## State of Hawai'i DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Aquatic Resources Honolulu, Hawai'i 96813

May 26, 2023

Board of Land and Natural Resources State of Hawai'i Honolulu, Hawai'i

### NON-ACTION ITEM: BRIEFING ON PROPOSED ADOPTION OF A NEW CHAPTER, CHAPTER 13-60.11, HAWAII ADMINISTRATIVE RULES, "KĪPAHULU COMMUNITY-BASED SUBSISTENCE FISHING AREA, MAUI"

Submitted for your review is a proposal to adopt chapter 13-60.11, Hawaii Administrative Rules (HAR), to designate the Kīpahulu Community-Based Subsistence Fishing Area, Maui (Kīpahulu CBSFA), to ensure abundant stocks of priority species and high-quality fishing now and in the future for residents and visitors to Kīpahulu and to reaffirm and perpetuate fishing practices that were customarily and traditionally exercised for Native Hawaiian subsistence, culture, or religion along the southeast coast of Maui.

### HISTORY

Kīpahulu is a traditional fishing and gathering area, sustaining the local Hawaiian population for centuries. Its approximately 150 residents live "off the grid," generating their own power, obtaining water through water catchment systems, streams, and wells, and processing food at Kālena Kitchen.<sup>1</sup> Local fishers have described abundant fishery resources present in Kīpahulu 30-40 years ago, noting that fish would "come up to smell your spear" and "papio would come when you snap under water." Since then, the community has observed a significant decline in fish abundance and biomass, highlighting the need for enhanced management of the area. Studies indicate that "[i]f fishing access increases without additional management in place, Kīpahulu could experience rapid and significant declines in fish abundance and biomass, similar to other more populated areas on Maui"<sup>2</sup>

This proposal is based on the management plan entitled, "Kīpahulu Community-Based Subsistence Fishing Area Proposal and Management Plan," (Attached as **Exhibit 1**) submitted by Kīpahulu 'Ohana, Inc. (KOI), a community organization comprised of traditional subsistence fishing practitioners and 'ohana with genealogical connections to the moku of Kīpahulu<sup>3</sup>

 $<sup>^{1}</sup>$  Kā lena Kitchen is a centrally located hale where the community gathers to prepare meals and discuss community-related issues.

<sup>&</sup>lt;sup>2</sup> Minton, D., Conklin, E., Amimoto, R., & Pollock, K. (2014). Baseline surveys of marine resources at Kīpahulu, Maui 2010 and 2013. Final Report, The Nature Conservancy, Honolulu, HI.

<sup>&</sup>lt;sup>3</sup> The moku of Kīpahulu is a traditional land division on the Southeast portion of the island of Maui that consists of multiple ahupua'a from Ka'āpahu in the west to Pua'alu'u in the east. See Figure 2, "Map: Proposed Kīpahulu

spanning multiple generations. KOI is dedicated to the cultural sustainability of Kīpahulu, Maui, through educational programs which incorporate local, national and international partnerships and projects. KOI envisions families working in harmony together to preserve and enhance the traditional cultural practices of the Hawaiian people. KOI conducts cultural demonstrations, restoration projects, self-sufficiency programs, and biological diversity projects. The management plan submitted by KOI is a result of over a decade of outreach efforts to community-members and -leaders, students, legislators, state agencies, and the general public. A detailed accounting of all of the KOI's outreach efforts is attached as **Exhibit 2** entitled, "Kīpahulu Community-Based Subsistence Fishing Area Administrative Record."

# THE KĪPAHULU NEARSHORE ENVIRONMENT: FISHERY AND NON-FISHERY USES

Generally, fishing and gathering in Kīpahulu is conducted for subsistence, sustenance, and recreational purposes, although commercial fishing has been observed. Fishing and gathering is greatly influenced by shoreline access, habitat type, and ocean conditions. Traditional and subsistence uses of this area include: hukilau,<sup>4</sup> pound and palu fishing with pole,<sup>5</sup> hook and line, throw net, akule fishing, fish sharing, intertidal gathering of limu, 'opihi, and other invertebrates, and family recreation. Recreational fishing effort typically consists of rod and reel fishing for ulua and other fish and gathering for resources like 'opihi, pipipi, 'a'ama, wana, and limu from the intertidal zone.

Over the past 30 years, the Kīpahulu community has experienced an increase in visitors and resource users, likely attributed to improvements to the Hāna and Pi'ilani Highways and land additions to the Haleakalā National Park. Intermittent boat traffic occurs, mostly from Hāna and south Maui, but no active launch sites are within the area. Shoreline access is generally restricted by landowners except in the Haleakalā National Park: in the ahupua'a of Ka'āpahu from 'Alelele to Ka'āpahu streams and at the Kīpahulu campground from 'Ohe'o Stream to Kukui Bay.

# TRADITIONAL, CUSTOMARY, AND SUBSISTENCE PRACTICES

Residents of Kīpahulu place a high value on subsistence fishing and gathering activities, Hawaiian practices, and values. The collective identity of Kīpahulu is defined by a shared cultural heritage that is maintained by a system of interdependence and social reciprocity. This system is expressed in many ways, including the sharing of food gathered through subsistence.

Akule fishing in particular is a traditional community-based event, where 20 to 30 people prepare and join the nets, surround the fish aggregation and use divers to secure the catch. Everyone who helps gets a share of the catch. Fishers go to traditional look-out points to watch for certain fish colors and behaviors to know when the akule are aggregating and spawning, to ensure harvest takes place after the fish spawn.

Moku CBSFA Designation Area," on page 9 of the "Kīpahulu Community-Based Subsistence Fishing Area Proposal and Management Plan" attached at the end of this submittal as **Exhibit 1**.

<sup>&</sup>lt;sup>4</sup> A traditional fishing method usually requiring participation by a whole community where a seine net is deployed from the shoreline and pulled into shore and the catch is collectively shared by all who participated.

<sup>&</sup>lt;sup>5</sup> Fishing using a traditional form of bait, or palu, made up of various ingredients ground up and mashed together.

Guided by traditional subsistence 'ohana values, customs, and practices, KOI has informally managed harvest practices within Kīpahulu. For example, KOI, in collaboration with the Haleakalā National Park, The Nature Conservancy (TNC), and the University of Texas A&M-Corpus Christi (UTAMCC), has developed informational signage and posters which are displayed at Haleakalā National Park Kīpahulu campground that inform visitors, including fishers, of the Voluntary 'Opihi Rest Area<sup>6</sup> as well as pono practices for harvesting 'opihi outside of the Rest Area. KOI subsistence practitioners also lead by example, harvesting using an informal code of conduct that focuses on pono fishing practices to maintain healthy, regenerative, and sustainable populations of nearshore resources.<sup>7</sup>

# PURPOSE AND OVERVIEW OF PROPOSED CBSFA RULES:

Pursuant to Section 188-22.6, Hawaii Revised Statutes (HRS), the Department of Land and Natural Resources' Division of Aquatic Resources (DAR) proposes to adopt a new chapter, HAR chapter 13-60.11, to designate the Kīpahulu CBSFA and to establish rules governing marine resource uses and activities within the area.

Section 1 describes the purpose of the chapter.

Section 2 provides definitions of relevant terms as used in the chapter.

Section 3 delineates the boundaries of the Kīpahulu CBSFA, the Kukui Bay Sanctuary, and the 'Opihi Rest Area.

Section 4 prescribes the permitted and prohibited activites within the Kīpahulu CBSFA. The regulations in Section 4 set stricter bag limits, size limits, and gear restrictions to prevent overharvesting while allowing for the continuance of subsistence levels of take. Within the CBSFA it will be <u>prohibited</u> to:

- 1) Take or possess more than ten finfish per person per day;
  - Exception for akule and introduced or invasive fish species
- 2) Take any akule for commercial purposes;
- 3) Take or possess more than one 'ōmilu per person per day;
- 4) Take or possess more than two kala per person per day;
  - Mirrors herbivore proposal
- 5) Take or possess any kole less than five inches in length;
  - Mirrors herbivore proposal
- 6) Take or possess any moi from May through September;
- 7) Take or possess any moi less than eleven inches in length or greater than eighteen inches in length;
- 8) Take or possess more than forty 'opihi of any species per person per day;
- 9) Take or possess any 'opihi with a shell diameter of less than one and one-fourth inches or greater than two inches;
- 10) Take or possess any 'opihi within the 'Opihi Rest Area;

<sup>&</sup>lt;sup>6</sup> The Voluntary 'Opihi Rest Area is not an official designation.

<sup>&</sup>lt;sup>7</sup> See page 7 of the "Kīpahulu Community-Based Subsistence Fishing Area Proposal and Management Plan" attached at the end of this submittal as **Exhibit 1**.

- 11) Take or possess any 'opihi while diving;
- 12) Take or possess any ula or ula pāpapa from May through September;
- 13) Take or possess a combined total of more than two ula or ula pāpapa;
- 14) Take or possess more than two spotted reef crabs per person per day;
- 15) Take or possess any native limu species with a holdfast or roots attached;
- 16) Engage in surround net fishing using a gill net with a stretched mesh of less than two and three-fourths inches;
- 17) Engage in surround net fishing to take any marine life, except akule and ta'ape;
- 18) Take any marine life using a bag net;
- 19) Possess a throw net with a stretched mesh of less than three inches while in the water or on or about the shore where fish can be taken;
- 20) Use more than two poles, provided that each pole may have only one line, and each line may have no more than two hooks, with each hook having only one point while at or near the shorleine, except that double or treble hooks are allowed when using fishing lures;
- 21) Take any marine life while using SCUBA gear or to possess both SCUBA gear and marine life at the same time; provided that the use of SCUBA gear is allowed to engage in surround net fishing for akule or to take introduced or invasive species;
- 22) Take or possess any marine life while diving at night (thirty minutes after sunset to thirty minutes before sunrise); and
- 23) Take or possess any marine life while within the Kukui Bay Sanctuary.

This section also recognizes that native Hawaiian traditional and customary rights recognized under article XII, section 7, of the Hawaii State Constitution shall not be abridged.

Section 5 carves out an exception allowing vessels in possession of restricted gear or species to traverse through the CBSFA as long as they remain in active transit.

Section 6 establishes the administrative and criminal penalties that may be imposed for violations of this chapter.

Section 7 recognizes the State's asset forfeiture authority as an enforcement tool for violations of this chapter. This section will facilitate enforcement of this chapter by providing the Department with the appropriate range of tools to deter violations.

The proposed rules drafted in Ramseyer format are not attached as an exhibit to this submittal because they are pending review by the Attorney General's Office.

Respectfully submitted,

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BRIAN J. NEILSON, Administrator Division of Aquatic Resources

APPROVED FOR SUBMITTAL

DAWN N. S. CHANG, Chairperson Board of Land and Natural Resources

Attachments:

Exhibit 1 – Kīpahulu Community-Based Subsistence Fishing Area Proposal and Management Plan

Exhibit 2 – Kīpahulu Community-Based Subsistence Fishing Area Administrative Record

# **KĪPAHULU MOKU**

Community-Based Subsistence Fishing Area Proposal & Management Plan



Backed by years of careful observation, research, and feedback from those most intimately connected to these resources, the proposed Community-Based Subsistence Fishing Area (CBSFA) and its attendant management plan will proactively protect subsistence resources subject to a range of ever-growing pressures and threats, and reduce the potential for human conflict that may arise from differing perspectives on appropriate harvesting behavior.

The recommended regulations in the Kīpahulu Moku Proposal and Management Plan represent a positive step toward perpetuating critically important public trust resources, while recognizing the traditional and customary practices and subsistence lifestyles unique to Kīpahulu. The proposed rules formalize a "code of conduct" that can guide the harvesting practices of all who may seek to gather nearshore resources in the waters of Kīpahulu moku.

Submitted by Kīpahulu 'Ohana, Inc. to the State of Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources Created July 27, 2017 Last updated January 23, 2023

# TABLE OF CONTENTS

# KĪPAHULU MOKU CBSFA PROPOSAL & MANAGEMENT PLAN

i.	Executive Summary i
1.	Organization Information 1
2.	Nearshore Environment and Human Uses
3.	Traditional, Customary, and Subsistence Fishing Practices
4.	Proposed Boundaries and Regulations
5.	Subsistence Resources Targeted for Management
6.	Management Objectives, Actions, and Draft Work Plan
7.	Abbreviations, Definitions, and Species Lists
8.	Bibliography

# Figures

Figure 1. Map: Kīpahulu Moku Site Reference	2
Figure 2. Map: Proposed Kīpahulu Moku CBSFA Designation Area	9
Figure 3. Map Closeup: Proposed 'Opihi Rest Area	9
Figure 4. Map Closeup: Proposed Kukui Bay Sanctuary	. 9

# **Tables**

Table 1. Proposed Regulatory Solutions	10
Table 2. Approximate Status of Subsistence Resources Targeted for Management	14
Table 3. Kīpahulu Moku CBSFA Draft Work Plan	25

# Appendix

Administrative Record (separate document)				
1.	Outreach Efforts Graphic (2013-2023)1			
2.	Outreach Efforts Table (2013-2023) 2			
3.	Outreach Efforts Timeline (2013-2023)			
4.	KOI's Natural and Cultural Resource Stewardship Experience			
5.	KOI's Partnerships and Network Affiliations			
6.	685 East Maui Resident Signatures for the Kīpahulu Moku CBSFA			
7.	Resolutions			
8.	Letters of Support			
9.	Example Outreach Materials (2013-2023)			
10.	Kīpahulu Mālama I Ke Kai Community Action Plan (2012)			

### **Executive Summary**

Kīpahulu Moku is a traditional fishing and gathering area, sustaining the local Hawaiian population for centuries. Its approximately 150 residents live off the grid, generating their own power, obtaining water through water catchment systems, streams, and wells, and processing food at Kalena Kitchen. The only public utility servicing Kīpahulu residents is telephone.

Yet, this remote moku annually attracts about one to two million visitors to the Haleakalā National Park. To help preserve its culture and customs, a small group of Native Hawaiians came together to restore natural systems and share and perpetuate practices that support the subsistence lifestyle of families across the moku, leading to the formation of the nonprofit Kīpahulu 'Ohana, Inc. in 1995.

Local fishers have described abundant fishery resources present in Kīpahulu 30-40 years ago, noting that fish would "come up to smell your spear" and "papio would come when you snap under water." Since then, fishery abundance and biomass has been observed to decline, suggesting room for improved management. "If fishing access increases without additional management in place, Kīpahulu could experience rapid and significant declines in fish abundance and biomass, similar to other more populated areas on Maui" (Minton et al., 2014).

On behalf of the residents and traditional practitioners of Kīpahulu moku, this Proposal and Management Plan seeks to ensure the perpetuation of customary practices and subsistence lifestyles by designating the marine waters and submerged lands of Kīpahulu moku from Kālepa to Pua'alu'u and extending seaward to three points that generally follow the 60-meter (180 feet) depth contour from the high-water mark of the shoreline, as a Community-Based Subsistence Fishing Area (CBSFA).

#### Acknowledgements

The creation of the Kipahulu Moku Proposal and Management Plan was made possible through the work and dedication of many hands over several decades. Mahalo to the kūpuna, fishers, gatherers, Kīpahulu residents, east Maui community members, marine scientists, land stewards, teachers, students, scholars, community organizers, elected and appointed officials, and agencies who participated in this process. Mahalo to the community of subsistence fishers and gatherers who live and perpetuate the customs, beliefs, and practices of kūpuna that have sustained the fisheries and marine resources of the Kipahulu moku for this generation and those to come. Mahalo to The Harold KL Castle Foundation, The Nature Conservancy, and NOAA's Coral Reef Conservation Program for funding support. Mahalo to Mo'omomi, Hā'ena, Ka'upūlehu, Miloli'i, and other Hawai'i communities for taking bold actions and paving the way for others to manage their resources in a culturally mindful and effective way, in cooperation with the State, to improve the health and sustainability of resources for future generations.

With permission and to the extent applicable, this document uses information from both the Mo'omomi-North Coast of Moloka'i and Hā'ena CBSFA Proposals and Management Plans. This Proposal and Management Plan fulfills the requirements laid forth by the Designation Procedures Guide, 2014, developed by the Department of Land and Natural Resources, Division of Aquatic Resources (DLNR-DAR).

#### **Suggested Citation**

Kīpahulu 'Ohana. (2023). Kīpahulu Moku Community-Based Subsistence Fishing Area Proposal and Management Plan. Kīpahulu, Hawai'i.



# **KĪPAHULU MOKU CBSFA** | **1. Organization Information**

**Organization Name** Kīpahulu 'Ohana, Inc. (KOI)

**Date Group Established** 1995

#### **Organization Membership**

The constituency of the KOI includes traditional subsistence fishing practitioners and 'ohana with familial connections to Kīpahulu moku spanning multiple generations. Since KOI was founded in 1995, moku residents have been regularly consulted and play an integral role in the stewardship of Kīpahulu moku. KOI provides a voice for Kīpahulu moku residents on fisheries management issues at the state, national, and international levels. KOI is not a membership-based corporation as registered with the Department of Commerce and Consumer Affairs.

KOI is comprised of staff and a volunteer board of directors including the following community members:

#### <u>Staff</u>

- Program Manager: Tweetie Lind, Kīpahulu resident, subsistence lawai'a and farming 'ohana
- Executive Director: Scott Crawford, Hāna resident, community-based nonprofit management
- Finance Manager: Cheyenne Kamalei Pico, Kīpahulu resident
- Program Assistants and Outreach Educators: Kane Lind, Ka'uiki Lind, & Pekelo Lind, Kīpahulu residents, subsistence lawai'a, lineal descendants



#### Board of Directors

- President: Michael Minn
- Vice-president: Stephan Reeve
- Secretary/Treasurer: Glenna Ann Lind
- Board Members: Laura Campbell, Angela Tavares, Rich Von Wellsheim

#### **Organization Mission Statement**

KOI is dedicated to the cultural sustainability of the Kīpahulu moku on Maui, Hawai'i, through educational programs which incorporate local, national and international partnerships and projects. KOI envisions families working in harmony together to preserve and enhance the traditional cultural practices of the Hawaiian people. KOI conducts cultural demonstrations, restoration projects, self-sufficiency programs, and biological diversity projects.

See the **Administrative Record** for more on KOI's extensive outreach efforts, stewardship experience, networks, Mālama I Ke Kai Community Action Plan, and Letters of Support. Visit <u>https://www.kipahulu.org/pdf/</u> <u>KipahuluOhana\_Bylaws.pdf</u> for KOI Governance Protocols/By-Laws.



# KĪPAHULU MOKU CBSFA | 2. Nearshore Environment and Human Uses

#### Place Names and Brief History

Hawaiian ancestors inscribed the landscape with names to acknowledge the sources of life, features, and activities of a particular area. The following list of place names indicate some of the many things that Kīpahulu moku is historically known for. There are eleven ahupua'a in Kīpahulu. From west to east they are Ka'āpahu, Kukui'ula, Kapuaikini, Maulili, Kiko'o, Kalena, Kakalehale, Halemano, 'Alaenui, 'Alaeiki, and Kaumakani (**Figure 1**). There are ten streams in Kīpahulu. From west to east they are Kālepa, 'Alelele, Lelekea, Ka'āpahu, Kukui'ula, Opelu, Ko'uko'uai, Kalena, 'Ohe'o, and Pua'alu'u.

Kīpahulu means "fetch (from) exhausted gardens." Kīpahulu was once abundant with agricultural resources such as taro and other Polynesian introduced food plants. From 1883-1947, Kīpahulu Landing was one of the regular ports of call for the Inter-Island Steam Navigation Company, which provided services around Maui and between islands. Kipahulu Landing allowed farmers and ranchers to ship their goods to markets. From 1899-1920, Kīpahulu was a sugar plantation town, bringing with it a diverse range of immigrants. When sugar farming ended, in the 1930s the lands were used for cattle ranching. In 1969, Kīpahulu vallev was added to Haleakalā National Park (HALE) drawing visitors to the remote area. Today, Kīpahulu moku has a residential population of about 150 people and about one to two million visitors annually, most of whom visit HALE's Kipahulu District. The only public utility service to Kīpahulu is telephone. Residents live off the grid, generating their own power, obtaining water through water catchment systems, from streams, or through wells, and many utilize Kalena Kitchen to process and prepare foods.

### Kīpahulu Moku Nearshore Geography and Habitat

The moku of Kīpahulu is located on the trade-wind exposed southeast side of Maui, south of Hāna and east of Kaupō, and is subject to rough sea conditions for much of the year. The moku is about 12,000 acres and



Figure 1. Map: Kīpahulu Moku Site Reference

begins at 8,105 feet elevation on mount Haleakalā and continues to the depths of the sea. The Kīpahulu shoreline and intertidal areas are made up of rocky lava cliffs, low shelves and tide pools, and boulder beaches. These areas provide important habitat for juvenile fish, near shore schooling fish, limu, and invertebrates.

The marine environment is characterized by high wave energy and high freshwater inputs from streams and underwater seeps. 'Ohe'o and Pua'alu'u streams have continuous water flow year-round, and eight other streams have water flow during the wet season. The largest of the streams is 'Ohe'o. It crosses many different ecosystems from high elevations to the sea, and like many

#### KĪPAHULU MOKU CBSFA | 2. Nearshore Environment and Human Uses

of the streams of Kīpahulu, hosts rare native aquatic species that depend on both the stream and marine ecosystems for their survival. The entire length of 'Ohe'o stream is within the National Park and is one of very few completely natural riparian habitats in Hawai'i.

The nearshore marine environment varies over the 5.7 miles (9.2 km) of shoreline. For example Ka'āpahu Bay is fed by three streams and has a fine sediment and sandy bottom. In contrast, Kukui Bay's freshwater inputs are all subsurface and the ocean bottom consists of boulders, reef and dramatic underwater cliffs.

Much of the nearshore habitat is hard basaltic bottom colonized by corals and algae. The habitats here are well suited for the juvenile and adult fish species that utilize reef, estuarine areas, and sandy bottom bays (e.g. akule, moi, āholehole, moano, 'ō'io, and jacks). The streams deliver organic matter, algae, insects, and shrimp that are food sources for the juvenile and adult fish in the estuarine environments. Native Hawaiian stream life include five 'o'opu species, two 'opae species, and two snail species, hihiwai and hapawai. All of the adults live and breed in freshwater streams and estuaries, while their larvae drift out to sea and remain there for several months before returning to the freshwater streams once again. The lo'i of Kīpahulu also provide important habitat for 'o'opu and 'opae as they return upstream from the ocean. Some 'o'opu and 'opae climb waterfalls to enter the Kapahu Living Farms lo'i kalo and continue into the upper areas of 'Ohe'o stream (Kīpahulu CAP, 2012).

# Fishery and Non-Fishery Uses within the Kīpahulu Moku Nearshore Environment

Generally, fishing and gathering in Kīpahulu moku is conducted for subsistence, sustenance, and recreational purposes, although commercial fishing has been observed. Fishing and gathering is greatly influenced by shoreline access, habitat type, and ocean conditions. Traditional and subsistence uses of this area include: hukilau, pound and palu fishing with pole, hook and line, throw net, akule fishing, fish sharing, intertidal gathering of limu, 'opihi, and other invertebrates, and family recreation. Recreational fishing effort typically consists of rod and reel fishing for ulua and other fish and gathering for resources like 'opihi, pipipi, 'a'ama, wana, and limu from the intertidal zone.

Local residents also access the shoreline for other recreational activities, mainly swimming at points including stream mouths at Koʻukoʻuai, Kālepa, 'Alalele, and Lelekea, Maʻulili Bay, Wongʻs Landing (which has an access easement for community members held by the Kīpahulu Community Association), Ka'āpahu Bay, and areas where the road is close to the shoreline. The major area of access is through the HALE campground where users go for camping, diving, snorkeling, shoreline harvest, and swimming when conditions permit. Over the past 30 years, an increase in visitors and resource users has been observed, given improvements to Hāna and Pi'ilani Highways and the land additions to HALE. Intermittent boat traffic occurs, mostly from Hāna and south Maui, but no active launch sites are within the area. Shoreline access is generally restricted by landowners except in HALE: in the ahupua'a of Ka'āpahu from 'Alelele to Ka'āpahu streams and at the campground from 'Ohe'o stream to Kukui Bay.



#### <u>Kaʻāpahu</u>

This section of shoreline in the ahupua'a of Ka'āpahu is easily accessed, heavily visited, and lies within Haleakalā National Park. The Hanawi estuary, fed by 'Alelele stream,

#### KĪPAHULU MOKU CBSFA | 2. Nearshore Environment and Human Uses

is accessed by both Kīpahulu subsistence fishers, locals from other parts of the island, and tourists to enjoy the beauty and freshwater. Subsistence practitioners pick 'opihi there and pole and line fishers and locals go there to fish, enjoy the freshwater, and surf in favorable conditions. In the winter, the muliwai opens to the ocean but otherwise is typically bounded by a rock berm and the water flows underground into the ocean to create a nearshore estuarine environment, which is an important nursery area for aquatic species. The beach is composed of boulders flanked on each side by a sloping boulder revetment wall to the east and pali to the west.

Lelekea Bay, one of the most heavily used area in this section of coastline, is fed by Lelekea and Ka'āpahu streams and has a small boulder and 'ili'ili beach with seasonal black sand. On either side of the beach are steep cliffs. Subsistence practitioners utilize this area as an akule lookout point to observe the spawning and other behaviors of akule ball (aggregation). For instance, they may see kāhala and other jacks school the akule ball over the black sandy bottom bay. When it is the proper time to harvest, practitioners will launch boats directly from the bay, surround the akule ball with net (not bag) so smaller akule can escape, and then bring the catch in.

Traditionally, gatherers are only allowed to share their akule catch with 'ohana and kūpuna, not sell. Sometimes to preserve their catch they will salt and dry the akule. Subsistence fishers will also gather 'opihi and pole and line fish in this area, sometimes using long strong bamboo poles, a traditional fishing practice utilized in east Maui. This bay is also where most residents from elsewhere on Maui come to pole and line fish, depending on the time of year, moon, conditions, weekends, tournaments, and holidays. The shore can get crowded, with poles lined up end to end in the bay. Other uses of this area include body boarding, beach going, and camping, noting that there are no public facilities in the area.

#### <u>Kukui'ula – Kakalehale</u>

For the ahupua'a of Kukui'ula, Kapuaikini, Maulili, Kiko'o, Kalena, and Kakalehale, shoreline access to the papa and

pali habitat is through private land. Subsistence fishers who know the landowners will request access and use discretion when fishing at these high and low cliffs and shelves that jut into the ocean. There is an important estuary and nursery for juvenile fish in this area at the mouth of Ko'uko'u'ai stream between Kiko'o and Kalena ahupua'a.

#### <u>Halemano – 'Alaeiki (HALE)</u>

The coastal area of the Kīpahulu section of HALE spans three ahupua'a - Halemano, 'Alaenui, and 'Alaeiki. The Park receives a very high rate of traffic, admitting hundreds of thousands of visitors a month. For instance, in 2012, a whopping 2,106,481 visitors entered the Park's Kīpahulu section via personal vehicles, taxis, and tour buses (National Park Service, 2012). Tourists and locals are drawn to the freshwater pools at 'Ohe'o Gulch, the Park's Visitor Center, campsites, coastal trails, and the Pipiwai Trail hike to Waimoku Falls. Subsistence practitioners typically pole and line fish, gather limu, 'opihi, and other invertebrates, and throw net in this area. Fishermen from all over Maui like to come here to camp, pole and line fish, harvest 'opihi, and dive when conditions are favorable.

There are important muliwai at 'Ohe'o stream mouth and in Kukui Bay where streams and/or freshwater seeps enter the ocean to create an estuarine habitat and nursery area for many marine and freshwater species. This section of coastline also is great tidepool habitat which is easily accessible from the Park campground and parking lot. As a layer of protection for the 'opihi within the Park, KOI established a voluntary 'opihi rest area here, asking people not to pick 'opihi within HALE.

#### <u>Kaumakan</u>i

Within the ahupua'a of Kaumakani is Pepeiaolepo Bay, another important estuarine habitat and nursery area for many marine and freshwater species. Access to the shoreline in this area is through private property and is made difficult due to the rugged sea cliff habitat and ocean conditions. This is an important subsistence fishing area for the Kīpahulu moku community.



# **KĪPAHULU MOKU CBSFA** | 3. Traditional, Customary, and Subsistence Practices

# The Importance of Traditional, Customary, and Subsistence Fishing Practices in Kīpahulu

Kīpahulu moku is an essential and extensively used traditional fishing and gathering area, sustaining the local population for centuries. This section provides a description of fishing practices traditionally used in Kīpahulu moku and the importance of marine resources for the community's subsistence, culture, and religion.

"Kīpahulu was a place of permanent habitation by a large number of Hawaiians. Traditional subsistence was based on farming and fishing, and settlements were located in areas best suited for these activities. The Kīpahulu area offered fertile soil and abundant water, as well as coastal access – all within a relatively small geographic area. The richness of the Kīpahulu area resources supported a large population prior to European contact. Descriptions by early explorers and visitors, as well as archeological evidence, all describe Kīpahulu as a well populated and intensively cultivated land" (National Park Service, 2015).

In 2011, during a ka'apuni led by KOI, members of the Kīpahulu community identified the areas of Kīpahulu moku where fish spawning, nurseries and fish aggregations and ko'a are located. Uses of this area traditionally and/or currently include: hukilau, canoe building, pound and palu fishing, throw net, akule fishing, fish sharing, intertidal gathering, and family recreation. Akule fishing in particular is a traditional community-based event, where 20 to 30 people prepare and join the nets, surround the fish aggregation and use divers to secure the catch. Everyone who helps gets a share of the catch. Fishers go to traditional look-out points to watch for certain fish colors and behaviors to know when the akule are aggregating and spawning, to ensure harvest takes place after the fish spawn.

Rural communities throughout the Hawaiian Islands, like Kīpahulu, Hoʻolehua, Hāʻena, and Miloliʻi may be regarded as cultural kīpuka, or oases of diversity that remain after destruction, "from which native Hawaiian culture can be regenerated and revitalized in the contemporary setting" (McGregor 1995). A cultural kīpuka "reveals the strongest and most resilient aspects of the Hawaiian culture and way of life" that survived amidst the "onslaught of post-statehood (1959) development" (McGregor 1995). These kinds of communities rely on marine and land-based resources for a subsistence lifestyle, which is interwoven with all aspects of community life and the cultural identity of Native Hawaiians in Hawai'i.



Residents of Kīpahulu place a high value on subsistence fishing and gathering activities, Hawaiian practices, and values. The collective identity of Kīpahulu is defined by a shared cultural heritage that is maintained by a system of interdependence and social reciprocity. This system is expressed in many ways, including the sharing of food gathered through subsistence. Subsistence fishing and gathering of marine resources is important for small, rural communities to help supplement lower income residents,

#### KĪPAHUKU MOKU CBSFA | 3. Traditional, Customary, and Subsistence Practices

reduce dependence on purchased food, and to provide a healthy, traditional diet for Hawaiian families. Obtaining equivalent food items, such as fish, from stores, can be costly and families on fixed incomes are known to purchase cheaper, less healthy foods. Subsistence activities also require physical exertion and provide opportunities for relatively inexpensive recreation that contribute to better health. With subsistence providing the availability of a healthy food source, this gives residents a sense of self-sufficiency and freedom. Without subsistence as a major means of providing food and hereby supplementing income, the standard of living in these communities would be greatly reduced (The Kohala Center, 2016; Governor's Moloka'i Subsistence Task Force Final Report, 1994).

Beyond the immediate economic and health advantages of subsistence fishing are other benefits that serve to enhance family identity and community cohesion to perpetuate traditional cultural values. Subsistence fishing and marine resource gathering reinforces relationships of 'ohana and extended family by providing fish and marine resources for customary foods for pā'ina and lū'au to celebrate important life cycle events such as weddings, first year baby lū'au, graduations, and funerals. The kūpuna are also supported by subsistence activities, as the younger fishermen in the 'ohana regularly share their harvest with the kūpuna and family members who are not as able-bodied to engage directly in subsistence fishing and harvesting. Knowledge of fishing ko'a, both fishing aggregation areas in the ocean and the shrines on the land that serve as markers, is passed down from one generation to the next as multiple generations of family members engage together in subsistence fishing and gathering. Through the practice of fishing and ocean gathering, ancestral scientific and cultural knowledge and values are passed on and perpetuated.

Additionally, subsistence fishing provides other benefits. Time spent subsistence fishing cultivates intimacy and harmony with the ocean and environment, reinforcing a strong sense of kinship with nature that is the foundation of Hawaiian spirituality and religion. While engaging in fishing and gathering activities, practitioners share experiences and gain knowledge that provides continuity between the past and the present, building trust and cooperation. These shared experiences reinforce beliefs and values that are critical for perpetuation of Hawaiian cultural identity. Subsistence fishing emphasizes group identity and relationships, rather than individual economic accomplishment. Food obtained through subsistence fishing is distributed within the community and is consumed at family and community gatherings, reinforcing community ties and social networks.



Overall, subsistence fishing and gathering reinforce 'ohana cultural values of respect for kūpuna, aloha kekāhi i kekāhi or mutual support and caring for each other, a sense of connection, and responsibility to mālama or take care of the ocean and coastal area that has fed generations of family members (Governor's Moloka'i Subsistence Task Force, 1994; McGregor, 2007).

#### Fishing Codes of Conduct

KOI has informally managed harvest practices within Kīpahulu moku guided by traditional subsistence 'ohana values, customs and practices. For example, KOI, in collaboration with HALE, The Nature Conservancy (TNC), and University of Texas A&M-Corpus Christi (UTAMCC), has signs and posters displayed at HALE that inform visitors, including fishers, of the voluntary 'opihi rest area in place and pono practices for harvesting 'opihi outside of the rest area. KOI subsistence practitioners also lead by example by harvesting using an informal code of conduct that focuses on how pono fishing should be practiced to maintain healthy, regenerative, and sustainable populations of nearshore resources.

## KĪPAHUKU MOKU CBSFA | 3. Traditional, Customary, and Subsistence Practices

# KĪPAHULU MOKU CODE OF CONDUCT

- The ocean is our icebox take only what you need to eat fresh, not for storage in the freezer
- Share with kūpuna and those who cannot fish
- Check-in at the Triangle, talk story, get the latest information, and learn how you can help
- Be safe never turn your back to the sea
- Respect the power of the ocean Kīpahulu can be very rough

# When Gathering 'opihi

- Communicate with other families to coordinate so you don't pick in the same area
- Take a few for your family tonight (no more than half gallon, shell on)
- Pick them bigger than a half dollar coin (1<sup>1</sup>/<sub>4</sub>"), but leave the really big ones (>2") which are prime spawners
- Don't pick the big ones below the waterline (kō'ele)
- Keep moving, don't take all from one area

# When pole fishing along the coast

- Only put out 1 or 2 lines
- Take only 1 per day of 'ōmilu, pāpio, and kahala they are important to schooling the akule, a fish that our community depends on
- Pick up and pack out your rubbish
- If your line gets caught in the cliff or coral, clean up lead and line best you can so marine life doesn't get harmed
- Use circle and barbless hooks when can
- Bring bait so you don't need to take tidepool animals

# When diving

- No diving at night
- Free dive only, no take on SCUBA
- Take a limited amount of fish up to 10 to ensure there will be fish for the future
- Leave blue uhu, kūmū and other heavily fished species
- Catch ta'ape and to'au to give the native fish a break

# When fishing for akule

- Only use surround net, no bag net, so that some fish can escape
- Don't take the whole school
- Share with the village, don't sell

# When throwing net

• Aim for the edge of the school, so as to catch only a few fish and let the rest go to reproduce and make more fish

# When gathering limu

- Clip the limu, never pull the roots so limu can re-grow
- Gather from here and there, never taking all of one patch



# **KĪPAHULU MOKU CBSFA** | **4. Proposed Boundaries and Regulations**

#### **Proposed CBSFA Boundaries**

The area proposed for designation as the Kīpahulu Moku CBSFA encompasses the marine waters and submerged lands off of the southeast coast of Maui, extending seaward from the high-water mark on the shoreline at Kālepa Gulch (20.646167, -156.086300) to three points roughly along the 60-meter depth contour and about ¼ to 1/2 mile from shore (20.637752, -156.080016; 20.639762, -156.049777; 20.658495, -156.028482), to Pua'alu'u Gulch (20.667318, -156.040689), spanning approximately 5.7 miles of coastline and 1,650 acres (2.58 m<sup>2</sup> or 6.68 km<sup>2</sup>) of submerged area (Figure 2). This area encompasses the entirety of the moku boundary, consistent with traditional Hawaiian management practice. Native Hawaiians who reside in Kīpahulu moku traditionally and customarily fish and gather marine resources here. Native Hawaiian uses within the moku

span from one end of the moku to the other, and traditional areas for fishing and gathering by the residents continue to be acknowledged and respected by the residents from other areas of Maui.

The area proposed for an 'Opihi Rest Area (no-take replenishment area for 'opihi species) extends from 'Ohe'o Gulch (20.662629, -156.041121) to Ka'ū Bay (20.659037, -156.044416), and from the high-water mark to 9 feet (3 m) in depth (**Figure 3**).

The area proposed for a Sanctuary (no-take replenishment area for marine species) extends from Kukui Bay interior (20.658259, -156.045675) to Submarine Point (20.656429, -156.046071) to Puhilele Point (20.654171, -156.045763) (**Figure 4**).



### **KĪPAHUKU MOKU CBSFA** | 4. Proposed Boundaries and Regulations



Figure 2. Map: Proposed Kīpahulu Moku CBSFA Designation Area







Figure 4. Map Closeup: Proposed Kukui Bay Sanctuary

#### **Proposed Regulatory Solutions**

Based on KOI's observations, experiences, and consultation with fishers and scientists, the following proposed CBSFA regulations are put forth to preventatively address threats and protect target subsistence resources within Kīpahulu moku. By addressing the threats of unsustainable harvest, inappropriate harvest, and overly efficient gear through CBSFA regulatory solutions, Kīpahulu moku may serve as an important example of traditional resource conservation to ensure future subsistence, economic, and cultural sustainability in Hawai'i. Designating the area as a CBSFA would join Kīpahulu's local knowledge and kuleana with the capabilities and charge of DLNR to protect Hawai'i's marine resources and traditional practices through co-management, "the only realistic solution for the majority of the world's fisheries." (Gutierres et al., 2011; Levine & Richmond, 2011).

#### Table 1. Proposed Regulatory Solutions

<b>RECOMMENDED KĪPAHULU MOKU COMMUNITY-BASED SUBSISTENCE FISHING AREA (CBSFA) REGULATIONS</b> Per person per day within the Kīpahulu Moku CBSFA   Existing State regulations continue to apply					
Bag Limits, Siz	Gears				
All Finfish	• Limit 10 combined (except akule and introduced species like roi, ta'ape, and to'au), including bait fish	<ul> <li>Surround Gill net: Minimum mesh size 2 ¾"; no surround gill net except for akule and ta'ape (bag net probibited)</li> </ul>			
Akule Bigeye Scad Selar crumenopthalmus	Non-commercial take only	<ul> <li>State standard is 2"</li> <li>Throw net: Minimum mesh size 3"</li> </ul>			
'Ōmilu Bluefin Trevally Caranx melampygus	• Limit 1 each State bag limit is 20 'ōmilu	<ul> <li>State standard is 2"</li> <li>Hook-and-line: Max 2 lines deployed from shoreline with max 2 hook per</li> </ul>			
Kala All Unicornfish Species Naso genus	• Limit 2 each	line, each hook having only one point, except that double or treble hooks are allowed with lures			
Kole Goldring surgeonfish Ctenochaetus strigosus	• 5" minimum	<ul> <li>SCUBA/underwater breathing apparatus: No take/possession of marine life while using gear (except</li> </ul>			
Moi Pacific Threadfin Polydactylus sexfilis	<ul> <li>11" minimum - 18" maximum State minimum is 11"</li> <li>Closed May – September State closed season is June-August</li> </ul>	<ul> <li>for akule and introduced species including roi, ta'ape, and to'au)</li> <li>Freediving: No take 'opihi while freediving</li> </ul>			
<b>Opihi</b> Limpet <i>Cellana</i> spp.	<ul> <li>Limit 40 pieces (shell on)</li> <li>1 ¼" minimum-2" maximum State minimum is 1¼"</li> <li>No take within 'Opihi Rest Area</li> </ul>	<ul> <li>Night diving: No take or possession of marine life while night diving during the period between one-half</li> </ul>			
Ula/Ula Pāpapa Spiny Lobster, <i>Palinuridae</i> family Slipper Lobster, <i>Scyllaridae</i> family	<ul> <li>Limit 2 combined</li> <li>Closed May – September State closed season is May-August</li> </ul>	hour after sunset and one-half hour before sunrise or to harvest utilizing any form of artificial light			
<b>7-11 Crab</b> Spotted Reef Crab Carpilius maculatus	• Limit 2 each	<ul> <li>'Opihi Rest Area</li> <li>From 'Ohe'o Gl. to Ka'ū Bay</li> <li>No harvest 'opihi within Rest Area</li> </ul>			
Limu All Native Species	<ul> <li>No taking native limu with holdfast/roots attached</li> </ul>	<ul> <li>Kukui Bay Sanctuary</li> <li>From Kukui Bay interior to Submarine Pt. to Puhilele Pt.</li> <li>No take within Sanctuary</li> </ul>			
(undated January 22, 2022)					

(updated January 23, 2023)

# Threats to Subsistence Resources Targeted for Management

There are three direct priority threats to the target species and therefore the traditional fishing practices within Kīpahulu moku, reducing the diversity and abundance of living organisms and/or altering or disrupting ecological patterns and processes. These are unsustainable harvest, inappropriate harvest, and overly efficient gear and methods. The proposed CBSFA is designed to protect vulnerable marine resources within the area from these negative impacts.

#### Unsustainable Harvest

Evidence from both resource users and researchers indicate that over the past 20 years, marine resources within the Main Hawaiian Islands (MHI) have generally declined (Friedlander et al., 2008). Overharvest is considered to be one of the largest threats to nearshore marine ecosystems, while land-based pollution and coastal development also pose significant harm (Harman & Katekaru, 1988; Grigg & Birkland, 1997; Tissot et al., 2009). Hawai'i's marine resources are especially susceptible to the threat of overharvest owing to the state's "relative isolation, limited recruitment, and high species endemism." (NOAA Fisheries, 2016). Size, density, and biomass of nearshore reef fish are drastically lower in the MHI than the Northwestern Hawaiian Islands (NWHI) (Friedlander & DeMartini, 2002). "Coastal fisheries are facing severe depletion and over-exploitation on a global scale and Hawai'i is no exception. This decline in abundance, particularly around the more populated areas of the state, is likely the cumulative result of years of chronic overfishing" (Shomura, 1987).

In 2010 and 2013, fish and benthic surveys within Kīpahulu moku found that reef fish, including target fish and prime spawners, had high total biomass (total weight of all fish) compared to other sites throughout the state open to fishing, but lower than areas closed to fishing (The Nature Conservancy, 2016).

"The region's abundance is likely due to its small population, relative isolation from Maui's main population centers, and rough ocean conditions much of the year. Fishing at Kīpahulu appears to be limited (no quantitative information on fishing pressure is available), and at its current level may be sustainable. However, this report makes comparisons with sites elsewhere around the state and does not examine the historical abundance of fish at Kīpahulu. Unlike at the state level where quantitative information has documented significant declines through time in important fishery species, similar information is not readily available at Kīpahulu, except through the observations of community members." (Minton et al., 2014).

"Enacting additional fishery management may not result in a significant increase in fish abundance or biomass, but it would be important in maintaining fish populations if access to the Kīpahulu reef, and thus fishing pressure, were to increase in the future. If fishing access increases without additional management in place, Kīpahulu could experience rapid and significant declines in fish abundance and biomass, similar to other more populated and open areas on Maui." (Minton et al., 2014).

The community has also measured the decline of 'opihi 'makaiauli abundance from 2010 to the present day in and around the HALE. This decline is likely due to the high rate of harvest in the summer months, as well as the harvest of the large reproducers and the small 'opihi before they reproduce (Kīpahulu CAP, 2012).

To address the issue of overharvest, KOI is proposing a bag and possession limit of ten finfish combined per person per day, except for akule and introduced species like roi (Peacock Grouper, *Cephalopholis argus*), ta'ape (Bluestripe Snapper, *Lutjanus kasmira*), and to'au (Blacktail Snapper, *Lutjanus fulvus*), noting that this rule cannot be less restrictive than any existing Maui island or statewide rules. Additional bag limits are proposed for species observed being unsustainably harvested and/or to prevent overharvest: kala (2 max), 'ōmilu (1 max), ula/ula pāpapa (2 max combined), 7-11 crab (2 max), and 'opihi (40 pieces shell on). There is also a proposed nocommercial take of akule, no-take of 'opihi within the designated rest area, and no-take of marine species from within the designated Sanctuary.

#### Inappropriate Harvest

Coral reef fishers may target undersized, immature (juvenile) individuals that haven't yet reached reproductive age or size and should be protected from harvest (Vasilakopoulos et al., 2001). Catching immature reef fish hurts a population's ability to regenerate by removing potential recruits that would otherwise "spawn-at-least-once" and contribute to recruitment (Myers & Mertz, 1998).

There is the additional issue of fishing for larger, longlived, slow-growing prized species at the onset, and then shifting to smaller, less desirable species as populations decline over time (Russ & Alcala, 1996; Pitcher, 2001; Friedlander & DeMartini, 2002). "The preference for

### KĪPAHUKU MOKU CBSFA | 4. Proposed Boundaries and Regulations

larger and older fish has disproportionately higher impact on the growth and replenishment of fish populations, since these fish produce more eggs and healthier offspring. If the abundance of a species drops too low, a fish population may lose its ability to rebuild itself. As large, predatory fish species are targeted and depleted, fishers will 'fish down marine food webs,' moving on to remaining smaller species which are then, in turn, depleted." (NOAA Fisheries, 2016).

Fishermen can also improperly harvest species during their spawning season, which reduces the offspring that would help regenerate the population. However, at Kīpahulu, members of KOI have observed local spawning behaviors and fish by their own informal calendar. By identifying these peak spawning periods for important food fish, expansion of th closed season for vulnerable speceis is proposed to be expaned so as not to disrupt spawning behavior and other natural processes.

Other examples of inappropriate harvest within Kīpahulu moku include certain methods of limu gathering and night diving. Traditionally when limu was gathered, one would avoid pulling out the holdfast or roots still attached to the rocks, to ensure limu regrowth. Harvesting while night diving is one of the single, most inappropriate modes of fishing since so many species are vulnerable at that time. By regulating the hours of spearfishing to daylight, many species can have a chance to recover.

To address the issue of inappropriately harvesting undersized and large brood stock individuals, the proposed CBSFA regulatory solutions create a minimum size limit of 5 inches for kole, maximum size limit of 18 inches for moi (in addition to the existing statewide 11 inch minimum size restriction for moi), and maximum size limit of 2 inches for 'opihi (in addition to the existing statewide 1¼-inch minimum size restriction for 'opihi). The new proposed regulatory solutions minimize the threat of inappropriately harvesting species during spawning seasons by extending closed seasons for moi and ula/ula pāpapa from May to September (in addition to the existing statewide closure for ula/ula pāpapa from May to August). To address the improper harvesting techniques of limu, the proposed CBSFA regulatory solutions ban the take of native limu with holdfast/roots attached. The improper and sometimes illegal harvest of juvenile, large, and spawning individuals strays from customary values and is directly averse to traditional practices and the sharing of valid information amongst fishermen.

#### **Overly Efficient Gear**

A growing number of people are using sophisticated fishing gear and technology to increase yields. This kind of fishing gear is often overly efficient, allowing humans to harvest marine resources at a rate that exceeds natural growth and reproduction. "The modern development of boat engines, depth finders, GPS units, diving gear, underwater lights, and other modern fishing gear in conjunction with the emergence of a market economy have greatly changed the nature of fishing and the ability of fishers to impact the resource. Natural marine refuges no longer exist due to modern technological ability to extract fish and other resources." (Jokiel et al., 2010). Jokiel et al. also noted that over time, "technology provided refrigeration and more efficient fishing gear, further accelerating the shift from subsistence to profitbased economies."

To address the issue of overly efficient gear and methods, the proposed regulatory solutions include general gear restrictions, including a gill net mesh size of 2 ¾ inches (larger than the existing statewide 2 inch minimum), no surround gill net except for akule and ta'ape, the prohibition of bag nets, a minimum throw net mesh size of 3 inches (larger than the existing statewide 2 inch minimum), maximum 2 fishing lines deployed at a time from the shoreline with a maximum of 2 hooks per line (each hook having only one point except that double or treble hooks are allowed with lures), no take of marine life while using SCUBA gear (except for akule and introduces species like roi, ta'ape, and to'au while using surround net), no harvest of 'opihi while freediving, and no take or possession of marine life while night diving during the period between one-half hour after sunset and one-half hour before sunrise or to harvest utilizing any form of artificial light.

#### Using Sanctuary Areas to Address Threats

Within the Kīpahulu Moku CBSFA, a no-take 'Opihi Rest Area and Kukui Bay Sanctuary are proposed to provide species protection within the healthy habitats that they need to eat, live, grow, and reproduce. Successful reproduction provides an abundance of marine resources. An abundance of resources in one area encourages both adults and larvae to "spillover" from the Sanctuary to areas where community members can fish and continue to gain sustainable benefits. This Sanctuary is connected to the rest of the moku through wind, currents, and the movement patterns of species, therefore, the health of one system ensures the health and abundance of nearby and connected systems.

### KĪPAHUKU MOKU CBSFA | 4. Proposed Boundaries and Regulations

Creating no-take Sanctuary areas (also called rest, kapu or pu'uhonua areas) is a traditional practice. Combining traditional and customary management techniques with other fisheries management methods can be very effective, given the prevalence of overly efficient modern fishing methods, growing populations, increasing demands on resources, and pollution and siltation. The combination of area, gear, and species-specific rules with a Sanctuary provides the best chance for achieving a thriving and abundant ecosystem, which in turn improves the community's overall well-being.

As the Hawaiian proverb goes, E Ola Ke Kai, E Ola Kākou (As the ocean thrives, so do we).

The proposed 'Opihi Rest Area fronts the HALE campground and has been in place since 2014 as a voluntary no-take 'opihi zone. Prior to the rest area, 'opihi populations were low and declining every year. In years of research since, 'opihi have increased within the rest area and in surrounding areas open for harvest (Bennett, 2018). The original proposed 'Opihi Rest Area boundary spanning 'Ohe'o Gulch to Kukui Bay Interior has been revised to extend from 'Ohe'o Gulch to Ka'ū Bay, a smaller area, given feedback gathered during the 2019-2022 public scoping process.

The proposed Kukui Bay Sanctuary, which is just southwest of the HALE campground, was chosen as a Sanctuary, or no-take area, because it is one of the most biologically diverse areas in Kīpahulu, home to many different types of fish and invertebrate populations. It has many different habitats for fish to eat, grow, and reproduce including boulder, drop-offs, and coral. It is an important estuary for reproduction of some species and recruitment of others. If protected, it will benefit those who fish the area fronting the HALE campground and other areas surrounding the Sanctuary, including the majority of the Kīpahulu coastline which is down-current. The original proposed Kukui Bay Sanctuary boundary spanning Maka'aikūloa Point to Puhilele Point has been revised to extend from Kukui Bay interior to Submarine Point to Puhilele Point, a smaller area, given feedback gathered during the 2019-2022 public scoping process. This is to allow safe access into deeper waters outside of the Sanctuary.

#### **Degraded Watershed**

An additional threat to marine resources in Kīpahulu moku that would not necessarily be managed by a CBSFA but can cause great harm to the marine environment is a degraded watershed. Kīpahulu's lower watershed in many areas is degraded by feral ungulates (i.e. cattle, pigs, deer, and goats) and alien invasive plant species (i.e. strawberry guava, clidemia, bamboo, ginger, African tulip, and miconia). These species create conditions that expose soil to run off, increase transpiration of water to the atmosphere, and decrease freshwater infiltration into groundwater. With disturbance of native vegetation and soils, more fresh water moves across the surface instead of being absorbed, and therefore carries more sediment to the ocean, especially during large rainfall events.

The excess sediment from the degraded watersheds impact intertidal areas, coral reefs, and nearshore waters that are frequently unable to recover from excessive and repeated episodes of sedimentation. Sediment blocks the sunlight that corals need to survive and can coat and smother corals and other organisms and habitats, thereby disrupting their feeding and reproduction patterns. The decrease in surface water flow from the degraded watershed has a negative effect on lo'i kalo (taro patch) production. Less water means fewer lo'i can be opened and maintained, resulting in less food, less income for the community, and fewer 'ōpae that can utilize the lo'i.

With the understanding that what happens on land impacts the ocean, this threat helps to paint a fuller picture of the stressors Kīpahulu's marine resources face in addition to those addressed by rulemaking.



#### Subsistence Resources Targeted for Management

Kīpahulu's nearshore fisheries include a high diversity of shallow-water reef fish, invertebrates and limu, as well as coastal pelagic species. The primary subsistence resources targeted for management are listed in **Table 2** based on the proposed regulatory solutions in **Table 1**. The target species identified are not only integral to the subsistence lifestyle and cultural practice of Kīpahulu moku practitioners, they are experiencing selective harvesting pressure and an intervention is needed to ensure sustainable populations and ecosystems. Each species has an important habitat and function which helps to maintain the overall success of interrelated reef relationships. It is critical to address the threats to these targeted nearshore species because of their unique role in the ecosystem which in turn helps all life to thrive.

#### Table 2. Approximate Status of Subsistence Resources Targeted for Management (Kipahulu CAP, 2012)

Targets	Habitat	Role on the reef	Current Status	Desired Status	
NEARSHORE PELAGIC FISH					
Akule (Bigeye Scad, Selar crumenopthalmus)	Nearshore pelagic	Eats zooplankton	Fair	Good	
<b>'Ōmilu</b> (Bluefin Trevally, <i>Caranx melampygus</i> )	Nearshore	Eats fish	Fair	Good	
REEF AND SHORELINE FISH					
Kala (Bluespine Unicornfish, Naso unicornis) Kole (Goldring surgeonfish, Ctenochaetus strigosus)	Nearshore	Eats algae	Fair	Good	
Moi (Pacific Threadfin, Polydactylus sexfilis)	Nearshore	Eats small invertebrates and debris	Fair	Good	
<b>Uhu</b> (Parrotfishes, <i>Scaridae</i> )	Nearshore	Eats algae and coral	Fair	Good	
INVERTEBRATES AND LIMU					
<b>'Opihi</b> (Limpet <i>, Cellana</i> spp.)	Intertidal	Eats algae	Fair	Good	
<b>Ula</b> (Banded Spiny Lobster, <i>Panulirus marginatus</i> ; Green Spiny Lobster, <i>Panulirus pennicilatus</i> )	Nearshore	Eats small invertebrates and debris	Fair	Good	
<b>Limu</b> — Varieties of seaweeds (Līpoa <i>, Dictyopteris plagiogramma</i> ; Kala <i>, Sargassum echinocarpum</i> ; Kohu <i>, Asparagopsis taxiformis</i> )	Intertidal	Food for algae eaters	Good	Very Good	

#### Ecological Life History Characteristics and Current Conditions of the Marine Resources Targeted for Management

(Species Photos: DLNR, Keoki Stender, University of Hawai'i, and Kohala Center)

#### I. Nearshore Pelagic Fish

Akule (Bigeye Scad, Selar crumenopthalmus) KOI currently ranks the status of akule as "fair" and strives for a status of "good." The proposed regulations seek to protect akule by perpetuating "non-commercial take" of akule from within the CBSFA. This would help prevent the unsustainable harvest of akule and reduce the likelihood of conflict between commercial and subsistence fishermen. This also affirms the traditional practice of harvesting and sharing akule as a community. The rules recommend prohibiting the use of bag nets when fishing for akule, as bag nets can catch the entire school and do not let smaller fish escape.

Akule is a valued fisheries resource in Hawai'i. This small coastal pelagic fish is found seasonally in large schools in the mid- and



surface level zones of the water column along the coast, or on shallow banks near shore (DAR, 2006). They are nocturnal and feed on zooplankton made up of small fish and crustaceans. In Hawai'i, akule aggregate in shallow waters and spawn approximately every three days between March and October. Akule become sexually mature at 9.8 inches and can reach up to 15 inches in length and weight up to 2 pounds (Clarke & Privitera, 1995; DAR, 2006).

Statewide, the net fishery for akule is the major coastal commercial fishery, with landings from commercial and subsistence fisheries ranging from 100 to 600 tons valued at >1 million US dollars annually (Work et al., 2008). In 2001, akule represented 61% of commercial catch in Hawai'i's coral reef fishery (DeMello, 2004). Their schooling behavior in shallow water makes them easy to exploit by means of seine or gill nets (Miyasaka & Ikehara, 2001). Thus, concerns over overharvesting of akule and competition between recreational/subsistence and commercial fishermen have existed since the 1970s. This triggered a comprehensive analysis of the status of the akule fishery in the MHI and implementation of regulations to reduce user conflicts by DAR: unlawful to take akule under 8.5 inches with net July through October or possess or sell more than 200 pounds of akule under 8.5 inches per day from July through October. Results of the study suggests the akule fishery is healthy, however user conflicts continue to be an issue (Weng & Sibert, 2000; Miyasaka & Ikehara, 2001).

In addition to being an important commercial species, akule have cultural and recreational value. Catching halalū (juvenile akule) by hook and line is popular among recreational shoreline fishermen. In Kīpahulu, stories passed down from kūpuna suggest akule were once very abundant in the area (Kīpahulu CAP, 2012).

### <u>'Ōmilu (Bluefin Trevally, Caranx melampygus)</u>

KOI currently ranks the status of 'ōmilu as "fair" and strives for a status of "good." The proposed regulation to harvest only 1 'ōmilu per day will reduce the likelihood of unsustainably and improperly harvesting 'ōmilu in Kīpahulu moku. The original proposed regulation was to harvest 2 'ōmilu per day and only within the slot limit of 10 to 24 inches. However, the regulation has been simplified to a bag limit of 1, given feedback gathered during the 2019-2022 public scoping process.

'Ōmilu, or the bluefin trevally, is a common jack species in Hawai'i. Juveniles frequent clear shallow bays



and estuaries while medium sized fish and adults are found over nearshore reefs (DAR, 2006). 'Ōmilu can be found in small groups or as solitary individuals. Their diet mainly consists of reef fish (e.g. wrasse, parrotfish, blennies, goatfishes) and feeding is primarily done individually, in pairs, or small schools during the daytime, peaking at dawn and dusk (Honebrink, 2000; Friedlander & Dalzell, 2004; DAR, 2006). Tagging studies by Holland et al. (1996) suggests 'ōmilu are not highly mobile and instead have a limited range of dispersal (Holland et al., 1996; Friedlander & Dalzell, 2004), Targeted harvest of 'ōmilu in one area can result in overharvest.

'Ōmilu can reach up to a maximum length of 31.5 inches, weight up to ~22 lbs, and live up to 8 years of age (Sudekum et al., 1991; Honebrink, 2000; Friedlander & Dalzell, 2004). Individuals become sexually mature at approximately 2 years of age and 14 inches. Peak spawning is also between May and August (Sudekum et al., 1991; Friedlander & Dalzell, 2004).

'Ōmilu are primarily caught via trolling, spear, net, handline, pole and line, and with surfcasting gear (DAR, 2006). Catch per unit effort has decreased since the 1990s. Limited commercial data also suggests 'ōmilu size has increased, however, it is most likely due to an increase

in small boats, advancements in fishing technology, and exploitation of new fishing populations (Friedlander & Dalzell, 2004).

'Ōmilu are part of a group of large, fast-swimming predatory fish referred to as ulua that inhabit coral reefs throughout Hawai'i. Ulua, in addition to sharks, are the primary nearshore predators on Hawaiian reefs. The giant trevally (*Caranx ignobilis*), known in Hawai'i as ulua aukea, are significant in Hawaiian culture for their role as a sport fish among chiefs of ancient Hawai'i (Friedlander & Dalzell, 2004). Popularity of ulua as a food and game fish has continued into present day.

The popularity of recreational fishing for ulua has resulted in significant declines in their abundance and average size (Friedlander & Dalzell, 2004; Meyer et al., 2007). Since the early 1900's, commercial landings of coastal jacks (excluding akule and 'ōpelu) have gradually declined by 84% and average size of ulua aukea and 'ōmilu caught recreationally has decreased (Friedlander & Dalzell, 2004). Where jacks make up 72% of the apex predator biomass in the NWHI, they only make up <1% in the MHI.

The current and relatively new DAR rules for ulua, state an individual fish must be a minimum of 10 inches forklength (FL) for take and 16 inches FL for sale, with a bag limit of 20 individuals per day (total, non-commercial) (DAR, 2006). Despite the new larger minimum size regulations, the high effort expended in catching larger individuals require continued monitoring of the recreational fishery, with a special focus on large reproducing females (Friedlander & Dalzell, 2004).

In Kīpahulu, ulua are considered an important target species. In the Mālama I Ke Kai Community Action Plan, KOI ranked the current status of the ulua fishery as "fair" with a desired status of "good" (Kīpahulu CAP, 2012). Baseline surveys conducted by TNC at 26 sites in 2010 and 2013 reported jacks made up a very small proportion of total fish biomass and abundance (Minton et al., 2014).

While the regulatory solutions do not directly target ulua, the proposed regulation to harvest only 10 combined finfish per person per day and to use two poles per person per day with a maximum of two hooks per line are indirect yet effective ways to reduce the likelihood of unsustainably harvesting ulua in Kīpahulu moku.

# II. Reef and Shoreline Fish

Kala (Unicornfish, Naso genus)

KOI currently ranks the status of kala as "fair" and strives for a status of "good." The proposed regulation to harvest only 2 kala per day will reduce the likelihood of unsustainably harvesting kala in Kīpahulu moku. The proposed regulation was initially for the species *Naso unicornis*, however it has been revised to include all Unicornfish species given feedback gathered during the 2019-2022 public scoping process.

Kala has increasingly become a local food fish favorite in Hawai'i (DAR, 2013). This diurnal species is found along inshore reefs



and in rocky shoreline habitats, and frequently moves into shallow water to graze on macroalgae (DAR, 2006; Andrews et al., 2016). Through herbivory, they help regulate excessive algae growth on coral reefs, making them a key species in maintaining the coral reef community structure in Hawai'i (Andrews et al., 2016). They are a schooling fish species with large solitary adults occasionally found at the reef's edge (DAR, 2006).

Males and females mature at 4.5 years (~12 inches) and 7.5 years (~14 inches) and may live up to 50 years or more (Eble et al., 2009; DeMartini et al., 2014). In Hawai'i, kala can reach up to 2 feet in length and weight up to 8 pounds (DAR, 2006). Spawning is highly seasonal, with a single short spawning period from May to June (DeMartini et al., 2014). Kala in Hawai'i were found to spawn earlier, mature at a larger size, reach a larger maximum size, and live longer than those found at lower latitudes of their distribution (Andrews et al., 2016).

In Hawai'i, recent increases in fishing pressure have raised concern and prompted studies on stock evaluations which suggest kala may be overfished (Nadon et al., 2015). The current legal-size limit for kala is 14 inches, meaning most females and two-thirds of males enter the fishery shortly after they mature. This, their longevity, and well-supported research on positive correlations between fish size and net fecundity suggests there is a need for both a minumum and maximum size limit to ensure a long-term sustainable fishery (Eble et al., 2009).

In Kīpahulu, kala populations appear to be relatively healthy, with fish abundance similar to that of an area closed to fishing (Minton et al., 2014). Despite indications of low fishing impacts, fish abundance and biomass have steadily decreased in the area since the 1960s. Given the

ecological and economic importance of kala, it is important regulations are put in place to prevent further decline (Minton et al., 2014).

#### Kole (Goldenring surgeonfish, Ctenochaetus strigosus)

KOI currently ranks the status of kole as "fair" and strives for a status of "good." The proposed regulation to harvest only 10 combined finfish per person per day and harvest kole at a minimum size limit of 5 inches will reduce the likelihood of unsustainably and improperly harvesting kala in Kīpahulu moku.

Kole is one of the most numerous reef fishes in Hawai'i and is targeted as a favored food and aquarium fish. It is found over coral, rock, and rubble, and is most common in shallow sub-



surge zones where it feeds on algae and decaying plant matter (DAR, 2006; Longernecker & Langston, 2008). Individuals are usually solitary, and favor certain areas based on food availability. They do not stray far from their home boundaries and are easily exploited due to this territorial behavior.

Size at 50% sexual maturity is estimated at 3.3 inches FL for females and 3.9 inches FL for males (Langston et al., 2009). Males and females mature by 15 months and 9 months, respectively, and may live up to 18 years or more (Langston et al., 2009). Spawning is mostly group spawning with some pair spawning (Sancho et al., 2000). Accounts of the spawning season range from March to June, to February to May (Longernecker & Langston, 2008; Langston et al., 2009).

In Kīpahulu, kole is a key subsistence fishery species, yet sightings were relatively rare in comparison to other east Maui sites surveyed, with only 18 individuals recorded at 3 of 26 sites over a 2-year study (Minton et al., 2014). Fishing pressure on kole in Kīpahulu is unknown and while low abundance is potentially due to habitat type more data is needed to draw conclusions. Individuals surveyed averaged ~4 inches in length and larger individuals were observed during 5-minute timed swims. Despite these observations, the proportion of the population larger than the size at maturity could not be calculated due to a small sample size (Minton et al., 2014).

#### Moi (Pacific Threadfin, Polydactylus sexfilis)

KOI currently ranks the status of moi as "fair" and strives for a status of "good." The proposed regulation to harvest only 10 combined finfish per person per day, harvest moi between a slot limit of 11-18 inches, use a throw net with a minimum mesh size of 3 inches, and harvest moi outside of the closed season from May to September will reduce the likelihood of unsustainably and improperly harvesting moi in Kīpahulu moku, especially while using overly efficient gear. The Kukui Bay Sanctuary also protects an important moi nursery area.

Moi are protandric hermaphrodites, meaning they initially mature as males after a year at about 7.8 - 9.8 inches FL



and then undergo a sex change, passing through a hermaphroditic stage and becoming functional females between 11.8 - 15.7 inches FL at about three years of age (Santerre et al., 1979). Spawning occurs inshore and eggs are dispersed and hatch offshore (Lowell, 1971). Larvae and juveniles are pelagic until juveniles attain a FL of about 2.4 inches, whereupon they enter inshore habitats including sandy bays, shoreline surf zones, reefs, and stream entrances (Santerre & May, 1977; Santerre et al., 1979). Newly settled young moi, called moi li'i, appear in shallow waters in summer and fall where they are the dominant member of the nearshore surf zone fish assemblage. Moi feed primarily on crustaceans and can be found in schools (DAR, 2006).

Moi is a popular and much sought-after sport and food fish in Hawai'i (Friedlander & Ziemann, 2003). In ancient Hawaiian culture, moi were reserved for the ruling chiefs and prohibited for consumption by commoners (Titcomb, 1972). Hawaiians developed a number of traditional strategies to manage moi for sustainable use. Kapu, or closures, were placed on moi during the spawning season (typically from May to August), so as not to disrupt spawning behavior (DAR, 2006).

Members of the Kīpahulu community recall a time when moi li'i could be found in every tide pool throughout the year (Kīpahulu CAP, 2012). However, no current information specific to moi abundance or biomass in Kīpahulu is available (Minton et al., 2014).

#### Uhu (Parrotfishes, Scaridae)

KOI currently ranks the status of uhu as "fair" and strives for a status of "good." While no specific rules are proposed for uhu, DAR Maui rules (adopted in 2014) cap the number of parrotfish and goatfish caught in Maui's waters. They include a limit of no more than two parrotfish per person per day and prohibit the take of both species of large male parrotfish (*Chlorurus perspicillatus* and *Scarus rubroviolaceus*). There are also

limits to the number of certain goatfish species that can be harvested per day. Thus, maui-wide rules are more restrictive than and would take precedence over the proposed regulation to harvest only 10 combined finfish per person per day. The additional restriction to not take or possess marine life while night diving from 6pm to 6am further reduces the likelihood of unsustainably harvesting uhu in Kīpahulu moku.

Uhu are herbivorous, feeding primarily on algae, using their strong beak-like teeth to scrape and gouge food from the coral substrate (Hoover, 2008). Parrotfish are also corallivorous, as they feed on coral and zooxanthellae, microscopic algae residing in corals (Gulko, 1998). Recent findings also uncovered that, for the five major species of parrotfishes of Hawai'i, it initially takes three years for females and two years for males to reach sexually maturity. Parrotfish appear to be reproductively active throughout the year, with peak spawning estimated to be April to July, with some species having a second, smaller peak around November (DeMartini & Howard, 2016).

Statewide, in addition to being a prized and sought-after species, larger parrotfish have great biological and ecological importance on the reef in terms of reproduction, algal grazing, and bioerosion rates (Birkeland & Dayton, 2005; Bellwood et al., 2011). *S. rubroviolaceus* and *C. perspicillatus* both play a fairly significant role in bioerosion on reefs in Hawai'i (Pardee, 2014) due to the significant effect of their feeding behaviors, with larger parrotfish producing as much as 800 pounds of sand per year (Ong & Holland, 2010).

Parrotfish are sequential hermaphrodites, with the largest females changing sex into males, defending territories, and creating a harem of females with which they breed. Territories of larger males contain more females, and male size could be a factor in reproductive success, with greater reproductive output from large males with large harems (Hawkins & Callum, 2003). Decreases in the proportion of these large males could cause females to have difficulties finding high-quality mates with whom to spawn (Hawkins & Callum, 2003; Clua & Legendre, 2008) and decrease the reproductive output of the population. If fishing prevents females from growing large enough to change sex, it could also result in a lower reproductive output (due to a limitation of males) unless the species can compensate by changing sex at a smaller size (Hawkins & Callum, 2003).

Parrotfish are most commonly caught by spear fishing and most efficiently caught at night while asleep on the reef (Lindfield et al., 2014). Commercial fishers have been observed to use surround nets, taking tons of uhu at one time. Large males are targeted over the smaller, initial phase males and females (Clua & Legendre, 2008). In MHI, a decrease in the average weight of landed uhu has been observed between 1977 and 2012 by catch reports and fish dealers (Pardee, 2014).

In Kīpahulu, baseline surveys revealed four species of parrotfish were present, with redlip or ember (*Scarus rubroviolaceus*) and palenose (*Scarus psittacus*) parrotfishes accounting for most of the observations and parrotfish biomass (Minton et al., 2014). Other parrotfish species observed were the spectacled (*Chlorurus perspicillatus*) and stareye (*Calotomus carolinus*) parrotfishes. Similar to other east Maui sites, the normally common and ecologically important bullethead parrotfish (*Chlorurus spilurus*) was not observed in Kīpahulu.

In 2013, fewer parrotfish were observed than in fish surveys conducted in 2010, but surveys again suggested a wide distribution across the Kīpahulu reef. Average size and the proportion of sexually mature individuals varied across species and is discussed separately below. Overall, the abundance of parrotfish in Kīpahulu is greater than that of other more accessible areas supporting larger human populations. (Minton et al., 2014).

# III. Invertebrates and Limu

#### 'Opihi (Limpets, Cellana spp.)

KOI currently ranks the status of 'opihi as "fair" and strives for a status of "good." The proposed regulations to harvest only 40 pieces (shell on), not while freediving, and only outside of the 'opihi rest area reduces the likelihood of unsustainably and improperly harvesting 'opihi in Kīpahulu moku, especially while using overly efficient gear.

There are three species of 'opihi, all of which are endemic to the Hawaiian Islands. They inhabit basaltic boulder and cliff shorelines with high wave



energy, and each species is found in a distinct zone along the shore. 'Opihi makaiauli (Blackfoot 'Opihi, *Cellana exarata*) lives highest on the shoreline, and can be found on rocks around the high tide line. 'Opihi 'ālinalina (Yellowfoot 'Opihi, *Cellana sandwicensis*) inhabits the area between the high tide and low tide lines. 'Opihi kō'ele (Giant 'Opihi, *Cellana talcosa*) is generally found below the water line.

'Opihi have planktonic larvae and must successfully settle in suitable habitat within 2 to 14 days of spawning. Once the larvae settle, 'opihi grow rapidly and reach reproductive maturity within seven to eight months (size at maturity varies by species, with makaiauuli and 'ālinalina maturing at 1.25 inches). This rapid growth rate suggests that 'opihi are a species that should be able to sustain local subsistence harvest pressure and recover quickly if managed appropriately, while sustainable levels cannot be maintained under commercial or over-harvest conditions. 'Opihi also face threats from climate change, sea level rise, and ocean acidification, which can affect dispersal and survival rates, making it very important to manage populations locally. 'Opihi have high cultural value as a food species often served at celebrations. The most desired species is 'opihi 'ālinalina. As a result of commercial demand and market price, many accessible shorelines across Hawai'i are overharvested.

Kīpahulu, overharvest of legal-size In adults, unsustainable harvest of large reproducing 'opihi and undersized individuals (before they can spawn), especially during a peak spawning period in summer months, are the primary concerns (Kīpahulu CAP, 2012). In 2014, Kīpahulu 'Ohana and another east Maui community organization, Nā Mamo O Mū'olea, revived the traditional practice of voluntarily resting an area from harvest, to allow populations to grow and replenish. Since then, rapid 'opihi surveys where 'opihi makaiauli are counted and measured have been conducted to monitor changes in abundance within and adjacent to rest areas ('Opihi, 2014-2017). Results showed populations increased within and down-current from rest areas, suggesting rest areas are successful and 'opihi populations will bounce back if left alone for a period of time after harvesting.

In east Maui, the traditional and customary practice is to not gather 'opihi below the low tide mark to protect the larger spawners and the kō'ele. 'Opihi that grow below the low tide mark are in many cases the spawners, providing the opportunity for the 'opihi to reproduce and have a healthy population. The low tide mark refers to the low tide on the day of the lowest tide in a calendar year. If 'opihi gatherers resort to gathering below the low tide mark, this is an indication that there are not enough 'opihi above the low tide mark and that the resource has diminished to the point where it should not be harvested at all and a kapu should be observed to allow the 'opihi to recover.

#### <u>Ula/Ula Pāpapa (Spiny Lobster, Palinuridae family;</u> Slipper Lobster, *Scyllaridae* family)

KOI currently ranks the status of ula as "fair" and strives for a status of "good." The proposed regulations to harvest 2 ula/ula pāpapa combined per person per day outside of the closed season from May to September will reduce the likelihood of unsustainably and improperly harvesting ula in Kīpahulu moku. The original proposed regulation was for two species of spiny lobsters: Banded Spiny Lobster (*Panulirus marginatus*) and Green Spiny Lobster (*Panulirus pennicilatus*). However, it has been revised to include the Spiny lobster family *Palinuridae* and Ula Pāpapa, or Slipper Lobster family *Scyllaridae*, given feedback gathered during the 2019-2022 public scoping process.

Ula are two species of spiny lobster in Hawai'i that inhabit crevices and caves, occurring from depths of a few feet to a maximum of 600ft (Hoover, 2008). They are nocturnal feeders and can forage from the reef to adjacent sandy



habitats. In Hawai'i, ula have a small home range and move relatively short distances as adults (Prescott, 1988; O'Malley & Walsh, 2013). Ula generally spawn yearround, with a peak from May through August. Early tagging studies indicate females spawn at least twice a year but may spawn more frequently (McGiness 1972). Fecundity is positively correlated with size of carapace length. In Hawai'i, larger females can produce up to 500,000 eggs at once and approximately 40% of females have eggs at any given time (Hoover, 2008). P. penicillatus lobsters with a carapace measuring 2.75 inches (70 mm) can lay up to 150,000 eggs whereas a lobster with a carapace measuring 4.3 inches (110 mm) can lay up to 575,000 eggs - 4 times as many (McGinnis, 1972). Panulirus spp. mature at around 3 to 4 years of age and can live up to 14 years (Cockcroft et al., 2013).

The spatial scale of populations is determined by how far juvenile larvae disperse during the long (6 months – 1 year) pelagic larval period (lacchei & Poepoe, 2015; lacchei & Toonen 2013). For both species, lacchei et al. (2014) found regional genetic differentiation between MHI and NWHI, indicating that Papahānaumokuākea Marine National Monument, which is closed to all fishing activities, does not serve as a source for re-populating ula in the MHI. This suggests that ula populations in the MHI may rely on local stocks to maintain future populations of ula in the area (lacchei & Poepoe, 2015).

Ula can easily be caught with tangle nets or traps, making them vulnerable to overharvesting. This is demonstrated by the NWHI lobster industry collapse in the 1990's, where a total of 11 million lobsters were harvested (Schultz et al., 2011), but landings (DiNardo et al., 2001) and catch per unit effort (O'Malley, 2009) declined by 87% within a decade (1983–1999) (Butler et al., 2013). There was also a significant shift towards decreasing carapace length in the same period (Parrish & Polovina, 1994). The National Marine Fisheries Service shut down the fishery in 2000 because of the decline and uncertainty associated with population and stock assessment models.

Overharvesting also led to current DAR rules; a seasonal closure from May through August, a minimum harvest size of 3 ¼ inches in carapace length, no taking or killing of females, and no spearing (DAR, 2019). These regulations are consequently leaving a larger number of males of greater size up for harvest (lacchei & Toonen, 2013). This skews the sex ratio in populations and results in less and smaller sized males being available for mating, possibly leaving females sperm-limited. This could potentially limit overall egg production and hinder stock recovery in the MHI (lacchei & Toonen, 2013).

In Kīpahulu, ula are a valued resource where shallow water *P. penicillatus* comprises most of the harvested catch. Their homing (territorial) behavior and shallow water habitat make them more vulnerable to overharvest and subsequently they make up a larger amount (88%) of total spiny lobster catch in the MHI. However, observations and informal data suggest they do not readily enter baited traps (lacchei & Toonen, 2013).

In addition to the Ula/Ula Pāpapa proposed regulation, a bag limit of 2 for the 7-11 Crab (Spotted Reef Crab, *Carpilius maculatus*) has been added given feedback gathered during the 2019-2022 public scoping process.



#### Limu – All Native Seaweed Species

KOI currently ranks the status of limu as "good" and strives for a status of "very good." The proposed regulations to harvest limu without the holdfast/roots attached will reduce the likelihood of unsustainably and improperly harvesting limu in Kīpahulu moku. The original proposed regulation was for Līpoa (*Dictyopteris plagiogramma*), Kala (*Sargassum echinocarpum*), and Kohu (*Asparagopsis taxiformis*) however it has been revised to include all native seaweed species given feedback gathered during the 2019-2022 public scoping process.

Native limu are valued in Hawai'i through traditional subsistence practices and for their cultural significance. Limu has long been a staple of the Hawaiian diet and one of three basic components of every meal, often paired with poi or fish (raw or cooked), functioning as a vegetable, relish or spice (Abbot, 1996; Aiona, 2003; McDermid &



Stuercke, 2003). Nutritionally, limu provides vitamins, minerals, protein, and fiber to its consumers, elements different from those provided from other staple foods like fish and poi. The nutritious nature of limu was particularly important for women who were prohibited from eating many other nutritious foods under the era of the kapu system (Abbot, 1996; McDermid & Stuercke, 2003). Limu are also utilized culturally in ceremonies, medicines, stories and legends, and in commerce as a trade item between families (McDermid & Stuercke, 2003). In adays gone by, chiefs would transplant the treasured limu species, bringing limu covered rocks when travelling to different islands (Aiona, 2003). Hawaiians cultivated limu and understood the importance of leaving the holdfast rooted to the substrate and considered uprooting to be careless (Aiona, 2003).

Limu are also vital for healthy marine ecosystems by providing food, protection, and shelter. Seaweed such as limu kala illustrate its role as a food source for herbivorous surgeon fish (kala), among many other marine animals (Abbot, 1996). Limu is also an important habitat for invertebrates (Longenecker et al., 2011).

Limu can also be detrimental to marine ecosystems when out of balance. Excess nutrient input and declining abundances of herbivorous fish due to overharvesting have contributed to phase shifts from coral dominated reefs to macroalgae dominated (Stimpson et al., 2001).

Edible native limu are an important component of the Hawaiian diet in Kīpahulu. Intertidal regions in the area are the areas where valued limu species (like kohu, kala, and līpoa) are abundant, but not as abundant as they once were. The loss of traditional and sustainable harvest techniques, such as trimming the top of the plant instead of pulling out the entire root, has led to a decline in limu abundance (Kīpahulu CAP, 2012).

# Additional Subsistence Resources (this list is not exhaustive)

'A'ama crab (Rock Crabs, Grapsus tenuicrustatus, Pachygrapsus plicatus)
Āholehole (Flagtails, Kuhlia sandvicensis, Kuhlia xenura)
'Ama'ama (Striped Mullet, Mugil cephalus)
Awa (Milkfish, Chanos chanos)
Awa 'aua (Hawaiian Ladyfish, Elops hawaiensis)
Ha'ue'ue (Ten-lined Urchin, Eucidaris metularia)
Hā'uke'uke kaupali (Helmet Urchin, Colobocentrotus atratus)
He'e mauli (Day Octopus, Octopus cyanea)
He'e (Octopuses, Octopoda spp.)
Hīnālea lauwili (Saddle Wrasse, Thalassoma duperrey)
Hou (Surge Wrasse, Thalassoma purpureum)
Kūmū (Whitesaddle Goatfish, Parupeneus porphyreus)
Kūpe'e (Polished Nerite, Nerita polita)

Kūpīpī (Blackspot Sergeant, Abudefduf sordidus) Loli (Sea Cucumbers, Aspidochirotida spp.) Mamo (Hawaiian Sergeant, Abudefduf abdominalis) Moano (Manybar Goatfish, Parupeneus multifasciatus) 'Ō'io (Bonefish, *Albula* spp.) O'opu Alamo'o (Hawaiian Freshwater Goby, Lentipes concolor) 'Ōpae (Shrimps, *Malacostraca* spp.) Pipipi (Black Nerite, Nerita picea) Po'opa'a (Hawkfish, Cirrhitus pinnulatus) Puhi paka (Yellowmargin Moray Eel, Gymnothorax *flavimarginatus*) Puhi ūhā (Hawaiian Conger Eel, Conger marginatus) Uku (Blue-Green Snapper, Aprion virescens) Uouoa (Sharpnose Mullet, Neomyxus leuciscus) 'U'u (Soldierfishes, *Holocentridae* spp.) Wana (Sea Urchins, Echinoidea spp.)



# KĪPAHULU MOKU CBSFA | 6. Management Objectives, Actions, and Work Plan

#### **Objectives and Actions**

**Biophysical - Objective 1**: Improve biodiversity and increase focal species abundance by 50% over 5 years as evidenced by regular monitoring.

Action 1a. Establish clearly defined and socially acceptable area-based rules that limit fishing and gathering effort for focal species in order to increase their size and abundance.

i. Adopt Regulatory Solutions (1a.i)

The regulatory solutions proposed by KOI are informed by traditional knowledge and customary practices and based upon observations and direct experience. Finalizing the management plan and rule package, conducting and completing the Chapter 91 Administrative Procedures process to adopt rules to establish a CBSFA for the Kipahulu moku and protect the marine resources of the area is integral to protecting the marine resources and the customs and practices that they sustain. KOI will work with DLNR to reach out to the east Maui and larger Maui Nui communities to gather feedback and share information to increase the public's understanding and support of the proposal, the State's administrative rule-making process, the community's role, the issues, and how they can get involved. By reaching out and seeking participation, KOI can address people's questions, and generate better understanding and more support. This increased understanding and public support will have a positive effect on the area once it is designated as a CBSFA.

ii. <u>Enforcement of Administrative Rules Within the</u> <u>CBSFA (1a.ii)</u>

The Hawai'i Division of Conservation and Resources Enforcement (DOCARE) is responsible for enforcing CBSFA rules, and is integrally involved in both voluntary compliance efforts and enforcement. KOI will support DOCARE in the efforts. Explore establishment of a DOCARE officer position in east Maui so that DOCARE presence and response time will be improved in this remote area.

iii. Ongoing Subsistence Fishing and Gathering (1a.iii) Engaging in fishing and gathering of marine resources, in accordance with the conservation guidelines of Native Hawaiian kūpuna is a traditional and customary practice. It is important for the community to be able to secure what they need for their day-to-day subsistence needs as well as be able to harvest and gather what is needed for larger 'ohana gatherings that are integral to the cultural practice of celebrating important life cycle events – birthdays, weddings, graduations, etc.

Action 1b. Assess biological parameters of reef and reef fish through standardized in-water monitoring every five years to track the status of ecosystem and target species over time (conducted by DAR or other science-based organization or agency) and share these findings to increase understanding of the effect of the CBSFA.

- i. DAR, TNC, & Partners Conduct Assessments (1b.i)
- DAR, TNC, and/or other partners with relevant technical expertise conduct fish and habitat utilization assessments to characterize the marine resources and habitat within the CBSFA as an initial assessment. The initial assessment to be conducted will help establish a baseline for evaluations to be conducted every five years.
- ii. Community Observations and Monitoring (1b.ii)
- Hawai'i Revised Statute (HRS) § 188-22.6, "Designation of Community Based Subsistence Fishing Area," states that the purpose of designating a CBSFA and carrying out fishery management strategies for such areas is to reaffirm and protect "fishing practices customarily and traditionally exercised for purposes of Native Hawaiian subsistence, culture, and religion." The science, art and skill of traditional and customary observation and monitoring were and continue to be integral to the fishing practices customarily and traditionally

exercised by Native Hawaiians, which HRS § 188-22.6 seeks to reaffirm and protect. Such observation and monitoring activities will be the principal activities to reaffirm and protect "fishing practices customarily and traditionally exercised," in the CBSFA. In addition, the monitoring methods that will be practiced are essential for the sustainable management of a robust ecosystem where diverse marine resources flourish.

Action 1c. Assess biological status of the intertidal ecosystem and 'opihi (inside and outside the rest area) through standardized shoreline monitoring to understand population trends (conducted periodically) and share these findings to increase understanding of the effect of the CBSFA.

i. Community and Partner Monitoring (1c.i)

Since 2009, KOI and partners have monitored 'opihi inside and outside the rest area located at HALE. This monitoring will continue to assess the impacts of the rest area and also the designation of a CBSFA in Kīpahulu moku.

Action 1d. Conduct a pakini/human use and creel survey to gather fisher catch/extraction data to understand what is being harvested.

 i. <u>Community and Partner Monitoring (1d.1)</u> Community will work with DLNR and other partners like the University of Hawai'i (UH) to conduct a human use and creel survey to monitor changes over time in human behavior and extraction.

**Governance - Objective 2**. Establish and maintain effective voluntary, legal, and governance structures and assess stakeholder participation within the first three years is positive as evidenced by a perceptions survey.

Action 2a. Ensure representativeness, equity and efficacy of collaborative management system through an open and transparent process.

- i. <u>Kīpahulu Konohiki Advisory 'Ohana (KKAO) (2a.i)</u> Form a Kīpahulu Konohiki Advisory 'Ohana (KKAO) comprised of fisher families from the area and convene on a regular basis (at least once every year or two years). The KKAO will serve as a liaison between KOI, the Kāko'o Management Team (KMT), and the community by providing feedback to KOI and by reporting and providing outreach to their 'ohana, neighbors, friends and the broader community.
- ii. <u>Kāko'o Management Team (KMT) (2a.ii)</u>
   Form a Kāko'o (support) Management Team (KMT) comprised of KOI's partners, Kīpahulu landowners Aha Moku, and government agencies (with around 10

representatives, one each from DAR, DOCARE, HALE, KOI, Kīpahulu Community Association (KCA), Aha Moku, Native Hawaiian practitioners, fishers, conservationists, and neighboring moku). The KMT will convene on a regular basis (at least once every year or two years) and will consult with and assist in the implementation of the management plan, review of observation and monitoring information and address concerns identified by the KKAO.

iii. 5-Year Evaluation (2a.iii)

Using information received from KOI observations and monitoring programs and from DAR and partners, KKAO and KMT will help conduct an evaluation of the management plan after the first five years and every five years thereafter.

Action 2b. Cooperate and coordinate with DOCARE as the enforcement agency for DLNR and participate in their Makai Watch Program for both voluntary compliance and enforcement.

i. Makai Watch (2b.i)

Participate in the Makai Watch - 'IKe Kai program, based on the idea that people who use, deal with, or live closest to the natural resources are in the best position to help in understanding the nature of the area. Through Makai Watch, the Kīpahulu community will better observe and report useful data for DOCARE when officers cannot be onsite during an infraction.

Action 2c. Establish an outreach and communications program with various stakeholders to build support and compliance for the Kīpahulu Moku CBSFA.

i. <u>Kīpahulu Moku Resident Outreach (2c.i)</u>

KOI and DLNR will hold at least one informational meeting in east Maui after the rules are approved, allowing for questions from the community and preparing for clarifications and answers. KOI and DAR will develop and disseminate educational materials and information regarding the new rules and the vision and goals for the CBSFA. DLNR and DAR will update their websites and update the fishing regulation book with the new rules. KOI will update their website www.kipahulu.org/cbsfa to highlight rules, codes of conduct and other outreach materials, which can be promoted in other outreach opportunities. Other community outreach (e.g. tshirts, calendars, printed rules and code of conduct), a talk-story (information) station, and one-on-one educational outreach efforts will help promote understanding the reasons behind the rules and promote voluntary compliance and support by fishers and community. These efforts reaffirm that Kipahulu

## KĪPAHULU MOKU CBSFA | 6. Management Objectives, Actions, and Work Plan

moku residents can continue subsistence fishing and gathering in the CBSFA and to inform them of the important regulations and guidelines to ensure that the marine resources will continue to be available for them and future generations.

ii. <u>Haleakalā National Park and Kīpahulu Campground</u> <u>Outreach (2c.ii)</u>

Because the primary point of access for non-resident users of Kīpahulu shoreline for fishing and gathering resources is through the Park and the Kīpahulu campground, and this is also the region of the 'opihi rest area, this will be a focus of educational outreach efforts. KOI and DAR will conduct joint trainings with HALE staff so that they can assist with outreach and education for visitors to the Park. Educational materials designed in Activity 2c.i will be provided at the HALE entry gate, visitor center, or campground.

iii. Signage (2c.iii)

DAR will, with support from DOCARE, HALE, and KOI, create and install regulatory signage throughout the CBSFA within one year of the CBSFA designation. Signage with information on the CBSFA and rules should be posted along with the Kīpahulu moku signage that is already located at/near the boundaries of the moku, and at key access points including in the HALE campground and Ka'āpahu Bay.

iv. Media Coverage (2c.iv)

It is important to generate media coverage and messaging about the protection of resources and ongoing subsistence practices at newsworthy points in local and statewide media outlets including the Maui News, the Star Advertiser, Hānaside News, MauiTime Magazine, etc. KOI and the management team can anticipate and issue a joint press release.

**Socioeconomic - Objective 3.** Enhance food security for coastal residents and the continuation of traditional and customary fishing and gathering practices, while maintaining the cultural, recreational, and ecological values of Kīpahulu to society.

Action 3a. Enhance respect for and understanding of local and Native Hawaiian knowledge and practices, and place names in Kīpahulu, as well as understanding of environmental and social sustainability, through culturally rich outreach efforts.

# i. Pono Fishing Calendar (3a.i)

Build appreciation and respect for the traditional ecological knowledge for Kīpahulu moku by developing a pono fishing calendar that shares CBSFA information alongside moku-specific spawning observations, similar to the pono fishing calendar created by Hui Mālama O Mo'omomi.

Action 3b. Perpetuate traditional practices and relationships and ensure traditional knowledge is passed down to future generations within families and is shared in outreach and exchange opportunities.

i. Youth Education Programs (3b.i)

KOI and others will continue youth engagement opportunities, including Kīpahulu Makai Exploration Days through the Hana School 21st Century Community Learning Centers Program, and integration of a makai component from the ahupua'a perspective in educational programs at Kapahu Living Farm. The focus of such activities is to link and continue Hawaiian customs and traditions for future generations, highlighting the historical levels of abundance (re-setting the baseline for today's youth), traditional fishing uses, place names, mo'olelo, traditional practices for caring for marine resources, and the importance of acquiring, using and transmitting ancestral knowledge. Voluntary compliance will best be achieved through users, especially youth, understanding the reasons behind the rules and the code of conduct, and the importance of maintaining and passing down traditional and customary practices. One of the primary audiences for initiation in sustainable fishing methods and values is children, who are the next generation of fishers and caretakers. KOI will explore working with Hana School and other educators to provide learning opportunities for youth.

ii. Networking (3b.ii)

KOI will continue to provide learning exchanges and opportunities related to traditional fisheries management and codes of conduct with educators, students, scientists, government agencies, and other community groups. In the past, these exchanges have enriched both KOI and those who have shared experiences. This is an important aspect of gaining acknowledgement and respect for traditional and customary fisheries' management.

Action 3c. Assess community perceptions of CBSFA through survey techniques.

i. Social Survey (3c.i)

KOI and DAR will conduct a survey (e.g. key informant interviews, household surveys, etc.) of the Kīpahulu community within five years of the CBSFA being implemented to measure societal perceptions of the CBSFA and to measure impacts to the community.

### Draft Work Plan

### Table 3. Kīpahulu Moku CBSFA Draft Work Plan

**Biophysical - Objective 1**: Improve biodiversity and increase focal species abundance by 50% over 5 and 10 years as evidenced by regular monitoring.

Action 1a. Establish clearly defined and socially acceptable area-based rules that limit fishing and gathering effort for focal species in order to increase their size and abundance.

Action Items What we want to see How we will measure Who & What When	Cost/Budget			
(1a,i) Adopt State adopt rules to Rules adopted through KOI PT staff time. Year 0	~\$40.000			
Regulatory establish Kīpahulu Moku the Chapter 91 process admin. travel	+			
Solutions CBSFA to protect marine				
resources and customs/				
practices they sustain				
(1a.ii) DOCARE creates a new Local resident of east DLNR DOCARE Year 2	~\$100,000			
Enforcement of position in east Maui Maui hired to fill (annual salary,				
Administrative DOCARE position fringe, operations)				
Rules Within the				
CBSFA				
(1a.iii) Ongoing Community is able to (1d.1) Community and KOI/Fishermen Years 1-5				
Subsistence secure day-to-day Partner Monitoring;				
Fishing and subsistence needs and (3c.i) Social Survey;				
Gathering conduct cultural practices Feedback during (2a.i)				
as well as harvest and KKAO and (2a.11) KMT				
gather what is needed for meetings.				
larger 'ohana gatherings				
Action 1b. Assess biological parameters of reef and reef fish through standardized in-water monitoring every f	ve years to			
track the status of ecosystem and target species over time (conducted by DAR or other science-based organiz	ition or			
agency) and share these findings to increase understanding of the effect of the CBSFA.				
(1b.i) DAR, INC, Reef fish surveys Dive surveys conducted KOI/NOAA/INC Pre-	~\$80,000			
& Partners according to designation	(X 2)			
Conduct established protocols at and Assessments				
Assessments Talldomized points Fear 4	~\$5,000			
Observations and about catch species size fisherman compiled fisherman /DAP	Ş3,000			
Monitoring abundance gonads periodically (nortion of salary of				
seasonality etc				
analysis)				
Action 1c. Assess biological status of intertidal ecosystem and 'opihi (inside and outside the rest area) through	standardized			
shoreline monitoring to understand population trends (conducted periodically by community with science par	tners) and			
share these findings to increase understanding of the effect of the CBSFA.	,			
(1c.i) Community 'Opihi population surveys Annual surveys KOI/UTAMCC/TNC Pre-	~\$25,000			
and Partner conducted according to (salaries, travel) designation				
Monitoring established protocols in and Years				
rest area and 1-5				
designated locations				
outside of rest area				
Action 1d. Conduct a pakini/human use and creel survey to gather fisher catch/extraction data to understand what is being				
Indivested.       (1d 1)	~\$100.000			
Community and data lineluding CDUE (NCO scientist	\$100,000			
Darthor	1			

## KĪPAHULU MOKU CBSFA | 6. Management Objectives, Actions, and Work Plan

**Governance - Objective 2**. Establish and maintain effective voluntary, legal, and governance structures and assess stakeholder participation within the first three years is positive as evidenced by a perceptions survey.

Action 2a. Ensure representativeness, equity and efficacy of collaborative management system through an open and transparent process.

transparent process	o.				
(2a.i) Kīpahulu Konohiki Advisory 'Ohana (KKAO)	Council of users to oversee implementation of CBSFA	Assess effectiveness of rules and outreach, make recommendations to KMT	KOI (salary, refreshments, travel)	Meet at least every 1-2 years	~\$500 (x 5)
(2a.ii) Kākoʻo Management Team (KMT)	Collaboration of stakeholders to oversee implementation of CBSFA	Assess effectiveness of rules and outreach, consider recommendations of KKAO, adjust as necessary	KOI/DAR/DOCARE/ HALE (salaries, travel \$500 each)	Meet at least every 1-2 years	~\$2,000 (x 5)
(2a.iii) 5-Year Evaluation	Review of CBSFA rules and outreach effectiveness	Rules or management plan amended based on feedback and experience if needed	Contract	Year 5	~\$20,000
Action 2b. Cooperat	te and coordinate with DOCA	ARE as the enforcement age	ency for DLNR, and par	ticipate in theii	r Makai
(2b.i) Makai Watch	Community participation in outreach, compliance	Community members trained, able to support	DOCARE officer time and travel	Years 1-5	~\$500 (x 5)
	monitoring	enforcement actions when needed			
Action 2c. Establish	an outreach and communica	ations program with variou	s stakeholders to build	support and co	ompliance for
(2c.i) Kīpahulu Moku Resident Outreach	Community presentations, promotional materials, flyers, kiosk at Triangle, email list distribution, website and social media posts	Signs, posters and handouts designed and posted/distributed	KOI/DAR	Years 1-5	~\$6,000
(2c.ii) Haleakalā National Park Outreach	Educational materials at the Kīpahulu entry gate, visitor center, campground and HALE website	HALE staff trained and updated annually	DAR staff conducted training \$500/day	Years 1-5	~\$500 (x 5)
(2c.iii) Signage	Educational signage at key locations (moku boundaries, key access points)	Effective signage designed and posted	DAR cost of 10 signs, posts, and concrete	Year 1	~\$1,500
(2c.iv) Media	Articles in local	Number of articles and	KOI (staff time)	Years 1-5	~\$2,500
Socioecopomic - Ot	newspapers	publications	nd the continuation of	traditional and	customary
fishing and gathering practices, while maintaining the cultural recreational and ecological values of Kinabulu to society					
Action 3a. Enhance respect for and understanding of local and Native Hawaiian knowledge and practices and place names in					
Kīpahulu, as well as	understanding of environme	ental and social sustainabili	ty, through culturally-r	ich outreach e	fforts.
(3a.i) Pono Fishing Calendar	Seasonal calendar with rules and pono fishing guidelines	Calendar produced	KOI contract for design and printing	Year 4	~\$6,000

# KĪPAHULU MOKU CBSFA | 6. Management Objectives, Actions, and Work Plan

Action 3b. Perpetuate traditional practices and relationships to ensure traditional knowledge is passed down to future						
generations within families and is shared in outreach and exchange opportunities						
(3b.i) Youth	Youth involved in hands-	Number of programs	KOI (staff time,	Years 1-5	~\$1,000	
Education	on activities	held and youth	travel \$500/day)		(x 5)	
Programs		participating				
(3b.ii) Networking	Connections and	Number and	KOI/ UTAMCC/	Years 1-5		
	collaborations with	effectiveness of	KMT/Maui Nui			
	supportive entities to	partnerships	Makai Network/			
	enhance effectiveness		Etc.			
	of CBSFA rules,					
	outreach, management					
	plan and monitoring					
Action 3c. Assess co	ommunity perceptions of CBS	SFA through survey technic	ues.			
(3c.i) Social	Survey of awareness,	Social survey	Contract or	Year 1,	~\$15,000	
Survey	understanding and	conducted and results	University	Year 4	(x 2)	
	attitudes about CBSFA	evaluated, shared, and				
	rules and management	incorporated into				
		recommendations for				
		outreach and if				
		necessary				
		management plan and				
		rules amendment				
Estimated five	Estimated cost is			5 years	~\$518,500	
year budget	\$103,700 per year over				total	
	multiple agencies and					



#### KĪPAHULU MOKU CBSFA | 7. Abbreviations, Definitions, and Species Lists

#### **Abbreviations**

BLNR – Board of Land and Natural Resources CBSFA – Community-Based Subsistence Fishing Area DAR - Division of Aquatic Resources DLNR – Department of Land and Natural Resources DOCARE - Division of Conservation and Resources Enforcement FL – Forklength HALE – Haleakalā National Park KCA – Kīpahulu Community Association KKAO – Kīpahulu Konohiki Advisory 'Ohana KMT – Kāko'o Management Team KOI – Kīpahulu 'Ohana, Inc. MHI – Main Hawaiian Islands NOAA – National Oceanic and Atmospheric Administration NWHI - Northwestern Hawaiian Islands TNC – The Nature Conservancy UTAMCC – University of Texas A&M-Corpus Christi

#### Definitions

'A'a – Jagged lava Ahupua'a - Land division Aloha kekāhi i kekāhi - Mutual support, caring for each other Halalū – Juvenile akule Hukilau – Harvest with a seine 'lli'ili – Pebble Ka'apuni – Coastal community surveying exercise Kāko'o – Support Kapu – Prohibited or forbidden Kīpuka – Oases of diversity that remain after destruction Koʻa – Fish aggregations Konohiki – Resource manager Kuleana – Responsibility Kūpuna – Ancestors/elders Laka – A god worshipped by canoe makers Lawai'a – Fisher Limu – Algae, varieties of seaweeds Lo'i – Irrigated terraces Lo'i kalo – Taro wetland farm Lū'au – Hawaiian feast or young taro top Mālama – Take care of Mālama i ke kai – Take care of the sea Mauka to makai – Mountain to the sea Moi li'i - Newly settled young moi Muliwai - River mouth or estuary Moku – District 'Ohana – Family Pā'ina – Small party with dinner Pali – Cliff Palu fishing – Fish bait made of fish head or guts Papa – Flat surface Pono – Moral gualities Po'o – Head

#### **Species**

Akule (Bigeye Scad, Selar crumenopthalmus) 'A'ama crab (Rock Crabs, Grapsus tenuicrustatus; Pachygrapsus plicatus) Āholehole (Flagtails, Kuhlia sandvicensis; Kuhlia xenura) 'Ama'ama (Striped Mullet, Mugil cephalus) Awa (Milkfish, Chanos chanos) Awa 'aua (Hawaiian Ladyfish, *Elops hawaiensis*) Hapawai (Neriting vesperting) Ha'ue'ue (Ten-lined Urchin, Eucidaris metularia) Hā'uke'uke kaupali (Helmet Urchin, Colobocentrotus atratus) He'e mauli (Day Octopus, Octopus cyanea) He'e (Octopuses, Octopoda spp.) Hihiwai (Neritina granosa) Hīnālea lauwili (Saddle Wrasse, Thalassoma duperrey) Hou (Surge Wrasse, Thalassoma purpureum) Kala (Unicornfish, Naso genus; Bluespine Unicornfish, Naso unicornis) Kāhala (Greater Amberjack, Seriola dumerili) Kole (Goldenring surgeonfish, Ctenochaetus strigosus) Kūmū (Whitesaddle Goatfish, Parupeneus porphyreus) Kūpe'e (Polished Nerite, Nerita polita) Kūpīpī (Blackspot Sergeant, Abudefduf sordidus) Limu Kala (Sargassum echinocarpum) Limu Kohu (Asparagopsis taxiformis) Limu Līpoa (Dictyopteris plagiogramma) Loli (Sea Cucumbers, Aspidochirotida spp.) Mamo (Hawaiian Sergeant, Abudefduf abdominalis) Moi (Pacific Threadfin, Polydactylus sexfilis) Moano (Manybar Goatfish, Parupeneus multifasciatus) 'O'io (Bonefish, Albula spp.) 'Ōmilu (Bluefin Trevally, Caranx melampygus) 'O'opu Alamo'o (Hawaiian Freshwater Goby, Lentipes concolor) 'Ōpae (Shrimps, Malacostraca spp.) 'Ōpelu (Mackerel Scad, Decapterus macarellus) 'Opihi (Limpets, Cellana spp.) 'Opihi makaiauli (Blackfoot 'Opihi, Cellana exarata) 'Opihi 'ālinalina (Yellowfoot 'Opihi, Cellana sandwicensis) 'Opihi kō'ele (Giant 'Opihi, Cellana talcosa) Pipipi (Black Nerite, Nerita picea) Po'opa'a (Hawkfish, Cirrhitus pinnulatus) Puhi paka (Yellowmargin Moray Eel, Gymnothorax flavimarainatus) Puhi ūhā (Hawaiian Conger Eel, Conger marginatus) Uhu (Parrotfishes, Scaridae family) Uku (Blue-Green Snapper, Aprion virescens) Ula (Spiny Lobster, Palinuridae family; Banded Spiny Lobster, Panulirus marginatus; Green Spiny Lobster, Panulirus pennicilatus) Ula Pāpapa (Slipper Lobster, Scyllaridae family) Ulua (Jacks, Carangidae family) Ulua Aukea (Giant Trevally (Caranx ignobilis) Uouoa (Sharpnose Mullet, Neomyxus leuciscus) 'U'u (Soldierfishes, Holocentridae spp.) Wana (Sea Urchins, Echinoidea spp.)
Abbott, I.A. (1996). Limu. An Ethnobotanical Study of Some Hawaiian Seaweeds. National Tropical Botanical Garden. Lawai, Hawai'i.

Aiona, K. (2003). Ike Kuuna Limu: Learning about Hawai'i's Limu. PhD dissertation, University of Hawai'i at Mānoa.

Andreakis, N., Procaccini, G., & Kooistra, W. H. (2004). *Asparagopsis taxiformis* and *Asparagopsis armata* (Bonnemaisoniales, Rhodophyta): genetic and morphological identification of Mediterranean populations. European Journal of Phycology, 39(3), 273-283.

Andrews, A. H., DeMartini, E. E., Eble, J. A., Taylor, B. M., Lou, D. C., & Humphreys, R. L. (2016). Age and growth of bluespine unicornfish (Naso unicornis): a half-century life-span for a keystone browser, with a novel approach to bomb radiocarbon dating in the Hawaiian Islands. Canadian Journal of Fisheries and Aquatic Sciences, 73(10), 1575-1586.

Bellwood, D. R., Hoey, A. S., & Hughes, T. P. (2011). Human activity selectively impacts the ecosystem roles of parrotfishes on coral reefs. Proceedings of the Royal Society B: Biological Sciences, 279(1733), 1621-1629.

Bennett, B. S. (2018). Effectiveness of Community-managed "Rest Areas" in Restoring a Population of Broadcast-Spawning Marine Invertebrates. Texas A&M University-Corpus Christi, 42 pp.

Birkeland, C., & Dayton, P. K. (2005). The importance in fishery management of leaving the big ones. Trends in Ecology and Evolution, 20(7), 356-358.

Butler, M., Cockcroft, A. & MacDiarmid, A. (2013). Panulirusmarginatus. The IUCN Red List of Threatened Species 2013:e.T170067A6724412.Retrievedhttp://dx.doi.org/10.2305/IUCN.UK.2011-1.RLTS.T170067A6724412.en

Cesar, H. S., & van Beukering, P. (2004). Economic valuation of the coral reefs of Hawai'i. Pacific Science, 58(2), 231-242.

Clarke, T. A., & Privitera, L. A. (1995). Reproductive biology of two Hawaiian pelagic carangid fishers, the bigeye scad, *Selar crumenophthalmus*, and the round scad, *Decapterus macarellus*. Bulletin of Marine Science, 56(1), 33-47.

Clua, E., & Legendre, P. (2008). Shifting dominance among Scarid species on reefs representing a gradient of fishing pressure. Aquatic Living Resources, 21(3), 339-348.

Cockcroft, A., MacDiarmid, A. & Butler, M. (2013). *Panulirus penicillatus*. The IUCN Red List of Threatened Species 2013: e.T169951A6691002. Retrieved from: http://dx.doi.org/10.2305/IUCN.UK.2011- 1.RLTS.T169951A6691002.en

Cole, K. S. (2009). Size-dependent and age-based female fecundity and reproductive output for three Hawaiian goatfish (Family Mullidae) species, *Mulloidichthys flavolineatus* (yellowstripe goatfish), *M. vanicolensis* (yellowfin goatfish), and *Parupeneus porphyreus* (whitesaddle goatfish). Report to the Division of Aquatic Resources Dingell-Johnson Sport Fish Restoration.

(DAR) Division of Aquatic Resources. (2006). Fishes of Hawai'i. State records as of 2006. Hawai'i Fishing News. Retrieved from: <u>https://dlnr.hawaii.gov/dar/files/2014/04/fishes\_of\_hawaii.pdf</u>.

(DAR) Division of Aquatic Resources. (2013). Commercial marine landings summary trend report. Department of Land and Natural Resources, State of Hawai'i, Honolulu, Hawai'i.

(DAR) Division of Aquatic Resources. (2019). Marine fishes and other vertebrates. Department of Land and Natural Resources, Division of Aquatic Resources, State of Hawai'i. Retrieved from: https://dlnr.hawaii.gov/dar/fishing/fishingregulations/marine-fishes-and-vertebrates/

(DAR) Division of Aquatic Resources. (2019). Marine invertebrates and limu. Department of Land and Natural Resources, Division of Aquatic Resources, State of Hawai'i. Retrieved from: https://dlnr.hawaii.gov/dar/fishing/fishingregulations/marine-invertebrates/

DeMartini, E. E., Langston, R. C., & Eble, J. A. (2014). Spawning seasonality and body sizes at sexual maturity in the bluespine unicornfish, *Naso unicornis* (Acanthuridae). Ichthyological Research, 61(3), 243-251.

DeMartini, E. E., & Howard, K. G. (2016). Comparisons of body sizes at sexual maturity and at sex change in the parrotfishes of Hawai'i: Input needed for management regulations and stock assessments. Journal of Fish Biology, 88(2), 523-541.

DeMartini, E. E., Andrews, A. H., Howard, K. G., Taylor, B. M., Lou, D. C., & Donovan, M. K. (2017). Comparative growth, age at maturity and sex change, and longevity of Hawaiian parrotfishes, with bomb radiocarbon validation. Canadian Journal of Fisheries and Aquatic Sciences, 75(4), 580-589.

DeMello, J. K. (2004). Commercial marine landings from fisheries on the coral reef ecosystem of the Hawaiian Archipelago. Status of Hawai'i's Coastal Fisheries in the New Millennium, 160-173.

DiNardo, G. T., DeMartini, E. E., & Haight, W. R. (2001). Estimates of lobster-handling mortality associated with the Northwestern Hawaiian Islands lobster-trap fishery. Fishery Bulletin, 100(1), 128–133.

Eble, J. A., Langston, R., & Bowen, B. W. (2009). Growth and reproduction of Hawaiian Kala, *Naso unicornis*. Fisheries Local Action Strategy, Final Report, Department of Land and Natural Resources, Division of Aquatic Resources, Honolulu, HI.

Friedlander, A. M., Aeby, G., Brainard, R., Brown, E., Chaston, K., Clark, A., McGowan, P., Montgomery, T., Walsh, W., Williams, I., & Wiltse, W. (2008). The state of coral reef ecosystems of the Main Hawaiian Islands. pp. 219-261. In Waddell, J. E., & Clarke, A.M. (Eds.), The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2008. Silver Spring, MD: NOAA Technical Memorandum NOS NCCOS 73. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team, 569 pp.

Friedlander, A. M., & DeMartini, E. E. (2002). Contrasts in density, size, and biomass of reef fishes between the Northwestern and Main Hawaiian islands: the effects of fishing down apex predators. Marine Ecology Progress Series, 230, 253-264.

Friedlander, A. M., & Ziemann, D. A. (2003). Impact of hatchery releases on the recreational fishery for Pacific threadfin (*Polydactylus sexfilis*) in Hawai'i. Fishery Bulletin, 101(1), 32-43.

Friedlander, A. M., & Dalzell, P. (2004). A review of the biology and fisheries of two large jacks, ulua (*Caranx ignobilis*) and 'ōmilu (*Caranx melampygus*), in the Hawaiian archipelago. In Status of Hawai'i's Coastal Fisheries in the New Millennium, revised 2004 edition. Proceedings of the 2001 fisheries symposium sponsored by the American Fisheries Society, Hawai'i Chapter (pp. 171-185). Honolulu (HI): Hawai'i Audubon Society.

Friedlander, A. M., Brown, E., Monaco, M. E., & Clarke, A. (2006). Fish habitat utilization patterns and evaluation of the efficacy of marine protected areas in Hawai'i: integration of NOAA digital benthic habitat mapping and coral reef ecological studies. Silver Springs, MD.

Froese, R., & Pauly, D. (2010). FishBase, electronic publication. Retrieved from: http://www.fishbase.org.

Gordon, M. (1997). Hāna embodies Spirit of Noel. The Honolulu Advertiser, December 15, 1997, A1-2.

Governor's Moloka'i Subsistence Task Force. (1994). Governor's Moloka'i Subsistence Task Force Final Report, Honolulu, HI: The Dept. of Business, Economic Development & Tourism.

Grigg, R. W., & Birkeland, C. (1997). Status of coral reefs in the Pacific. Manoa: Sea Grant College Program, University of Hawai'i.

Gulko, D. (1998). Hawaiian Coral Reef Ecology. Mutual Publishing Company. Honolulu, HI.

Gulko, D., Maragos, J., Friedlander, A., Hunter, C., & Brainard, R. (2000). Status of coral reef in the Hawaiian archipelago. In: Wilkinson C (ed) Status of coral reefs of the world. Australian Institute of Marine Science, Cape Ferguson, Queensland, pp 219–238.

Gutierrez, N., Hilborn, R., & Defeo, O. (2011). Leadership, social capital and incentives promote successful fisheries. Nature, 470, 386-389. doi:10.1038/nature09689

Harman, R.F., & Katekaru, A.Z. (1988). Hawai'i commercial fishing survey: Summary of results. (State of Hawai'i Dept. Land and Natural Resources, Division of Aquatic Resources Rep. Honolulu).

Hawkins, J. P., & Callum, M. R. (2003). Effects of fishing on sex-changing Caribbean parrotfishes. Biological Conservation, 115(2), 213-226.

Holland, K. N., Lowe, C. G., & Wetherbee, B. M. (1996). Movements and dispersal patterns of blue trevally (*Caranx melampygus*) in a fisheries conservation zone. Fisheries Research, 25(3-4), 279-292.

Honebrink, R. R. (2000). A review of the biology of the family Carangidae, with emphasis on species found in Hawaiian waters. Technical report 20-01, Department of Land and Natural Resources, Division of Aquatic Resources, Honolulu, HI.

Hoover, J. P. (2008). Hawai'i's Sea Creatures: A Guide to Hawai'i's Marine Invertebrates. Mutual Publishing Company. Honolulu, HI.

Hoover, J. P. (2008). The Ultimate Guide to Hawaiian Reef Fishes, Sea Turtles, Dolphins, Whales, and Seals. Mutual Publishing Company. Honolulu, HI.

Huisman, J. M., Abbott, I. A., & Smith, C. M. (2007). Hawaiian reef plants. University of Hawai'i Sea Grant College Program. Honolulu, HI.

lacchei, M., & Toonen, R. J. (2013). Caverns, compressed air and crustacean connectivity: Insights into Hawaiian spiny lobster populations. In Diving for Science 2010. Proceedings of the 29th American Academy of Underwater Sciences Symposium, N. W. Pollock, Ed., American Academy of Underwater Sciences. Dauphin Island (AL).

lacchei, M., O'Malley, J. M., & Toonen, R. J. (2014). After the gold rush: Population structure of spiny lobsters in Hawai'i following a fishery closure and the implications for contemporary spatial management. Bulletin of Marine Science, 90(1), 331-357.

lacchei, M., & Poepoe, K. M. (2015). Population genetic structure of the pronghorn spiny lobster *Panulirus penicillatus* at Mo'omomi, Moloka'i, HI. A Report for the Western Pacific Fisheries Management Council, 21p.

Jokeil, P. L., Rodgers, K. S., Walsh, W. J., Polhemus, D. A., & Wilhelm, T. A. (2010). Marine Resource Management in the Hawaiian Archipelago: The Traditional Hawaiian System in the Relation to the Western Approach. *Journal of Marine Biology*, 2011, doi:10.1155/2011/151682

(Kīpahulu CAP) Kīpahulu Mālama I Ke Kai Community Action Plan. (2012). Retrieved from: <u>https://kipahulu.org/</u> whatwedo/malamaikekai/cbsfa/

Kittinger, J. N., Teneva, L. T., Koike, H., Stamoulis, K. A., Kittinger, D. S., Oleson, K. L., Conklin, E., Gomes, M., Wilcox, B. & Friedlander, A. M. (2015). From reef to table: social and ecological factors affecting coral reef fisheries, artisanal seafood supply chains, and seafood security. PloS One, 10(8), e0123856.

The Kohala Center, et. al. (2016). Health Impact Assessment of the Proposed Mo'omomi Community Based Subsistence Fishing Area, Island of Moloka'i, Hawai'i.

Langston, R., Longenecker, K., & Claisse, J. (2009). Reproduction, growth, and mortality of kole, *Ctenochaetus strigosus*. Fisheries Local Action Strategy, Final Report, Department of Land and Natural Resources, Division of Aquatic Resources, Honolulu, HI.

Levine, A. S. & Richmond, L. S. (2014). Examining enabling conditions for community-based fisheries comanagement: Comparing efforts in Hawai'i and American Samoa. Ecology and Society, 19(1), 24.

Lindfield, S. J., McIlwain, J. L., & Harvey, E. S. (2014). Depth refuge and the impacts of SCUBA spearfishing on coral reef fishes. PloS One, 9(3), e92628.

Longernecker, K., & Langston, R. (2008). Life history compendium of exploited Hawaiian fishes. Fisheries Local Action Strategy, Final Report, Department of Land and Natural Resources, Division of Aquatic Resources, Honolulu, HI.

Longenecker, K. R., Bolick, H., & Kawamoto, R. (2011). Macrofaunal invertebrate communities on Hawai'i's shallow coral-reef flats: changes associated with the removal of an invasive alien alga. Bishop Museum Technical Report 54, Hawai'i Biological Survey, Bishop Museum. pp. 51.

Lowell, N. E. (1971). Some aspects of the life history and spawning of the moi (*Polydactylus sexfilis*). MS thesis, University of Hawai'i at Mānoa.

McDermid, K. J., & Stuercke, B. (2003). Nutritional composition of edible Hawaiian seaweeds. Journal of Applied Phycology, 15(6), 513-524.

McGinnis, F. (1972). Management investigation of two species of spiny lobsters, *Panulirus japonicus* and *P. penicillatus*. Division of Fish and Game Report, Department of Land and Natural Resources, Honolulu, HI.

McGregor, D. P. (1995). Waipi'o Valley, a Cultural Kīpuka in early 20th Century Hawai'i. *The Journal of Pacific History*, *30*(2), 194-209.

McGregor, D. P. (2007). Nā Kua'āina: Living Hawaiian Culture. Honolulu, HI: Bishop Museum Press.

Meyer, C. G., Holland, K. N., & Papastamatiou, Y. P. (2007). Seasonal and diel movements of giant trevally *Caranx ignobilis* at remote Hawaiian atolls: implications for the design of marine protected areas. Marine Ecology Progress Series, 333, 13-25.

Minton, D., Conklin, E., Amimoto, R., & Pollock, K. (2014). Baseline surveys of marine resources at Kīpahulu, Maui 2010 and 2013. Final Report, The Nature Conservancy, Honolulu, HI.

Miyasaka, A., & Ikehara, W. (2001). Status and management of Hawai'i's akule fishery. American Fisheries Society Hawai'i Chapter Fisheries Symposium.

Munro, J. L., Gaut, V. C., Thompson, R., & Reeson, P. H. (1973). The spawning seasons of Caribbean reef fishes. Journal of Fish Biology, 5(1), 69-84.

Myers, R. A., & Mertz, G. (1998). The limits of exploitation: a precautionary approach. Ecological Applications, 8, S165-S169.

Nadon, M. O., Ault, J. S., Williams, I. D., Smith, S. G., & DiNardo, G. T. (2015). Length-based assessment of coral reef fish populations in the Main and Northwestern Hawaiian Islands. PloS One, 10(8), e0133960.

National Park Service. (2012). Haleakalā National Park Year to Date Report [Web page]. Retrieved from: <u>https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%</u> <u>20Reports/Park%20YTD%20Version%201?Park=HALE</u>

National Park Service. (2015). Kīpahulu District [Web page].Retrievedfrom:<u>https://www.nps.gov/hale/learn/</u><u>historyculture/kipahulu-district.htm</u>

The Nature Conservancy. (2016). Summary of Findings, 2010 and 2013 Coral Reef and Fish Surveys, Kīpahulu, Maui. 2 pp.

NOAA. (2018). How do coral reefs protect lives and property? Retrieved from: <u>https://oceanservice.noaa.gov/facts/coral\_protect.html</u>

NOAA Fisheries, Pacific Regional Office. (2016). Fisheries Local Action Strategy – Hawai'i (FLASH), Retrieved from: http://www.fpir.noaa.gov/HCD/hcd\_las.html

('Opihi, 2014-2017) Community-based monitoring 'opihi rest area surveys (2014-2017). Summary of results report, The Nature Conservancy, Honolulu, HI.

O'Malley, J. M. (2009). Spatial and temporal variability in growth of Hawaiian spiny lobsters in the Northwestern Hawaiian Islands. Marine and Coastal Fisheries, 1(1), 325-342.

O'Malley, J. M. (2011). Spatiotemporal variation in the population ecology of scaly slipper lobsters, *Scyllarides squammosus* in the Northwestern Hawaiian Islands. Marine biology, 158(8), 1887-1901.

O'Malley, J.M., & Walsh, W. A. (2013). Annual and long-term movement patterns of spiny lobster *Panulirus marginatus*, and slipper lobster, *Scyllarides squammosus*, in the Northwestern Hawaiian Islands. Bulletin of Marine Science, 89(2), 529-549.

Ong, L., & Holland, K. N. (2010). Bioerosion of coral reefs by two Hawaiian parrotfishes: Species, size differences and fishery implications. Marine Biology, 157(6), 1313-1323.

Pardee, C. (2014). Status of the parrotfish fishery in the Main Hawaiian Islands. MS. thesis, Hawai'i Pacific University. Parrish, F. A., & Polovina, J. J. (1994). Habitat thresholds and bottlenecks in production of the spiny lobster (*Panulirus marginatus*) in the Northwestern Hawaiian Islands. Bulletin of Marine Science, 54(1), 151-163.

Pauly, D. (1983). Length converted catch curves. A powerful tool for fisheries research in the tropics(Part 1). ICLARM Fishbyte, 1(2)9-13.

Pitcher, T. J. (2001). Rebuilding ecosystems as a new goal for fisheries management: reconstructing the past to salvage the future. Ecol Appl, 11, 601–617.

Poepoe, K. K., Bartram, P. K. & Friedlander, A. M. (2007). The use of traditional knowledge in the contemporary management of a Hawaiian community's marine resources. In Haggan, N., Neis, B. & Baird, I.G. (Eds.), Fishers' Knowledge in Fisheries Science and Management (119- 143). Paris, France.

Prescott, J. (1988). Tropical spiny lobster: An overview of their biology, the fisheries and the economics with particular reference to the double spined rock lobster *P. penicillatus*. South Pacific Commission Workshop on Pacific Inshore Fishery Resources, Noumea, New Caledonia.

Randall, J. E. (2007). Reef and Shore Fishes of the Hawaiian Islands. University of Hawai'i Press. Honolulu, HI.

Reed, M. (1907). Economic seaweeds of Hawai'i and their food value. Annual report of the Hawai'i Agricultural Experimental Station 1906. pp. 61–88.

Russ, G. R., & Alcala, A. C. (1996). Marine reserves—rates and patterns of recovery and decline of large predatory fish. Ecol Appl, 6, 947–961.

Santerre, M. J., & May, R. C. (1977). Some effects of temperature and salinity on laboratory- reared eggs and larvae of Polydactylus sexfilis (Pisces: Polynemidae). Aquaculture, 10(4), 341-251.

Santerre, M. J., Akiyama, G. S., & May, R.C. (1979). Lunar spawning of the threadfin, *Polydactylus sexfilis*, in Hawai'i. Fish. Bull, 76, 900-904.

Schultz, J. K., O'Malley, J. M., Kehn, E. E., Polovina, J. J., Parrish, F. A., & Kosaki, R. K. (2011). Tempering expectations of recovery for previously exploited populations in a fully protected marine reserve. Journal of Marine Biology, 14, 1-14.

(Smith, UH Botany) Smith, C. (no date). Key to the species of Dictyopteris. Key to the common genera and species of Hawaiian phaeophyta. Retrieved from: http://www.botany.hawaii.edu/ReefAlgae/Dictyopteris.htm

Shomura, R. (1987). Hawai'i's marine fishery resources: Yesterday (1900) and today (1986). NOAA NMFS SWFSC Administrative Report H-87-21, Honolulu, HI: Southwest Fisheries Center, National Marine Fisheries Service, Honolulu Laboratory.

Sudekum, A. E., Parrish, J. D., Radtke, R. L., & Ralston, S. (1991). Life history and ecology of large jacks in undisturbed, shallow, oceanic communities. Fish Bull, 89, 493-513.

Taylor, B. M., Houk, P., Russ, G. R., & Choat, J. H. (2014). Life histories predict vulnerability to overexploitation in parrotfishes. Coral Reefs, 33(4), 869-878.

Tissot, B. N., Walsh, W. J., & Hixon, M.A. (2009). Hawaiian Islands marine ecosystem case study: Ecosystem-and community-based management in Hawai'i. Coastal Management. 37, 1-19. doi:10.1080/08920750902851096

Titcomb, M. (1972). Native Use of Fish in Hawai'i. University of Hawai'i Press. Honolulu, HI.

Vasilakopoulos, P., O'Niell, F. G., & Marshall, C. T. (2011). Misspent youth: Does catching immature fish affect fisheries sustainability? ICES Journal of Marine Science. 68(7), 1525-1534. doi: 10.1093/icesjms/fsr075 Weng, K. C. M., & Sibert, J. R. (2000). Analysis of the fisheries for two pelagic Carangids in Hawai'i. SOEST 00-04, JIMAR Contribution 00-332, University of Hawai'i. Honolulu, HI.

Williams, I. D. & Ma, H. (2013). Estimating catch weight of reef fish species using estimation and intercept data from the Hawai'i Marine Recreational Fishing Survey. Pacific Islands Fisheries Science Center Administrative Report H-13-04.

Work, T. M., Takata, G., Whipps, C. M., & Kent, M. L. (2008). A new species of Henneguya (Myxozoa) in the big-eyed scad (*Selar crumenophthalmus*) from Hawai'i. The Journal of Parasitology, 524-529.

Zatelli, G. A., Philippus, A. C., & Falkenberg, M. (2018). An overview of odoriferous marine seaweeds of the Dictyopteris genus: insights into their chemical diversity, biological potential and ecological roles. Revista Brasileira de Farmacognosia, 28(2), 243-260.

**KĪPAHULU MOKU**Community-Based Subsistence Fishing Area *Administrative Record* 



This Administrative Record documents background information about the Kīpahulu Moku Community-Based Subsistence Fishing Area (CBSFA) efforts since 2013, in support of the Proposal and Management Plan as it moves through the Ch. 91 rulemaking process. This record includes graphics, timelines, and examples of relevant outreach materials and initiatives that support Kīpahulu 'Ohana's proposal, in addition to letters and signatures of support.

### TABLE OF CONTENTS

### **KĪPAHULU MOKU CBSFA ADMINISTRATIVE RECORD**

1.	<b>Outreach Efforts Graphic (2013-2023)</b> 1
2.	Outreach Efforts Table (2013-2023)
3.	Outreach Efforts Timeline (2013-2023)
4.	KOI's Natural and Cultural Resource Stewardship Experience
5.	KOI's Partnerships and Network Affiliations
6.	685 East Maui Resident Signatures for the Kīpahulu Moku CBSFA
7.	Resolutions
8.	Letters of Support
9.	Example Outreach Materials (2013-2023)
10.	Kīpahulu Mālama I Ke Kai Community Action Plan (2012)66

### **Suggested Citation**

Kīpahulu 'Ohana (2023). Kīpahulu Moku Community-Based Subsistence Fishing Area Administrative Record. Kīpahulu, Maui.



ADMINISTRATIVE | 1. Outreach Efforts Graphic (2013-2023)



### KĪPAHULU MOKU CBSFA OUTREACH EFFORTS (2013-2023)



1



ADMINISTRATIVE RECORD

### 2. Outreach Efforts Table (2013-2023)

Kīpahulu Moku CBSFA Outreach Efforts (2013-2023)		
Levels of Outreach	# of Outreach Efforts ( <i>estimated</i> )	# of Individuals Reached ( <i>estimated</i> )
1. Petition of Support by East Maui Residents (Kaupō to Ke'anae)	1	685
2. Outreach to East Maui Community	22	433
3. Outreach to <b>DLNR</b>	13	52
4. Outreach to <b>Public</b>	58	3,247
5. Outreach to <b>Students</b>	14	228
6. Outreach to <b>Kūpuna</b>	2	35
7. Outreach to Legislators	6	34
8. Letters of Support Collected	21	23
9. Publications & Media	38	258,844 <sup>i</sup>
TOTALS	<b>175</b> total outreach efforts	4,737 from direct outreach 258,844 <sup>i</sup> from publications & media <b>263,581</b>

# These outreach efforts include meetings, events, presentations, etc., that promote the learning and involvement of key stakeholders in the development of the Kīpahulu Moku CBSFA. The efforts summarized in this table can be found in the Outreach Efforts Timeline (2013-2023) on page 3. "Levels of Outreach" are further categorized below.

i: Publications and Media: The estimated total number of individuals reached through publications and media is derived from readership/viewership numbers for Hānaside News, The Maui News, Hāleakala National Park, OHA Newspaper, Hawaiian Airlines, Outside Hawai'i, Maui Now, Hawai'i Public Radio online, ICCA, Kaupō Community Newsletter, Hawai'i Business Magazine, and KOI's social media analytics for Instagram and Facebook. PLEASE NOTE: The estimate of total individuals reached through publications and media DOES NOT include readership/viewership numbers for Island Environment 360 Interview, West Hawai'i Today, Associated Press News, U.S. News, S.F. Gate, Hawai'i Tribune Herald, Star Advertiser, HanaMaui.com, Hawai'i Public Radio and KAOI listeners, Shane Perry Marketing, IUCN, and Pacific Business News.

1. Petition of Support by East Maui Residents (Kaupō to Ke'anae): includes door to door gathering of support signatures (685).

2. Outreach to East Maui Community: includes Kīpahulu Community Association Meetings, Community Action Planning, Aha Moku meetings, Hāna Community Endowment Fund meetings, 'opihi monitoring, and CBSFA meetings advertised to the East Maui Community.

3. Outreach to DLNR: includes CBSFA Steering Committee Meetings and DLNR meetings and site visits.

4. Outreach to the Public: includes Limu Festival, Taro Festival, E Alu Pū gatherings, Coral Reef Task Force meetings, Maui Nui Makai Network gatherings, Maui Hikina Huliāmahi meetings and presentations, and 'opihi monitoring events.

5. Outreach to Students: includes classroom visits and fieldtrips with Hāna school and Upward Bound students.

6. Outreach to Kūpuna: includes Hale Hulu Mamo events and Aha Moku o Kaupō Kūpuna Council Meetings.

7. Outreach to Legislators: includes visits to the legislature, meetings with OHA and the Maui County Council, and one on one conversations.

8. Publications and Media: Detailed above<sup>i</sup>.

9. Letters of Support Collected: includes the 23 letters currently collected.



### ADMINISTRATIVE RECORD | 3. Outreach Efforts Timeline (2013-2023)

#### Outreach Efforts Timeline (2013-2023)

Kīpahulu 'Ohana (KOI) has attended and conducted events and meetings to communicate their conservation efforts and discuss the proposed CBSFA designation with a variety of stakeholders. The following timeline details KOI's outreach activity between 2013 and 2023. This list is not exhaustive.

2013	
SeptOct. 2013	<b>Petition of Support by East Maui Residents (Kaupō to Ke'anae)</b> – <i>Community signatures</i> . Greg & Eunice Lind visited residents between Kaupō and Ke'anae, gathering 600 signatures supporting KOI's efforts in Kīpahulu moku. (685 individuals engaged)
October 12, 2013	<b>Outreach to East Maui Community</b> – <i>Kīpahulu Community Association Meeting</i> . Shared KOI's CBSFA efforts and sought input from Kīpahulu residents. (25 individuals engaged)
October 16, 2013	<b>Outreach to Students</b> – <i>Hāna High School Presentation</i> . Paolo Burns, on behalf of the KOI, presented a PowerPoint to his Hāna High School science students explaining management efforts. (15 individuals engaged)
November 5 <i>,</i> 2013	<b>Outreach to Public</b> – <i>Hāna Limu Festival, E Wala'au Kākou Evening Presentation</i> . Leimamo Lind- Stauss participated with the Maui Nui Makai Network (MNMN) to present a slideshow of KOI's management efforts. (100 individuals engaged)
2014	
May 1, 2014	<b>'Opihi Intertidal Monitoring Cruise</b> – Keahi Lind represented KOI on the two-week long Papahānaumokuākea Marine National Monument research trip, along with scientists and agency representatives from the National Oceanic and Atmospheric Administration (NOAA).
June 11, 2014	<b>Outreach to East Maui Community</b> – <i>Community Action Plan (Mālama I Ke Kai) Community</i> <i>Informational Meeting</i> . Discussed Kīpahulu moku projects and CBSFA proposal at Hāna School. (10 individuals engaged)
June 13, 2014	<b>Outreach to Kūpuna</b> – <i>Mālama I Ke Kai Kūpuna Informational and Talk</i> Story <i>Session</i> . In an intimate talk-story setting at Hale Hulu Mamo, discussed with kūpuna KOI's CBSFA efforts and the size of the 'opihi rest area. (20 individuals engaged)
July 24-27, 2014	<b>Outreach to Public</b> – <i>E</i> Alu <i>Pū Gathering in Kīpahulu</i> . Presented KOI's Mālama I Ke Kai Plan. Kua'āina Ulu 'Auamo (KUA) facilitated a CBSFA support discussion where participants agreed to provide letters of support for the Kīpahulu Moku CBSFA. (50 individuals engaged)
August 23, 2014	<b>Outreach to East Maui Community</b> – <i>Aha Moku Meeting</i> . KOI shared information on the CBSFA process. (10 individuals engaged)
September 11, 2014	<b>Outreach to Public</b> – <i>TNC Reception for U.S. Coral Reef Task Force</i> . Participants visited 6 tables representing the 6 MNMN community groups where KOI shared the work being done in Kīpahulu. (50 individuals engaged)

September 14, 2014	Outreach to East Maui Community – 'Opihi outreach. Informed community participants about 'opihi rest areas. (15 individuals engaged)
2015	
January 20, 2015	<b>Outreach to East Maui Community</b> – <i>'Opihi outreach</i> . Met with individual community members to explain and generate support around 'opihi rest area. (5 individuals engaged)
February 18, 2015	<b>Outreach to Legislators</b> – <i>KUA Legislative Sessions with community representatives</i> . Visited different legislative representatives to educate them on KOI's community resource management. (5 individuals engaged)
Feb. 28-Mar. 1, 2015	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . Participated in and presented at the semi-annual MNMN gathering in Hāna. (25 individuals engaged)
March 15, 2015	<b>Outreach to East Maui Community</b> – 'Opihi outreach. Met with individual community members to explain and generate support around 'opihi rest areas. (5 individuals engaged)
April 2015	<b>Publications &amp; Media</b> – <i>Hānaside News Article</i> . "Mauka to Makai" written by Gina Lind supporting KOI's efforts in Kīpahulu moku. (approx. 5,000 individuals engaged)
April 25, 2015	<b>Outreach to Public</b> – <i>Hāna Taro Festival</i> . Engaged and informed community members and festival participants about KOI's management efforts and passed out explanatory brochures. (100 individuals engaged)
June 5-6, 2015	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . 'KOI members along with community volunteers, University of Texas A&M-Corpus Christi (UTAMCC) Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. (10 individuals engaged)
June 12, 2015	<b>Outreach to East Maui Community</b> – <i>CBSFA Discussion.</i> KOI facilitated a CBSFA discussion with east Maui community members to answer questions about a CBSFA designation and go over the new DLNR CBSFA Designation Procedure Guide with Erin Zanre. (15 individuals engaged)
Jun. 24-Jul. 7, 2015	<b>'Opihi Intertidal Monitoring Cruise</b> – Pekelo Lind represented KOI on the two-week long Papahānaumokuākea Marine National Monument research trip, along with scientists and agency representatives from NOAA.
August 4-6, 2015	<b>Outreach to Public</b> – <i>Hawai'i Conservation Conference</i> . As part of the MNMN Workshop, shared KOI's efforts with conference attendees in small break-out groups. (80 individuals engaged)
August 27, 2015	<b>Outreach to East Maui Community</b> – 'Opihi outreach. Met with individual community members to explain and generate support around 'opihi rest areas. (5 individuals engaged)
Sept. 18-20, 2015	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . Participated in and presented at the semi-annual MNMN gathering in Hāna Town. (30 individuals engaged)
October 3, 2015	<b>Outreach to East Maui Community</b> – <i>Hāna Aloha Week</i> . Hosted a booth at the Aloha Week Parade Day, gathering 19 signatures from residents in support of CBSFA designation. Discussed Kīpahulu's Mālama I Ke Kai Plan. (19 individuals engaged)
October 8-9, 2015	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . 'KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. (5 individuals engaged)
October 15, 2015	<b>Outreach to Public</b> – <i>Mālama Wao Akua 2015 Presentation Series</i> . Spoke about KOI's Mālama I Ke Kai program, including CBSFA designation and application. (30 individuals engaged)
November 21, 2015	<b>Outreach to Public</b> – <i>Hāna Limu Festival</i> . Engaged festival participants in KOI's Mālama I Ke Kai program, CBSFA designation, and application. Printed and sold new t-shirts which include the five priorities in KOI's Community Action Plan. (100 individuals engaged)

December 4, 2015	<b>Outreach to East Maui Community</b> – <i>Public Informational Meeting in Hāna</i> . Hosted a public information meeting for KOI's CBSFA plans, engaging attendees in discussions about the current proposed rules and designation procedure. (40 individuals engaged)	
December 5, 2015	<b>Outreach to Public</b> – <i>Hale Hulu Mamo Christmas Fair</i> . Sold Kīpahulu t-shirts and spoke with attendees about CBSFA plans. (20 individuals engaged)	
2016		
April 1-3, 2016	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . Participated in the semi- annual MNMN gathering in Makawao, hosted by 2015 Network chair Wailuku CMMA. (10 individuals engaged)	
April 9-10, 2016	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. (5 individuals engaged)	
May 1, 2016	<b>'Opihi Intertidal Monitoring Cruise</b> – Kaneholani Lind represented KOI on the two-week long Papahānaumokuākea Marine National Monument research trip, along with scientists and agency representatives from NOAA.	
2017		
February 6-14, 2017	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. (5 individuals engaged)	
March 3-5, 2017	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . A meeting on Lāna'i to share lessons learned and CBSFA updates. (10 individuals engaged)	
April 29-25, 2017	<b>Outreach to Public</b> – <i>Hāna Taro Festival</i> . KOI shared outreach materials for the 'opihi rest area, a two-sided fish/'opihi infographic, and CBSFA brochures. (100 individuals engaged)	
May 19-30, 2017	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. (5 individuals engaged)	
Sept. 22-28, 2017	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. Dr. Chris Bird also shared a report out of data collected over a three-year period. (5 individuals engaged)	
Sept. 29-Oct. 1, 2017	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . Discussion of CBSFA process and outreach with Russell Sparks, Uncle Mac Poepoe, and other Network members. (20 individuals engaged)	
October 3, 2017	<b>Publications &amp; Media</b> – <i>KOI 'Opihi poster posted</i> . KOI, NPS, UTAMCC, and TNC partnered to create an 'opihi outreach poster that is displayed at the Haleakalā National Park (HALE) Kīpahulu visitor restroom kiosk and camp area. (approx. 50,000 individuals engaged – this is a vast underestimate of how many Park visitors will see this outreach. This number is also not tallied in the number of individuals reached through KOI's outreach efforts)	
October 11, 2017	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . Hāna 21st Century Community Learning Center Program with Hāna School keiki grades 1-6, 11 participants explored the Kīpahulu shoreline to learn about 'opihi rest areas and other makai management programs. (11 individuals engaged)	
November 2, 2017	<b>Outreach to Public</b> – <i>'Opihi monitoring</i> . KOI members along with community volunteers, UTAMCC researcher Chris Bird, and TNC conducted 'opihi monitoring in Kīpahulu moku to learn about 'opihi rest areas and coastal management. Dr. Chris Bird also shared a report out of data collected over a three-year period. (5 individuals engaged)	

November 17-18, 2017	<b>Outreach to Public</b> – <i>Hāna Limu Festival</i> . KOI gave a presentation along with Uncle Mac Poepoe on the CBSFA designation processes for Mo'omomi and Kīpahulu, and KOI had an educational table regarding limu and 'opihi, with CBSFA outreach brochures. (50 individuals engaged)
December 27, 2017	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . Hāna 21st Century Community Learning Center Program with Hāna School keiki grades 1-6 explored Koukouai muliwai. (9 individuals engaged)
2018	
January 3, 2018	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . Hāna 21st Century Community Learning Center Program with Hāna School keiki grades 1-6, 5 participants explored shoreline two locations including Alalele. (5 individuals engaged)
February 25, 2018	<b>Outreach to DLNR</b> – <i>Kīpahulu CBSFA Steering Committee Meeting</i> . Discussed management plan and educational outreach plans with DAR, community, and partners. (5 individuals engaged)
Mar. 30-Apr. 1, 2018	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . KOI hosted a gathering at Kalena Triangle, discussed Kīpahulu and Moʻomomi CBSFA. (10 individuals engaged)
March 27, 2018	<b>Outreach to East Maui Community</b> – <i>Hāna Community Endowment Fund Meeting</i> . Gave update on CBSFA status to nine other Hāna nonprofits. (9 individuals engaged)
April 18, 2018	<b>Outreach to DLNR</b> – <i>DOCARE and DAR Meeting</i> . Shae Kamaka'ala shared KOI's CBSFA 2-pager with Maui's DOCARE officers and branch chief and Maui DAR staff including Howard Rodrigues, Luna Kekoa, Russell Sparks, Adam Wong, Shae Kamaka'ala, Kenneth Bode, Ronald Cahill, Randy Decambra, Hilbert Manlapao, Nathan Hillen, Jeffrey Kinores, Erik Vuong, John Yamamoto, Mark Chamberlain, Joshua Rezentes, and Skippy Hau. (15 individuals engaged)
April 21, 2018	<b>Outreach to Public</b> – <i>Hāna Taro Festival</i> . KOI booth featured educational outreach displays and materials (plus sale of "Kīpahulu Moku" t-shirts, hats and stickers); staff members interacted with the public regarding CBSFA proposal. (100 individuals engaged)
May 5, 2018	<b>Outreach to East Maui Community</b> – <i>Kīpahulu Community Association Meeting</i> . Gave update to about 50 members in attendance including many traditional fishermen of the area and handed out new one-page informational flyer. (50 individuals engaged)
May 6, 2018	<b>Outreach to Public</b> – <i>Sarah Joe Memorial Regatta</i> . KOI tent featured educational outreach displays and materials, interacting with the public regarding CBSFA proposal. (40 individuals engaged)
June 4, 2018	Publications & Media – Viewpoint article in Maui News. Viewpoint article by Kane Lind as po'o of MNMN for World Oceans Day shared about Kīpahulu CBSFA proposal. (approx. 20,000 individuals engaged) http://www.mauinews.com/opinion/columns/2018/06/celebrate-world-oceans-day-by-taking-care-of-our-ocean/
June 15, 2018	<b>Outreach to DLNR</b> – <i>Kīpahulu CBSFA Steering Committee Meeting</i> . Reviewed draft management plan, proposed rules, outreach strategy with Greg, Kane, Pekelo Lind, Scott Crawford, Alana Yurkanin (TNC), Shae Kamaka'ala (DAR) and Officer Ron Cahill (DOCARE). (2 individuals engaged)
Jun. 20-Jul. 18, 2018	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . As part of the 21st Century Community Learning Centers Program partnership with Hāna School, KOI hosted students from grades 1-6 for four coastal field trips (Koukouai, Alalele, 'Ohe'o/Punahou, and Hāmoa). (20 individuals engaged)
July 20-23, 2018	<b>Outreach to Public</b> – <i>E Alu Pū, Waimanalo</i> . Pekelo Lind attended, provided update on Kīpahulu CBSFA and other efforts. (30 individuals engaged)
August 18, 2018	<b>Outreach to Public</b> – <i>Hāna Cultural Center Ho'olaule'a</i> . KOI tent featured educational outreach displays and materials regarding CBSFA proposal. (10 individuals engaged)

August 2018	<b>Publications &amp; Media</b> – <i>HānaSide News Article</i> . Update on Kīpahulu Moku CBSFA application published in HānaSide News fall edition. (readership of 5,000 individuals already accounted for)
September 8, 2018	Outreach to Public – Maui Nui Makai Network Semi-Annual Gathering. As chair of MNMN, KOI hosted a gathering at Ala Kukui Retreat Center, including a community planning training workshop with east Maui communities and CBSFA information sharing. (10 individuals engaged)
September 25, 2018	<b>Outreach to East Maui Community</b> – <i>Hāna Community Endowment Fund Meeting</i> . Gave update on CBSFA status to seven other Hāna nonprofits. (7 individuals engaged)
October 11, 2018	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . As part of the 21st Century Community Learning Centers Program partnership with Hāna School, KOI hosted 24 students from grades 1-6 for Makai Day experiential learning field trip to shoreline area (Koukouai), including coloring activity sheets and taking CBSFA handouts home to their families. (24 individuals engaged)
November 13, 2018	<b>Outreach to DLNR</b> – <i>Kīpahulu CBSFA Steering Committee Meeting</i> . Discussed proposed rules and outreach strategies with John, Greg, Glenna Ann, Eunice, Kane, and Pekelo Lind, Scott Crawford (KOI); Sam 'Aina, Linda Clark, Alohalani Smith (Kaupo); Alana Yurkanin (TNC); Russell Sparks and Adam Wong (DAR); Officer Ron Cahill (DOCARE); James Herbaugh (HALE). (3 individuals engaged)
November 17, 2018	<b>Outreach to East Maui Community</b> – <i>Kīpahulu Community Association Meeting</i> . Scott Crawford provided background and update on the CBSFA proposal, and requested a letter of support from the KCA, which was approved unanimously by the general membership. (30 individuals engaged)
December 27, 2018	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . As part of the 21st Century Community Learning Centers Program partnership with Hāna School, KOI hosted 21 students from grades 1-8 for a learning field trip (Kalena), including fish dissection and fish prints. (21 individuals engaged)
2019	
January 4, 2019	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . As part of the 21st Century Community Learning Centers Program partnership with Hāna School, KOI hosted 20 students from grades 1-8 for a field trip (Koukouai) to learn about streams & mauka-makai connections. (20 individuals engaged)
February 8, 2019	<b>Outreach to Public</b> – <i>World Whale Film Festival</i> . Pekelo Lind, Kamalei Pico and Scott Crawford manned educational table with information about CBSFA proposal at Iao Theatre; Scott introduced the film "The Hoa'āina Of Hā'ena" and shared about Kīpahulu's CBSFA efforts. (415 individuals engaged)
March 8-10, 2019	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Gathering</i> . Kane Lind, Pekelo Lind, Scott Crawford gave an update on CBSFA application status at Ka Honua Momona, Moloka'i.
March 15, 2019	<b>Outreach to DLNR</b> – <i>Kīpahulu CBSFA Steering Committee Meeting</i> . John Lind, Pekelo Lind, Scott Crawford met with Alana Yurkanin and Luna Kekoa (DAR) (via video conference) to review proposed rules. (1 individual engaged)
March 20, 2019	<b>Outreach to Students</b> – <i>Kīpahulu Makai Day</i> . As part of the 21st Century Community Learning Centers Program partnership with Hāna School, KOI hosted 25 students from grades 1-8 for a field trip ('Ōheo and HALE), including paipai net fishing and fish dissection. (25 individual engaged)
March 30, 2019	<b>Outreach to Kūpuna</b> – <i>Aha Moku o Kaupō Kūpuna Council Meeting.</i> Gave presentation on Kīpahulu's proposed CBSFA and rules package. (15 individual engaged)
April 13-27, 2019	<b>Outreach to Public and Legislators</b> – <i>Hāna Taro Festival</i> . CBSFA educational display board and outreach materials at Kīpahulu booth; Tweetie, Pekelo, Kane Lind and Scott Crawford participated in conversation with Rep. Lynn DeCoite re Kīpahulu CBSFA efforts. (51 individual engaged – 50 public, 1 legislator)

April 29, 2019	Outreach to DLNR – Kīpahulu CBSFA Steering Committee Meeting. Discussion of rules package proposal with Russell Sparks, Adam Wong and Luna Kekoa (DAR); Officer John Yamamoto (DOCARE); Emily Fielding and Alana Yurkanin (TNC); Sam Akoi IV, Moses Bergau and Alohalani Smith (Aha Moku); Greg Lind Sr., Eunice Lind, Tweetie Lind, Kane Lind, Pekelo Lind, Keahi Lind, Scott Crawford (KOI); Kevin Chang and Wally Ito (KUA). (3 individual engaged)
April 29, 2019	<b>Outreach to Public</b> – <i>Creation of CBSFA Kiosk</i> . A wooden outreach and comment board was created to live at the fruit stand at Kalena Kitchen in Kīpahulu to gather feedback continually on the CBSFA. (approx. 100 individuals engaged)
September 21, 2019	Outreach to East Maui Community – <i>Kīpahulu Community CBSFA Meeting</i> . Gathered community's CBSFA comments before submitting to DLNR with Tweetie, John, Greg, Eunice, Kāne, Pekelo Lind, Scott Crawford, Laura Campell (KOI); Ty, Kaimana, & Meleana Kurokawa, Bruce Lind, Kepa Lind, Federico Nunez, Lusha and Thomas Cilltti, Dege O'Connell, Roger Wolf Hodnick, Pualani Brown (Kīpahulu Residents); Emily Fielding, Alana Yurkanin (TNC). (13 individual engaged).
October 30, 2019	<u>Kīpahulu Moku CBSFA Proposal and Management Plan and Administrative Record submitted to</u> the Department of Land of Natural Resources.
December 2019	<b>Publications &amp; Media</b> – <i>HānaSide News article</i> . Update on Kīpahulu Moku CBSFA application published in HānaSide News winter edition. (readership of 5,000 individuals already accounted for)
December 9, 2019	<b>Outreach to DLNR</b> – <i>DAR Site Visit</i> . Brian Neilson, Russell Sparks, and Edward Luna Kekoa site visit to Kīpahulu, including stops at Lelekea, Alelele, Moku Ahole lookout, Hāleakala National Park baseyard overlooking Kukui Bay, and Hāleakala National Park campground and 'opihi rest area. (1 individual engaged).
December 14, 2019	<b>Outreach to East Maui Community</b> – <i>Kīpahulu Community Association Meeting</i> . Shared KOI's CBSFA update with Kīpahulu residents. (20 individuals engaged)
2020	
Jan Dec. 2020	<b>Outreach to Public (Fishers)</b> – <i>Kīpahulu Moku CBSFA flyer in fishing stores</i> . The Kīpahulu 'Ohana updated their CBSFA outreach flyer in January, and with the help of Adam Wong from DAR, distributed and restocked it over the year at fishing stores in central Maui. (80 individuals engaged)
January 16, 2020	<b>Outreach to Legislators</b> – <i>Opening Day</i> . With KUA delegation of community representatives, visited legislators and staff to educate them on community-based resource management, distributed Kīpahulu Moku CBSFA outreach material. (7 individuals engaged)
January 21, 2020	<b>Outreach to Public</b> – <i>Site visit to 'opihi rest area with Chef Troy Guard</i> . Planning to open a restaurant called 'Opihi in Wailea in November and wants to share educational information with his customers about 'opihi and provide regular charitable donations to support the Kīpahulu 'Ohana's Mālama I Ke projects. (2 individuals engaged)
March 10, 2020	<b>Outreach to DLNR</b> – <i>Community-Based Monitoring Hui</i> . Shared Kīpahulu's perspective on 'opihi rest areas and surveys. (21 individuals engaged)
July 8, 2020	<b>Outreach to DLNR</b> – <i>Check-in Call</i> . With Luna Kekoa, Russell Sparks, Adam Wong, and Brian Neilson of DAR to update the tentative timeline for the Chapter 91 process.
August 14, 2020	Outreach to Public – Lei Ānuenue, Episode 63: Lawai'a Pono: A Movement for Fishing Hawaiian. Virtual presentation with E Alu Pu communities in Lei Ānuenue program shared on Vimeo: <u>https://vimeo.com/461716024</u> . (142 individuals engaged)
August 28, 2020	<b>Publications &amp; Media</b> – <i>Maui News Letter to the Editor</i> . Letter of support for the Mo'omomi CBSFA and an explanation why Kīpahulu Moku also seeks to designate a CBSFA. (readership of

	20,000 individuals already accounted for) <u>https://www.mauinews.com/opinion/letters-to-the-editor/2020/08/kipahulu-ohana-supports-</u> <u>cbsfa-for-moomomi/</u>
November 30, 2020	<b>Outreach to DLNR</b> – <i>Check-in Call</i> . With Luna Kekoa, Russell Sparks, Adam Wong, and Brian Neilson of DAR to discuss outreach progress with target audiences and update the tentative timeline for the Chapter 91 process.
December 16, 2020	<b>Outreach to Public (Fishers)</b> – <i>Talk Story with DAR and Fishers</i> . Organized by Adam Wong from DAR, members of the Kīpahulu 'Ohana joined a talk story with two ulua fishers from central Maui, Junior Carvalho and Kurtis Kee Chong, and members of DAR to discuss the proposed CBSFA rules. (2 individuals engaged)
2021	
January 2021	Publications & Media – HānaSide News article. (readership of 5,000 individuals already accounted for)
January 2021	<b>Outreach to Public (Fishers)</b> – <i>Outreach flyers distributed to fishers</i> . With help of DAR's Adam Wong and local fishers Junior Carvalho and Kurtis Kee Chong, 40 outreach flyers were distributed to other Maui fishers with information about the proposed CBSFA. (40 individuals engaged)
January 26, 2021	<b>Outreach to East Maui Community</b> – <i>East Maui CBSFA Zoom Meeting.</i> The Maui Nui Makai Network hosted Kīpahulu 'Ohana for a virtual CBSFA presentation with the goal of reaching east Maui community members with specific information about the rules and boundaries proposed and to get a sense of community support. During the presentation, several polls were conducted to engage with the audience, and we learned that the majority of participants support this CBSFA, better understand this CBSFA after the presentation, and would be willing to support the CBSFA, especially via letters of support. (43 individuals engaged)
February 2021	<b>Publications &amp; Media</b> – <i>Island Environment 360 Interview.</i> During an interview with Darla Palmer- Ellingson, Scott Crawford included some discussion of the CBSFA and invited listeners to check out Kīpahulu 'Ohana's website for the proposed rules and management plan.
February 22, 2021	<b>Outreach to DLNR</b> – <i>Check-in Call</i> . With Luna Kekoa, Russell Sparks, Adam Wong, and Brian Neilson of DAR to discuss outreach progress with target audiences and update the tentative timeline for the Chapter 91 process.
March 13, 2021	Publications & Media – Maui-wide CBSFA Zoom Meeting announced in Maui News. (readership of 20,000 individuals already accounted for) https://www.mauinews.com/news/community-news/2021/03/ahead-of-the-class-202/
March 16, 2021	<b>Outreach to Public</b> – <i>Maui-wide CBSFA Zoom Meeting</i> . The Maui Nui Makai Network hosted Kīpahulu 'Ohana for a virtual CBSFA presentation with the goal of reaching a Maui-wide audience with specific information about the rules and boundaries proposed and to get a sense of community support. During the presentation, several polls were conducted to engage with the audience, and we learned that the majority of participants better understand this CBSFA after the presentation. (24 individuals engaged)
March 18, 2021	Publications & Media – Maui News article about CBSFA Zoom Meeting. (readership of 20,000 individuals already accounted for) <u>https://www.mauinews.com/news/local-news/2021/03/nonprofit-seeks-protected-fishing-area-for-kipahulu/</u>
March 19, 2021	Publications & Media – West Hawaii Today article about CBSFA. https://www.westhawaiitoday.com/2021/03/19/hawaii-news/maui-resident-group-aims-to-set- up-subsistence-fishing-area/

March 19, 2021	Publications & Media – Associated Press News article about CBSFA. https://apnews.com/article/wailuku-seaweed-hawaii-ea12c6623d455348e18fb5b06df89944
March 19, 2021	Publications & Media – U.S. News article about CBSFA. https://www.usnews.com/news/best-states/hawaii/articles/2021-03-19/maui-resident-group- aims-to-set-up-subsistence-fishing-area
March 19, 2021	Publications & Media – S.F. Gate article about CBSFA. https://www.sfgate.com/news/article/Maui-resident-group-aims-to-set-up-subsistence- <u>16039258.php</u>
March 20, 2021	<b>Outreach to Public</b> – <i>Maui-wide CBSFA Zoom Meeting</i> . The Maui Nui Makai Network hosted Kīpahulu 'Ohana for a virtual CBSFA presentation with the goal of reaching a Maui-wide audience with specific information about the rules and boundaries proposed and to get a sense of community support. During the presentation, several polls were conducted to engage with the audience, and we learned that most participants better understand this CBSFA after the presentation and support the designation of this CBSFA. (19 individuals engaged)
March 21, 2021	Publications & Media – Hawai'i Tribune Herald article about CBSFA. https://www.hawaiitribune-herald.com/2021/03/21/hawaii-news/state-briefs-for-march-21-5/
March 24, 2021	Publications & Media – Star Advertiser article about CBSFA. https://www.staradvertiser.com/2021/03/24/hawaii-news/maui-group-aims-to-set-up- subsistence-fishing-area/
April 21, 2021	<b>Publications &amp; Media</b> – <i>Kīpahulu 'Ohana Virtual Huaka'i video</i> . Filmed and edited by Hāna High School Students and published by Maui Huliau Foundation, featuring introduction to CBSFA proposal. Promoted via social media and posted on website. (557 individuals reached) <u>https://www.youtube.com/watch?v=tG5CmgWL9Yg</u>
April 28, 2021	<b>Outreach to East Maui Community</b> – <i>'Opihi survey with Ma Ka Hana Ka 'Ike crew</i> . Approximately 20 staff members assisted with survey of Kīpahulu 'opihi rest area and received background information on CBSFA. (20 individuals engaged)
May 17, 2021	<b>Outreach to East Maui Community (NPS)</b> – <i>KOI Admin Team Meeting.</i> Mike Minn, John Lind, Tweetie Lind, and Scott Crawford met with Haleakalā National Park Superintendent Natalie Gates and Kīpahulu District Manager James Herbaugh to sign renewal of 5-year Cooperative Agreement; provided update on CBSFA designation process and 'opihi rest area.
May 17-18, 2021	<b>Outreach to Students</b> – <i>Hāna High School Presentation and 'Opihi Survey.</i> As part of KOI's NOAA BWET "Maui Hikina Opio Stewardship Development Project," Uncle John Lind, Auntie Tweetie Lind, and Scott Crawford gave a presentation in the Hāna High School 10th grade science class to approximately 20 students and 3 teachers/staff on May 17, including CBSFA background and overview. On May 18, 17 students and 2 teachers assisted with survey of Kīpahulu 'opihi rest area. (23 individuals engaged)
May 19, 2021	<b>Outreach to Students</b> – <i>Careers in Conservation</i> . Scott Crawford participated in Maui Huliau Alumni Council: Careers in Conservation online event to share about the projects of the Kīpahulu 'Ohana, including CBSFA. (20 individuals engaged)
June 15, 2021	<b>Outreach to Students</b> – <i>Upward Bound Field Trip</i> . Visited Kapahu Living Farm and the 'opihi rest area and proposed Kukui Bay sanctuary area to learn more about KOI's Mālama I Ke Kai programs; information was shared about the CBSFA proposal with 5 students and 4 staff. (9 individuals engaged)
June 16, 2021	<b>Outreach to Public (Miloli'i)</b> – <i>CBSFA Exchage</i> . Members of the Miloli'i CBSFA effort attended KOI's regularly scheduled meeting to exchange meaningful insight on the Chapter 91 process and share lessons learned with each other. (4 individuals engaged)

- June 30, 2021 Outreach to Public Nature + Culture Connection: Indigenous Solutions to Climate Change. A virtual event sponsored by Historic Hawai'i Foundation. KOI presented on the CBSFA. (206 individuals engaged)
- August 1, 2021Publications & Media Ka Wai Ola O OHA Newspaper Article. "Holding on to a Self-Sufficient<br/>Lifestyle" focusing on CBSFA process. (75,500 individuals engaged 70,000 via KWO circulation,<br/>5,500 individuals engaged through social media)
- August 11, 2021Outreach to Public Office of Hawaiian Affairs Maui Community Meeting. Virtual presentation by<br/>Scott Crawford included CBSFA information.
- August 19, 2021Outreach to Public Maui Nui Makai Network Speaker Series. Pekelo Lind presentation included<br/>information about CBSFA. (38 individuals engaged)

## August 19, 2021Outreach to Public – Maui Nui Makai Network Maui Hikina Huliāmahi Presentation. Scott<br/>Crawford presentation included information about CBSFA. (29 individuals engaged)

September 15, 2021 **Outreach to Public (Fishers) & Legislators** – *Maui-wide CBSFA Zoom Meeting*. The Maui Nui Makai Network hosted Kīpahulu 'Ohana for a virtual CBSFA presentation with the goal of reaching a Maui-wide audience of fishers with specific information about the rules and boundaries proposed and to get a sense of community support. During the presentation, several polls were conducted to engage with the audience, and we learned that most participants better understand this CBSFA after the presentation and support the designation of this CBSFA. Both Rep. Linda Clark and Keani Rawlins-Fernandez expressed their support during this meeting. (62 individuals engaged – 60 public, 2 legislators)

- October 26, 2021 **Outreach to Public** *Maui Nui Makai Network Maui Hikina Huliāmahi Meeting*. Kalaola/Eharis 'ohana planning meeting, Scott Crawford presentation about Kīpahulu Moku CBSFA. (16 individuals engaged)
- November 9, 2021 **Outreach to Public (Fishers)** *Talk Story with DAR and Fishers*. Meeting with Maui fisher Darrell Tanaka and Kīpahulu fishermen, sharing feedback and understanding each other's points of view. (1 individual engaged)
- November 13, 2021 **Outreach to Public** *Maui Nui Makai Network Maui Hikina Huliāmahi Meeting*. Na Moku 'Aupuni O Ko'olau Hui planning meeting, Scott Crawford presentation about Kīpahulu Moku CBSFA. (20 individuals engaged)
- December 22, 2021 **Outreach to DLNR** *'Opihi Presentation.* Hosted by Dr. Chris Bird of Texas A&M University Corpus Christi to share results of 'opihi genetic studies, attended by Luna Kekoa, Russell Sparks, Adam Wong, David Sakota, and Keali'i Sagum of DAR. (1 individual engaged)

#### 2022

January 6, 2022 Publications & Media – Maui CARES: Kīpahulu 'Ohana. With unemployment at record levels due to COVID-19, a new program put more than 70 Maui and Moloka'i residents to work in November of 2020, providing KOI and six other local conservation nonprofits with needed labor to benefit coral reefs, cultural resources, and the environment. This project was made possible through the County of Maui Office of Economic Development's Maui CARES program, which was funded by the Federal CARES Act. The video is posted on YouTube through the Maui Nui Marine Resource Council and is also available for viewing through Hawaiian Airlines In-Flight Entertainment. (3,426 individuals reached - 150 YouTube views, 3,276 Hawaiian Airlines In-Flight Entertainment views) <a href="https://www.youtube.com/watch?v=oK2r2MuSjkM">https://www.youtube.com/watch?v=oK2r2MuSjkM</a>

February 22, 2022Outreach to Public – Office of Hawaiian Affairs, Beneficiary Advocacy and Empowerment<br/>Committee. Heard testimony on and passed a resolution supporting Kīpahulu Moku CBSFA. (27<br/>individuals engaged)

Feb 27 - Mar 26, 2022	Publications & Media – Ho'omahele Video Series Episode of Outside Hawai'i. Aired on OC16, including a segment on Kīpahulu (at 9:06) with content re CBSFA. The episode aired multiple times from February 27 to March 26. (50,000 individuals engaged - the average number of households watching the Mālama Learning Center's TV show each month) https://vimeo.com/682926967
April 13, 2022	<b>Outreach to DLNR, Legislators, &amp; East Maui Community</b> – <i>Kīpahulu Moku Site Visit</i> . Attended by DAR staff, DOCARE officer, BLNR Board Member Pua Canto, Senator Lynn DeCoite, Mayor Michael Victorino, Haleakalā National Park Superintendent Natalie Gates, representatives from Hā'ena, Mo'omomi, Miloli'i, Ko'olau, Nahiku, Hāna, and Kaupō communities, and partner organizations KUA, TNC, and Maui Nui Makai Network. (60 individuals engaged – 10 legislators, 50 East Maui Community members)
April 29, 2022	<b>Outreach to Public</b> – <i>Hāna Farmers Market</i> . Ka'uiki Lind manned an outreach table with CBSFA outreach materials. (45 individuals engaged)
May 19, 2022	Outreach to Public – Maui Nui Makai Network Speaker Series. Kīpahulu 'Ohana's Scott Crawford joined Hank Eharis, Emily Fielding and scientist, Dr. Chris Bird in the presentation "We Love 'Opihi" where the Kīpahulu Moku CBSFA and 'opihi rest area were highlighted. (34 individuals engaged - 22 in attendance, 12 page views) https://protect-us.mimecast.com/s/UuoZCqxpojhgnjQVFZqwO1?domain=youtube.com
May 21, 2022	<b>Outreach to Public</b> – <i>Hālau Ke'ala Kahinano O Puna at Kapahu Living Farm</i> . Shared overview of Mālama I Ke Kai programs and CBSFA proposal. (25 individuals engaged)
June 1, 2022	<b>Outreach to Public</b> – <i>Maui Nui Marine Resource Council Know Your Ocean Speaker Series</i> . Scott Crawford joined members of the Maui Nui Makai Network in their presentation "Weaving the Net - How the Maui Nui Makai Network is connecting communities for a healthy land and sea of tomorrow" where the Kīpahulu CBSFA was mentioned. (162 individuals engaged - 35 Zoom attendees, 5 Facebook Live attendees, 122 Facebook views)
June 2, 2022	Publications & Media – Maui Now article on Kīpahulu CBSFA. "Public scoping on proposed Kīpahulu Community-Based Subsistence Fishing Area". (1,144 individuals engaged) <u>https://mauinow.com/2022/06/02/public-scoping-on-proposed-kipahulu-community-based-subsistence-fishing-area/</u>
June 7, 2022	Publications & Media – Public scoping meeting announcement on HanaMaui.com. https://hanamaui.com/event/kipahulu-moku-cbsfa-scoping-meeting/
June 7, 2022	Outreach to Public – DAR-led Public Scoping Meeting. (102 individuals engaged)
June 7, 2022	Publications & Media – Hawai'i Public Radio The Conversation interview. "Community-Based Subsistence Fishing Area proposed along Maui coastline". (108 individuals engaged - 68 downloads, 40 page views; this does not include number of people who listened to the interview when aired by HPR) <u>https://www.hawaiipublicradio.org/the-conversation/2022-06-07/community-based-subsistence-fishing-area-proposed-along-maui-coastline</u>
June 8, 2022	Publications & Media – The ICCA Consortium article on Kīpahulu CBSFA. "Hawai'i celebrates progress on Community-Based Subsistence Fishing Areas". (105 individuals engaged) https://www.iccaconsortium.org/index.php/2022/06/08/hawaii-progress-community-based-subsistence-fishing-areas/
June 8, 2022	Publications & Media – The ICCA Consortium article on Kīpahulu CBSFA. "One can think of life after there are fish in the canoe." https://www.iccaconsortium.org/index.php/2022/06/08/hawaii-fisheries-community-managed- areas/

June 10, 2022	Publications & Media – Maui News article on Kīpahulu CBSFA. "Kīpahulu nonprofit moves closer to fishing management vision". (readership of 20,000 individuals already accounted for) https://www.mauinews.com/news/local-news/2022/06/kipahulu-nonprofit-moves-closer-to-fishing-management-vision
June 13, 2022	Publications & Media – Maui Now article on Kīpahulu CBSFA. "New community-based subsistence fishing areas in Hawai'i to ensure future abundance". (1,061 individuals engaged) <u>https://mauinow.com/2022/06/13/new-community-based-subsistence-fishing-areas-in-hawai%ca%bbi-to-ensure-future-abundance/</u>
June 14, 2022	Publications & Media – Shane Perry Marketing Article. "New community-based subsistence fishing areas in Hawai'i to ensure future abundance." <u>https://news.shaneperrymarketing.com/new-community-based-subsistence-fishing-areas-in- hawai%ca%bbi-to-ensure-future-abundance/</u>
June 23, 2022	Publications & Media – IUCN article on Kīpahulu CBSFA. "Progress on Community-Based Subsistence Fishing Areas (CBSFA)". <u>https://test-iucn-web2022.pantheonsite.io/story/202206/progress-community-based-subsistence-fishing-areas-cbsfa</u>
July - Sept 2022	<b>Publications &amp; Media</b> – <i>Pōʿai Pili: Kaupō Community Newsletter</i> . Kīpahulu 'Ohana contributed an article "Kīpahulu Moku CBSFA: Protecting our Ocean Resources." (2,601 individuals engaged - 209 views, 1,892 impressions, 500 East Maui readership)
July 1, 2022	Outreach to Public – Hawai'i State Public Library System Presentation. "Kīpahulu 'Ohana 'Opihi Rest Area: Making 'Opihi Momona Again". (39 individuals engaged - 13 in attendance, 26 page views) https://youtu.be/pK4sZas79CY
July 25, 2022	<b>Outreach to Students</b> – University of Colorado Boulder interview. Scott did a phone interview with Michelle Benedum re CBSFA process for her PhD dissertation. (1 individual engaged)
August 13, 2022	<b>Outreach to Public</b> – <i>Hāna Limu Festival</i> . Kīpahulu 'Ohana shared outreach materials and interactive activities with participants. (500 individuals engaged)
August 18, 2022	<b>Outreach to Students</b> – <i>Hāna High School Presentation.</i> Pekelo and Scott did a 45-minute presentation/Q&A in the 10th grade science class as an orientation for our NOAA BWET project for this year. (25 individuals engaged)
August 20, 2022	<b>Outreach to Public</b> – <i>Hawaiʻi Farmers Union United, Hāna Chapter</i> . Hosted annual meeting at Kapahu Living Farm, focusing on mauka programs and highlighting our makai work. (50 individuals engaged)
September 2, 2022	<b>Outreach to Legislators</b> – <i>Maui County Council Meeting.</i> Resolution Supporting A Community- Based Subsistence Fishing Area Designation For Kīpahulu Moku, approved 9-0. (9 individuals engaged)
September 2, 2022	<b>Outreach to Legislators</b> – <i>Maui County Council Meeting</i> . Resolution Supporting A Community- Based Subsistence Fishing Area Designation For Kīpahulu Moku, approved 9-0. (9 individuals engaged)
September 18, 2022	<u>Kīpahulu Moku CBSFA Proposal and Management Plan and Administrative Record re-submitted</u> to the Department of Land of Natural Resources.
Sept. 30-Oct. 2, 2022	<b>Outreach to Public</b> – <i>Maui Nui Makai Network Semi-Annual Meeting</i> . Participated in and presented at the semi-annual MNMN gathering in Ulupalakua.
October 8, 2022	<b>Outreach to East Maui Community</b> – <i>Kīpahulu Community Association Meeting</i> . CBSFA update given to general membership. (27 individuals engaged)

October 2022	<b>Publications &amp; Media</b> – <i>HānaSide News article</i> . Update on Kīpahulu Moku CBSFA application published in HānaSide News fall edition. (readership of 5,000 individuals already accounted for)
October 26, 2022	Publications & Media – Maui Now article. Honoring John and Tweetie Lind with The Nature Conservancy's Kāko'o 'Āina Award. (average article readership of 1,000 individuals already accounted for) <u>https://mauinow.com/2022/10/26/john-and-tweetie-lind-of-kipahulu-maui-honored-with-the- nature-conservancys-kakoo-aina-award/</u>
November 3, 2022	<b>Publications &amp; Media</b> – <i>KAOI Radio interview.</i> Broadcasted on FM 96.7, Kipahulu 'Ohana and Mayor Victorino spoke about the CBSFA in context of the recent community acquisition of 'Ōpelu Point in Kīpahulu.
November 3, 2022	Publications & Media – Maui Now article. 9.5-acres at 'Ōpelu Point in Kīpahulu, Maui is now protected in perpetuity. (average article readership of 1,000 individuals already accounted for) <a href="https://mauinow.com/2022/11/03/9-5-acres-at-%CA%BBopelu-point-in-kipahulu-maui-is-now-protected-in-perpetuity/">https://mauinow.com/2022/11/03/9-5-acres-at-%CA%BBopelu-point-in-kipahulu-maui-is-now-protected-in-perpetuity/</a>
November 4, 2022	Publications & Media – Maui News article. 'Ōpelu Point protected as conservation land. (readership of 20,000 individuals already accounted for) <u>https://www.mauinews.com/news/local-news/2022/11/opelu-point-protected-as-conservation-land/</u>
November 4, 2022	Publications & Media – Pacific Business News article. Nonprofit acquires 9.5-acre 'Ōpelu Point on Maui. https://www.bizjournals.com/pacific/news/2022/11/04/nonprofit-acquires-9-5-acre-opelu-point- on-maui.html
November 12, 2022	<b>Outreach to East Maui Community</b> – <i>Kaupō Makai Management Planning Meeting</i> . Part of the Network's Maui Hikina Huliāmahi initiative, presentation given on CBSFA. (15 individuals engaged)
December 31, 2022	<b>Publications &amp; Media</b> – <i>Social Media Analytics</i> . Between December 1, 2021, and December 31, 2022, KOI posted 78 posts on both Instagram and Facebook. Average reach per post was 494 people for Instagram and 1,630 people for Facebook, totaling 38,542 impressions for Instagram and 127,157 impressions for Facebook. (2,124 individuals engaged - average combined reach for Instagram and Facebook accounts in this time period)
2023	
January 2023	<b>Publications &amp; Media</b> – <i>Hawai'i Business Magazine article, January/February issue</i> . Protecting Maui's Land and Water by Noelle Fujii-Oride celebrates John and Tweetie Lind and recognizes their reception of the Kāko'o 'Āina Award from The Nature Conservancy in October 2022. (47,218 individuals engaged - based on their monthly gross reach of print and digital editions)
January 23, 2023	<u>Kīpahulu Moku CBSFA Proposal and Management Plan and Administrative Record re-submitted</u> <u>to the Department of Land of Natural Resources.</u>

#### Recognition of KOI's Management Efforts

The following is a list of awards and video recognition received by members of KOI in appreciation of KOI's efforts to return resources to abundance mauka to makai through the perpetuity of Hawaiian culture:

<u>Keep It Hawai'i Kahili Award (2005)</u>: KOI was recognized in 2005 by the Hawai'i Tourism Authority's "Keep It Hawai'i" Kahili Awards for "authentic portrayal of the Hawaiian culture" (community organization awardee for the County of Maui).

<u>Keep It Hawai'i Individual Award (2008)</u>: John Lind, Project Director and traditional konohiki, was recognized in 2008 by the Hawai'i Tourism Authority's "Keep It Hawai'i" individual award in recognition of his commitment to perpetuate the Hawaiian culture.

<u>Kāko'o 'Āina Award (2014)</u>: The Nature Conservancy honored KOI as a member of the Maui Nui Makai Network for exemplifying how communities can return reefs and fisheries to abundance.

<u>The Tiny Malaikini Mea Kokua Award (2019)</u>: John and Tweetie Lind were recognized during the 2019 Hāna Aloha Festival with the Tiny Malaikini Mea Kokua Award for

"extraordinary leadership and service to the Hāna community." This award is the east Maui Community's most highly regarded public honor, presented annually to the person who has been judged to have given most selflessly of themselves for the betterment of the community during the past year. The award includes a koa framed presentation, a cash honorarium, and the addition of the winner's name to a perpetual trophy which is on permanent display at the Hāna Cultural Center.

<u>Kāko'o 'Āina Award (2022)</u>: The Nature Conservancy honored Tweetie and the late John Lind in recognition of their lifelong commitment, enduring partnership, and community leadership to protect Hawai'i's lands and waters.



#### Films Documenting Traditional Fishing and Mālama Practices in Kīpahulu

<u>NFL Presents: What a Ride (2016)</u>: A short film featuring Isaiah Lind and Shaka Kalalau's subsistence lifestyle and use of traditional practices along with their involvement in football in Hāna.

<u>Maui Huliau Foundation Kīpahulu 'Ohana Virtua Huaka'i (2021)</u>: Filmed and edited by Hāna High School Students, featuring an introduction to the CBSFA proposal. <u>https://www.youtube.com/watch?v=tG5CmgWL9Yg</u>

<u>Maui CARES: Kīpahulu 'Ohana</u> (2022): With unemployment at record levels due to COVID-19, a new program put more than 70 Maui and Moloka'i residents to work in November of 2020, providing KOI and six other local conservation nonprofits with needed labor to benefit coral reefs, cultural resources, and the environment. This project was made possible through the County of Maui Office of Economic Development's Maui CARES program, which was funded by the Federal CARES Act. <u>https://www.youtube.com/watch?v=oK2r2MuSjkM</u>

<u>Ho'omahele Video Series Episode of Outside Hawai'i</u> (2022): Aired on OC16, including a segment on Kīpahulu (at 9:06) with content regarding the CBSFA. <u>https://vimeo.com/682926967</u>



ADMINISTRATIVE RECORD

### 4. KOI's Natural and Cultural Resource Stewardship Experience

# KOI's Natural and Cultural Resource Stewardship Experience

KOI represents Kīpahulu residents whose subsistence lifestyle depends on efforts to mālama natural and cultural resources for present and future generations. KOI has been actively caring for resources on behalf of the people of Kīpahulu moku and has provided stewardship of the natural and public trust resources since 1995. Below is a brief summary of the wide array of natural and cultural resource stewardship activities that exemplify the depth of experience.

#### Kapahu Living Farm (1995 - present):

Kapahu Living Farm is a traditional Hawaiian taro wetland farm, or lo'i kalo, managed by KOI through a partnership agreement with HALE. Ancient lo'i kalo have been cleared and restored to active production, and other "canoe plants" such as breadfruit, banana, sweet potato, and mountain apple are also grown. Kalo and other products are processed at Kalena Center for distribution to the community. Through hands-on educational programs, KOI hosts schools and community groups from Maui, other Hawaiian Islands, and beyond.

Nine-Acre Orchard, Farm, and Pasture (1995 - present): KOI manages another state parcel referred to as "9acres" which is home to agricultural operations including banana orchard, fruit orchard, field crops, and cattle.



## Kalena Triangle, Kalena Center, and Kīpahulu Kitchen (1996 - present):

Kīpahulu Kitchen is a shared-use commercial kitchen certified by the Hawai'i State Department of Health and built by KOI in collaboration with the KCA. Along with processing products like poi from Kapahu Living Farm, other value-added processors and lunch wagon vendors also rent the facility to meet Department of Health requirements. Kīpahulu Kitchen is part of Kalena Center, an agricultural processing facility and community meeting place. Kalena Center is located on a parcel of land known as the Kalena Triangle which is leased from the State of Hawai'i, and also supports other agriculture operations including a fruit orchard and vegetable gardens, poultry and livestock.



<u>Cable Ridge Native Forest Project (2001 - present)</u>: Cable Ridge is the location of KOI's main native forest protection and recovery efforts. Working in partnership with HALE, US Fish & Wildlife Service, the State of Hawai'i Division of Forestry and Wildlife, Whispering Winds Bamboo, and local family landowners, KOI has installed a three-acre exclosure to protect three endangered plant species, erected almost a mile of feral ungulate control fencing, and planted koa trees.

### KĪPAHULU MOKU CBSFA | 4. KOI's Natural and Cultural Resource Stewardship Experience



'Opihi Rest Area Monitoring Project (2010 - present): Since 2010, KOI has helped develop protocol for Hawai'i's 'Opihi Partnership, and conducted regular intertidal monitoring as a baseline prior to implementing an 'opihi rest area, an area designated as a voluntary notake zone or 'opihi sanctuary. In 2014, KOI established an 'opihi rest area as a section of shoreline adjacent to HALE, from 'Ohe'o stream to Kukui Bay. From 2014-2017 KOI conducted a study in collaboration with HALE, Dr. Chris Bird of UTAMCC, and TNC's Maui Marine Program, to measure the effects of allowing 'opihi populations to recover in this area. The results showed up to a 2-fold increase in the 100m and 1,000m areas down current from the rest areas, indicating a spill-over effect. The net population growth rate in the rest areas (number of 'opihi per meter per year) increased from 2 to 6 times their original measured population. Overall, more larger 'opihi were surveyed in rest areas and more new recruits were observed down current. Through this partnership, KOI continues to conduct regular population surveys to gather data on the impact of management actions. KOI also partners with Nā Mamo O Mū'olea, who manages another 'opihi rest area in east Maui. Members of the community are encouraged to join 'opihi survey days to learn more about this program.

#### Moku signage (2014):

Working in partnership with the KCA, KOI designed moku boundary signs to be placed near the Hāna and Kaupō moku boundaries. The signs were installed on June 7, 2014. The purpose of the signage is to serve as a reminder of the traditional land system, so that travelers on the Hāna Highway know when they are entering a new moku and understand that the traditional people of that moku are still practicing their culture and managing lands and resources. The signs have the following sayings:

KĪPAHULU: Ka 'Aina O Ka Makani Ka'ili Aloha — Land of the Love-Snatching Wind

KAUPŌ: Ka 'Aina O Ka Ua Pe'e PohakuLand of the Rain that Makes One Hide Behind Rocks

HĀNA: Ka 'Aina O Ka Ua Kea — Land of the White Misty Rain





### KOI's Partnership and Network Affiliations

This section details the government partners, network affiliations, nonprofit, non-governmental, and academic institutions that have partnered with KOI towards their resource management efforts.

#### **KOI Government Partners**

Government Partners	Time Period	Collaboration
Haleakalā National Park (HALE)	1995 to present	General Agreement for the operation of Kapahu Living Farm, traditional wetland taro farm, for agricultural and educational programs. Partnership for outreach and education for 'opihi rest area on shoreline adjacent to park, including signage and educational posters, and participation of Park staff in communication regarding voluntary compliance to park users.
Office of Hawaiian Affairs	2004 to present	Funding for Kapahu Living Farm, native forest protection programs, and Kalena Center community commercial certified kitchen and agricultural processing center.
County of Maui, Office of Economic Development	2004 to present	Funding for various projects and programs, improvements and equipment for Kalena Center and Kapahu Living Farm.
Hawaiʻi Tourism Authority	2006 to present	Funding for Kapahu Living Farm and Mālama I Ke Kai programs.
National Oceanic and Atmospheric Administration Coral Reef Conservation Program (NOAA-CRCP)	2010 & 2013	Reef and reef fish surveys conducted in Kīpahulu funded by TNC and NOAA-CRCP.
Administration for Native Americans	2010 to 2013	Funding for Kapahu Living Farm agricultural projects and support infrastructure.
State of Hawaiʻi, Department of Land and Natural Resources, Division of Aquatic Resources	2010 to present	Provides input and guidance for 'opihi rest area and CBSFA application process.
Natural Resources Conservation Service/Hana Soil & Water Conservation District	2012 to present	Assisted development of Conservation Plans for Kapahu Living Farm and "9-Acres" agricultural parcel. Currently in contract for conservation practices implementation at 9-acres.
State of Hawai'i, Department of Land and Natural Resources	2014 to present	Lease GL S-5398 for "Triangle" and "9-Acres" parcels.

### KĪPAHULU MOKU CBSFA | 5. KOI's Partnership and Network Affiliations

National Oceanic and2020 to presentAtmospheric Administration2020 to presentBay Watershed Education &7raining (NOAA-BWET)	Maui Hikina 'Ōpio Stewardship Development Project in partnership with Hāna School
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### **KOI Network Affiliations**

Network Affiliations	Time Period	Collaboration
E Alu Pū	2002 to present	KOI has been participating in E Alu Pū (and its predecessor networks) meetings starting in 2002. In 2014, KOI hosted the annual E Alu Pū gathering in Kīpahulu with over 150 participants. <u>kuahawaii.org/e-alu-pu</u>
Aha Moku	2012 to present	KOI has participated in the Aha Moku council program since its creation in 2012. <u>ahamoku.org</u>
ʻOpihi Partnership	2010 to present	Since 2010 KOI has partnered with Dr. Chris Bird (now at UTAMCC), TNC's Maui Marine Program, and HALE to conduct biological surveys of 'opihi populations along the shoreline adjacent to the park in Kīpahulu. KOI also collaborates with Nā Mamo O Mū'olea, a nonprofit organization that also manages an 'opihi rest area in east Maui as part of the partnership. KOI staff helped develop and continues to contribute to the refinement of the biological monitoring methods and protocols. In late 2014, KOI established a three-year 'opihi rest area, or voluntary no-take zone along this area, from 'Ohe'o stream to Kukui Bay. <u>facebook.com/OpihiPartnership</u>
Hāna Community Endowment Fund (HCEF)	2010 to present	KOI is one of ten community nonprofit organizations in Hāna that together formed the HCEF and raised over \$1 million as an endowment as ongoing support for the member organizations, managed through the Hawai'i Community Foundation. <u>hanaaloha.org</u>
Mālama Kīpahulu Fund	2012 to present	KOI is one of three community nonprofit organizations in Kīpahulu that are beneficiaries of the Mālama Kīpahulu Fund, managed through the Hawai'i Community Foundation.
Maui Nui Makai Network (MNMN)	2013 to present	KOI is a founding member of MNMN, a group representing communities across Maui Nui (Maui, Moloka'i, and Lāna'i) who are embracing their kuleana to care for the ocean in a way that honors cultural and traditional practices of their place and their kūpuna. Supporting members include TNC, the Maui Nui Marine Resource Council, and Kua 'Āina 'Auamo (KUA). KOI participates in MNMN gatherings, trainings, and public outreach events such as Hawai'i Conservation Conference workshops, and signed onto the Mālama Honua Promise to Pae'āina, as part of the Network. KOI was the po'o of the Network for 2018, and hosting two semi-annual gatherings. KOI is currently facilitating Network efforts to support other east Maui communities in developing their capacity and plans for place- based shoreline management. <u>mauinui.net</u>
Limu Hui	2014 to present	KOI has been participating in the Limu Hui, a statewide network, since its inception in 2014. KOI attends annual Hui gatherings, and KOI presents an educational table at the annual Hāna Limu Festival (coordinated by Nā Mamo O Mū'olea). <u>kuahawaii.org/limu-hui</u>

### KĪPAHULU MOKU CBSFA | 5. KOI's Partnership and Network Affiliations

Hawaiʻi Farmers Union United	2016 to present	KOI is a member of the Hāna Chapter of HFUU, participates in the Hāna Farmers Market and other events, and hosted the 2022 Hāna Chapter
		Annual Meeting at Kapahu Living Farm.

### Nonprofit, Non-Governmental, and Academic Institution Affiliations

Affiliations	Time Period	Collaboration
East Maui Taro Festival	1995 to 2019	KOI anchored the agriculture tent for the festival annually, providing kalo, poi, and other products, assisted with cultural demonstrations, and shared outreach information regarding makai programs and the CBSFA application.
Kīpahulu Community Association (KCA)	1996 to present	Assisted in the construction of Kalena Center. Partnered in the Cable Ridge native forest protection and restoration project. Participated in the Mālama I Ke Kai and CBSFA planning processes.
Hāna High & Elementary School	1996 to present	Educational programs including 21st Century Community Learning Centers program, and NOAA B-WET program, hosting field trips mauka and makai.
Nā Mamo O Mū'olea (NMOM)	2004 to present	KOI advocated for the public acquisition of Mū'olea preserve lands and supported the development of the nonprofit organization. KOI and NMOM have collaborated as members of the 'Opihi Partnership and in the management and monitoring of 'opihi rest areas. KOI participates in educational activities at annual Hāna Limu Festival coordinated by NMOM, both as members of the Maui Nui Makai Network.
The Nature Conservancy - Maui Marine Program (TNC)	2010 to present	Facilitated the Conservation Action Plan planning process that resulted in the Mālama I Ke Kai plan. Assisted in the development of the proposed CBSFA proposal, management plan, rules and outreach strategy, and educational outreach materials. Conducted baseline reef and reef fish surveys in 2010, 2013 and 2019.
Dr. Chris Bird, Texas A&M University-Corpus Christi (UTAMCC)	2010 to present	Provides research assistance for 'opihi rest area monitoring and evaluation.
Kupu Hawaii	2021 to present	Host site for a Conservation Leadership Development Program position.



### ADMINISTRATIVE RECORD | 6. 685 East Maui Resident Signatures for the Kipahulu Moku CBSFA

#### 685 East Maui Resident Signatures for the Kīpahulu Moku CBSFA

From September to October 2013, Greg and Eunice Lind visited east Maui residents between Kaupō and Ke'anae, gathering 685 signatures supporting KOI's efforts in Kīpahulu moku. Below is the first page of those signatures (please contact <u>ohana@kipahulu.org</u> to see the remaining 30 pages).

#### Petition



I support the designation of a Community Based Subsistence Fishing Area in the Kīpahulu Moku, from Pua'alu'u to Ka**kapa**. The area includes 4.5 miles of coastline out to 180 feet in depth. The area is 1670 acres. Fishing is allowed but limited by rules to protect fish stocks for current and future generations.

Address Name Phin Signature Hana Wakiy R 96712 Aaca 9671 40138 avo HC138 Hana 96713 Mivasa Box 951, Hana Box 951 Hana P.O Box 135 96713 Has Pio. Bot 16 Nakin P.O. BOX 16 Lame the hund Kechorch P.O. BOX 501 Hana, HI 96713 Russell Kahookele kayla Lina Kipahulu 110/13 Kipahulu Vamos Hann. 98713 Lester Kaiwis PO 20.1-Ver. Olei Xunann pahvio Mont Yamashrk. Mikahala Kenolio mi Wyatt K 1.JAI anal



### Resolutions

The following resolutions were proposed and passed in support of the Kīpahulu Moku CBSFA by respected and influential governing bodies.

Governing Body	Date	Description
Office of Hawaiian Affairs	March 10, 2022	A Resolution of the Office of Hawaiian Affairs: "Regarding Support For Community- Based Subsistence Fishing Area Designations And Rules In Kīpahulu, Maui, Hawaiʻi" (4 pages)
Maui County Council	September 2, 2022	Resolution No. 22-205: Resolution Supporting A Community- Based Subsistence Fishing Area Designation For Kīpahulu Moku (5 pages) (awaiting final signed copy)

### "REGARDING SUPPORT FOR COMMUNITY-BASED SUBSISTENCE FISHING AREA DESIGNATIONS AND RULES IN KĪPAHULU, MAUI, HAWAI'I"

WHEREAS, global environmental governance institutions at the highest levels as a result of international advocacy by Indigenous people and local communities—in some cases led by grassroots Native Hawaiian communities—have recognized the significance and importance of Indigenous tribalnational or community-based natural resource management<sup>1</sup>; and

WHEREAS, growing science and social science research has begun to document the role of traditional ecological knowledge and its efficacy in an age of climate change and massive resource concerns<sup>2</sup>; and

WHEREAS, less than 200 years ago, the Hawaiian Islands and their resources sustained a thriving and substantial Native Hawaiian population close to contemporary population numbers through a resource governance system founded on observational, place-based, and experiential knowledge and tried and true centuries-long practices; and

WHEREAS, recent research affirms that Native Hawaiians sustainably caught 50% more fish than modern Hawai'i fishers catch and harvested three times the maximum sustainable yield for island nations worldwide today (12 metric tons of fish per square kilometer of reef annually from the years 1400 to 1800);<sup>3</sup> and

WHEREAS, Native Hawaiian traditional and customary practices for sustaining fisheries were based on a time-tested intimate knowledge of ahupua'a resources and were adaptive and included kapu or lāhui on certain species (flora and fauna), temporary fishery closures, harvest limits on certain species, size, sex characteristics, natural celestial cycles, and spawning times; and

WHEREAS, the gear our kūpuna used were less prone to abuse, less wasteful and less detrimental to the environment than gear used today; and

WHEREAS, Native Hawaiian traditional and customary practices and systems include aspects of cogovernance, community-based management and/or co-management in which the community of resource users itself takes part and is active and accountable in shaping the relationship with and management of their land and ocean resources; and

WHEREAS, Hawai'i's nearshore fisheries play a crucial role in household subsistence, the statewide socio-economic fabric and the quest for food security; and

WHEREAS, beyond the provision of food, subsistence fishing contributes to largely unquantifiable and extremely valuable benefits, including: cultural and environmental ecosystem services; upholding long-held community practices, values and virtues such as generosity, sharing, industriousness, and selfreliance skills and practices; healthy social roles and networks; communal reciprocity; and community and societal insurance, especially for Hawai'i's rural communities that serve as kīpuka,<sup>4</sup> or oases of our most cherished cultural legacies;<sup>5</sup> and

WHEREAS, current nearshore ocean resources and systems have been compromised by overfishing, abuse of fishing technologies, insufficient enforcement capacity or legal infrastructure, coastal development, local and global pollution, conflicting ocean uses and purposes, invasive species, continent-focused and/or over-centralized resource management paradigms and climate change; and

WHEREAS, current governmental regulatory agencies are often under-funded and under-resourced in a time when rapid human population expansion and exploitation of ocean resources are at its peak; and

- Continued -

<sup>&</sup>lt;sup>3</sup> IUCN-IPO World Summit and Indigenous Agenda https://www.lucn.org/theme/governance-and-rights/ourwork/indigenous-peoples/worldsummit-and-indigenous-agenda IUCN 2016 WCC-2016-Res-065-EN Community Based Natural Resource Management in the State of Hawai'i, https://portals.iucn.org/library/inode/47953

<sup>&</sup>lt;sup>3</sup> Winter, K. Chang, K., Lincoln, N. et al., Biocultural Restoration in Hawai'i (2019), https://www.mdpi.com/journal/sustainability/special\_issues/ Biocultural\_Restoration, Dawson, N., Collsaet, B., Sterling, E. et. al., The role of Indigenous peoples and local communities in effective and equitable conservation (2021), https://www.ecologyandsociety.org/vol26/iss3/art19/

<sup>&</sup>lt;sup>3</sup> McClenacban, Loren and Kittinger, John N., Multicentury trends and the sustainability of coral reef fisheries in Hawai'i and Florida. Fish and Fisheries, Vol 14. Pg. II, Issue 3. March 20, 2012.

<sup>&</sup>lt;sup>4</sup> McGregor, Davianna Põmaika'i, Nä Kua'äina, University of Hawai'i Press, 2007.

<sup>&</sup>lt;sup>1</sup> Blaich-Vaughn, Mehana & Peter Vitousek, Mahele: Sustaining Communities through Small-Scale Inshore Fishery Catch and Sharing Networks, Pacific Science 67(3):329-344, 2013.

WHEREAS, top-down, centralized decision-making processes—though necessary in some contexts—are often insufficient, ineffective, and too simplistic as a one-size-fits-all management approach for complex and unique place-based ecosystems that would greatly benefit from local and Indigenous knowledge and traditional resource management; and

**WHEREAS,** current studies estimate that the people of Hawai'i are now dependent on outside resources for 85-90% of our food supplies with only weeks, if not days, of food supply on the island should food imports cease; and

WHEREAS, Hawai'i's communities are concerned and possess much capacity, many resources, and knowledgeable individuals, and are eager to enlist these assets in collaboration with appropriate government agencies in the effort to malama our resources; and

WHEREAS, our collective values and traditions, passed down intergenerationally by our kūpuna, are renewed, practiced, and perpetuated as essential to our cultural identity, sense of place and sustainability as ka pae 'āina o Hawai'i (Hawaiian archipelago); and

WHEREAS, in 1984, the Miloli'i-Ho'opūloa Community Development Plan was completed to secure housing and fishing rights and to complete the process of consummating long-term lease agreements with Miloli'i residents and the State as authorized by Act 62 and reinforced by Act 83; and

WHEREAS, since the 1990s, communities at Mo'omomi (Moloka'i), Kīpahulu (Maui), Miloli'i, Ho'okena, and Kalapana (Hawai'i), Hā'ena and Hanalei (Kaua'i), and 'Ewa and Wai'anae (O'ahu), among others gathered and helped establish a movement for nearshore community-fishery governance and management. This inspired the vision for networks such as Kai Kuleana (Hawai'i Island), Maui Nui Makai Network (Maui Nui), E Alu Pū, Limu Hui (statewide), and organizations like Kua'āina Ulu 'Auamo; and

WHEREAS, these community efforts led the founding of co-governance and co-management policies and laws such as the Community Based Subsistence Fishing Area (CBSFA) law, Hawai'i Revised Statute 188-22.6, passed in 1994,<sup>6</sup> "(F)or the purpose of reaffirming and protecting fishing practices customarily and traditionally exercised for purposes of Native Hawaiian subsistence, culture, and religion;" and

WHEREAS, a two-year pilot project managed by Hawaiian Homesteaders and integrating Indigenous ecological knowledge and complementary western scientific approaches to the management of Mo'omomi and Kawa'aloa Bays on Moloka'i<sup>7</sup> inspired eight<sup>8</sup> communities to establish their own traditional management structures and rules customized to their unique place under the CBSFA process for which they continue to await State approval; and

WHEREAS, the founding CBSFA law inspired other laws specifically designating areas in Miloli'i (2005; Hawai'i Island) and Hā'ena (2006; Kaua'i Island) and the interests in and/or active pursuit of CBSFA designation by many other communities including Miloli'i, Ho'okena, Kīholo and Kalapana (Hawai'i Island); all of Moloka'i, Lāna'i and Ni'ihau; Kīpahulu, Mū'olea, Polanui and Wailuku (Maui); and Kahana (O'ahu); and

WHEREAS, the Kīpahulu 'Ohana a 501(c)(3) nonprofit organization founded in 1995 dedicated to the cultural sustainability of the Kīpahulu moku in East Maui, Hawai'i, that envisions families working in harmony to preserve and enhance the traditional cultural practices of the Hawaiian people through culturally based agricultural and resource management projects from ma uka to ma kai including: the management of Kapahu Living Farm, a traditional wetland taro farm, in partnership with Haleakalā National Park; operation of Kīpahulu Kitchen, a certified commercial kitchen and agricultural processing facility; an 'opihi "rest area" no-take zone adjacent to Haleakalā National Park; ongoing fishing and human use (creel) surveys; and the proposal and management plan for the designation of Kīpahulu moku as a CBFSA; and

WHEREAS, the Hui Maka'āinana o Makana (Hā'ena, Halele'a, Kaua'i), with the support and participation of the larger communities in their moku and the statewide network efforts cited herein,

- Continued -

<sup>\*</sup> HRS 188-22.6 was inspired by the Governor's Moloka'i Subsistence Task Force recommendations to allow Ho'olehua Homesteaders to manage shoreline marine resources for subsistence fishing.

<sup>&</sup>lt;sup>3</sup> Poepoe, Kelson K., Bartram, Paul K. & Friedlander, Alan M. 2001. The use of traditional Hawaiian knowledge in the contemporary management of marine resources. Putting Fishers Knowledge to Work Conference Proceedings, 328-339, Friedlander Alan M., Poepoe, Relson "Mac", Helm, Kanolowailuku, Bartam, Paul B., Maraga, Iames, and Abbei Tabella, 2000. Application of Hawaiian traditions to community-based fishery management. Proceedings 9th International Coral Reef Symposium, Bali Indonesia 23-27 October 2000, Vol. 2.
\* Iligueli, Jodi. 2008. Propagating cultural kipuka: The obstacles and opportunities of establishing A communitybased subsistence fishing area. University if Hawai'i Law Review, 31-193; 1-30.

passed their CBSFA rules in 2015, have actively managed their area in partnership with the State, have seen an increase in fish populations and are now going through their five-year review; and

WHEREAS, in 2005, the Miloli'i fisheries management area was designated as a community based subsistence fishing area, as provided in HRS §188-22.7 to:

(1) Ensure long-term sustainable populations of fish and other marine species; and

(2) Encourage the scientific study and understanding of subsistence fishing management. [L 2005, c 232, section 2]" (HRS §188-22.7); and

WHEREAS, since 2005, Pa'a Pono Miloli'i, now Kalanihale, with the support and participation of the larger communities in the māhele 'āina o Kapalilua, has and continues to work diligently with stakeholders and the broader community to draft rules for the area from the ahupua'a of Kīpāhoehoe to Manukā, through survey, scientific research and consultations with thousands of community members, individuals, commercial interests and government agencies; and

WHEREAS, Hui Mālama o Mo'omomi (Mo'omomi, Pālā'au, Moloka'i) has been pursuing a designation and rule package for over 20 years and continues efforts to develop subsistence rules for the community fishery there; and

WHEREAS, scientific surveys of various locations around Hawai'i show that locations under community-based management with customary stewardship harbor fish biomass that is equal to or greater than that in no-take marine protected areas<sup>9</sup>; and

WHEREAS, on Sept. 1, 2016, at the International Union for Conservation of Nature's World Conservation Congress in Hawai'i, and as part of the Sustainable Hawai'i Initiative, Gov. David Ige announced the State's commitment to effectively manage 30% of Hawai'i's nearshore waters by 2030; and

WHEREAS, after decades of community outreach meetings with DLNR-DAR staff, fisher discussions, and community monitoring and rule development work, the community efforts in Kīpahulu (Maui) in 2016 and in Miloli'i (Hawai'i) in 2019, respectively, submitted their official CBSFA letters of inquiry, and in 2019, Kīpahulu and Miloli'i submitted their official CBSFA draft management proposals to the DLNR; and

**WHEREAS**, the Marine 30x30 Initiative focuses on the development and strengthening essential components of effective management, including partnerships with communities to integrate place-based knowledge, pono practices, and the best of current science and sociocultural understanding;

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Office of Hawaiian Affairs that we call upon lawmakers to commit to continued progress toward streamlining, accommodating, and empowering communities to carry out the work of sustainable community-based subsistence fisheries by integrating place-based and Native Hawaiian traditional and customary practices and values and best practices and methods developed by contemporary science to create Community-Based Subsistence Fishing Areas and rules and approaches that will benefit present and future generations;<sup>10</sup> and

- Continued -

<sup>&</sup>lt;sup>9</sup> Friedlander, Alan M., Shackeroff Janna M. and Kittinger, John N. Customary Marine Resource Knowledge and use in Contemporary Hawai'i. Pacific Science, 67(3); 441-460. 2013.

<sup>&</sup>lt;sup>19</sup> Recent studies of fishery management in the Western Pacific call for better collaboration and integration of government and traditional management approaches both of which when applied alone are found to come up short:

<sup>&</sup>quot;The limited capacity of governments in all the countries evaluated, especially at the subnational level, is a critical issue to be addressed if effective management of coastal marine resources is to be achieved. Well-traffed laws at the national level often fail to affect local communities due to a lack of technical capacity, resources, and political will to see the laws through to implementation. Enforcement capacity is typically limited and not well coordinated, and even when violators are captured, prosecutorial intent is often lacking.

Customary systems of management, an important tool for managing coastal resources, also face serious challenges. With increasing access to markets, incentives to violate customary management systems also grow. A common perception is that transgressions against customary marine management systems stem primarily from outsiders; interviews during the study indicated, however, that violations from people within the community can be of equal or greater concern. With limited enforcement capacity and the eroding salience of traditional law, it is becoming more difficult to maintain the integrity of customary management systems. Another key challenge with customary systems is that they may not be sufficient to achieve ecological objectives on their own in the context of mounting pressures. The rules are often as much about community social structures as they are about natural resource management, and they can therefore be insufficient for maintaining or enhancing the health of marine ecosystems, unless supporting systems (e.g. enforcement, fishery management) are in place.

While NGOs have developed the capacity to build awareness of the threats to the coastal marine environment where government or community capacity is weak, they have not necessarily succeeded in integrating local institutions into the management of natural resources and in many cases have supplanted the government as service provider. This raises questions about the durability of NGO interventions and makes it unlikely that exemplary programs will be adopted, financed, and replicated by local governments and institutions. Identifying ways in which the NGO community can better cultivate strong engagement with local communities and build a foundation to transition fisheries and coastal marine management systems to local communities and governments under appropriate comanagementarrangements is imperative if efforts are ever to reach meaningful scale."

The Trust for Conservation Innovation: Conservation Investment Community Forum, Executive Summary: Assessment of the Enabling Conditions for Rights Based Management of Fisheries and Coastal Marine Resources in the Western Pacific; pg 8, (2013)

**BE IT FURTHER RESOLVED**, that we call upon lawmakers and policymakers to promote policies and strengthen institutional frameworks and resource flows that develop cooperation and coordination, in a spirit of partnership among government at all levels with local populations and community groups, and that when there is flexibility in interpreting statutes in favor of community-based subsistence resource management to interpret it as such; and

**BE IT FURTHER RESOLVED**, that state resource policies should be consistent with the State's public trust duties and the precautionary principle - that communities applying traditional ecological knowledge and management approaches not be unduly burdened with proving their generational knowledge with scientific certainty in accordance with western methodologies of proof - rather that Indigenous, traditional knowledge be respected on its own merit and acknowledged for its centuries of proven effectiveness in restoring and maintaining natural resource sustainability, health, and abundance; and

**BE IT FURTHER RESOLVED**, that a certified copy of this resolution be given to the Governor of the State of Hawai'i; President of the Hawai'i State Senate; Speaker of the Hawai'i State House of Representatives; the Hawai'i State Senate Committees on Water and Land, and Hawaiian Affairs; the Hawai'i State House Committees on Water and Land, and Judiciary and Hawaiian Affairs; all County Mayors and County Councils; the State of Hawai'i Board of Land and Natural Resources; the National Oceanic Atmospheric Administration; Department of Interior Office of Native Hawaiian Relations; the Association of Hawaiian Civic Clubs; and any other entity that may be interested in, or supportive of, efforts to develop CBSFAs.

Carme	n "Hulu" Lindsey
Chairp	enson, Trustee, Maui
Leina <sup>4</sup>	ala Ahu Isa, Ph.D.
Vice C	hair, Trustee, At-large
Dan Chuma	
<b>Dan Ahuna</b>	Brendon Kalei*āina Lee
Trustee, Kauaʻi and Niʻihau	Trustee, At-large
Kalihin Aku	Allan B. Jawa
Kaleihikina Akaka	<b>Mililani B. Trask</b>
Trustee, Oʻahu	Trustee, Hawaiʻi
Latri Aknos	11 million of the second secon
Keli'i Akina, Ph.D.	John D. Waihe'e IV
Trustee, At-large	Trustee, At-large
Kuhlepe Luana Alapa Trustee, Moloka'i and Lāna'i	en e
Date: MAR 1 0 2022	

# Resolution

### **No.** 22-205

#### SUPPORTING A COMMUNITY-BASED SUBSISTENCE FISHING AREA DESIGNATION FOR KIPAHULU MOKU

WHEREAS, in 1994, the Hawai'i State Legislature enacted Section 188-22.6, Hawai'i Revised Statutes ("HRS"), giving the Department of Land and Natural Resources ("DLNR") the authority to designate community-based subsistence fishing areas ("CBSFA") "for the purpose of reaffirming and protecting fishing practices customarily and traditionally exercised for purposes of native Hawaiian subsistence, culture, and religion";

WHEREAS, the DLNR can establish management strategies for CBSFAs by adopting rules in accordance with the administrative procedure for State agencies outlined in Chapter 91, HRS, and community organizations can propose CBSFAs to the DLNR for consideration by submitting a management plan that includes regulatory recommendations; and

WHEREAS, as a result of international advocacy by indigenous people and local communities—in some cases led by grassroots Native Hawaiian communities—global environmental institutions have recognized the significance and importance of indigenous tribal-nation or community-based natural resource management; and

WHEREAS, developments in science and social science research have documented the role of traditional ecological knowledge and its efficacy in an age of climate change and massive natural resource concerns; and

WHEREAS, less than 200 years ago, the Hawaiian Islands sustained a thriving and substantial Native Hawaiian population through a resource governance system founded on observational, place-based, and experiential knowledge and tried and true centuries-long practices; and

WHEREAS, Native Hawaiian traditional and customary practices for sustaining fisheries were adaptive and based on time-tested intimate knowledge of ahupua'a resources and included kapu or lāhui on certain

### Resolution No. 22-205

flora and fauna species, temporary fishery closures, and harvest limits based on species, size, sex characteristics, natural celestial cycles, and spawning times; and

WHEREAS, nearshore fisheries in Maui County and throughout the State play a key role in household subsistence, the statewide socio-economic fabric, and the quest for food security; and

WHEREAS, beyond providing food, subsistence fishing contributes to largely unquantifiable yet extremely valuable benefits, including: serving the cultural and environmental ecosystem; upholding long-held community practices, values, and virtues, such as generosity, industriousness, and self-reliance; developing healthy social roles, skills, and networks; building communal reciprocity; and advancing community and societal insurance, especially for rural communities that serve as kīpuka, or oases of our most cherished cultural legacies; and

WHEREAS, nearshore ocean resources and systems have been compromised by overfishing, abuse of fishing technologies, insufficient enforcement capacity or legal infrastructure, coastal development, local and global pollution, conflicting ocean uses and purposes, invasive species, continent-focused and over-centralized resource management paradigms, and climate change; and

WHEREAS, regulatory agencies are often under-funded and under-resourced even as rapid human population expansion and exploitation of ocean resources are at their peak; and

WHEREAS, top-down, centralized decision-making processes are often ineffective in managing complex and unique place-based ecosystems that would greatly benefit from local and indigenous knowledge and traditional resource management; and

WHEREAS, our local communities are concerned about these important issues, and many knowledgeable individuals are eager to collaborate with appropriate government agencies in the effort to mālama our natural resources; and

WHEREAS, it is essential to our cultural identity, sense of place, and sustainability as ka pae'āina o Hawai'i that our collective values and

KĪPAHULU MOKU CBSFA | **7. Resolutions** 

### Resolution No. <u>22-205</u>

intergenerational traditions passed down by our kūpuna are renewed, practiced, and perpetuated; and

WHEREAS, since the 1990s, communities at Kīpahulu on Maui island; Mo'omomi on Moloka'i; Miloli'i, Ho'okena, and Kalapana on Hawai'i island; Hā'ena and Hanalei on Kaua'i; and 'Ewa and Wai'anae on O'ahu, among others, gathered to help establish a movement for nearshore community fishery governance and management, and this movement inspired the vision for networks and organizations such as Kai Kuleana, Maui Nui Makai Network, E Alu Pū, Limu Hui and Kua'āina Ulu 'Auamo; and

WHEREAS, a two-year pilot project managed by Hawaiian homesteaders and integrating indigenous ecological knowledge and complementary scientific approaches to management of Mo'omomi and Kawa'aloa Bays on Moloka'i inspired eight communities to establish their own traditional management structure and rules customized to their unique place under the CBSFA process for which they continue to await State approval; and

WHEREAS, in 2005 Miloli'i on Hawai'i island became the first permanently designated CBSFA in the State, followed by Hā'ena on Kaua'i in 2006, and many other communities continue to actively pursue CBSFA designation; and

WHEREAS, the Hā'ena CBSFA rules and management plan were approved in 2015, and Hui Maka'āinana o Makana has actively managed their area in partnership with the State, resulting in an increase in fish populations with ongoing monitoring, enforcement, education, and outreach efforts; and

WHEREAS, on September 1, 2016, at the International Union for Conservation of Nature's World Conservation Congress in Hawai'i, and as part of the Sustainable Hawai'i Initiative, Governor David Ige announced the State's commitment to effectively manage 30 percent of Hawai'i's nearshore waters by 2030; and

WHEREAS, the Marine 30x30 Initiative focuses on developing and strengthening essential components of effective management, including partnership with communities to integrate place-based knowledge, pono
## Resolution No. 22-205

practices, and the best of current science and sociocultural understanding; and

WHEREAS, Kīpahulu 'Ohana, Inc. is a nonprofit organization founded in 1995 and dedicated to the cultural sustainability of the Kīpahulu Moku in East Maui; and

WHEREAS, Kīpahulu 'Ohana, Inc. envisions families working in harmony to preserve and enhance the traditional cultural practices of the Hawaiian people through culturally based agricultural and resource management projects from mauka to makai; and

WHEREAS, Kīpahulu 'Ohana, Inc. manages Kapahu Living Farm, a traditional wetland taro farm, through a Cooperative Agreement with Haleakalā National Park; operates Kipahulu Kitchen, a certified commercial kitchen and agricultural processing facility; has established a voluntary 'opihi "rest area" no-take zone adjacent to Haleakalā National Park with educational outreach and regular biological monitoring; and conducts ongoing fishing and human use (creel) surveys; and

WHEREAS, in 2012 Kīpahulu 'Ohana, Inc. published their Kīpahulu Malama I Ke Kai Community Action Plan, developed over two years with input from more than 50 community members, fishermen, scientists, managers, and teachers, which identified the unsustainable harvest of fish, limu (seaweed), and 'opihi (limpets) as contributing to the degradation of the marine environment and a threat to the traditional subsistence lifestyle of the area; and

WHEREAS, one Malama I Ke Kai Plan objective is to "locally manage near shore fisheries for the sustenance needs of the Kīpahulu community" with the strategy to obtain CBSFA designation, which would formally recognize local communities as valued co-management partners in protecting natural resources and reaffirm and protect traditional and customary practices for subsistence and culture; and

WHEREAS, Kīpahulu 'Ohana, Inc. has conducted dozens of community outreach meetings over the last ten years to gather input on the proposed rules and management plan for Kīpahulu Moku, which was submitted to the DLNR in October 2019; and

## Resolution No. 22-205

WHEREAS, the DLNR plans to begin the formal CBSFA rulemaking process under Chapter 91, HRS, for the proposed Kīpahulu Moku Community-Based Subsistence Fishing Area in 2022; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

- 1. That it supports the designation of Kīpahulu Moku as a Community-Based Subsistence Fishing Area and the creation of rules and a management plan for the Kīpahulu Moku CBSFA;
- 2. That it supports the Kīpahulu community's continued efforts to integrate place-based and Native Hawaiian traditional and customary practices and values with best practices and contemporary scientific methods for the benefit of present and future generations; and
- That certified copies of this Resolution be transmitted to the 3. Honorable David Y. Ige, Governor, State of Hawai'i; the Honorable Ronald D. Kouchi, Senate President, State of Hawai'i; the Honorable Scott Saiki, Speaker of the House, State of Hawai'i; the Honorable Maile S. L. Shimabukuro, Senate Committee on Hawaiian Affairs: Chair. the Honorable Mark M. Nakashima, Chair, House Committee on Judiciary and Hawaiian Affairs; the Maui County delegation to the State Legislature; Carmen Hulu Lindsey, Chair, Board of Trustees, Office of Hawaiian Affairs; Suzanne D. Case, Natural Resources: of Land and Chair, Board William J. Aila, Jr., Chair, Hawaiian Homes Commission; the Honorable Michael P. Victorino, Mayor, County of Maui; Administrator, Oceanic National Richard W. Spinrad, Atmospheric Administration; Deb Haaland, United States Secretary of the Interior; Ka'i'ini Kaloi, Director, Office of Native Hawaiian Relations, United States Department of the Interior; and Hailama V. K. K. Farden, President, Association of Hawaiian Civic Clubs.

paf:ans:22-188a

**INTRODUCED BY:** 

Somm M. Z

SHANE M. SINENCI



## Letters of Support

The following letters of support have been provided by Kīpahulu residents, east Maui community members, independent cultural experts and practitioners, scientists, partner organizations, government agencies, Kīpahulu district senators and council members, the Mayor of Maui, and other local community groups supportive of KOI co-managing Kīpahulu moku in partnership with DLNR-DAR through a CBSFA designation.

Name	Affiliation/Relationship
Mayor Michael Victorino	Mayor, County of Maui
Senator Lynn DeCoite	Senate Majority Leader, Senator, 7th District
J. Kūhiō Lewis	Council for Native Hawaiian Advancement, Chief Executive Officer
Tapani Vuori	Maui Ocean Center, General Manager
Becky Lind	Hāna Arts, Executive Director
Sheila Roback	Hale Hulu Mamo, Senior Center, Director
Kau'i Kanaka'ole	Ala Kukui, Executive Director
Sam Akoi IV	Aha Moku, Hāna Representative, Traditional Practitioner
Senator J. Kalani English	Former Senate Majority Leader, Senator, 7th District
Councilmember Shane Sinenci	Maui County Council, East Maui Representative
Natalie B. Gates	National Park Service, Haleakalā National Park, Superintendent
Mac Poepoe	Hui Mālama O Moʻomomi, Resource Manager, Traditional Practitioner
Christopher E. Bird	Texas A&M University, Corpus Christi, Associate Professor, Director, Genomics Core Laboratory
Erin Lindbergh	Kīpahulu Community Association, Director
Kevin K. J. Chang	Kua'āina Ulu 'Auamo, Executive Director
Megan Edgar	Maui Nui Marine Resource Council, General Manager
Hannah Kihalani Springer	Kaʻūpūlehu Marine Life Advisory Committee, Member, Traditional Practitioner
Presley Wann	Hui Maka'ainana O Makana, President, Traditional Practitioner
Ulalia Woodside	The Nature Conservancy, Executive Director
Legario Eharis	Nā Mamo O Mū'olea, President, Traditional Practitioner
Alohalani Smith	Aha Moku, Kaupō Representative
Lucienne De Naie	Sierra Club Maui Group, Chairperson
Makale'a Chana Ane	Maui Conservation Alliance, Chair

MICHAEL P. VICTORINO Mayor

> SANANDA K. BAZ Managing Director





COUNTY OF MAUI OFFICE OF THE MAYOR 200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAII 96793

July 6, 2022

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office, Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Aloha e Chair Case,

# RE: Letter of Support for Community-Based Subsistence Fishing Area Designation in Kīpahulu

As the Mayor of Maui County, I am very pleased to write this letter urging support for the proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu.

I recently attended a site visit to Kipahulu on April 13, 2022 and was impressed by the efforts of Kipahulu 'Ohana, Inc. (KOI) to malama their place and to take a leadership role in Maui County's climate change and resilience initiative. KOI is a wellestablished and respected organization with over 20 years of experience conducting projects for ahupua'a management, including traditional Hawaiian agriculture and shoreline management. Under the leadership of John and Tweetie Lind, they have established programs such as Kapahu Living Farm, a traditional wetland kalo farm in Haleakalā National Park, and the 'opihi rest area on the shoreline adjacent to the national park. They have shared important traditional knowledge of their place and their kupuna and inspired a generation of young Hawaiians and others as to the importance of carrying on traditions and being actively involved in managing our local areas. They have proven their ability to work in collaborative partnership with agencies and organizations for co-management efforts, and their capacity to sustain projects and programs over time. Under the leadership of KOI, the CBSFA application and draft management plan have been over 10 years in the making, engaging many stakeholders and allowing many different opportunities for community input along the way.

Kīpahulu moku is a very special place, rich in history, culture, and resources, and is also under threat from various influences, including overharvesting and improper harvesting of marine resources. I believe it is an appropriate geographic area and community partner for designation as a CBSFA so that the community, traditional practitioners and state and other agencies, as well as supportive nongovernmental organizations can all work together for the effective co-management of this area. July 6, 2022 Page 2

I believe that a CBSFA designation for Kīpahulu moku is very consistent with the Holomua: Marine 30×30 goal initiated by Governor Ige to have 30% of Hawai'i's coastal areas under effective management by the year 2030. Such a designation would be consistent and supportive of Executive Order 18-06 (relating to the United Nations Sustainable Development Goals) that supports an increase in community management of marine resources and the protection of Hawai'i's cultural and natural heritage.

Kīpahulu 'Ohana, Inc. has my full support in their efforts to designate the Kīpahulu moku as a Community-Based Subsistence Fishing Area, and I urge the Department to look favorably on their application and move the administrative rule-making process forward expeditiously.

Sincerely,

Michael P Vite

Michael P. Victorino Mayor, County of Maui



The Senate

STATE CAPITOL HONOLULU, HAWAI'I 96813 September 12, 2022

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St.

Dear Chair Case,

Honolulu, Hawai'i 96813

## SUBJECT: Support for the proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu, Maui

As the State Senator for District 7 that encompasses all of East Maui including the areas of Hāna and Kīpahulu, I support the application by the Kīpahulu 'Ohana to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu.

Over the past few years the members of the Kīpahulu 'Ohana have done their due diligence to engage most, if not all, of the community members surrounding the Kipahulu moku to formulate a CBSFA proposal that the majority of the community has agreed upon. I appreciate their outreach work and willingness to listen to the concerns that have been brought to their attention and their efforts to address them so the community can feel comfortable with this proposal.

I recently attended a site visit to Kīpahulu on April 13, 2022 that included members of the Kīpahulu 'Ohana, community members, DLNR- Division of Aquatic Resources (DAR) and elected officials, and was impressed by the efforts of everyone involved to be as inclusive as possible.

I feel that the CBSFA proposal for the moku of Kīpahulu balances community concerns and needs while planning best efforts to protect and restore the natural resources that community members rely on for subsistence and culture.

If you would like to speak with me directly about my support for the Kīpahulu CBSFA proposal please contact me at (808)587-7225 or <u>sendecoite@capitol.hawaii.gov</u>.

Respectfully with Aloha,

Jym DeCrite

Senator Lynn DeCoite Majority Floor Leader Hawai'i State Senate 7<sup>th</sup> District

Senator Lynn DeCoite District 7: East and Upcountry Maui: Sprecklesville, Pukalani, Makawao, Olinda, Pülehu, Kula, Waiohuli, Keokea, Ulupalakua, portion of Keoneoio, Pä'ia, Lower Pä'ia, Ha'ik, Pauvela, Ulumalu, Huelo, Kailua, (portion of Kahului), Ke'anae, Wailua, Nahiku, Häna, Hoku'ula, Hamoa, Pu'uki, Haou, Mü'olea, Kipahulu, Kaupō, Islands of Kaho'olawe, Molokini, Lana'i, & Moloka'i State Capitol, Room 231, Honolulu, H'96813 - Phone: (808) 857-7223 - Fax: (808) 587-7230 Email Address: <u>sendecoite/@capitol.hawaii.gov</u>



COUNCIL for NATIVE HAWAIIAN ADVANCEMENT

J. Kūhiō Lewis Chief Executive Officer Council for Native Hawaiian Advancement 91-1270 Kinoiki St., Bldg. 1 Kapolei, Hawaiʻi 96707

August 5, 2022

Brian Neilson, Administrator Division of Aquatic Resources 1151 Punchbowl Street, Room 330 Honolulu, Hawaiʻi 96813

Re: Kīpahulu Moku CBSFA

Aloha e Administrator Neilson and DAR Staff:

On behalf of the Council for Native Hawaiian Advancement (CNHA), I write in strong support of Kīpahulu 'Ohana's efforts to designate Kīpahulu Moku's nearshore waters as a Community-Based Subsistence Fishing Area (CBSFA). Not only would such designation offer an additional layer of protection to roughly 5.7 miles of coastline and 1,650 acres of submerged land, but it would also further the state's Marine 30x30 Initiative as well as effectuate the state's affirmative duty to protect and preserve Native Hawaiian traditional and customary practices.

Kīpahulu is home to kama'āina families who continue to maintain a significantly subsistencebased lifestyle. Steadfast in their traditional fishing, farming, and hunting practices, these families are determined to pass these traditions on to future generations. This kuleana, which is itself a traditional practice that stems from time immemorial, helps to ensure that future generations will be able to know the abundance of their kūpuna.

In more recent memory, the Kīpahulu 'Ohana has been working to ensure the proper stewardship of Kīpahulu's natural resources for nearly 25 years. In 2011, they promulgated the Mālama I Ke Kai Community Action Plan, which identified unsustainable harvest of fish, limu, and 'opihi as one of the priority threats contributing to the degradation of the marine environment. With the community becoming increasingly frustrated with the noticeable decline in abundance, the Kīpahulu 'Ohana reached out to DAR in 2016 to consider CBSFA designation, and submitted an official CBSFA Proposal and Management Plan in 2019.



### COUNCIL for NATIVE HAWAIIAN ADVANCEMENT

CNHA expresses great appreciation to the Kīpahulu 'Ohana for all their hard work and effort. The proposed rules for the Kīpahulu Moku CBSFA were developed over a decade of conversations with Kūpuna, East Maui residents, fishers, state and county agencies, and science experts. Additionally, in furtherance of the proposal, Kīpahulu 'Ohana spent several years conducting outreach activities to gather input and grow support for the designation, including community meetings, individual and family interviews and talk-story sessions, and educational tables at local festivals and other events.

CBSFA designation, along with a collaborative management plan, will provide Kīpahulu with an invaluable tool to help reduce, and hopefully eliminate, unsustainable harvest by changing human behaviour and allowing fish populations to stabilize and recover. Moreover, designation would serve to acknowledge and reinforce the kuleana that this community holds, and it would also empower them to have a greater say in regard to the management of the resources that have sustained their families for countless generations.

Accordingly, CNHA stands in strong support of the proposal to designate Kīpahulu Moku as a CBSFA, and we urge DAR to expeditiously bring this matter before the Board of Land and Natural Resources.

Mahalo nui for the opportunity to provide this letter of support.

Me ka ha'aha'a,

J. Kūhiō Lewis Chief Executive Officer Council for Native Hawaiian Advancement

## **MAUI OCEAN CENTER**

Our Mission: To foster understanding, wonder and respect for Hawaii's marine life.

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Dear Chair Case,

My name is Tapani Vuori and as General Manager at the Maui Ocean Center and a President of the Board at the Maui Ocean Center Marine Institute I am very pleased to write this letter urging support for the proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu, Maui. The CBSFA application and draft management plan submitted by Kīpahulu 'Ohana, Inc. (KOI) has been many years in the making and garnered much support not only in Kīpahulu but also in neighboring communities far and wide.

It is disheartening to witness the degradation to near shore marine eco systems in many of our communities as demonstrated by ample data and research but also anecdotally as we all have heard the stories from our kūpuna how things used be. The community of Kīpahulu has become increasingly concerned about the continued decline of natural resources in their area and the perceived disconnect with the regulations that are supposed to protect them. Here we have a community that has recognized the importance of getting involved and becoming engaged with an existential issue of having ability to manage, or rather mālama, natural resources in their community.

Papahānaumokuākea and Kahekili Herbivore Fisheries Management Area and 'Āhihi-Kīna'u reserve are great examples already here on Maui what is possible with regards to protecting our natural resources. These and other Marine Protected Areas (MPA) give us a window to the most likely outcome with the CBFSA designation for the Kīpahulu community. Data shows that within MPAs not only are there benefits to marine life with regards to biomass, resiliency, numerical density and organism size but also financial benefit has been documented. Then there is a well-documented "spillover" effect that positively impacts the areas around the MPA's. Empowering the local community to take care of their natural resources is a very powerful multiplier in our collective efforts to safeguard the natural resources for the future generations.



192 Ma'alaea Road Wailuku, Hawai'i 96793 • mauioceancenter.com • 808.270.7000

I applaud you in your designation in the State of Hawai'i of the Miloli'i Community as a Community-Based Subsistence Fishing Area (CBSFA), on Hawai'i Island. This demonstrates that this is doable and the level of excitement about this has been palpable Statewide. Both Miloli'i and Kīpahulu have many things in common but again most importantly they both have communities that are engaged and committed to protecting the natural resources in communities, and they are very passionate about this.

KOI has my full support in their efforts to designate the Kīpahulu moku as a Community-Based Subsistence Fishing Area, and I urge the Department to look favorably on their application and move the administrative rule-making process forward expeditiously.

Thank you for your consideration.

Aloha,

Tapani Vuori 808.561.2022 tvuori@mauioceancenter.com

BOARD OF DIRECTORS: Robin Newton, President Daniele Comeaux, Vice President Blessing Hancock, Treasurer Jessica Keay, Secretary Robin Rayner Kari Hagedorn Andrea Rodriguez Sara Tobin



P.O. Box 686, Hāna, Hawaiʻi 96713 808-248-7569 <u>friends@HanaArts.com</u> www.HanaArts.org

TO: Whom it may concern

RE: Letter of Support for Kipahulu Moku Community Based Subsistence Fishing Area (CBSFA)

September 8, 2022

Aloha,

As the Executive Director of Hāna Arts, I am writing in complete support of Kipahulu 'Ohana and their efforts to create a Community Based Subsistence Fishing Area (CBSFA). Kipahulu 'Ohana has the tremendous kuleana of maintaining and managing one of our most significant and sacred places; Kipahulu Moku. These near shore waters are valuable and sustain important resources for our community. I submit this letter of support for Kipahulu 'Ohana and their (CBSFA) to continue the culturally-appropriate management and protection of this special place.

The coastline of Kipahulu Moku has been a culturally significant resource for our community in many ways. By perpetuating many varieties of Hawaiian fish, limu and opihi, they serve as a storehouse to provide "food" to our people who come back to the ocean and wish to fish these places once again. Having a bountiful shoreline, the Kipahulu 'Ohana have shared harvest and allowed for fish population to stabilize and recover from their moku.

Hāna Arts has partnered with Kipahulu 'Ohana in a variety of ways, especially with building and maintaining the connections between the keiki of Hāna and Kipahulu Moku. The preservation and maintenance of Kipahulu Moku's near shore waters as a CBSFA for future generations is vital to the community of Hāna and Hawai'i nei. As cultural practitioners of today Kipahulu 'Ohana gather traditionally from the ocean and provide cultural education and experiences for our students that have been woven into the very fabric of our community.

Please consider the proposal submitted by Kipahulu 'Ohana with my support and that of Hāna Arts. Thank you for your consideration.

Mahalo,

Becky Lind

Becky Lind Executive Director Hana Arts





August 9, 2022

Hale Hulu Mamo PO Box 567 Hana, HI 96713

Re: Kipahulu Moku Community Based Subsistence Fishing Area (CBSFA)

I am writing in complete support of Kipahulu 'Ohana and their efforts to create a Community Based Subsistence Fishing Area (CBSFA). Kipahulu 'Ohana has the tremendous *kuleana* of maintaining and managing one of our most significant and sacred places; Kipahulu Moku. This near shore waters is valuable and sustains important resources for our community. I submit this letter of support for Kipahulu 'Ohana and their (CBSFA) to continue the culturally-appropriate management and protection of this special place.

The coastline of Kipahulu Moku has been a resource for our community in many ways. By perpetuating many varieties of Hawaiian fish, limu and opihi, they serve as a storehouse to provide "food" to our people who come back to the ocean and wish to fish these places once again. Having a bountiful shoreline, the Kipahulu 'Ohana have shared harvest and allowed for fish population to stabilize and recover from their moku. We at Hale Hulu Mamo have assisted Kipahulu 'Ohana in whatever ways we can, especially with building and maintaining the connections between the Kupuna of Hāna and Kipahulu Moku. The preservation and maintenance of Kipahulu Moku's near shore waters as a CBSFA for future generations of Kanaka Maoli is vital to the Kupuna of Hāna and Hawai'i nei. As cultural practitioners of today we still gather from the ocean, *la'au lapa'au*, traditional medicines, food for our people and *sustenance* physically, spiritually and emotionally.

Please consider the proposal submitted by Kipahulu 'Ohana with my support and that of the Kupuna of Hāna. Thank you for this opportunity to share our letter of support and the voices of our Kupuna.

Me ke aloha,

Sheila Roback Hale Hulu Mamo Senior Center Director



Kau'i Kanaka'ole PO Box 1012 Hāna, HI 96713 (808)248-7677

December 11, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

Welina Mai Ke Aloha e Chairperson Case,

I would like to express my sincere support of Kipahulu Ohana Inc.'s (KOI) proposal and management plan to adopt place-based regulations and designate the Kīpahulu Moku Community-Based Subsistence Fishing Area. I am the great-great grandaughter of Kahele, 1890's native Hawaiian wahine landowner in Kipahulu, and daughter of Parley Kanaka'ole who is buried at Kanekauila alongside Kahele, her daughter Marie and numerous family members. I am a long standing supporter of Kipahulu Ohana's work to better care for the lands and fishers of this area of which my kupuna not only were born and raised, but whose 'iwi have returned to nourish the soil.

It is clear that the CBSFA proposal embodies the intricate knowledge and fishing practices that are generations deep and still prevelant in those living and practicing today. Being kupa of this 'āina, a kumu hula who actively teaches hālau in Hāna and the Executive Director of Ala Kukui Hāna Retreat, I can confidently relay anecdotal evidence that speaks to the collaborative work I have exprienced in various roles with KOI and their immense knowledge and aloha they have for Kipahulu and its people.

I am in full support of Kipahulu Ohana Inc's initiative to protect its natural and cultural resources through CBSFA designation and encourage you to consider this effort in order to insure continued abundance for our future generations.

Me ka ha'aha'a,

alade

Kau'i Kanaka'ole Kupa 'Āina, Kumu Hula, Executive Director—Ala Kukui

P.O. Box 489 | Hāna, Hawai'i, 96713 | www.alakukui.org | contactealakukui.org | 808.248.7841

Suzanne Case: Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl Street Honolulu, Hawaii 96813

02/14/2019

Aloha Chairperson Case,

My name is Samuel Ahling Akoi IV. My father's 'ohana is from the Keanae side of the Hana Coast and my Mother's is from Kipahlulu and Kaupo. My Grandchildren trace their Kipahulu heritage back 8 generations to the Pio family.

I recently moved back to Kipahulu after nearly 20 years of being away, working, getting my children through school and generally, "making a living".

But you know, it didn't really feel like, "making a living", it felt like just getting by.

While living, "outside", I would come, "home" often. I would come home to fish, hunt and gather. But I also needed to come home to nourish and nurture my soul. I needed to come home to, "fill myself up" with the good, with the real of who I truly am.

As a child we lived in Hana town, but came to Kipahulu on weekends, school breaks and for the summer. My Grandfather was the Kipahulu Ranch Manager and all of my Aunties, Uncles and Cousins would come as an 'Ohana to reconnect, gather and be together.

One of the things I remember doing regularly was surrounding akule at Lelekea. I'm in my 50's now, I'm back in Kipahulu, I go down to Lelekea, my Grandparents are gone, my mother is gone, many of my Uncles are gone, and the akule are gone.

In their place there are trophy fisherman from outside, camping at Lelekea with numerous poles per fisherman in the water, leaving opala, toilet paper and their own human waste, posting pictures on instagram and bragging at fishing tournaments about where their prize ulua came from.

I walk each morning from my house near Kukuiula, Kipahulu to Kalepa and back. Most mornings there are fisherman camping at Lelekea and most weekends at Hanawi as well.

I make it a point to talk to the fisherman and let them know the mana'o behind this area and our traditional practices. I ask them to take their rubbish away with them, to remind them to take

only what they need to eat. I ask them to please not post the location of their catch online. I ask them to please give back to this area and to be thankful for what they received.

I feel so blessed that when I get hungry for fish, instead of driving to the market and buying my dinner, I grab my throw net and catch my dinner. This is subsistence living. This is what Kipahulu still is today.

If Kipahulu was designated as a Community Based Subsistence Fishing Area (CBSFA), this precious lifestyle would be protected and be available for future generations. When I went on my walks in the morning I would not only be suggesting that this area be treated respectfully and used in a pono way; it would be the legal mandate.

Please support Kipahulu 'Ohana and the people of Kipahulu in our continued Malama 'Aina of our home and wahi Pana.

Mahalo,

Sam Akoi IV PO Box 993 Hana, Hi 96713 uluponomauka@gmail.com (808)281-4259



## The Senate

STATE CAPITOL HONOLULU, HAWAI'I 96813

January 11, 2019

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Aloha e Chair Case,

As the State Senator representing East Maui, and as a Native Hawaiian and traditional practitioner, I am very pleased to write this letter urging support for the proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu.

Kīpahulu Ohana, Inc. is a well-established and respected organization with over 20 years of experience conducting projects for ahupua'a management, including traditional Hawaiian agriculture and shoreline management. Under the leadership of John and Tweetie Lind, they have established programs such as Kapahu Living Farm, a traditional wetland kalo farm in Haleakalā National Park, and the 'opihi rest area on the shoreline adjacent to the national park. They have shared much important traditional knowledge of their place and their kūpuna, and inspired a generation of young Hawaiians and others as to the importance of carrying on traditions and being actively involved in managing our local areas. They have proven their ability to work in collaborative partnership with agencies and organizations for co-management efforts, and their capacity to sustain projects and programs over time.

Under the leadership of Kīpahulu 'Ohana, Inc. the CBSFA application and draft management plan have been years in the making, engaging many stakeholders and allowing many different opportunities for community input along the way.

Kīpahulu moku is a very special place, rich in history, culture and resources, and is also under threat from various influences, including overharvesting and improper harvesting of marine resources. I believe it is an appropriate geographic area and community partner for designation as a CBSFA so that the community, traditional practitioners and state and other agencies, as well as supportive nongovernmental organizations can all work together for the effective comanagement of this area. January 11, 2019 Page 2 of 2

I believe that a CBSFA designation for Kīpahulu moku is very consistent with the "30 by 30" goal initiated by Governor Ige to have 30% of Hawai'i's coastal areas under effective management by the year 2030. Such a designation would be consistent and supportive of Executive Order 18-06 (relating to the United Nations Sustainable Development Goals) that supports an increase in community management of marine resources and the protection of Hawai'i's cultural and natural heritage. This designation is also in line with the 2019 Senate Legislative Program.

Kīpahulu Ohana, Inc. has my full support in their efforts to designate the Kīpahulu moku as a Community-Based Subsistence Fishing Area, and I urge the Department to look favorably on their application and move the administrative rule-making process forward expeditiously.

With Warm Regards,

Senator J. Kalani English Senate Majority Leader Senator, 7th District (Hāna, East & Upcountry Maui, Moloka'i, Lāna'i and Kaho'olawe)

#### KĪPAHULU MOKU CBSFA | 8. Letters of Support

Council Chair Kelly T. King

Vice-Chair Keani N.W. Rawlins-Fernandez

Presiding Officer Pro Tempore Tasha Kama

Councilmembers Riki Hokama Alice L. Lee Michael J. Molina Tamara Paltin Shane M. Sinenci Yuki Lei K. Sugimura



COUNTY COUNCIL COUNTY OF MAUI 200 S. HIGH STREET WAILUKU, MAUI, HAWAII 96793 www.MauiCounty.us

February 27, 2019

Ms. Suzanne Case, Chair Board of Land & Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

Aloha Chair Case,

## SUBJECT: SUPPORT FOR CBFSA FOR KIPAHULU 'OHANA

My name is Shane Sinenci and I am the County Council Representative for East Maui. I am a Cultural Practitioner and also the East Maui Representative for "Aha Moku." As such, I would like to express my sincere support for the proposal to designate the Moku of Kipahulu as a Community Based Subsistence Fishing Area (CBSFA).

Kipahulu Ohana is a long established, dependable non-profit organization which represents their ahupua'a in many different ways with CBSFA as their most current project. They are a group many others look up to regarding making their ahupua'a more independent and sustainable. There is much concern regarding East Maui's resources; resources that many in our community need to sustain their families. East Maui still has many families who hunt and fish to subsist, given the lower income status and the high cost of living. Through Kipahulu Ohana, there are at least three other ahupua'a interested in and attending workshops towards designating their own ahupua'a as CBSFA also.

As East Maui's Representative, I hope to assist with placing more Moku in East Maui and the whole Maui Nui into a CBSFA program assuring our future

Director of Council Services Maria E. Zielinski February 27, 2019 Page 2

generations will always have food to sustain their livelihood and way of life for generations to come.

I fully support Kipahulu Ohana in their effort to designate Kipahulu Moku as a Community Based Subsistence Fishing Area and urge you to please move forward with this process. You are welcome to call me if you have any questions or need further information.

Mahalo. ma

Shane Sinenci, Councilmember Maui County Council East Maui Representative

cc: Kipahulu 'Ohana

### KĪPAHULU MOKU CBSFA | 8. Letters of Support



United States Department of the Interior

NATIONAL PARK SERVICE Haleakalā National Park PO Box 369 Makawao, HI 96768



IN REPLY REFER TO:

HALE A.1.2; 10.A

April 2, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main OfficeFA Kalanimoku Building 1151 Punchbowl Street Honolulu, Hawai'i 96813

Dear Suzanne:

I am writing to express the support for the Kīpahulu 'Ohana's efforts for resource protection through the Kīpahulu Moku Malama I Ke Kai program.

Haleakalā National Park first entered into a partnership agreement with the Kīpahulu 'Ohana in 1995 for the management of Kapahu Living Farm, a traditional wetland taro farm located within the park. For the last few years, Kīpahulu 'Ohana have taken the initiative on several shoreline management projects, including the voluntary 'Opihi Rest Area which is located adjacent to the park. The campground that the park manages is the access point for thousands of residents and visitors enjoying the Kīpahulu shoreline, and we strive to educate users regarding makai resource management issues and efforts. This includes the establishment and promotion of the community-based voluntary 'Opihi Rest Area spearheaded by the Kipahulu 'Ohana as part of the 'Opihi Partnership. The Partnership's co-members include the National Park Service as well as other key state and federal agencies and private organizations. Park staff have worked with the 'Ohana to place ''' Opihi Rest Area - No Take'' signs along key access points to the shoreline, participated in the design of an educational poster that is displayed at the campground and visitor center, participated in 'opihi biological surveys, received training and provided information to campground and other shoreline users to encourage voluntary compliance within the 'Opihi Rest Area.

As the Community-Based Subsistence Fishing Area (CBSFA) proposed by the Kīpahulu 'Ohana is considered for formal designation, we wish to continue providing input into how the park can be an effective partner in this process. We support education and training of park staff so they can communicate with visitors in a way that supports the traditional and customary practices of the area. Our goal is to encourage a healthy environment for residents and visitors to enjoy. We support the Kīpahulu 'Ohana's application for the Kīpahulu Moku to be designated as a Community-Based Subsistence Fishing Area.

Sincerely,

atalie B Gates

Natalie B. Gates Superintendent

December 1, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Dear Chairperson Case,

I write this letter in **strong support** of Kīpahulu 'Ohana Inc.'s (KOI) proposal and management plan to adopt place-based regulations and designate the Kīpahulu Moku Community-Based Subsistence Fishing Area.

Since the inception of the Maui Nui Makai Network in 2011, I have had the privilege of being involved with the Kīpahulu Community as well as other Maui Nui Community network members and volunteers diligently seeking ways to improve and sustain the natural and cultural resources in their areas. Traditional Hawaiian Konohiki practices always protected and ensured availability of these food sources, but we no longer have those protections in place. It has become the kuleana of organizations such as Maui Nui Makai Network and KOI to pursue opportunities to look after the health and well-being of their places.

For more than 20 years I have served as the resource manager for Hui Mālama o Mo'omomi on Moloka'i. During that time I have been an advocate for the sustainability of the marine resources on our islands. The partnership that I have been able to establish with Maui Nui Makai Network and KOI has put me in touch with people from communities who are also seeking to be responsible users of our precious and fragile ecosystems. We are encouraging others to do the same.

This CBSFA proposal certainly qualifies a community such as Kīpahulu to become a supportive part of Governor Ige's 30 by 30 plan, which addresses the global decline of natural resources. As a rural community in an isolated area of East Maui, it is critical for the people to be able to continue their lifestyle and traditional practices as has been handed down for multiple generations. Co-management through a CBSFA would create a partnership with the Kīpahulu Community, involving those who know the area best and have a critical stake in managing and caring for their natural resources.

I fully support KOI and the Kīpahulu community's initiative to protect its natural and cultural resources by designating the moku of Kīpahulu as a CBSFA.

Sincerely,

Mac Poepoe Resource Manager Hui Mālama o Mo'omomi



Christopher E. Bird Department of Life Sciences - College of Science and Engineering 6300 Ocean Dr. Unit 5802 Corpus Christi, Texas 78412-5800 P: 361-825-6024 - F 825-2742

December 1, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Dear Chairperson Case,

I would like to express my **strong support** for Kīpahulu 'Ohana Inc.'s (KOI) proposal and management plan to adopt place-based regulations and designate the Kīpahulu Moku Community-Based Subsistence Fishing Area (KM-CBSFA). My relationship with KOI began in 2008, over ten years ago, when they (and The Nature Conservancy's Maui Marine Program) requested my assistance in monitoring their 'opihi populations while I was a postdoctoral fellow at the Hawai'i Institute of Marine Biology, and after earning my Ph.D. at the University of Hawai'i at Mānoa studying 'opihi. I have continued to work with KOI and TNC through to the present day.

There are three primary reasons why I support KOI's application for the KM-CBSFA:

- Through our monitoring efforts, we found a decline in 'opihi abundance from 2010-2014, and it's no secret that 'opihi have been in decline for a long time.
- 2) In over 40 years of 'opihi management by the State of Hawai'i, there has been no evidence of recovery, but in three short years of management by KOI, 'opihi are recovering without the benefit of legal enforcement. I have attached a copy of the thesis for your review. Imagine how successful KOI would be in managing their fisheries with the explicit support of the State of Hawai'i in the form of a CBSFA.

Through education and outreach, alone, KOI has successfully launched a program that encourages fishermen to voluntarily comply with 'Opihi Rest Areas where 'opihi can live an reproduce without being harvested. The 'Opihi Rest Areas, which begin in 2014, have been successful in increasing the abundance of 'opihi in the Rest Areas and down-current in actively harvested areas. The results of this action are detailed in a Master's thesis written by my former student, Ms. Brenda Bennett, and passed the critical review of her two committee members at Texas A&M University – Corpus Christi. This work is being submitted to a peer-reviewed scientific journal shortly.

3) The future of Hawaii's fisheries rests with the State and organizations like KOI and the State of Hawai'i should embrace, support, and partner with these local organizations. KOI is highly-organized, has demonstrated dedication to the sustainable extraction of marine resources in East Maui, is well-supported by The Nature Conservancy under the direction of Ms. Emily Fielding, and has intricate knowledge and fishing practices that have been patiently acquired and passed down by multiple generations, including that of the current generations of fishermen. As you surely know, KOI is focused on managing their whole moku, not just 'opihi, and has been successful in the majority of their endeavors.



Christopher E. Bird Department of Life Sciences - College of Science and Engineering 6300 Ocean Dr. Unit 5802 Corpus Christi, Texas 78412-5800 P: 361-825-6024 - F 825-2742

I recognize the longstanding efforts of KOI as they continue to care for the natural and cultural resources of Kīpahulu Moku and East Maui. I fully support KOI and the Kīpahulu community's initiative to protect its natural and cultural resources by designating the moku of Kīpahulu as a CBSFA.

Sincerely,

Christopher E. Bird, Ph.D. Associate Professor Director, Genomics Core Laboratory

Kipahulu Community Association HC 1 Box 168 • Hana, Hawaii 96713

December 19, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Aloha Chair Case,

The Kipahulu Community Association, Inc. (KCA) is a 501(c)(3) nonprofit organization founded in 1993 whose membership is comprised of all residents of Kipahulu area. The purposes of the KCA include: to help meet the needs and promote the affairs of Kipahulu; to provide a forum for the exchange of ideas and information; to promote self-sufficiency and conservation; and to preserve the natural beauty and rural agricultural values of the community.

We support the designation of Kipahulu moku as a Community-Based Subsistence Fishing Area, as proposed by the Kipahulu Ohana, in order to protect the resources and the traditional lifestyles upon which our members depend.

The KCA has worked in collaboration with Kipahulu 'Ohana on several projects in the past, including the development of the shared-use certified Kipahulu Kitchen and the Cable Ridge feral animal management and native forest restoration project.

The KCA's members include several Hawaiian families who have lived in the area for many generations and are practitioners of traditional subsistence fishing.

Our members participated in the Malama I Ke Kai planning process that the Kipahulu Ohana led in 2010-2012 that set a priority to "Designate Kipahulu as a local management area under DLNR," and also in the development of the proposed rules that are part of the Kipahulu Ohana's CBSFA application.

As the CBSFA proposed by the Kīpahulu 'Ohana is considered for formal designation, we wish to continue supporting and providing input on this process, including being a partner in the management plan as appropriate to help to effectively implement the rules once the CBSFA is established.

Sincerely,

Arigh

Erin Lindbergh Director



November 22, 2018

ATTN: Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

### SUBJECT: Letter of Support for the Kīpahulu 'Ohana Inc. and the Kīpahulu Moku Community-based Subsistence Fishing Area Proposal.

Aloha Chairperson Case:

Kua'āina Ulu 'Auamo (KUA) submits this letter in strong support of Kīpahulu 'Ohana Inc.'s (KOI) proposal and management plan to adopt place-based regulations and designate the Kīpahulu Moku Community-Based Subsistence Fishing Area

KUA was founded by kupuna of KOI to empower communities to improve their quality of life through caring for their environmental heritage together. We employ a community-driven approach that currently supports a network of more than 32 mālama 'āina community groups collectively referred to as E Alu Pū (moving forward together), 38 fishpond restoration projects and practitioners called the Hui Mālama Loko I'a, and a new and growing hui of Limu practitioners all from across our state.

We were also founded by Hui Mālama Mo'omomi, the group that inspired the creation of the community-based subsistence fishing area law that inspired the efforts in Kīpahulu over twenty years ago. This is to say support of the efforts at places like Hā'ena, Mo'omomi, Kīpahulu, Miloli'i and others has been a long-time purpose in our network and capacity building activities. Our E Alu Pū network council has made a priority of supporting the development of CBSFA's. We continue to connect CBSFA focused communities to build capacity and share knowledge, success and struggles and empower each other through networks.

KUA recognizes and supports the longstanding efforts of KOI as they continue to care for the natural and cultural resources of Kīpahulu moku and East Maui. Indeed, their work, the inspiration they provide their community and others, the creation of KUA and the networks it supports have inspired a movement and vision for 'āina momona which will better the way we take care of Hawai'i and each other now and into the future.

Pūpūkahi i holomua e ho'okanaka (Let's unite to better the human condition)

Kevin K.J. Chang Executive Director

47-200 WAIHE'E ROAD C/O KEY PROJECT KĀNE'OHE, HI 96744 | 808.672.2545



January 31, 2019

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Dear Chairperson Case,

On behalf of the Maui Nui Marine Resource Council (MNMRC) I'm writing this letter in strong support of Kīpahulu 'Ohana Inc.'s (KOI) proposal and management plan to designate the Kīpahulu Moku as a Community-Based Subsistence Fishing Area and adopt place-based regulations for the area. MNMRC, through its involvement with the Maui Nui Makai Network (MNMN), has worked with KOI since 2012 when the Network was formed. We have supported them as they have grown into a highly respected community managed conservation organization.

The founders of KOI embody aloha 'āina in all they do. From teaching youth about the ecological sustainability of traditional kalo farming systems, to working to preserve cultural sites within the Kīpahulu moku, to influencing the local community to support an 'opihi resting zone, KOI has had a huge influence in helping both the local and visiting community understand the importance of sustainable subsistence practices. KOI's founders and managers possesses intricate knowledge of traditional farming and fishing practices, passed down to them over multiple generations and carefully refined through both the study of historical documents and research on aquatic ecosystems and effective fisheries management. KOI is highly respected in the local community and therefore uniquely positioned to propose and govern bottom-up pono fishing practices that will ensure culturally sensitive and effective fisheries management in Kīpahulu moku. KOI has also acted as a leader, reaching out to other East Maui communities and sharing experience and tools to empower them in the management of their own areas.

Maui Nui Marine Resource Council recognizes the longstanding efforts of KOI as they continue to care for the natural and cultural resources of Kīpahulu moku and East Maui and serve as a model for Maui and the state. MNMRC is in fully support of KOI and the Kīpahulu community's initiative to protect its natural and cultural resources by designating the moku of Kīpahulu as a CBSFA.

Sincerely,

Megan Edgar General Manager Maui Nui Marine Resource Council

Hannah Kihalani Springer Kukui'ohiwai, Ka'ūpūlehu, North Kona, Hawai'i 72-3403 Māmalahoa Highway Kailua, Kona, Hawai'i \* HI 96740 <u>ohiwai@gmail.com</u>

December 14, 2018

Ms. Suzanne Case, Chairman Board of Land and Natural Resources 1151 Punchbowl Street, Room 130 Honolulu, Oʻahu \* HI 96813

Me ka ha'aha'a,

I am writing in **STRONG SUPPORT** of Kīpahulu 'Ohana Inc.'s (KOI) proposal and management plan for place-based regulations for the designation of the Kīpahulu Moku Community Based Subsistence Fishing Area. I visited Kīpahulu and learned of the KOI initiative in 2014, at the E Alu Pū Annual Gathering, which I attended as a member of the Ka'ūpūlehu Marine Life Monitoring Committee (KMLAC).

My family has lived in Ka'ūpulehu and adjacent Kūki'o ahupua'a since before the time of Kamehameha. We have seen and been a part of changes and the adjustment to them, from one generation to the next, through that time. We and the KMLAC maintain our intimate, generational, occupational, and recreational relationships with our place and we recognize the same among KOI.

The KMLAC has been engaged together since 1996, for the purpose of monitoring the marine life of the shoreline and near-shore waters of Ka'ūpūlehu and adjacent Kūki'o. We have looked at various ways to influence the health of the shoreline and near-shore waters in positive ways, and in 2016 our proposed ten-year all species rest period for the shorelines of Ka'ūpūlehu and Kūki'o and their near-shore waters was approved. The KOI seeks the same opportunity that the communities of Hā'ena, Kaua'i and Ka'ūpūlehu, Hawai'i already have. Kīpahulu, Maui joins with Mo'omomi Moloka'i in seeking the same.

We respect the ways that different communities express their kuleana (responsibility (ies)): how they acquire and pass down knowledge from one generation to the next; how they act upon their intimate understanding of their shorelines and near-shore waters; how they pass on their time-honored fishing practices, methods, and gear types; and the way that they relate to and care for the natural and cultural resources of their home shores and waters. We support like-spirited efforts and the way that such community / place - based initiatives can be beneficial to the State and in keeping with Its kuleana to mālama 'āina. The Kīpahulu 'Ohana Inc. embodies the ways a community resolutely expresses their kuleana as kama 'āina of place and kupa'āina (citizens) of Hawai'i nei.

We pray that you agree with our support for the Kīpahulu 'Ohana Inc. proposal and thank you for your attention to their initiative.

'O mākou nō me ka 'oia'i'o,

Hannah Kihalani Springer member, Kaʻūpūlehu Marine Life Advisory Committee

Nov. 27, 2018

Ms. Suzanne Case, Chairperson Board of Land and Natural Resource DLNR Main Office Kalanimoku Building 1151 Punchbowl st. Honolulu, Hawaii 96813

Dear Chair Case,

I am writing this letter on behalf of the Hui Maka'ainana O Makana of Ha'ena, Kaua'i's strongly supporting Kipahulu Ohana Inc.'s proposal and management plan to adopt place-based regulations and designate the Kipahulu Moku Community Based Subsistence Area. We believe that community based management is the wave of the future for Hawaii and internationally. Especially, in isolated communities like Ha'ena and Kipahulu, resource management has and is traditionally and culturally important to their existence. Similar to Ha'ena, Kipahulu is truly a modern example of a ahupua'a uninterrupted from mountain to the ocean. It is, like Hatena, the perfect setup for a Community Based Fishing Area to work. Kipahulu, like Ha'ena .periodically experiences heavy flooding events. We are isolated from the outside communities for periods of time. Is in times like these, it is clearly important to have these resources options to feed our communities and potential visitors who could be trapped. With the warnings of climate change, this theoretical situation could become a reality. For Ha'ena, the Ha'ena Community Based Subsistence Fishing Area has proven to be fruitful and sustainable for the Ha'ena/ Wainiha community and Kaua'i with little cost to the State. Since the dissolution of the Konohiki, the general feeling is that our resource have declined. Community Based Management is about the community act as the Konohiki, collectively, they understand their resources as well as anyone. I have spent time in Kipahulu with some community members. They know and share their knowledge of their resources openly. Please give back the opportunity for Kipahulu Ohana Inc. and the Kipahulu community their kuleana to malama their fisheries. Finally, a old Hawaiian proverb states, Ina malama 'oe i ke kai, (if one takes care of the ocean) malama no kekai ia 'oe (the ocean will take care of you).

Mahalo Nui Loa,

Presley Wann (President of the Hui Maka'ainana O Makana)



The Nature Conservancy, Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817 Tel (808) 537-4508 Fax (808) 545-2019 nature.org/hawaii

January 15, 2019

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl Street Honolulu, Hawai<sup>•</sup>i 96813

Dear Chairperson Case:

The Nature Conservancy (TNC) strongly supports Kīpahulu 'Ohana's proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku of Kīpahulu. Kīpahulu 'Ohana is a community-based organization that has worked diligently for the past seven years to engage the East Maui community in developing a CBFSA proposal guiding responsible fishing practices to restore abundance to Kīpahulu reefs and nearshore waters. The Kīpahulu CBSFA proposal is supported by more than 600 East Maui residents, and is shaped by knowledge and observations of this place and its resources, traditional customs and subsistence practices gathered at community meetings, individual and family interviews, and talk-story sessions.

Guided by science and our mission to conserve the lands and waters on which all life depends, TNC works with government and academic partners and more than 30 communities across the state to restore and protect the coastal habitats that support Hawai'i's culture, fisheries, economy, and way of life. Since 2008, TNC has partnered with the Kīpahulu 'Ohana to restore coastal resources through the establishment of a voluntary 'opihi rest area along the public access coastline of Haleakalā National Park in collaboration with the National Park Service and Texas A&M University-Corpus Christi. TNC also works closely with Kīpahulu 'Ohana through the Maui Nui Makai Network, a network of community groups across Maui Nui that care for the special places and natural resources on which we all depend.

Empowered communities like Kīpahulu will help the DLNR Division of Aquatic Resources and Division of Conservation and Resources Enforcement ensure that the State's marine resources are managed sustainably and that the benefits of food, shoreline protection, recreation, and cultural values will be available today and for future generations. Kama'āina families, kūpuna, keiki, fishers and gatherers, and other East Maui community members want to restore productive, sustainable subsistence fishing in their home. They have witnessed the dramatic declines in resource populations over generations, and they have the commitment, energy, knowledge, and connection to place necessary to help manage the area respectfully and sustainably.

TNC recognizes the longstanding efforts of Kīpahulu 'Ohana as they continue to care for the natural and cultural resources of East Maui and fully supports the Kīpahulu community's proposal to designate the moku of Kīpahulu as a CBSFA.

Ulalia Woodside

Executive Director The Nature Conservancy, Hawai'i Program

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P.O. Box 824 • Hana, Hawaii 96713

January 9, 2019

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Dear Chairperson Case,

On behalf of the Board and families of Nā Mamo O Mū'olea, we offer our strong support of the proposal and management plan of Kipahulu Ohana Inc. (KOI) to adopt place-based regulations and designate the Kīpahulu Moku as a Community-Based Subsistence Fishing Area.

Founded in 2006, Nā Mamo O Mā'olea is a non-profit organization dedicated to perpetuate traditional 'ahupua'a management of the Mū'olea 'ahupua'a in East Maui, and to restore and maintain the area's natural, cultural, scenic, historic and marine resources for the benefit, education and enjoyment of our community and future generations. We manage a 72-acre area of coastal land that is owned by the County of Maui through a 50-year lease agreement, including various shoreline management and educational projects.

Nā Mamo O Mū'olea and Kipahulu Ohana, Inc. have worked in partnership on our makai efforts since both organizations started to put a particular focus on this aspect of our programs around 2010. Both organizations are part of the 'Opihi Partnership and manage voluntary 'opihi rest areas in collaboration with The Nature Conservancy and Texas A&M University Corpus Christi. We share our 'opihi survey methods that were developed through the work of the Partnership, and support each other in our rest area efforts. In addition, both organizations were co-founders in 2013 of the Maui Nui Makai Network, bringing together communities on Maui, Moloka'i and Lāna'i that are actively engaged in culturally- and community-based makai management projects to encourage and support each other's efforts.

Nā Mamo O Mū'olea letter of Support for Kīpahulu Moku CBSFA

page 2

Kipahulu Ohana, Inc. has demonstrated an enduring commitment to ahupua'a management and education programs, from the mountain to the sea, based on the generational traditional knowledge of the Native Hawaiian practitioners of the area, and supported by appropriate science and technology.

As all of our communities in East Maui, we know that the traditional fishermen and practitioners of Kīpahulu have witnessed a decline in the abundance and diversity of their nearshore fisheries over the years, and are concerned about the impact of overharvesting and inappropriate harvest methods and other pressures that will continue to degrade the fisheries over time without intervention.

Although Nā Mamo O Mū'olea has chosen not to pursue CBSFA designation for the area we manage at this time, we support the co-management model to protect traditional and customary practices that the CBSFA designation embodies, and we believe Kīpahulu moku is very appropriate region to protect and manage in this fashion.

We offer our continued support for the Kīpahulu 'Ohana in their ongoing makai management efforts, and strongly encourage the Department to support the application and management plan for the designation of Kīpahulu moku as a Community-Based Subsistence Fishing Area.

Sincerely,

Logino Ettos

Legario Eharis, Jr. President



808-870-2820

April 21, 2019

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

Aloha Chair Case,

As the Representative of Kaupo, under Act 212, Section 1, I'm very honored to write this letter in support for the proposed designated Community-Based Subsistence Fishing Area (CBSFA) in the Moku (District) of Kipahulu. I have worked hand in hand with the Kipahulu Ohana Inc for years and admire the work they do in managing the traditional Hawaiian agriculture and shoreline projects. The traditional knowledge of Kipahulu is passed down to the Generations that John and Tweety Lind nurtures for preservation. Our Youths have grown up inspiring others in the importance of Ike (knowledge), being active and involved in managing our areas and proving their ability to teach.

We appreciate the collaborative Partnerships they have established and to which has been extended to our Kaupo Moku (district). We highly believe in this process and that it will assist us in protecting our natural resources and traditional lifestyle that our Communities live upon.

As the Kaupo's Kupuna Advisory Council, we are in full support for formal designation for the CBSFA in Kipahulu under the Kipahulu Ohana Inc. Please help to expedite their process for a prosperous outcome.

Sindere

Jade Alohalani Smith Aha Moku O Kaupo Representative

November 30, 2022

Ms. Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building <u>1151 Punchbowl St.</u> Honolulu, Hawai'i 96813

Dear Chairperson Case,

Sierra Club Maui Group wishes to express our strong support of the designation of a Community Based Subsistence Fishing Area (CBSFA) in Kipahulu Moku. The Sierra Club has offered many educational outings along this beautiful coastline and we have been impressed by the inspirational work done by the Kipahulu 'Ohana Inc, (KOI) over many years. We commend the locally based leadership of KOI for leading a true community process to develop this CBSFA application and draft management plan and rules package over the last 10 years. The process has engaged many fishers and resource users, and allowing many different opportunities for community participation and input.

KOI is a well-established and respected organization with over 20 years of experience conducting projects for ahupua'a management, including traditional Hawaiian agriculture and shoreline management. They have proven their ability to work in collaborative co-management partnership with agencies and organizations, and their capacity to sustain projects and programs over time.

Kīpahulu moku, while rich in history, culture, and resources, is also under threat from various influences, including overharvesting and improper harvesting of marine resources. In this remote location, a community based management model for ocean resources is a good fit.

The Kīpahulu 'Ohana effort directly aligns with and supports the "30 by 30" Holomua Initiative goal initiated by Governor Ige to have 30% of Hawai'i's coastal areas under effective management by the year 2030.

Please know that the well-respected KOI group has the full support of Sierra Club, Maui in their efforts to designate the Kīpahulu moku as a Community-Based Subsistence Fishing Area, and we urge the Department to support their application and move through the administrative rule-making process in a timely manner.

Sincerely,

Lucienne De Naie Chairperson, Sierra Club Maui Group



September 20, 2022

Suzanne Case, Chairperson Board of Land and Natural Resources DLNR Main Office Kalanimoku Building 1151 Punchbowl St. Honolulu, Hawai'i 96813

#### Letter of Support for Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu

Aloha mai kākou,

On behalf of the Maui Conservation Alliance (MCA), we would like to voice our support for the proposal to designate a Community-Based Subsistence Fishing Area (CBSFA) for the moku (district) of Kīpahulu. Please note that three of the thirteen principal members of MCA have abstained from voting on this letter of support (Department of Land and Natural Resources, East Maui Watershed Partnership, and Maui Forest Bird Recovery Project).

Under the leadership of Kīpahulu 'Ohana, Inc. (KOI), the CBSFA application and draft management plan have been over 10 years in the making, engaging many stakeholders, amassing over 600 signatures of support from East Maui residents, reaching over 30,000 people locally and globally with information regarding their management efforts, and allowing many different opportunities for community input along the way. KOI is a well-established and respected organization with over 20 years of experience conducting projects for ahupua'a management, including traditional Hawaiian agriculture and shoreline management. They have proven their ability to work in collaborative partnership with agencies and organizations for co-management efforts, and their capacity to sustain projects and programs over time.

Kīpahulu moku, while rich in history, culture, and resources, is also under threat from various influences, including overharvesting and improper harvesting of marine resources. Local fishers have described abundant fishery resources present in Kīpahulu 30-40 years ago, noting that fish would "come up to smell your spear" and "papio would come when you snap under water." Since then, fishery abundance and biomass have been observed to decline, suggesting the need for improved management. This effort aligns with and greatly supports the "30 by 30" goal initiated by Governor Ige to have 30% of Hawai'i's coastal areas under effective management by the year 2030. Such a designation would be consistent with Executive Order 18-06 (relating to the United Nations Sustainable Development Goals) that supports an increase in community management of marine resources and the protection of Hawai'i's cultural and natural heritage.

Me ka mahalo nunui a me ke aloha no, Makale'a Chana Ane, Chair Tamara Sherrill, Secretary

The MCA is a cooperative partnership of thirteen government, private and non-profit organizations who are the key leaders in the management of Maui's native ecosystems. MCA is committed to accelerating conservation management on Maui's highest priority conservation needs.



### Example Outreach Materials (2013-2023)

The following are examples of outreach materials KOI has developed between 2013 and 2023 for the Kipahulu Moku CBSFA. These materials have been shared at events, online, and at locations detailed in the Outreach Efforts Timeline (2013-2023) on page 3.

#### Kīpahulu Moku CBSFA FAQ Flyer

KOI has been handing out a Frequently Asked Questions (FAQ) flyer at events and meetings and posting online to gather feedback and spread awareness within east Maui and beyond about the Kipahulu Moku CBSFA. DAR printed and distributed this flyer to fishing supply stores leading up to multiple Public Scoping Meetings held from 2019 to 2022.



WHERE CAN I GET MORE INFORMATION?

Follow us on Instagram and Facebook (@kipahuluohana), and visit our website at <u>kipahulu.org/cbsfa</u> to download our full Proposal and Management Plan and view other educational materials and videos. Also, feel free to email <u>cbsfa@kipahulu.org</u> with any questions or comments about the CBSFA. Mahalo



KURUI BAY SANCTUARY — Kukui Bay was chosen as a Sanctuary, or no-take area, because it is one of the most biologically diverse areas in Kipahulu, home to many different types of fish and invertebrate populations. It is an important estuary for reproduction of some species and recruitment of others. If protected, it will benefit those who fish the area fronting the Haleakalä National Park campground and other areas surrounding the Sanctuary.

## KĪPAHULU MOKU CBSFA | 9. Example Outreach Materials (2013-2022)

## Kīpahulu Moku CBSFA Kiosk

This wooden outreach and comment board was created to live at the fruit stand at Kalena Kitchen in Kīpahulu. It houses brochures, comment forms, and outreach squares to gather feedback continually on the CBSFA from east Maui community members and visitors.



<u>Kīpahulu Moku CBSFA Social Media Posts</u> Example posts from KOI's Instagram and Facebook accounts.

## Kīpahulu Moku CBSFA Outreach Squares

These outreach squares were made for distribution at public events and at the Kalena Center.



We are the Kīpahulu 'Ohana—families and community members working together to return abundance to our moku (district). We revive and promote traditional Hawaiian ahupua'a (watershed) management through restoration projects, self-sufficiency programs, and educational events. In collaboration with the Kīpahulu community, we have restored Kapahu taro farm and created a Mālama I Ke Kai (Take Care of the Ocean) Community Action Plan with input from community members, fishermen, scientists, managers, and teachers.





Now, to prevent future resource declines, we need your help to designate the shoreline and nearshore reefs of Kipahulu as a Community-Based Subsistence Fishing Area (CBSFA) through formal adoption of pono (sustainable) harvesting guidelines as state rules. Hawai'i's CBSFA designation recognizes local communities as valued partners in protecting natural resources, and reaffirms and traditional and customary practices for subsistence and culture. Acquiring the CBSFA designation is a community-driven process. With extensive public input and support since 2012, we have developed culturally-based regulatory recommendations as part of our Community Action Plan.

Please join our community in this effort. We need your input and support to maintain resource abundance at Kīpahulu!



The proposed CBSFA plan and regulations are available for review and comment at kipahulu.org/CBSFA and in person at Kalena Center, one mile west of the Kīpahulu District Haleakalā National Park- please stop by. For more information, contact ohana@kipahulu.org. Comments are welcomed now and as the Division of Aquatic Resources leads the administrative rulemaking process. Mahalo!






## ADMINISTRATIVE RECORD | 10. Kīpahulu Mālama I Ke Kai Community Action Plan (2012)

## Kīpahulu Mālama I Ke Kai Community Action Plan (2012)

KOI's work, including the Kīpahulu Moku CBSFA Proposal and Management Plan, is guided by the Mālama I Ke Kai Community Action Plan (Kīpahulu CAP), developed by community members in 2012. Over 50 participants contributed a diverse range of skills and backgrounds, from farmers, to fishermen, National Park staff, east Maui residents, schoolteachers, and marine scientists. KOI used a participatory and inclusive approach to collaborative community marine spatial planning with various activities and planning tools, spanning five meetings from May 2011 to June 2012. One of the priority strategies identified in this plan was to "Designate Kīpahulu as a local management area under Department of Land and Natural Resources rules," leading to the request to apply for CBSFA designation. The community planning process was facilitated by The Nature Conservancy's Maui Marine Program.

To view the entire 15-page Kīpahulu CAP, please visit: https://www.kipahulu.org/pdf/Kipahulu Malamaikekai CAP.pdf

