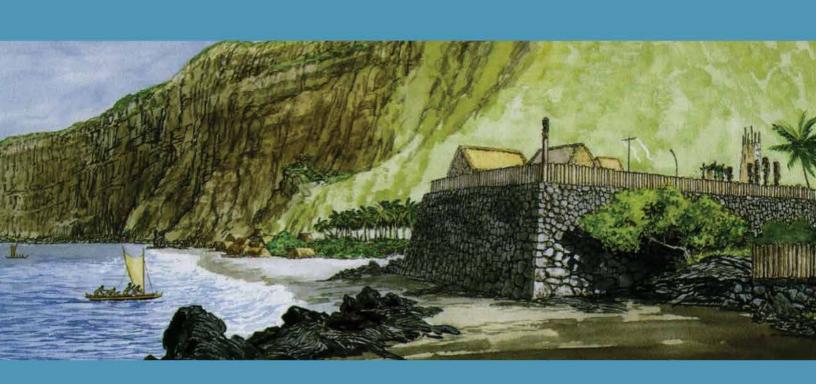
# KEALAKEKUA BAY COMMUNITY ACTION PLAN

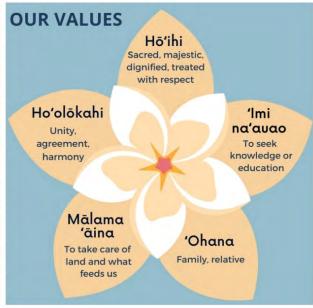


# KEALAKEKUA BAY COMMUNITY ACTION PLAN

#### **OUR VISION**

Kealakekua Bay is a living, spiritual place. It is a vibrant ecosystem interwoven with traditional knowledge and practices, honored and cultivated through understanding and reverence of this wahi pana (sacred place).





- · Be respectful of village residents and private property
- Be observant (kilo)
- Tread lightly
- Quiet hours 5 pm 8 am
- · Relationship building with
- Compliance of the rules on signage
- Show respect and reverence for cultural and archeological sites and their practitioners
- · Stay on trails
- Refrain from entering archeological and spiritual areas

#### CODE OF CONDUCT



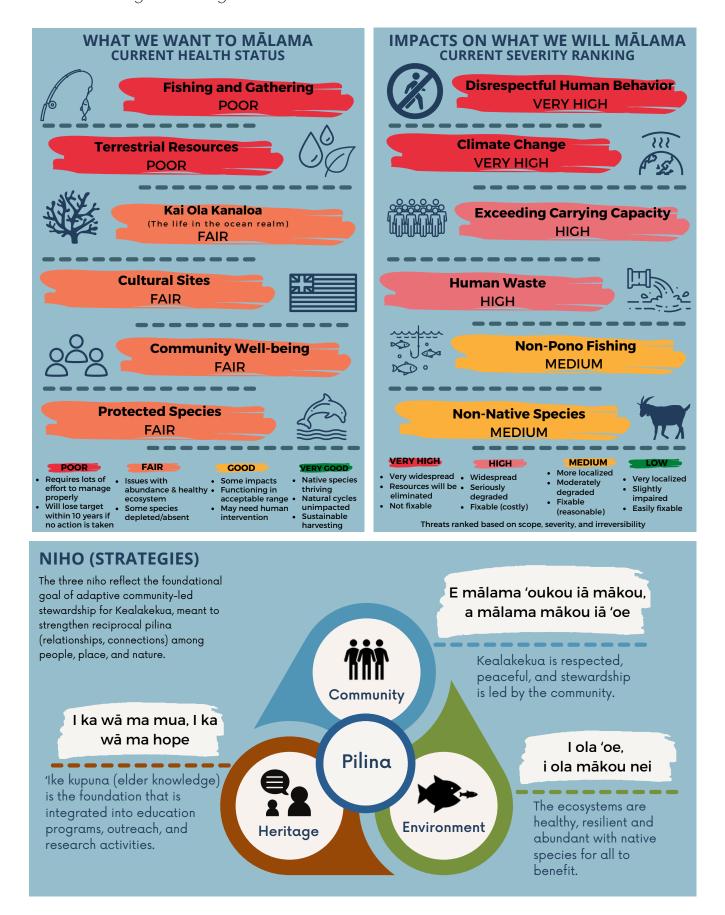


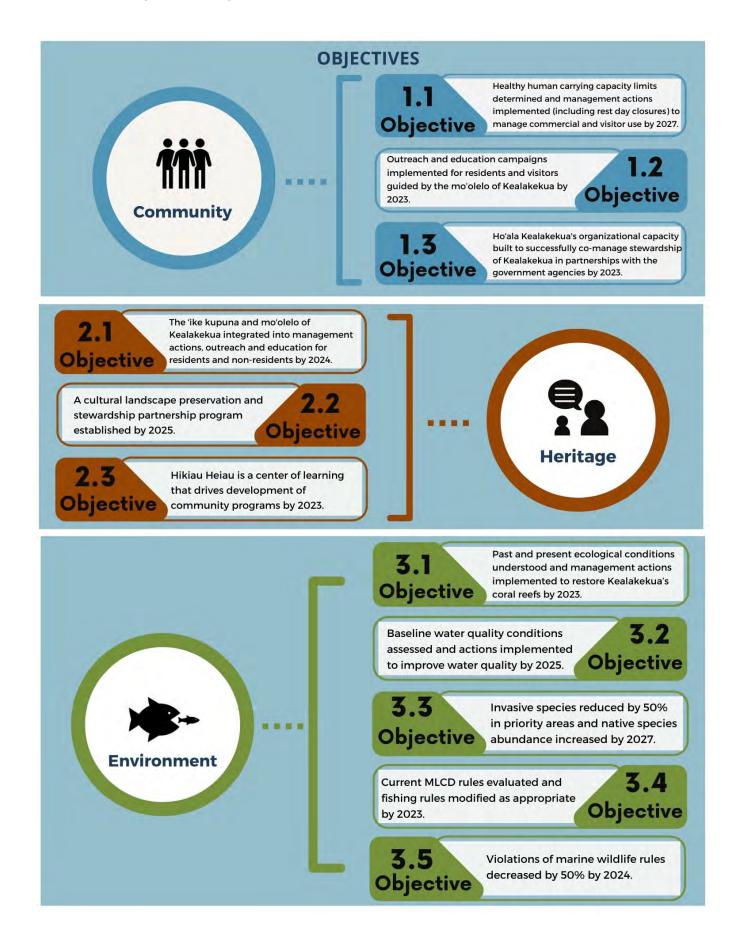
- · Treat this sacred place with reverence
- · Keep distance from wildlife
- · Coral is a living animal Please float above and don't step on it
- · Safety first When in doubt, don't go out
- · Bring plenty of water
- · Pack out what you pack in

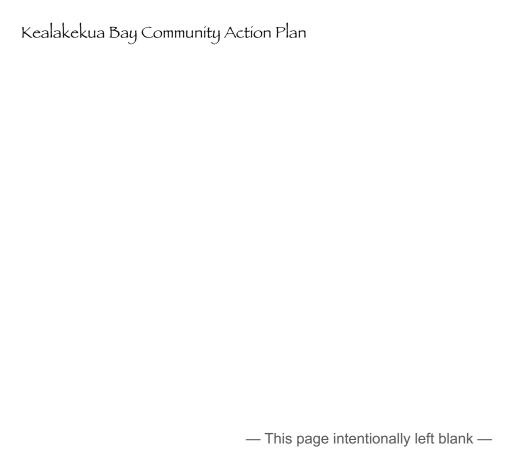


- · Harvest for the table, not the freezer
  - · Share your catch
  - Respect traditional fishing practices
  - Respect local fishing rules









# Kealakekua Bay Community Action Plan

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# Acknowledgements

Our gratitude to the *wahi pana* (storied place) of Kealakekua Bay, which has held the community in its embrace for generations and continues to nurture, feed, and inspire us to listen to what it needs. The Community Action Planning partnership is committed to honoring the rich history and traditions of Kealakekua with thoughtful collaborations to *mālama 'āina* (care for that which feeds us). We are humbled to join the long line of stewards of this *wahi pana* and to uphold our place in that line of succession by bringing our highest selves and our collective strength to carry our *kuleana* (*privileged responsibility*) with grace, wisdom, and perseverance.

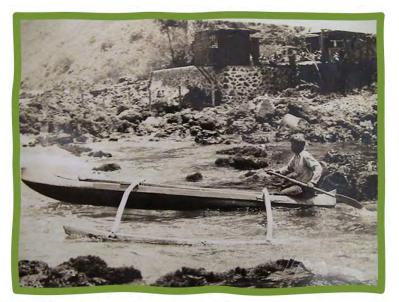
The collective effort to create a Community Action Plan (CAP) for Kealakekua would not be possible without the thoughtful intentions of the community members who are the stewards of the 'ike kūpuna (elder knowledge) and mo'olelo (stories of place). Mahalo piha (wholehearted gratitude) to Uncle Chuckie Leslie and his partner



Courtesy Leslie 'Ohana, Bishop Museum

Krista Johnson for bringing us together to build this partnership. Mahalo to the planning committee for thoughtfully outlining the process to make this plan inclusive and collaborative. Through the traditions and customs of transferring traditional knowledge from one generation to the next, mahalo to Shane Akoni Palacat-Nelsen for his inclusive approach to build the knowledge of the planning participants in the *moʻolelo* and *oli* (chant) of Kealakekua Bay to ensure that our foundation is grounded in place-based knowledge systems.

Each person and organization that joined this community action planning process brought their full selves to chart our path forward, committing to our relationships to Kealakekua and each other first. As a result, this plan reflects the participants' personal connections to place, professional expertise, and resources to share the *kuleana*. The implementation of the Community Action Plan is intended to be



Courtesy Leslie 'Ohana

adaptive to the changing conditions of the future, while rooted in the collective intention to *mālama* Kealakekua Bay through active stewardship and partnerships that honor the history and cultural practices and traditional philosophies of this *wahi pana*.

Mahalo piha to each of the planning participants. We are hopeful for the future, while acknowledging the hana (work) ahead of us. There is great comfort in knowing that the hana is made much more joyous and lighter through the shared kuleana and laulima (cooperation), as many hands make light work.

### Context



View of Kealakekua Bay, 1864 by Rufus Anderson, Bishop Museum, Courtesy Leslie 'Ohana

Located within the district of *Kona Hema* (South Kona) on the Moku o Keawe (Island of Hawai'i) is the pulsating *wahi pana* (storied place) of Kealakekua Bay (including the traditional place name of Kapukapu Bay). It is a location of great importance to the history of the Hawaiian people and continues to be cherished by all that reach its shores today. The lands and waters of Kealakekua have shaped the *moʻolelo* (stories of place), the origins of place names, the interactions between the people and the *akua* (gods, natural phenomenon), and the reverence that people continue to hold for the *mana* (energetic forces) of Kealakekua Bay.

The bay was likely populated between 900-1300 A.D., eventually becoming a ruling center for the Kona coast. Determined by the abundance of i'a (marine animals), such as 'ōpelu (mackerel scad) and akule (bigeye scad), Kealakekua Bay became the home of a thriving community for centuries. The abundance and health of the fishery was closely tied to the konohiki system, an adaptive, self-sustaining and holistic method of land and resource stewardship that administered and enforced kapu (taboo, prohibition) and kānāwai (law, code, rule). Kilo (observations) of seasonal cycles allowed for guiding adjustments to ensure food security for the kanaka maoli (Hawaiian people). While scarce in surface water resources, Kealakekua Bay relies on the natural and seasonal rain cycles and has significant puna wai (freshwater springs) that the kanaka maoli relied upon for drinking, bathing, and

#### Kealakekua Bay Community Action Plan

traditional aquaculture, such as *lokowai* (anchialine pools) and *loko* (ponds). These cooling freshwater sources are essential for the communities and for the ecological conditions shaped by the nutrient-rich waters.

Pivotal historical events at Kealakekua Bay fill volumes, including the arrival of Captain Cook and his men to the shores at Kealakekua in 1779. During the late 1700s, the great *ali'i* (chief) King Kamehameha established a royal residence and naval yard for his warships at Nāpo'opo'o (southeast area of the bay). In the late 1800s, the population center shifted from Ka'awaloa to Nāpo'opo'o as new missionaries arrived and established a whaling port here.

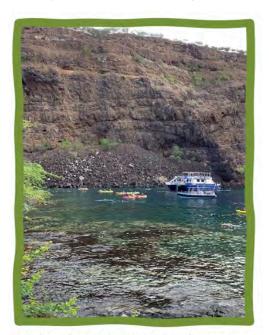


Wharf at Ka'awaloa, ca. 1880, Courtesy Leslie 'Ohana

From the late 1800s through the mid 1900s, many changes took place at

Kealakekua Bay with different commercial enterprises growing and then dwindling. Immigrants joined the community as laborers for various agricultural and cattle enterprises. World Wars shaped the villagers' way of life, and railroads became established in the region. In the mid to late 1900s, another significant shift occurred in the bay with major commercial operations closing, except fishing, and the population moving from *makai* (toward the sea) to *mauka* (toward the mountain) areas.

For several decades and more prevalent from the early 1990s, stewardship of Kealakekua Bay was heavily focused on providing access and infrastructure for tourism and recreational users, which



Ka'awaloa, Courtesy Leslie 'Ohana

continues to attract a growing number of visitors – both residents and non-residents – each year. The recreational and commercial activities that attract these visitors, including kayaking, snorkeling, diving, hiking, boating, and short term vacation rentals, have degraded traditional uses and the natural and cultural resources. These impacts have dramatically diminished the quality of life for the Kealakekua Bay community and have led to ongoing user conflicts and displacement of lineal families. While numerous efforts have been made to discuss and find solutions to the conflicts, these efforts have had limited impact or success.

Through all the changes at Kealakekua Bay, the cultural traditions of this *wahi pana* persevere. Rooted in deep knowledge of place, these traditions weave together both the physical and spiritual realms through everyday practices. The traditions and *moʻolelo* serve to guide its stewardship, ensuring that which is best for Kealakekua Bay perseveres.

#### Ka'ao O Ke Ala Ke Kua

"There was a story about how Kealakekua came about. Perhaps this is where the name came into use. Sometimes I wonder why they said it is the pathway of the gods. Is it named for the belief of the people and their gods of the past and where they worshipped, or was it named for a particular god as the story states? Only the people of the past know."

Aunty Mona Kapule Kahele Clouds of Memories

#### Ke-ala-ke-Kua (The path of Kua)

It is unknown of the exact date when Kua arrived in Kealakekua Bay. We know he appears in our genealogies around the same time the Pele Clan arrives to the islands. Kua was a chief from Kaʻū and was known for his frequent travels throughout the entire Pacific Ocean. He returned with new concepts, objects, and people that he acquired on his journeys.

After a long expedition from the Pacific Northwest, Kua sighted Kapukapu Bay. A humble and kind man, he was welcomed by the villagers with lots of Aloha. He shared his expeditions that took him to cold and rainy regions. He would share his journeys under the night sky and during daylight hours, Kua was eager and open to learn their style of fishing, farming, canoe building, and participated in familial ceremonies specific to this area. Kua learned quickly and his humbled nature allowed him to be trusted and part of the 'ohana and was no longer treated as a visitor.

Eventually, after gaining respect from the people to accept his knowledge, Kua began to share the characteristics of the seasons he observed at Kapukapu and how it could help them recover from the famish times they were experiencing. One day he overheard a few farmers from Piele complaining about the lack of soil that was recently flushed due to flooding and the lack of surface water. Kua had the opportunity to share a technique called maka'ili, by planting 'uala and kalo in rock beds. They no longer suffered and if they did, it was for a brief time.

One day after coming down from Manu'ā and Kuapehu, he perched on Pali'ula'ula above Kalepeamoa and observed the nai'a swimming through the large schools of halalū, and months later the 'ōpelu, then akule. He then proceeds to construct ko'a and teaches the people how to grow and increase their fish population in the open ocean. As time went by, they established the right time to harvest in large quantities.

With the abundance of food after the harvest, the fires of the cook house were readied. Kua then introduces the method of keeping heated coals lighted just enough so the people could cook their food more frequently providing a variation of processing food for consumption.

The day arrived when Kua announced that he had to return to his own people. Everyone was heartbroken because they were now losing a member of their 'ohana. They begged him to stay, but he thanked them and said, "I enjoyed my stay and all of you have treated me as a relative and not a visitor. Someday, I will return until then, when the sun is bright and the horizon is red and gold, I will be here, and even if I am not here physically, you will always be safe within the boundaries of this bay. Continue the practices I shared with you and this will be true for your generations to come."

The people were confused because as Kua stepped into the water, he bent down and cupped his hand to his mouth and chanted a booming voice that only his mouth knew. Suddenly, two dark lines on the sea appeared from the horizon to the shore as Kua stood still watching this formation.

The people murmured as Kua chanted over the water and the lines appeared, "he must be an ali'i", those lines were his canoes approaching him. As the lines touched the shore, the people's voices resounded in awe, "aue! He must be a god!" He stood in the center of the lines as he turned and gave his last farewell and dove into the water and reappeared as a shark swimming between two rows of sharks towards the setting sun. They were then certain that Kua was the great king of sharks.

In remembering this occasion, the people constructed a koʻa on the land and called the waters Kai-a-ke-Kua, the sea water of Kua, and this is where the Nāpoʻopoʻo wharf stands today. The people kept their promise to Kua by following the ways of his teachings, and Kua has kept his promise to protect them and the generations to come, hence, Kapukapu recognizes the kapu of Kua.

Mo'olelo provided by Shane Akoni Palacat-Nelsen

## Purpose and Need

Kealakekua Bay faces severe challenges due to habitat degradation, overuse, and tourism that are an ever-growing concern across Hawai'i nei (beloved Hawai'i), with many communities facing similar challenges. During the global COVID-19 pandemic in 2020-2021, our community witnessed and experienced the positive effects of a pause in tourism, which reminded many of us of times long ago, inspiring us to work together to care for Kealakekua Bay. Our efforts center on pursuing a more balanced and sustainable relationship with each other and the resources that fosters community wellbeing. This improved and sustainable management of natural resources will provide a more enriching experience for all. Through the integration and perpetuation of mo'olelo and 'ike kūpuna, we will improve the health of the bay's cultural and natural resources for the akua, people, and wildlife that depend on it. We will strive to learn, educate, and care for Kealakekua Bay with a deeper understanding of this wahi pana, and through our actions, serve as a model for community management to inspire others to care for their wahi.

The desire to create a Community Action Plan (CAP) was inspired by other communities that have applied similar approaches to overcoming these challenges. Our plan focuses on establishing community capacity for co-management of natural and cultural resources with the county, state and federal government agencies and building diverse partnerships among stakeholders and rights-holders with the interest, expertise, and resources to collectively address challenges.

Together, challenges will be met by the collaborative partnerships while upholding our *loina* (code; see sidebar). This *loina* reflects our respect for place and for each other and directs the manner in which we work together.



Na Ao Kupa	ianaha a Kealakekua
'Oli kanaenae o Ualeilani-a-Kāne	The Pilihala wind bears the rain called Hāleu'ole
E Kānehoalani e	Hey Kānehoalani (the heat element)
E Lono-noho-i-ka-wai	Hey Lono-noho-i-ka-wai (the charging element in the water
Ō ho'ūlu 'oe, ō 'īnana 'oe, ho 'īnana i ke ola	Inspire, animate, and give life
Pūnohunohu ke kualau a Kāne	The kualau rains of Kane spread wide and long.
Halihali 'ia i ka makani a Pilihala	Collected and moved by the Pilihala wind
Kokolo aku 'o Hāleu'ole	The creeping Hāleu'ole rains
ua kupu! ua lau! ua loa!	Sprout! Multiply! Expand!
ua 'ao! ua mu'o!	Bud! Branch outward!
'O luna, 'o lalo, 'o uka, 'o kai e	Everything above, below, upland and in the sea.
Ua 'ikeā	I "see" you and experiencing it!
Mai pa'a i ka leo	My voice is my affirmation - "I do declare"
Haku 'ia (composed by): Sha	ne Akoni Palacat-Nelsen, 1999, rev. 2019

# Kealakekua Community Action Plan Process

Our planning group developed the Kealakekua Bay CAP to define and structure our actions to protect the natural and cultural resources and nurture relationships to improve community well-being in Kealakekua Bay. Between August 2021 and July 2022, we held 14 meetings via Zoom and one inperson to develop the CAP to guide our work. Our meetings were facilitated by The Nature Conservancy (TNC) local staff, who have led numerous Hawai'i communities through the CAP process. The plan, grounded in our love of place and our deep respect for past and future generations, guides the work we undertake to ensure Kealakekua Bay is healthy, respected, and allowed to thrive.

#### **Participants**

Our planning group, referred to as CAP participants, represents multiple stakeholders and rights-holders engaged in using and caring for Kealakekua Bay, including community members, government agencies (county, state, and federal), nonprofit organizations, researchers, and ecotourism companies (Table 1). We continue to enlist additional members with complementary expertise, resources, and skillsets (Appendix B) to help implement the CAP strategies outlined in this plan.



Kealakekua Bay CAP Participants, April 2022 workshop

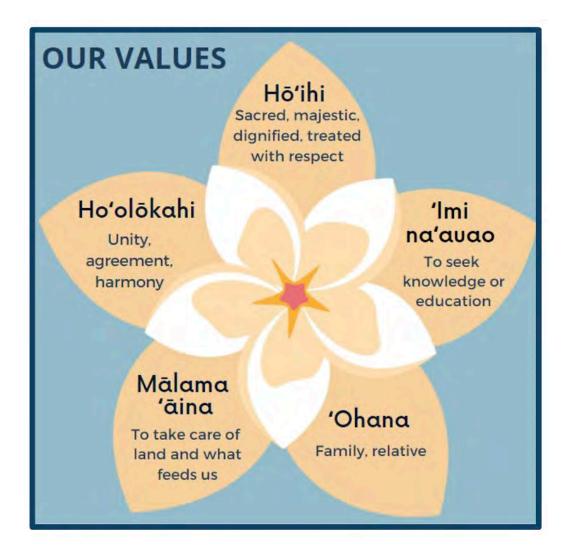
Table 1. CAP Particip	ants (* = Steering Committee Member)
Community Partners	
Chuck Leslie*	Kupuna, Kealakekua Bay Cultural Advisory 'Ohana, Community member
Krista Johnson*	Kealakekua Bay Cultural Advisory 'Ohana, Community Member
Shane Akoni Palacat-Nelsen*	Kealakekua Bay Cultural Advisory 'Ohana, Community Member; Office of Hawaiian Affairs
Mary Crispi	Hoʻala Kealakekua
Alayna DeBina*	Hoʻala Kealakekua; Community Member
Scott Neish*	Hoʻala Kealakekua
Usha Kilpatrick*	Community Member; The Healy Foundation
Bill Morris	Community Member
Government Partners	
Aric Arakaki*	Ala Kahakai National Historic Trail, National Park Service
Tanya Souza*	Ala Kahakai National Historic Trail, National Park Service
Curt Cottrell	DLNR Division of State Parks
John Kahiapo	DLNR Division of Aquatic Resources
Megan Lamson	DLNR Division of Aquatic Resources; Hawaii Wildlife Fund
Nikki Smith	DLNR Division of Aquatic Resources
Chris Teague*	DLNR Division of Aquatic Resources
Tracy Tam Sing*	DLNR Division of State Parks
Martha Yent*	DLNR Division of State Parks
Maile David*	Hawai'i County Council
Cameron Dabney	National Oceanographic and Atmospheric Administration, Hawaii Island Cetacean Response Coordinator
Adam Kurtz	National Oceanographic and Atmospheric Administration
Non-Governmental Organ	nizations & Research Partners
Manuel Mejia*	Coral Reef Alliance
Erica Perez	Coral Reef Alliance
Ulu Ching	Conservation International
Scott Laursen*	University of Hawai'i, Pacific Islands Climate Adaptation Science Center
Rebecca Most*	The Nature Conservancy
Julia Rose	The Nature Conservancy
Leah Keller	The Nature Conservancy
Barbara Seidel	The Nature Conservancy
Cecile Walsh	The Nature Conservancy
Ecotourism Partners	
Mendy Dant	Fairwinds Cruises
Adam Dant*	Fairwinds Cruises
Frank Carpenter	Kona Boys Kayak Company

#### Our Vision and Values

Our vision drives all of the work that we do, and our values shape the way we interact with each other, with the broader community, and with the environment. They reflect our core beliefs and serve as the guiding principles for how we conduct ourselves in the shared *hana* to care for Kealakekua Bay.

#### **OUR VISION**

Kealakekua Bay is a living, spiritual place. It is a vibrant ecosystem interwoven with traditional knowledge and practices, honored and cultivated through understanding and reverence of this wahi pana (sacred place).



#### Focus Area

The CAP focus area is located in the South Kona District where partners will implement actions to care for the bay across the *ahupua'a* (traditional land divisions) from Keōpuka in the north to Kahauloa 2 in the south. It is important to consider this *ahupua'a* approach to stewardship since areas adjacent to the focus area (*mauka* and *makai*) are connected to and impact the things we want to *mālama* (care for).

The focus area encompasses three protected areas and a coastal village:

- The 537-acre Kealakekua Bay State Historical Park, which includes the sacred cliffs of Palipoko-a-Manuahi and Hikiau Heiau, a significant spiritual site still used for cultural practices;
- The Kealakekua Bay Marine Life Conservation District (MLCD), which includes a shallow coral reef ecosystem and deeper sandy habitat that extends to a depth of 120 feet;
- A portion of the 175-mile Ala Kahakai National Historic Trail corridor; and
- Nāpoʻopoʻo Village, which includes the wharf, Manini Beach Park, large landholdings mauka of the bay, and the surrounding residential community, home to both short-term visitors staying in a growing number of vacation rentals and long-term residents, some of whom are lineal descendants of Kealakekua.



# Famed Fresh Water Sources of Kealakekua Bay



#### Ka'awaloa Ahupua'a

Awili: mixture of kai and wai currents

Hāli'ilua: naturally purified, physical and spiritual cleansing

#### Kealakekua/Kīloa Ahupua'a

Waiulu: spring forth, gushing; used for growth, great source of potable water

Waiakekeua/Waiakeakua: sacred water, deified

#### Waipuna'ula/Kalamakumu/Kalama'umi/Kalamakowali Ahupua'a

Wai'awa'awa: murky water, appears like the water in a kanoa (kava bowl)

Wai'ula: caused by the abundance of limu kohu that grew in the area

#### Kalamakapala/Kalamawai'awa'awa Ahupua'a

Waiamau: constant steady flowing water source

Waile'a: soothing, pleasing, healing

#### Nā Kaiaulu o Kapukapu

l ka lewa nu'u 'o Makali'i 'ea Hānau ka Makahiki i ka liko hou 'ea

> I ka moana e wao nahele 'ea E ala helelima o Kalama 'ea

E Kūlou a Maluhia 'ea Noho mai i ka lae o Palemanō 'ea

> Eō e ke one o Ke'ei 'ea' Owili i ke 'ale he'e nalu 'ea

Ke lu'u nei o Lelekawa 'ea Wela nui 'o Keawaiki 'ea

Pane mai e Kahauloa 'ea Ho'olohe 'o Kapahukapu 'ea

Ulana moʻolelo a mau a mau ʻea Lihilihi kai nui paʻakai ʻea

Pāla'a pahe'e a ua nui 'ea A inu kuhikuhi o Waiamau 'ea

Aia 'o Kua ka manō 'ea Ho'ohihi na manu no Kekua 'ea

> Eia ke koʻa a Kekua ʻea Halihali pū na iʻa ʻea

E kipa mai e Waipuna'ula 'ea A ho'iho'i e Kapukapu 'ea

Aia i Ke Ala Ke Kua 'ea

Hanohano 'ia 'o Hikiau 'ea

Kū a'e I ka pali a Kāloa 'ea Kau I ka hanohano 'ea

Aia ka pali o Keoua 'eal ka la'i o ka Lepemoa 'ea

Hoʻākoakoa e Hāliʻilua ʻea

но акоакоа е нап'пиа еа Не wahine kapu i ka wai 'ea

Hoapili a'e e Kāne me Kanaloa Ke ola ka wai ulu a Wākea 'ea High above is Makali'i

The season of Makahiki emerges in a new era

From the horizon to the forest spaces
The fingers of Kalama are extended

Kūlou and Maluhia

You reside at Palemanō

Respond to the sands of Ke'ei

The tumbling surf

Lelekawa a favorite leaping spot

Keaweiki is hot

Kahauloa answers

Now listen for Kapahukapu

Weaving the stories of the past

The creeping ocean provides the salt

The rains arrive and the limu pahe'e spreads We drink the sweet water from Wajamau

There is Kua our 'aumakua

The masses of Kekua are intertwined

Here is the shrine of Kekua The fish gathers in abundance

Waipuna'ula welcomes you

Return to Kapukapu

There is the Path of Kua Glorifying at Hikiau

There is the pali of Kāloa

A glorifying place

There is the pali of Keoua

In the calm of Kalepeamoa

Hāli'ilua gathers

The water is reserved for ranking women.

The companions Kane and Kanaloa

The unifying water of Wākea lives on.

#### This chant honors place names of Kapukapu

Haku 'ia (composed and choreographed by): Shane Akoni Palacat-Nelsen, Kūkulu hulahula 'o Kanani Enos

## **Community Action Plan Outcomes**

#### Targets: What We Want to Mālama

CAP participants identified six natural and cultural resource priorities to *mālama* (Table 2). The priorities are referred to as targets in CAP terminology and throughout this plan.

Participants then ranked the health or viability of each target based on the key attributes of the target and what a good or healthy target looks like (Table 3). The ranking or "current status" is based on the standard CAP system, defined as:

Poor

Heavily impacted or depleted, ecosystem function impaired, requires lots of effort to manage properly, will lose target within 10 years if no action is taken

Issues with abundance and ecosystem function, some species depleted or absent

Some impacts observed but functioning in an acceptable range, may need human intervention

Very Good

Native species are thriving, natural cycles are not impacted, harvest is sustainable

#### Oli Komo no Kua I ka waha ko'u noho At the mouth I await your arrival He 'ele'ele, he uliuli, he kala, he lipoa ka moena A black, dark, yellowish and sea greenish bed Mai hele a noho i ka moana nui, moana iki In the vast ocean, the small ocean E Uli noho i ke alohilani, The goddess Uli is dwelling in the glistening light, auau i ke ponaha ke one vibrating in the swirling sand E kulia I ka naenae a Kanaloa Striving to the peak of Kanaloa's breath The multitude of gods are the companions of the reefs E na kini a ke akua, na hoa o ka papa The white reefs of Lono Ka papa kaha kua kea o Lono O Lono ka pao The interjecting Lono Ola ke au a Kanaloa The thriving currents of Kanaloa Composed by Shane Akoni Palacat-Nelsen

Table 2.	CAP	<b>Targets</b>	and	<b>Definitions</b>
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Target	Definition
Fishing and Gathering	Fishing and gathering is the practice of harvesting marine and terrestrial resources for subsistence and/or cultural reasons. Harvesting through traditional practices and ensuring access to resources are crucial components of fishing and gathering. Kealakekua's traditional practices include <i>akule</i> surrounds, 'ōpelu fishing, pole and line fishing, and gathering <i>hala</i> plants and plumeria flowers for weaving and <i>leimaking</i> . Food resources commonly harvested at Kealakekua include <i>limu kohu</i> (Asparagopsis taxiformis), <i>limu pahe'e</i> (Porphyra sp.), <i>akule</i> (bigeye scad), <i>kole</i> (Goldring surgeonfish), <i>pāku'iku'i</i> (Achilles tang), <i>ula</i> (lobster), and <i>wana</i> (sea urchin). Educated fishers and sustainable catch per unit effort (CPUE) help to secure the abundance of these resources for generations.
Terrestrial Resources	Terrestrial resources are natural elements (biotic and abiotic) found in land-based ecosystems. These resources include flora, fauna, freshwater ecosystems (such as anchialine pools), and geological features such as the <i>pali</i> (cliffs). Terrestrial resources are considered most healthy when native species have high biodiversity, invasive species abundance is low, and <i>wai</i> (freshwater) resources are abundant and free of pollutants.
Kai Ola Kanaloa	Kai Ola Kanaloa refers to all life in the ocean realm. This includes coral, fish, limu (algae), and invertebrates, such as <i>he'e</i> (octopus), <i>ula</i> (lobster), snails, crustaceans, <i>'opihi</i> (limpet), and <i>wana</i> (sea urchin). Water quality, rugosity (structural complexity) of reefs, herbivore biomass, number of people in the water, and the resiliency and genetic diversity of coral and other organisms all interact to determine the health of the ocean ecosystem and marine life.
Living Cultural Sites	Kealakekua's cultural sites include archeological and natural features that hold rich heritage and history. Hikiau Heiau is considered one of the most important <i>heiau</i> in the District of Kona and had an important role in the annual Makahiki. Other significant sites include trails, dry-stack walls, <i>lokowai</i> (anchialine pools), <i>Wailokoali'i a loko wai</i> (ponds), birthing sites, house sites, and burial grounds.
Community Well-Being	Community well-being is the combination of social, spiritual, economic, environmental, cultural, and political conditions that are essential for communities to thrive. This is achieved through feelings of connectedness, livability, and equity. A thriving residential community that includes lineal descendants and their families, harmonious resident and visitor interactions, respect of place, and opportunities for cultural succession are important aspects that contribute to community well-being.
Protected Species	Protected species are those designated under the Marine Mammal Protect Act and/or the Endangered Species Act. Some of these species include <i>nai'a</i> (spinner dolphins), <i>koholā and palaoa</i> (humpback and sperm whales), <i>honu</i> (green sea turtles), <i>'īlioholoikauaua</i> (monk seals), <i>manō</i> (sharks), <i>hāhālua</i> (manta rays) and <i>ōpe'ape'a</i> (Hawaiian hoary bat).

# Target Viability (Health Rankings)

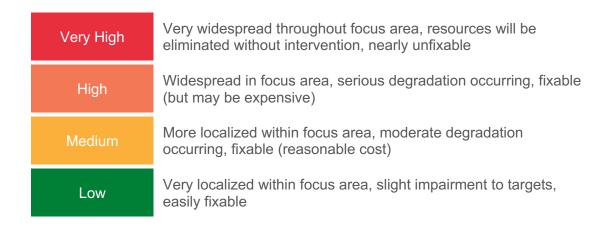
Table 3. Targets, I	Key A	Attributes,	and	Current	Status
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Target	Key Attributes	What Good Looks Like	Current Status	
Fishing and Gathering	Harvest using traditional practices, access to food resources, gathering for customary uses	Abundance of food and natural resources (akule, limu kohu, lauhala, and plumeria), access to favorite fishing spots ('ōpelu ko'a), ability to do akule surrounds, akule present at wharf and can be hooked off the pier, taste of food is 'ono (delicious), trees are healthy	Poor	
Terrestrial Resources	Abundant freshwater available and free of pollutants, diversity of native plants, low invasive flora and fauna	Public awareness and advocacy for freshwater resources, low human waste (sewage and trash), absence of invasive species and abundance of native species, minimized upslope erosion and pollution	Poor	
Kai Ola Kanaloa	Clean water, structure intact (non-living habitat), healthy herbivore biomass, more coral than algae, coral and genetic diversity and resilience	High abundance and biomass of fish, high coral cover, abundant predators, return of the fish species that used to be here, return of edible <i>limu</i> abundance, clean and clear water (can see the bottom)	Fair	
Cultural Sites	Heiau, trails, burials, dry-stack walls (including walls around loko and lokowai)	Cultural sites are intact, undamaged, and actively and appropriately cared for, people have access to sites and trails based on Native Hawaiian traditional and customary rights, practices and religious purposes, and the community has rights to implement restrictions	Fair	
Community Well-Being	Residents, youth, soundscape, parking access, traditions actively practiced	Tourism is well managed (controlled, sustainable, regenerative, and community-guided), culturally appropriate outreach materials are shared with visitors, residents have access to parking, there is a calm atmosphere in the village; thriving residential community that includes lineal descendants and their families; commuity has access and are comfortable practicing ceremonies at cultural sites, traditional practies are occuring, place names are used and honored, 'ike kūpuna is respected, protocols are followed, and stories are shared and preserved; community is comanaging natural and cultural resources with government, there is clear and frequent communication between the community and partners, and the local workforce is engaged in management	Fair	
Protected Species	Dolphins, whales, green and hawksbill turtles, sharks, mantas, Hawaiian hoary bats	Protected species are free of harrassment, dolphins engage in normal behavior and are visible during the day and throughout the week, the water is clean and free of disease (toxoplasmosis) and other pollutants, wide variety of native algae in the bay	Fair	

#### Threats: Impacts on What We Want to Mālama

CAP participants identified six critical threats impacting our targets (Table 4).

We then ranked the level of each threat based on the scope, severity, and irreversibility each has on our targets (Table 5). This process helped us identify which threats were having the greatest impact on the most targets, so we could develop strategies and actions to mitigate the threats and maintain and/or improve target health. The overall threat ranking is based on the standard CAP system, defined as:





Wildlife harassment at Kealakekua Bay, Courtesy of the Leslie 'Ohana.

Table 4. CAP Threats and Definitions			
Threat	Definition		
Disrespectful Human Behavior	Behavior that diminishes target health, intentionally or unintentionally, such as general disrespect towards residents and natural and cultural resources; illegal activity, including extracting $p\bar{o}haku$ (rocks) and trespassing on private lands and historic trails; commercialization; and social media posts and other promotions that contribute to exceeding Kealakekua's carrying capacity and result in traffic congestion and parking problems in the small village.		
Climate change	Impacts of climate change – including periodic marine heatwaves that cause coral bleaching, ocean acidification, increased drought, rising sea levels, and increased storm damage – degrade target health and are expected to increase in severity.		
Exceeding Carrying Capacity	Carrying capacity refers to the maximum population – residents and visitors – that an environment can support sustainably. Exceeding that level leads to the degradation of the environment and impacts to traditional and cultural practices and community quality of life with many factors contributing, including too many people, boats, kayaks, cars, and vacation rentals.		
Human Waste	Point and non-point sources of pollution that can enter an ecosystem and be a vector for disease, algae blooms, and physiological impairments to marine wildlife (e.g., coral health and reproduction). Human waste includes marine debris (e.g., derelict fishing gear, litter, fishing line), trash, and sewage (including from cesspool and septic tanks).		
Non-Pono Fishing	Pono fishing is the sustainable harvest of marine resources. Non-pono fishing includes the depletion of food resources through illegal and unsustainable fishing activities. Non-pono fishing was identified as a threat because it greatly impacts food security and, therefore, community well-being. It also diminishes the relationship between people and nature that is a key aspect of Hawaiian culture.		
Non-Native Species	Aquatic and terrestrial species that are not native to a particular area often displace native species and become invasive. Non-native aquatic species include <i>taʻape</i> (bluestripe snapper), <i>toʻau</i> (blacktail snapper), <i>roi</i> (peacock grouper), guppies, mollies, and tilapia. Non-native terrestrial species include goats, plants, rats, and mongoose.		

**Table 5. Threat Ranking** 

Targets Threats	Fishing and Gathering	Terrestrial Resources	Kai Ola Kanaloa	Cultural Sites	Community Well-Being	Protected Species	Overall Threat Ranking
Disrespectful Human Behavior	Very High	High	Low	Very High	Very High	Very High	Very High
Climate Change	High	High	Very High	Very High	Very High	High	Very High
Exceeding Carrying Capacity	Medium	High	High	Medium	Very High	High	High
Human Waste	High	High	High	High	High	Medium	High
Non-Pono Fishing	Medium	Low	Low	Medium	Medium	Medium	Medium
Non-Native Species	High	High	High	High	Low	Low	Medium

We identified **disrespectful human behavior** and **climate change** (ranked as Very High) as the threats having the greatest impacts (in terms of scope, severity, and irreversibility), followed by **exceeding carrying capacity** and **human waste** (ranked as High). **Non-pono fishing** and **non-native species** were ranked Medium. As we work to address all six threats, the rankings will help guide management efforts in terms of the resources (funding, time, staffing) needed to improve the health of each target.

#### **Voluntary Code of Conduct**

As a first step toward improving people-to-people and people-to-nature *pilina* (relationships) in the focal area, CAP partners developed a voluntary code of conduct. Based on the area's cultural traditions, it is a guide for proper behavior when living in or visiting the bay.

When followed, the code of conduct is a summary of actions that will improve the quality of life for all in Kealakekua Bay. Encouragement to respect this voluntary code of conduct will be shared online and through signage, brochures, and direct engagement to help educate visitors as to how to respectfully interact with the natural and cultural landscape. The goal is to reduce the negative impacts of overuse and disrespectful, unsustainable behaviors.

Promoting the code of conduct through outreach activities is key to helping people understand the ways they can individually contribute to preserving the villagers' lifestyle, improving habitat for native species, perpetuating cultural traditions, and improving everyone's relationship with the bay.



#### 'Awa o Manu'ā Eia ka 'ai e Kahulipapahonua Here is the food source from Kahulipapahonua (earthly realms) Ke akua i ke alo i ka 'ōpū o Lono The god is in my presence, and I am filled (bloated) like the water that fills the gourd of Lono E ho'i e Mihakalani Mihakalani (tranquil/mesmerizing state of mind) is intensified E ala e Pelehonuamea Pelehonuamea (peppery heat) arises (creeps up/sneaky) E ala e ke kumu o Hulinu'u I am on the path to the source of Hulinu'u (the highest heavens) O Hulinu'u Kealohiloa i ka lua e... The elongated splendor likened to Hulinu'u This chant honors the place names of Manu'a, Kawa'aloa for their potency and favored by the high-ranking chiefs of Kapukapu and neighboring districts. Excerpt from: Ke Ka'ao Ho'oniua Pu'uwai no Kamiki a Maka'iole (The Heart Stirring Story of Kamiki and Maka'iole)

#### Niho (Strategies)

To revive a culture of community-driven stewardship that is inherently adaptive, resilient, and sustainable, our plan centers on three *Niho* – Community (people), Heritage (place), and Environment (nature). Like the *niho* (foundation stone) in traditional dry-stack masonry, they provide the foundation our plan is built upon with the aspirational goal for each reflected in the sentiments of ' $\bar{o}$ lelo no'eau (Hawaiian proverbs). We will nurture and strengthen the *pilina* (relationships) among these *niho* within the Kealakekua Bay *wahi pana* in our actions, words, and embodiment of our values.

CAP partners developed SMARTIE (specific, measurable, achievable, relevant, time-bound, inclusive, and equitable) objectives and specific actions for each *niho*. The actions will be implemented through collaborative management involving the community, government agencies, private businesses, landowners, and nonprofit organizations. We do not view the *niho* as separate, but rather three prongs of the same spear. As such, we will supportively elevate our collective efforts to reach our aspirational goals.

The actions we identified focus on improving community connectivity, cultural understanding, and visitor engagement through place-based 'ike (knowledge) with a central focus stemming from the current practices, philosophies, traditions, and customs from Hikiau Heiau to enhance residents' and visitors' relationships to place, reduce violations and threats to natural and cultural resources, and ensure Kealakekua is healthy, respected, and cared for. Our community strives to protect the interest of

#### Kealakekua Bay Community Action Plan

indigenous knowledge by upholding the Paoakalani Declaration (Appendix C) and the United Nations Declaration on the Rights of Indigenous Peoples and will use these principles to develop a process to properly engage and consult with traditional knowledge holders through the Kealakekua Bay Cultural Advisory 'Ohana, and ensure that Hikiau Heiau is a center for learning and the traditional practices are perpetuated.

We will meet to share progress and advance our work. As we implement the plan, we intend to be flexible and nimble to changing situations and address new opportunities and challenges as they arise. To that end, the CAP plan will be revisited and revised periodically (every 5 years) to reflect the changes needed to achieve the *niho*. To foster increased and long-term engagement in this effort, CAP partners will develop and host community discussions, bi-annual workshops, and other events that feature local *kūpuna* and youth leaders; that honor place-based traditions with local cultural practitioner networks; and that strengthen person-to-person and person-to-nature *pilina*, fostering collective actions.

#### Relationality (Kinship)

Cross-Cutting Theme

In support of strengthening adaptive, resilient, sustainable, and community-led stewardship of Kealakekua's resources, the Kealakekua community will perpetually engage, interconnect, and strengthen long-term person-to-person and person-to-nature relationships rooted within the Kealakekua wahi pana to, thereby, facilitate and root broader community connectivity, awareness, understanding, communication processes, and visitor engagement through a place-based vantage maintained by long-term relationships locally.

Together we will develop long-term frameworks for community discussion and connection to ensure adaptive and resilient communication forums in perpetuity (e.g., inclusive of Hoʻala Kealakekua, the Cultural Advisory 'Ohana, CAP Participants, and regularly seeking out additional Kealakekua community members wishing to participate). Such regular local engagement frameworks will allow community members to express challenges that arise in addressing CAP objectives and actions, discuss solutions, and then work together to put collaborative solutions into practice. Such framework and regular support of person-to-person and person-to-nature long-term relationships will root collective actions and broader community engagement in diverse knowledge forms, trust, and honor place-based knowledge within local practitioner networks on the ground (i.e., 'ike kūpuna). Long-term relationships will additionally maintain the CAP as a living document that is iterative and adaptive to needs that evolve in the future. Novel approaches can, thereby, be piloted within such long-term communal processes in support of this cross-cutting theme, strengthening adaptive capacities through time at a local level.

Scott Laursen
Community Action Plan Steering Committee Member

COMMUNITY	E mālama 'oukou ia mākou, a mālama mākou ia 'oe You care for us, we care for you
Goal	Kealakekua is respected, peaceful, and stewardship is led by the community.
Objectives	Actions
Objective 1.1: Healthy human carrying capacity limits determined and management actions implemented (including rest day closures) to manage commercial and visitor use by 2027.	<ul> <li>a. Design and implement carrying capacity studies relating to ocean, trails, land, roads, and short-term rentals by the end of 2023.</li> <li>b. Establish a reservation system with a parking lot (payment for non-residents) and shuttle for visitors at the Gasper Coffee Mill location (above Hikiau Heiau) and establish parking zones in Nāpoʻopoʻo village with access given to residents by the end of 2027.</li> <li>c. Conduct outreach to local commercial operators, residents, and visitor industry to see if they will voluntarily participate in rest day closures rather than be subject to top-down regulation.</li> <li>d. Consult <i>'ike kūpuna</i>, researchers, and findings from carrying capacity studies to design an effective management plan and ecological closure plan (by area, time, season, etc.).</li> <li>e. Work with government agencies to develop a rest day(s) closure process, rules, and management plan for the bay.</li> <li>f. Implement management plan and access rules in collaboration with enforcement agencies.</li> </ul>
Objective 1.2: Outreach and education campaigns implemented for residents and visitors guided by the moʻolelo of Kealakekua by 2023.	<ul> <li>a. Create and display appropriate outreach materials (signage, social media, TV, and websites) for compliance with the Code of Conduct; evaluate and reassess on an annual basis. (See Action 2.1)</li> <li>b. Create ongoing certification process for commercial operators (including short-term rentals) to keep <i>moʻolelo</i> (stories) narrative consistent and accurate and increase compliance with Code of Conduct by summer 2023.</li> <li>c. Implement a Makai Watch program and collaborate with DOCARE and NOAA enforcement officers to observe and gather data and increase compliance with rules and community Code of Conduct.</li> </ul>
Objective 1.3: Hoʻala Kealakekua's organizational capacity built to successfully comanage stewardship of Kealakekua in partnership with government agencies by 2023.	<ul> <li>a. Staff Hoʻala Kealakekua with paid positions; hire at least one staff by the end of 2022 and two more by mid-2023.</li> <li>b. Increase the membership and initiate capacity-building training for Hoʻala Kealakekua Board of Directors to guide successful implementation of mission.</li> <li>c. Develop a 5-year strategic plan and implement funding strategy (grants, donations, parking and reservation fees, and concession stands) to support Hoʻala Kealakekua by the end of 2023.</li> <li>d. Develop and implement volunteer engagement strategy that incorporates voluntourism programs to generate revenue and build Hoʻala Kealakekua's capacity to achieve its mission.</li> </ul>

HERITAGE	I ka wā ma mua, I ka wā ma hope To seek the future, we must look deeply to the past
Goal	'Ike kūpuna is the foundation that is integrated into education programs, outreach, research, and management activities.
Objectives	Actions
Objective 2.1: The 'ike kūpuna and mo'olelo of Kealakekua integrated into management actions, outreach, and education for residents and non-residents by 2024.	<ul> <li>a. Create a list of people to interview including village 'ohana, historical researchers, and <i>pili</i> (close) people by December 2023.</li> <li>b. Complete an ethnographic study in collaboration with Ho'ala Kealakekua and the Cultural Advisory 'Ohana to collect, securely store, and determine appropriate mo'olelo to be used for education and outreach by the end of 2024.</li> <li>c. Create place-based <i>oli</i> and/or <i>mele</i> to be incorporated into outreach, education, and <i>mālama 'āina</i> activities by the summer of 2023.</li> </ul>
Objective 2.2: A cultural landscape preservation and stewardship partnership program established by 2025.	<ul><li>a. Complete an Archaeological Inventory Survey and Preservation Plan by the end of 2025.</li><li>b. Conduct cultural landscape monitoring and enforcement to protect and preserve archaeological sites.</li></ul>
Objective 2.3: Hikiau Heiau is a center of learning that drives development of community programs by 2023.	<ul> <li>a. Implement the philosophies of <i>heiau</i> protocols with community (e.g., through closures that are aligned with cultural philosophies of management).</li> <li>b. Identify active <i>'ohana</i> practitioners to help formalize <i>heiau</i> protocols and capture their <i>mana'o</i> (thoughts) in writing, art, music, <i>mele</i> (<i>song</i>, <i>chant</i>), or videos to be incorporated into outreach and education programs.</li> </ul>

ENVIRONMENT	I ola 'oe, i ola mākou nei When you thrive, we thrive
Goal	The ecosystems are healthy, resilient, and abundant with native species for all to benefit
Objectives	Actions
Objective 3.1:  Past and present ecological conditions understood and management actions implemented to restore Kealakekua's coral reefs by 2023.	<ul> <li>a. Compile existing research of marine, coastal, and terrestrial habitats by the end of 2023.</li> <li>b. Develop capacity and implement coral restoration through collaborations with DAR, researchers, and non-profit organizations by the end of 2022.</li> </ul>
Objective 3.2: Baseline water quality conditions assessed and actions implemented to improve water quality by 2025.	<ul> <li>a. Identify water quality pollution sources and extent in collaboration with researchers by the end of 2024.</li> <li>b. Identify short-term and long-term management actions that would improve water quality by the end of 2024.</li> <li>c. Implement water quality improvement plan for Kealakekua Bay by the end of 2025.</li> </ul>
Objective 3.3: Invasive species reduced by 50% in priority areas and native species abundance increased by 2027.	<ul> <li>a. Identify priority restoration areas and management actions to remove invasive species (flora and fauna).</li> <li>b. With volunteer support, remove invasive plant species in priority areas and replant with native species sourced from the region by the end of 2027.</li> <li>c. Reduce feral ungulates by 50% in collaboration with landowners through fencing and removal.</li> <li>d. Reduce invasive aquatic species by 50% within priority restoration areas.</li> <li>e. Restore <i>loko</i> (pond) habitat quality by the end of 2025.</li> </ul>
Objective 3.4: Current MLCD rules evaluated and fishing rules modified as appropriate by 2023.	<ul> <li>a. Document and discuss historical fishing practices with village kūpuna, long-time fishers, and community members by the end of 2023.</li> <li>b. Determine which pono practices are still appropriate to reestablish, as guided by 'ike kūpuna by the end of 2023.</li> <li>c. Develop a fisheries management plan for the MLCD in collaboration with DAR and revise the rules as needed.</li> </ul>
Objective 3.5: Violations of marine wildlife rules decreased by 50% by 2024.	<ul> <li>a. Increase frequency and number of DLNR and NOAA enforcement agents routinely visiting the bay by the end of 2022 and work in collaboration with Kealakekua Makai Watch.</li> <li>b. Increase monitoring and data collection on dolphin behavior by partnering with researchers, citizen scientists, and others by the summer of 2023.</li> </ul>

#### Ua Lu'ulu'u Kai Nei

Beneath The Ocean

Ua lu'ulu'u kai nei ka uku ako'akoa The coral polyp dives beneath the sea.

Mai ka wai huna o Lononuiakea From the hidden waters of Lononuiakea

Ohua ka ohua ma ka pa'akea āhua. The young fry fish sliding around the swelling reef.

Hi'ipoi iā ka ho'olu'u pa'akai 'o Hinakāmalama and Hinahele, tend to the salt baskets

Hinakāmalama 'o Hinahele

Ua puka The coral emerges

Ua eli It digs in; takes root

Ua uku a iā It renumerates

O ka 'Ale'ale'a, o ka leho, o ke kualakai, o These are the sea snail, cowry snail, sea slug, and octopus

 kahe'e – all familial god forms that scrub, rub, crawl and burrow on the reef and are crucial to maintaining its ecological balance

Mai hiki hāpapa a hiki kohola From the Shoal waters to the reef flats

E waiho kuanaka I ke au o Lono pau The hard coral is placed in the currents of Lono pao

Ua ikea It is being known, it is being expressed, it is happening now

Mai pa'a ka leo The profoundness is proclaimed. Which makes it wisdom

This chant was developed as the opening protocol for coral restoration work on the Kealakua reef.

Haku 'ia (composed by) 'o Kahaka'io Ravenscraft, 2022

# Appendix A: Translations, Glossary, and Acronyms

Translations					
Akua	Gods; natural phenomenon				
Akule	Bigeye scad mackerel				
Aliʻi	Chief				
Aloha	An action that requires reciprocation; greetings, love, affection, and respect				
Aue	Oh! Alas! Goodness! Really!; action of "matter of fact" (used to express wonder, fear, scorn, pity, affection)				
Hāhālua	Manta ray				
Hana	Work				
Halalū	Juvenile akule				
He'e	Octopus				
Heiau	Place of worship, altar				
l'a	Marine fish				
'lke/ 'ike kūpuna	Knowledge, wisdom of respected elders that is transmitted generationally				
ʻĪlioholoikauaua	Monk seal				
Ka'ao	Transcendental novels, myths, or legends. Stories that are passed down about how or why something came to be; or stories designed to teach a lesson about a real person in history, with a few facts dramatically changed.				
Kahakai	Area near the sea, beach				
Kaheka	Tidal pool area				
Kai	Sea, sea water, area near the sea				
Kai ola a Kanaloa	All life in the ocean realm				
Kalo	Taro				
Kanaka Maoli	An individual whose ancestors were natives of the area which consists of the Hawaiian Islands prior to 1778 (42 U.S. Code, § 3057k – "Native Hawaiian" defined)				
Kānāwai	Law, code, rule				
Kapu	Taboo, prohibition				
Kilo	Observations				
Koʻa	Shrine, often consisting of circular piles of coral or stone, built along the shore or by ponds or streams, used in ceremonies as to make fish multiply				
Koholā	Humpback Whale				
Kohola	Reef flats, bare reef, the first law a chief promulgates.				
Kole	Goldring surgeonfish				
Konohiki	Sub-chief; land agent for a chief; landlord agent. Headman of an ahupua'a land division under the chief/self-sustaining and holistic methods of land and resource stewardship				
Konohiki System	A partial definition of "The Ancient Hawaiian Land System" which legally defines stewardship for right-holders within a specific region. (10-JUL Haw. B.J. 46, Hawaii Bar Journal, July 2006, Hon. Jon J. Chinen (ret.), copyright 2006				
Kuleana	Prerogative; privledged responsibility; assignment; land division act of 1850.				
Kupuna/kūpuna	Respected elder, grandparent, ancestor/plural of kupuna,				

Lauhala	Leaves of the hala tree (Pandanus tectorius)				
Laulima	Cooperation				
Limu	Algae				
Limu kohu	Asparagopsis taxiformis				
Limu pahe'e	Porphyra sp.				
Loina	Rule, custom, manners, code				
Loko	Ponds				
Lokowai	Anchialine pools				
Mahalo/Mahalo piha	Thank you/wholehearted gratitude				
Maka'ili	Rocky patches where sweet potato and kalo were cultivated				
Makai	Towards the ocean, seaward				
Mālama/Mālama 'āina	To care for / To care for that which feeds us				
Mana	Power				
Mana'o					
Manō	Thought, idea, belief, opinion Shark				
Mauka	Toward the mountains, inland, upland				
Mele	Song, anthem, or chant of any kind; poem, poetry				
Moʻolelo	Stories of place				
Nai'a	Porpoise, dolphin				
Niho	Foundation stone in dry-stack masonry				
Niuhi	Carnivorous shark				
'Ohana					
Oli	Family Chant				
'Olelo no'eau					
Ōpe'ape'a	Hawaiian proverbs				
'Ōpelu	Hawaiian hoary bat				
'Opihi	Mackerel scad Limpet				
Pākuʻikuʻi	Achilles tang				
	Sperm whale; lei palaoa, makau palaoa - tusk used from the palaoa. Highly				
Palaoa	prized as a gift from Kanaloa. An indication or metaphor for abundance.				
Pali	Cliffs				
Pili	Close				
Pilina	Relationships				
Pōhaku	Rocks				
Pono	Moral, righteous				
Puna wai	Freshwater springs				
Roi	Peacock grouper				
Ta'ape	Bluestripe snapper				
Toʻau	Blacktail snapper				
'Uala	Sweet potatoes				
Ula	Lobster				
Wahi pana	Storied place				
Wai	Water other than sea water				
Wana	Sea urchin				

Glossary					
Actions	In the context of a Community Action Plan, the activities or interventions that explain how objectives will be accomplished				
Adaptive management	Adjusting your actions based on what you learn from implementing and monitoring				
Area-based management	The integrated, sustainable management of the full suite of human activities occurring in large, spatially defined areas, which take into account biophysical, socioeconomic, and jurisdictional considerations, wherein no-impact and low-use areas may be necessary elements of biodiversity protection				
Community	Residents, families, and people who come together from across a wider geography to care about a place from many perspectives – anyone who cares enough, steps up and helps take care of and lift up a place is part of the community				
Community-led stewardship/ Community- based management	Natural resource stewardship regime in which a community comprised of an organized group of people with an ancestral, residential, and/or use-based relationship with a place is empowered through agreement, policy, or legal ownership to inform decision-making about how that place's resources are used, managed, and conserved. This includes a range of governance conditions, from a community playing a formal advisory role to a government agency, a community exercising exclusive collective ownership, or a hybrid set-up within this spectrum. The advisory type of community-based management is currently the most commonly practiced in contemporary Hawai'i.				
Collaborative or Co-management	Occurs when two or more parties within the collaboration share decision making authority over common-pool resources (Berkes et al. 1991). The 1996 World Conservation Congress states via Resolution 1.42 that co-management is a "partnership in which government agencies, local communities and resource users, non-governmental organizations and other stakeholders negotiate, as appropriate to each context, the authority and responsibility for the management of a specific area or set of resources."				
Goals	A simple phrase that succinctly communicates your aim or desired result				
Herbivore/ Herbivorous fish	An animal/fish that feeds on plants				
Objectives	In the context of a Community Action Plan, the outcomes you hope to achieve that answer the questions what, where, by how much, and in what time frame				
Resource/ Resource species	In the context of a <i>Community Action Plan</i> , something the community wants to protect. Typically, a plant, animal, or habitat of biological, social, cultural, and/or economic significance				
Stakeholder(s)	In the context of a Community Action Plan, individual or group with interest in the geographic area/resources your group is working to protect				
SMARTIE objectives	Objectives are specific, measurable, achievable, realistic, time-bound, inclusive, and equitable				
Target	In the context of a Community Action Plan, resources your group is working to protect				
Threat	In the context of a <i>Community Action Plan</i> , people or things putting pressure on the resources your group is working to protect				
Viable/viability	Capable of survival				

# Kealakekua Bay Community Action Plan

Vision	In the context of a Community Action Plan, conveys what your resources, place, or			
	community will look like once you achieve your mission			

Acronyms	
CORAL	Coral Reef Alliance
DAR	DLNR Division of Aquatic Resources
DLNR	Hawai'i Department of Natural Resources
DOCARE	DLNR Division of Conservation and Resources Enforcement
HWF	Hawai'i Wildlife Fund
MLCD	Marine Life Conservation District
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
TNC	The Nature Conservancy
UH	University of Hawai'i

# Appendix B: Capacity Needs Assessment

The CAP participants brainstormed an initial list of potential collaborators, resources, and opportunities for support to implement CAP actions. We will expand upon the list as the CAP is implemented and new information and relationships develop.

COMMUNITY	E mālama 'oukou ia mākou, a mālama mākou ia 'oe You care for us, we care for you			
Goal	Kealakekua is respected, peaceful, and stewardship is led by the community.			
Objectives	Potential collaborators and resources to support workplan activities			
Objective 1.1: Healthy human carrying capacity limits determined and management actions implemented (including rest day closures) to manage commercial and visitor use by 2027.	<ul> <li>Friends of Hanauma Bay</li> <li>Kamuela Plunkett</li> <li>DLNR Division of Boating and Recreation</li> <li>UH Mānoa DURP Program</li> <li>Pūpūkea Carrying Capacity Study</li> <li>Ha'ena and Hāpuna Beach State Parks</li> <li>Hawai'i Tourism Authority Destination Management Action Plans</li> <li>Other ecotourism operators (e.g., at Molokini)</li> <li>The Kohala Center</li> <li>Fair Wind Cruises</li> <li>Kona Boys Kayak Co.</li> </ul>			
Objective 1.2: Outreach and education campaigns implemented for residents and visitors guided by the <i>moʻolelo</i> of Kealakekua by 2023.	<ul> <li>Ala Kahakai National Historic Trail</li> <li>Frecia Cevallos (Hawai'i County)</li> <li>Caroline Anderson (Hawai'i Tourism Authority)</li> <li>Coral Reef Alliance (CORAL)</li> </ul>			
Objective 1.3: Hoʻala Kealakekua's organizational capacity built to successfully co-manage stewardship of Kealakekua in partnership with government agencies by 2023.	<ul> <li>The Nature Conservancy</li> <li>Hui Maka'āinana o Makana</li> <li>Hui Aloha Kīholo</li> <li>Hawai'i Community Foundation</li> <li>Hawai'i Alliance of Nonprofit Organizations</li> <li>State Parks</li> <li>Kealakekua Bay Cultural Advisory 'Ohana</li> </ul>			

HERITAGE	I ka wā ma mua, I ka wā ma hope To seek the future, we must look deeply to the past			
Goal	'Ike kūpuna is the foundation that is integrated into education programs, outreach, research, and management activities.			
Objectives	Potential collaborators and resources to support workplan activities			
Objective 2.1: The 'ike kūpuna and mo'olelo of Kealakekua integrated into management actions, outreach and education for residents and non-residents by 2024.	<ul> <li>Kealakekua Bay Cultural Advisory 'Ohana</li> <li>Edith Kanaka'ole Foundation</li> <li>Uncle Chuckie Leslie</li> <li>Kona Historical Society</li> <li>E Ala Pū Network, Kua'āina Ulu 'Auamo</li> <li>University of Hawai'i at Hilo's Heritage Management Program</li> <li>Ala Kahakai National Historic Trail, NPS</li> <li>Halau Ohia</li> <li>Kamuela Plunkett</li> <li>Kumu Pono</li> <li>Daviana McGregor Hawai'i Tourism Authority</li> <li>Kepa Maly (2004) resource</li> <li>Hawai'i Community Foundation</li> </ul>			
Objective 2.2: A cultural landscape preservation and stewardship partnership program established by 2025.	<ul> <li>Kealakekua Bay Cultural Advisory 'Ohana</li> <li>Division of State Parks, DLNR</li> <li>Ala Kahakai National Historic Trail, NPS</li> <li>Huliaupa'a</li> <li>Hawaiian Civic Club</li> <li>Big Island Hiking Club</li> <li>Dennis Klimke</li> <li>Local Educators</li> <li>Kumu Hula</li> <li>University of Hawai'i at Hilo Heritage Management Program</li> <li>Halau Ohia</li> <li>Kamuela Plunkett</li> </ul>			

Objective 2.3: Hikiau Heiau is a center of learning that drives development of community programs by 2023.	<ul> <li>Shane Akoni Palacat-Nelson</li> <li>Kealakekua Bay Cultural Advisory 'Ohana</li> <li>Ku-A-Kanaka, Aunty Kū Kakahakalau mā</li> <li>Local Educators</li> <li>Kumu Hula</li> <li>University of Hawai'i at Hilo Heritage Management Program</li> <li>Ala Kahakai National Historic Trail</li> <li>Halau 'Ōhia</li> <li>Kamuela Plunkett</li> <li>Office of Hawaiian Affairs</li> <li>Office of Hawaiian Education</li> <li>Native Hawaiian Education</li> <li>Kōkua Hawai'i Foundation</li> </ul>
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ENVIRONMENT	I ola 'oe, i ola mākou nei When you thrive, we thrive		
Goal	The ecosystems are healthy, resilient, and abundant with native species for all to benefit		
Objectives	Potential collaborators and resources to support workplan activities		
Objective 3.1:  Past and present ecological conditions understood and management actions implemented to restore Kealakekua's coral reefs by 2023.	<ul> <li>Dr. John Burns (University of Hawai'i at Hilo)</li> <li>Arizona State University</li> <li>Edith Kanaka'ole Foundation</li> <li>Manuel Mejia (Coral Reef Alliance)</li> <li>Cultural Advisory 'Ohana</li> </ul>		
Objective 3.2: Baseline water quality conditions assessed and actions implemented to improve water quality by 2025.	<ul> <li>Erica Perez (Coral Reef Alliance)</li> <li>Tracy Wiegner (University of Hawai'i at Hilo)</li> <li>Pam Madden (Natural Energy Laboratory of Hawai'i Authority)</li> <li>Rebecca Most (The Nature Conservancy)</li> <li>Rick Bennett or Rae Chandler-'lao (Kona Water Keepers)</li> <li>Hawai'i Wai Ola</li> <li>Stuart Coleman (Wastewater Alternatives and Innovations)</li> <li>Craig Downs (Haereticus Environmental Laboratory)</li> <li>Greg Asner (Arizona State University)</li> <li>Representative Nicole Lowen</li> <li>NOAA Coral Reef Conservation Program grants</li> <li>Hōkūli'a Water Quality Reports</li> </ul>		

	Fair Wind Water Quality results (Dear Ocean collaboration)
Objective 3.3: Invasive species reduced by 50% in priority areas and native species abundance increased by 2027.	<ul> <li>The Nature Conservancy</li> <li>Hui Loko network</li> <li>Steve Hess (USGS Pacific Island Ecosystems Research Center, retired)</li> <li>South Kohala Coastal Partnership</li> <li>Three Mountain Alliance</li> <li>Local hunting and fishing groups</li> <li>Hiki Ola</li> <li>University of Hawai'i at Hilo</li> <li>Terraformation</li> <li>Hawai'i Wildlife Fund</li> <li>USDA Natural Resources Conservation Service</li> <li>Division of Forestry and Wildlife</li> </ul>
Objective 3.4: Current MLCD rules evaluated and fishing rules modified as appropriate by 2023.	<ul> <li>Stacia Marcoux (Division of Aquatic Resources)</li> <li>Keali'i Sagum (Division of Aquatic Resources)</li> <li>Ka Huli Ao</li> <li>CBSFA communities</li> <li>NO CRISES research group</li> <li>Hannah Springer (Ka'ūpūlehu Marine Life Advisory Committee)</li> <li>TNC FishPath</li> <li>Department of Land and Natural Resources</li> </ul>
Objective 3.5: Violations of marine wildlife rules decreased by 50% by 2024.	<ul> <li>David Aku Carruthers (NOAA Office of Law Enforcement)</li> <li>Cammy Dabney (NOAA)</li> <li>Division of Conservation and Resources Enforcement (DOCARE) Kona Officers</li> <li>Hawai'i County Police Department</li> <li>Hawai'i County Planning Office</li> <li>Hawai'i Tourism Authority</li> </ul>

# Appendix C: Indigenous Rights, Right-holders and Stakeholders, and the Application of the Paoakalani Declaration

In October 2003, Kanaka Maoli of Ka Pae 'Āina Hawai'i gathered at the Ka 'Aha Pono – Native Hawaiian Intellectual Property Rights Conference – and united to express our collective right of self-determination to perpetuate our culture under threat of theft and commercialization of the tradtional knowledge of Kanaka Maoli, our wahi pana, and nā mea Hawai'i.

The Kealakekua Bay CAP acknowledges the unique legal status of the indigenous residents of Kealakekua Bay, generally referred to as Mauliauhonua, generational residents or Native Hawaiians, and urges to protect and continue to create abundance for their traditions, customs, and spiritual lifestyle, not limited to but, afforded by the County of Hawai'i, State of Hawai'i, U.S. Federal, and International governments. The Kealakekua Bay CAP also recognizes place-based knowledge holders to navigate traditions, customs, and spiritual lifestyles within the jurisdiction of the Kealakekua Bay CAP.

The Paoakalani Declaration can be found on the Office of Hawaiian Affairs website at this link: <a href="https://www.oha.org/news/statement-on-the-aloha-poke-controversy/paoakalani-declaration/">https://www.oha.org/news/statement-on-the-aloha-poke-controversy/paoakalani-declaration/</a>

# Appendix D: Community-Based Participatory Research - Data Management and Collection

Community-based participatory research is an approach to research that involves collective, reflective and systemic inquiry in which researchers and community stakeholders and right-holders engage as equal partners in all steps of the research process with the goals of education, improving practice, or bringing about social change. This approach to research is recognized as particularly useful when working with populations that experience marginalization, such as Indigenous communities, because it supports the establishment of respectful relationships and the sharing of control over individual and group health and social conditions.

The purpose of this appraoch is to recognize the value of *'ike kupuna*, community place-based knowledge holders, and academic researchers and to set up a framework to address the need for improved transdiciplinary and intervention research methods.

The Kealakekua Bay CAP will design an appropriate framework for all stakeholders and right-holders to facilitate and prioritize the increase and evolution of all knowledge sources and understanding of a given *akua* (phenomenon) and to integrate the knowledge gained with interventions for policy and social change benefiting the community and natural and cultural resources the Kealakekua Bay CAP serves.

An optional template for research and data sharing agreements can be found on page 184 of the Mālama I Ke Kai guidebook created by the Maui Nui Makai Network.