	Estimated Total Cost	Estimated Time
Taro field restoration	Volunteer labor. Donated materials.	donated	3 years
Selected house site restoration	Volunteer labor. Donated materials supplemented by grant request	\$100,000	3 years
Paths, access, viewpoints	Volunteer labor. Donated materials supplemented by grant request	\$100,000	2 years
Interpretive signage	In-house resources collaborate with design professionals. Grant request for production.	\$50,000	1 year

PHASE IV Time-frame: 7 years

ltem	Resources*	Estimated Total Cost	Estimated Time
Interpretive Center remodel	Potential grant sources: OHA, HTA	TBD	18 months
Interactive displays and exhibits	In-house and donated design resources. Grant for production costs.	\$50,000	1 year
Cultural activities	Volunteer labor, kūpuna and community leaders.	in-house resources	ongoing
Facilities integration with Poʻipū Beach	Consultation with County.	TBD	TBD

^{*} volunteer labor includes County work service detail

4.2. Budget

When available, the most current budget and funding plan will be provided as an attachment to this document.

4.3. County assistance

Assistance of the County has been requested / is being provided on several issues related to the project.

These include:

- 1- Assistance in acquisition of adjacent parcel (former YMCA property), currently zoned Open, Public, Cultural, in the public interest, for expansion of the *Poi'pū* Beach Mauka Preserve.
- 2- Funding support for security wall in phase I.
- 3- Assistance with flood mitigation and drainage issues.
- 4- Coordination of traffic and parking plan.
- 5- Coordination of facilities integration with Poʻipū Beach Park.

4.4. Revision

An update to the Implementation section is scheduled in 12 months to take account of data gathered in Phase I.

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Section 6. APPENDICES

APPENDIX 1. Board of Directors, Hui Mālama O Kāneiolouma

Rupert Rowe - President and Po'o

Billy Kaohelauli'i - Vice President

John Stem - Treasurer

Tessie Kinnaman - Secretary

Randy Wichman

Kane Turalde

John Spaar

Cheryl Lovell-Obatake

Terrie Hayes

CONTACT: Rupert Rowe

(808) 639-1239

kaneiolouma@gmail.com

www.kaneiolouma.org

APPENDIX 2: Stewardship Agreement

COUNTY OF KAUA'I

ADOPT-A-PARK AGREEMENT

FOR THE STEWARDSHIP OF KANE-I-OLO-UMA HEIAU COMPLEX

Poipu Beach Mauka Preserve TMK: 2-8-17: 13, 14, 24

STEWARDS: HUI MALAMA O KANEIOLOUMA, 501(C)(3) ID# 80-0254784 COUNTY OF KAUAH Leonard A. Rapozo Jr., Director Director of Parks and Recreation Wallace G. Rezentes Jr., Peter Nakamura, County Clerk Director of Finance Date: Approved as to Form and Legality Mauna Kea Trask, Deputy County Attorney

INTRODUCTION

Pursuant to the Director of Parks and Recreation's authority to develop and implement programs for the cultural, recreational, and other leisure-time activities for the people of the county under Kaua'i County Charter Section 31.03. The County of Kaua'i hereby enters into this Stewardship agreement with Hui Malama O Kaneiolouma under the County of Kaua'i's Adopt-A-Park program.

This stewardship agreement addresses the *malama* (to preserve, protect and enhance) of the *Kaneiolouma Heiau Complex* within the *Poipu Beach Park Mauka Preserve* (Attachment 1.Historical overview, site description).

Kaneiolouma Heiau is located on the south shore of Kaua'i, Kona District and borders the ahupuaa of Kōloa and Weliweli within the Po'ipū beach Mauka Preserve. The Po'ipū Beach Mauka Preserve covers a land area that totals 11.04 acres and is identified as TMK: (4) 2-8-17:13,14,23,24. The County of Kaua'i created the Po'ipū Beach Mauka Preserve in recognition of Kaneiolouma's archaeological, historical and cultural significance to Kaua'i.

The Kaneiolouma Heiau complex is considered sacred to the Hawaiian culture and an important historic landmark to the residents of Kauai. Currently under the jurisdiction of the County of Kauai and known as the Poipu Beach Park Mauka Preserve, the stewardship group Hui Malama O Kaneiolouma is proposing to clear, maintain, and rehabilitate this complex as a public cultural preserve.

There are three components to this complex: religion, agriculture and aquaculture (fish ponds). This site also contains the sacred spring of *Waiohai*. The amount of monumental Hawaiian architecture represented here has the potential of yielding important information regarding ancient temple religion, agriculture and fishpond management. Extensive walled enclosures, alters, numerous bases for temple images, shrines, taro patches, irrigation ditches, a series of large fishponds, house platforms, extensive cooking areas, and terracing throughout make this complex ideal for rehabilitation.

The County of Kauai's Poipu Beach Park has consistently been recognized as one of our Nations most beautiful beaches. The Kaneiolouma Heiau complex

is a component of Poipu Beach Park and by preserving and enhancing both elements, the County of Kauai is enriching its world class destination. Yet, perhaps more important to us as an island, is a sense of pride that our unique cultural heritage is preserved in perpetuity.

This agreement is between the County of Kaua'i (hereinafter referred to as "County") and Hui Malama O Kaneiolouma (hereinafter referred to as "the stewards") to serve as the stewards for the Kaneiolouma Heiau Complex, within the Po'ipū Beach Park Mauka Preserve.

The County of Kaua'i is represented by the County of Kaua'i Parks

Department (hereinafter referred to as "Parks department"). The Parks

Department has ownership and management review jurisdiction over this significant historic site. The staff of the Parks Department shall oversee the operation and activities of the Stewards for compliance with this agreement.

The stewards will perform all duties and responsibilities without pay from the County of Kaua'i. The stewards further acknowledge that they will defend, indemnify, and hold harmless the County of Kaua'i and will ensure that all volunteers under their supervision have current health insurance.

THE AIM OF THE COUNTY OF KAUA'I MALAMA HEIAU ADOPT-A-PARK AGREEMENT

The aim of this program is to:

- 1. Better maintain significant historic sites and natural resources and protect them from vandalism, natural factors, and unintentional human actions that will damage sites.
- 2. Provide the County of Kaua'i citizens greater access to view and understand the importance of these sites and its past history.

It is the role of the **Stewards** to help protect the sites under its jurisdiction and to help provide public access for all the **County of Kaua'i** citizens.

The **Stewards** cannot restrict public access during opening hours except during cultural ceremonies.

The **Stewards** shall not install interpretive devices on the site without the prior approval of the Parks Department.

The Stewards cannot undertake site improvements unless these tasks are covered in the stewardship agreement or in later amendments to each agreement. These constraints are extremely important to ensure that the site is properly protected and are properly interpreted – thereby benefiting all the citizens of the County of Kaua'i.

THE STEWARD'S RESPONSIBILITIES

- 1. The **Stewards** will maintain the grounds within the boundaries of the **Kaneiolouma Heiau Complex**, Poipu Beach Park Mauka Preserve. This shall be done without ground disturbance to prevent damage to the structural integrity of the site and to subsurface archaeological deposits. Weed-eaters, machetes, lawnmowers, and other hand-tools may be used. Plants should not be pulled up by the roots, as this can displace rocks and damage subsurface deposits. An herbicide with dissipation properties, such as *Round-Up* or *Rodeo*, may be used to control weeds and vegetation growth around the rocks of the site.
- 2. The Stewards will designate a volunteer supervisor(s). All volunteers must submit a completed County of Kaua'i volunteer waiver form. The Stewards may sponsor volunteer projects and non-commercial educational tours in addition to their regular maintenance responsibilities. The Parks Department shall be notified five (5) working days in advance of projects and tours involving over twenty-five (25) individuals.
- 3. The Stewards are required to assist in coordinating volunteer efforts that may be forthcoming from other organizations or individuals. Such other groups or individuals may participate in activities without being required to become a member of the Steward organization. However, the Stewards will supervise said volunteers and said volunteers will be bound by this stewardship agreement and all applicable County, State and or Federal laws.
- 4. The **Stewards** will discourage littering at the site. Trash cans may be installed in a manner that does not visually impinge on the view of the site. All cut and gathered vegetation from the site should be taken to a designated area. There is to be no burning within the area (except as designated).
- 5. The **Stewards** shall keep a logbook/journal of all activities conducted at the site to be available upon request.
- 6. The **Stewards** will assist with the maintenance of the interpretive signs, the site name sign, and the plant name plaques at the site. If the **Stewards** wish to change the signs or add more signs, design, and

wording will be prepared in consultation with and be approved by the Parks Department. The Stewards may prepare and install interpretive devices or displays, contingent upon approval of specific plans by the County of Kaua'i and consultation from the Kaua'i Historic Preservation Review Commission and/or the State of Hawai'i Historic Preservation Division.

- 7. The Stewards will periodically check the site, to attempt to prevent vandalism and damage. Should any damage be discovered, the Stewards will notify the Parks Department.
- 8. The **Stewards** may undertake landscaping, watering and planting activities for the purpose of providing ground stabilization and minimizing erosion of the area, contingent upon approval of specific plans by the **Parks Department**.
- 9. The Stewards may retain the services of a professional archaeologist for the purpose of excavation at the site to obtain data which may contribute to the interpretation of the site but this must be contingent upon the prior approval of specific plans for the archaeological work by the Parks Department and consultation from the Kaua'i Historic Preservation Review Commission and/or the State of Hawai'i Historic Preservation Division. The retained archaeologist must meet the minimal professional standards of the U.S. Department of the Interior.
- 10. Restoration work, and the construction of traditional Hawaiian hale, is subject to plans approved by the County of Kaua'i and consultation from the Kaua'i Historic Preservation Review Commission and/or the State of Hawai'i Historic Preservation Division.
- 11. The **Stewards** may be consulted on proposed activities at the site and assist with cultural protocol as may be needed. The **Stewards** may be invited to participate in meetings and discussions as the cultural specialists for the site.
- 12. The **Stewards** will submit an annual report of its activities relative to the historic site(s) under this agreement.

- 13. The **Stewards** may propose amendments to this agreement to undertake other tasks at the site. These proposed amendments must be approved by the **Parks Department**. Upon approval, the amendments will become a part of this agreement. Failure to obtain approval for additional tasks may lead to the termination of this agreement and possible fine, pursuant to applicable law.
- 14. The **Stewards** will defend, indemnify, and hold harmless the County in any action arising out of any injury, physical or otherwise, by any volunteer or their representative and or successor.
- 15. The **Stewards** will ensure that all volunteers under their supervision have current health insurance and agree to pay any expenses arising out of any claim by any person injured while volunteering at the site if said person does not have health insurance.
- 16. The Stewards agree to obtain an appropriate insurance policy or policies with the appropriate minimum amounts as required by the County.
- 17. The **Stewards** will ensure that all volunteers under their control and or supervision are in good health and are informed of the possible hazards involved in the restoration of the site. The **Stewards** shall deny any volunteer's ability to engage in restoration work if they are not in good health or they are under the influence of alcohol or drugs, or if volunteers fail to abide by any terms of this agreement and or any County, State, Federal law.

SPECIAL CONDITIONS

The Stewards shall not:

- 1. Undertake or permit commercial and/or fundraising activity on the site, including the sale of any items or advertising of any commercial products.
- 2. Permit participants to possess, display, use/consume alcoholic beverages or illegal drugs at site.
- 3. Cause any significant disruption to normal park usage.

RESPONSIBILITIES OF COUNTY OF KAUA'I PARKS DEPARTMENT

County of Kaua'i agrees to provide the Stewards with information relating to the site, including but not limited to archaeological an historical information, surveys of sites or structures, environmental impact statements, and plans regarding existing or proposed future uses of lands within the immediate area of the site.

The assistance of **County of Kaua'i** may be requested by the **Stewards** for support with grant writing. This includes but is not limited to: master plan, rehabilitation of the site, fish pond restoration, opening to the general public for viewing and enjoyment.

The assistance of **County of Kaua'i** may be requested by the **Stewards** for large clearing and hauling projects and with herbicide.

RESTRICTIONS ON THE STEWARD'S ROLE

The **Stewards** may not undertake tasks which are not specified in this agreement. This restriction is to protect the site. No matter how sincere the intent of the **Stewards**, a fragile site can be damaged. Additional tasks,

however, can be proposed as amendments to the agreement, and it is anticipated that many of these can be approved after review and the insertion of any needed protective provisions. The **Parks Department** agrees to respond to the **Steward's** proposed amendments within sixty (60) days of receipt of the proposed amendments.

It must be emphasized that failure to get approval of additional tasks may lead to the revoking of the **Steward's** agreement and could lead to a possible fine, pursuant to applicable law, if damage is severe.

CHECKS TO INSURE PROPER STEWARDSHIP

The Parks Department, or their representative, will make two (2) field checks per year to see that proper stewardship is being done. If it is determined that proper curation is not taking place, the Parks Department will notify the Stewards in writing of the problem and will provide the Stewards with suggestions to correct the problem. The Stewards will be allowed a reasonable time to correct the problem. If the Stewards fail to correct the problem within a reasonable time, this agreement will be subject to revocation.

THE TERM OF THIS AGREEMENT

The term of this agreement shall be for ten (10) years, renewable for each ten (10) year period upon agreement of the principles. If either party wishes to terminate the agreement at any time, written notice shall be given to the party.

LIABILITY CONCERNS

Stewards are personally liable for any negligent acts or omissions of its members or any volunteers who work with them that cause personal injury or property damage and as such they agree to obtain and maintain an appropriate insurance policy with appropriate minimum amounts as determined by the County. The Stewards shall keep a current Agreement for individual voluntary Services form (Attachment 2. Liability Waiver) recorded in the logbook/journal kept by the Stewards.

PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAI'I OFFICE OF HAWAIIAN AFFAIRS

711 KAPI'OLANI BOULEVARD, SUITE 500 HONOLULU, HAWAI'I 96813

July 27, 2009

Mr. Rupert Rowe 4780 A Iiwi Road Kapaa, HI 96746

Aloha e Rupert,

I'm writing to you in support of the rehabilitation of the Kaneiolouma Heiau Complex, Poipu Beach Mauka Preserve. Over the past seven years, I've been aware of this Heiau and your efforts with Billy Kaohelauli`i to preserve this unique complex and continue to be amazed, as I learn more of its history. As you so often quote, "the past will become the future and the future will become the present." It is this present I would like to address today.

The stewardship agreement with the County of Kaua'i is an important step, as it sets in motion for all Counties in Hawai'i the building blocks necessary for assuming our cultural and spiritual responsibilities to sacred sites located on County property. Both the Kaua'i County Administration and Kaua'i County Council have my full support to make this a reality. I'm also aware the County of Kaua'i has taken positive steps towards nominating this Heiau Complex to the National Register of Historic Places and commend their efforts in doing so.

It is very fortunate that Henry Kekahuna spent so much time recording this complex in 1959, He has not only given us a detailed map, he has written extensively on its preservation, leaving us with a clear blueprint to follow. Nowhere is this more evident than the current work conducted with Bishop Estate and Billy Fields. Using Henry Kekahuna's material, two large Heiau have been repaired, transforming the landscape in such a way we can be proud of. When the Kaneiolouma Complex is repaired, our experience at Poipu Beach Park will be enriched culturally and spiritually beyond measure. My understanding is that Billy Fields has been very supportive of this project and is even willing to work on Kaneiolouma.

My fellow Trustees are already aware of your group's endeavors and I shall continue to keep them updated..... In the meantime, I wish the Board of Directors and volunteers of Hui Malama O Kaneiolouma the very best......

Donald B. Cataluna Trustee, Kaua'i & Ni'ihau

Office of Hawaiian Affairs

Denald B. Catalyean

FAX (808) 594-1865

PHONE (808) 594-1888



STATE OF HAWAI'I OFFICE OF HAWAIIAN AFFAIRS 711 KAPI'OLANI BOULEVARD, SUITE 500 HONOLULU, HAWAI'I 96813

July 20, 2009

Mr. Rupert H. Rowe 4780 Iwi Road

Kapa'a Kaua'i 96746

Aloha Rupert, HAP

I am writing to you today to show my support for the work you folks have been doing in caring for Kaneiolouma Heiau in Koloa on the island of Kaua'i. I know the road has been tough but I believe you folks have made great strides in not only indentifying Kaneiolouma Heiau but also sharing it with the public and especially the Kaua'i County Council.

Making others aware of our sacred sites and sharing with them the importance of these sites give us strength to move forward knowing that we are doing what needs to be done. A main focus of OHA's mission is to "... better conditions for our people". By caring for the "spiritual" as well as the physical, we can do just that. Kaneiolouma Heiau has managed to bring folks together not just physically, but spiritually as well, in terms of joining folks together and connecting to our Kūpuna and their legacy which they have left for all of us.

My fellow Trustees of the Office of Hawaiian Affairs are aware of your progress and I will keep informing them of the steps you are taking to protect and hopefully restore Kaneiolouma Heiau. Mahalo nui and please let me know if there is anyway we can help.

Aloha nui,

Robert K. Lindsey, Jr.
Office of Hawaiian Affairs

Trustee - Hawai'i Island

APPENDIX 4: Language Glossary

Following is a glossary of Hawaiian words used in this document. The meanings given are not exhaustive definitions but give meanings as used in the text. Reference: *Ulukau* Hawaiian Electronic Libraries Hawaiian Dictionary.

'āpana land parcel

ʻahaʻaina feast, banquet

āholehole Hawaiian flagtail fish

ahupua'a wedge-shaped land division extending from the mountains to

the sea, usually defined by river valleys, containing all the

resources needed for life.

'āina landakua godsali'i chief

ali'i 'aimoku chief of entire region or island ali'i-nui great chief, same as ali'i 'aimoku

ama'ama striped mullet

'aumakua deified ancestors, family or personal gods

'auwai ditch, canal

awa 'aua milkfish (young)

hākōkō wrestling

hala pandanus tree

halau meeting house, open-sided grass house

hale house

hale pili grass house

hale ali'i house of the chiefhale papa'a royal storage househale ulana house of the weaver

heiauplace of worship $h\bar{o}$ 'ailonasign or symbol

hui group

huli taro cuttings for planting

iihi a clover-like wood sorrel, Oxalis spp.iili land section, subdivision of an αhυρυα'α

imu underground oven

ipu gourd (vine)

kahiko ancient

kahua site, location; also arena, stage

kalo taro

kānāwai law (literally "equal sharing of water")

Kāneiolouma "man who runs and pushes"; also arm-wrestling.

kapa tapa, as made from wauke or māmaki bark

kapu forbidden

ki'i temple image, statue, idol, sacred object

ki'o small pond for rearing young fish

kō sugar cane

kōkua help

konohiki head of an ahupua'a under the chief

kowali maoli true kowali, a kind of morning glory vine used for swings and nets

kowali pehu moonflower

kuauna bank or border of a taro patch

kuleana responsibility

kūpuna grandparents, ancestors, relatives or close friends from the

grandparents' generation

laulima cooperation, people working together, lit "many hands"; also

community food patch

lo'i irrigated terrace, especially for taro

loko iʻa kalo combination of fishpond and taro patch

loko wai freshwater pond or lake

lua deadly grappling

mai'a banana

mahele portion, division, section; the Great Mahele: land division of 1848

maka'āinana common people

mākāhā sluice gate, used in fishpond

makahiki Ancient festival beginning mid-October and lasting about 4

months, with sports competitions, festivities, and kapu on war.

makai toward the ocean

mālama to care for, preserve, protect

mana miraculous power

mauka toward the mountains

makua main corm of kalo plant; also parent

meakanu plant
mele song
moʻolelo legend

Na Huihui o Makali'i the Pleaides constellation

niho stones set interlocking, as in a wall

niu coconut

noni Indian mulberry tree Morinda citrifolia

'ohā shoots of kalo

'ohana family
oli chant
'ōpae shrimp

'o'opu fishes in the families Eleotridae, Gobiidae, Blennidae; gobies

pana celebrated, noted, or legendary place

pia arrowroot $p\bar{o}haku$ stone

poʻo head, leader

popolo black nightshade, berries valued for medicine and ceremonies

pua'a pig

pule prayer, blessing, grace

'uala sweet potato

uhaloa Waltheria indica, herb used for sore throat

uhau humu pōhaku Hawaiian dry stack masonry

uhi yam

'ulu breadfruit

uma forearm wrestling

'umeke bowl

unu 1- small stone; 2- altar, heiau, especially a crude one for

fishermen or the god Lono

wa'a canoe

wahi pana sacred place, celebrated place, treasured place

wai fresh water

waiwai abundance, wealth, prosperity

wauke paper mulberry



Prepared by: Jennifer R. Allen

Administrative Manager

Hui Mālama O Kāneiolouma

PO Box 244, Kōloa HI 96756

jrallen@kaneiolouma.org

808-826-5262 / 808-634-1374