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

November 15, 2019

The Honorable Kelly T. King
Council Chair
County of Maui
Wailuku, Hawaii 96793

Dear Chair King:

SUBJECT: **APPROVING KE AO HĀLI`I'S LAND MANAGEMENT PLAN AND PROPERTY STEWARD FOR TAX MAP KEY (2) 1-4-010:004, MOKAE, MAUI, HAWAI`I**
(PAF 19-353)

May I request the attached proposed resolution, entitled "APPROVING KE AO **HĀLI`I'S** LAND MANAGEMENT PLAN AND PROPERTY STEWARD FOR TAX MAP KEY (2) 1-4-010:004, MOKAE, MAUI, HAWAI`I," be placed on the next Council meeting agenda.

Sincerely,

Keani Rawlins-Fernandez

KEANI N.W. RAWLINS-FERNANDEZ
Council Vice-Chair

paf:jgk:19-353c

Attachment

Resolution

No. _____

APPROVING KE AO HĀLI`I'S LAND
MANAGEMENT PLAN AND PROPERTY
STEWARD FOR TAX MAP KEY (2) 1-4-010:004,
MOKAE, MAUI, HAWAI`I

WHEREAS, Ke Ao Hāli`i desires to acquire approximately 27 acres, identified for real property tax purposes as tax map key (2) 1-4-010:004, located in Mokae, Maui, Hawai`i ("property"), for the purpose of maintaining open space on coastal lands in Maui Hikina; and

WHEREAS, as provided for in Appendix A, Part II, Special Purpose Revenues - Schedule of Revolving/Special Funds for the Fiscal Year 2020 Budget, Ke Ao Hāli`i may receive a grant of $750,000 from the Open Space, Natural Resources, Cultural Resources, and Scenic Views Preservation Fund to acquire the property; and

WHEREAS, before Ke Ao Hāli`i can acquire the property, the County must maintain an ownership interest in the property until the Council approves a land management plan and a land trust or tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code as the steward of the property; and

WHEREAS, Ke Ao Hāli`i's land management plan for the property is attached as Exhibit "A"; and

WHEREAS, Ke Ao Hāli`i has selected the Hawaiian Islands Land Trust, a land trust or tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code, to be the steward of the property; and

WHEREAS, the Council desires to give its approval for Ke Ao Hāli`i's land management plan and steward for the property; now, therefore,

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

1. That the Council approves Ke Ao Hāli`i's land management plan for the property;

2. That the Council approves the Hawaiian Islands Land Trust as the steward of the property; and

3. That certified copies of the resolution be sent to Ke Ao Hāli`i, the Hawaiian Islands Land Trust, and the Honorable Michael P. Victorino, Mayor, County of Maui.

APPROVED AS TO FORM AND LEGALITY

_____

Deputy Corporation Counsel
County of Maui

paf:jgk:19-353d

Ke Ao Hāliʻi

Save Hana Coast

Mokae and Makaʻalae Management Plan

Version 1.3: October 2019

EXHIBIT "A"

Vision of Ke Ao Hāli'i

Sacred Hana lands are protected and undeveloped in perpetuity.

The native ecosystem is restored and full of life

that feeds and empowers our families.

Native Hawaiians and the community sustainably manage the 'aina.

Our 'iwi are at peace and our culture is alive and passed to future generations.

Executive Summary

While many details of the long-term management plan are still to be worked out and decided, this document represents the initial framework for land management planning for the Mokae and Maka'alae lands, and is the first version of an iterative process. All of our management decisions will be made with appropriate input from lineal descendants and local community members, with support of agencies and partners with relevant expertise.

The Mokae and Maka'alae pasture lands are currently being grazed on a rotational basis by Hana Ranch/Bio-Logical Capital through a lease agreement with HRP Hana LLC. For the immediate future, we anticipate continuing the management of the land predominantly with cattle grazing through an ongoing partnership with Hana Ranch. Although cattle grazing does have some negative consequences, overall it is an effective method to keep the lands open and accessible and minimize encroachment by invasive species. In addition to cattle, we plan to do manual removal of invasive plant species, with the possibility for very limited, targeted herbicide treatments if necessary.

We will consult archaeologists to determine if any historical sites are in need of protection and preservation measures from grazing cattle or invasive plants, through fencing or other means. We have discussed carbon dating the charcoal layers to learn more about the time periods of habitation. We will develop a policy for handling 'iwi that become exposed through coastal erosion based on the guidance of the lineal descendants, Hawai'i State Historic Preservation Division (SHPD), and the Maui County Burial Council.

In some key areas, particularly in the coastal strand, we will consider carefully the viability of doing native plant, seabird and native bee habitat restoration and reintroduction. This would entail fencing to keep out cattle, feral cats, mongoose and rodents, and replanting with appropriate native vegetation.

We do not intend to restrict pedestrian access, but we plan to manage vehicular access to allow for limited usage while preventing overuse. We will develop a fair and open policy for how access is granted, to whom and for what purposes, and a code of conduct for the use of the property for activities such as family and educational gatherings.

We will strive as much as possible to accomplish our management goals through community volunteer efforts, but we will hire specialized services (e.g. fencing, arborists) or management staff as needed to maintain the property in accordance with our goals and the terms of the conservation easements.

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Background

Responding to a recognition in the Hāna community of the risk of sale and development of precious coastal open space lands, Ke Ao Hali'i ("KAH") was formed early in 2018 with the purpose "to protect and preserve the natural and cultural resources of the Hāna moku and the customary and traditional practices of Native Hawaiians of the region; to hold title to and own interests in real property or to hold easements; to preserve and manage the area's natural, cultural, scenic, historic and marine resources for the benefit, education and enjoyment of our community and future generations."

Our name *Ke Ao Hāli'i* literally means "The Blanket of Clouds." After a site walk and ceremony for seeking a name, a vision that came to a kupuna of the area was Ke Ao Hāli'i, a blanket of protective clouds over the land. This also connects to one of the sayings of Hāna, Ka 'Āina o Ka Lani Ha'aha'a, the land of the low-lying clouds (lit. 'humble heaven') which refers to the way that the clouds sit on the hills over the Hāna area, or come all the way down to form Ka Ua Kea Noenoe, the white misty rain of Hāna. This blanket of clouds protects the land from the intensity of the sun, and provides life-giving moisture that keeps our region green and lush. In the same way that the blanket of clouds protects the land, so do we as the supporters of Ke Ao Hāli'i wish to protect the land. We wish to ensure that the land thrives, remains open and lush, protects the shoreline and reef, and allows the families who have deep ancestral ties to these areas to continue their traditional and customary practices and subsistence lifestyle along the Hāna coast. To us, it is much more than just a name, Ke Ao Hāli'i is a spiritual blessing of Ke Akua and our ancestors. It is our kuleana to protect this land for future generations.

According to our bylaws, the majority of members of the Board of Directors are Native Hawaiians who currently reside in Hāna moku. Our 11-member board is composed of a combination of members of families of the area with lineal descendancy from these lands, and supportive community members who bring a variety of relevant experience, expertise and skills. Each of our Directors also appoints an Alternate who is also active in Board deliberations and is able to vote in the Director's absence, thus ensuring regular quorum and expanding the number of community members who are actively engaged in the operation of the organization without becoming too cumbersome.

Our initial short-term goal is simply to prevent the development of this land by securing fee simple title, and establishing conservation easements to protect the land in perpetuity.

Our long-term goal is to steward the land to protect and restore its conservation values, including open space and view planes, cultural and historical resources, native plant and animal habitats and shoreline ecosystems, appropriate agriculture, and community access for subsistence and recreational uses.

Land Management Planning Process

While we have focused our initial efforts mainly on securing the lands, we clearly recognize the need to comprehensively address their long-term management as crucial for maintaining their conservation values. We are approaching the management planning as an ongoing, iterative process, that will continue to become more detailed, specific and comprehensive over time as we get to know the land more intimately, and gather input. All of our management plans and decisions will be made with appropriate input from lineal descendants and local community, and in collaboration with relevant agencies and partners who can provide tools and expertise in the relevant subjects.

This is the first iteration of the Land Management Plan, including a broad outline of the threats, resources, goals, objectives, and action steps. We recognize that many of these areas are preliminary, presenting options and possibilities that we will further research, evaluate and refine as we continue to gather community, stakeholder and expert input.

We are fortunate to have the facilitation and support of the Nature Conservancy–Maui Marine Program (TNC-MMP), the Maui Nui Makai Network (MNMN) and the Maui Nui Marine Resources Council (MNMRC) in the development of this plan. TNC-MMP and MNMRC have assisted several communities in Maui Nui with facilitation in developing Conservation Action Plans for their nearshore areas, including two in East Maui—Na Mamo O Mu'olea and the Kipahulu 'Ohana—who are also founding members of the Network and have provided their support and guidance to KAH from their experience in doing land and nearshore management planning and implementation. Other Maui Nui communities from the Network, including Polanui Hiu and Mo'omomi, have also offered and provided support.

This first version of the plan has been developed primarily through a series of four weekend-long workshops with our Board and community supporters that were facilitated by the TNC and MNMRC staff and MNMN members, starting in September 2018 through August 2019, along with several other focused planning sessions of our board. We have also conducted multiple site visits to the land with lineal descendants and traditional practitioners, as well as expert resources in subject areas of archaeology, botany, seabird recovery, native habitat restoration, 'opihi and limu, and pasture management.

TNC-MMP, MNMRC and communities of the MNMN have expressed their commitment to continuing to provide facilitation, GIS mapping tools, and other facilitation support as we develop more detailed and specific plans.

Ke Ao Hali'i draws its breath from our community therefore as a community based effort our management plan is an authentic reflection of the many voices of its visionaries who have contributed to its writing.

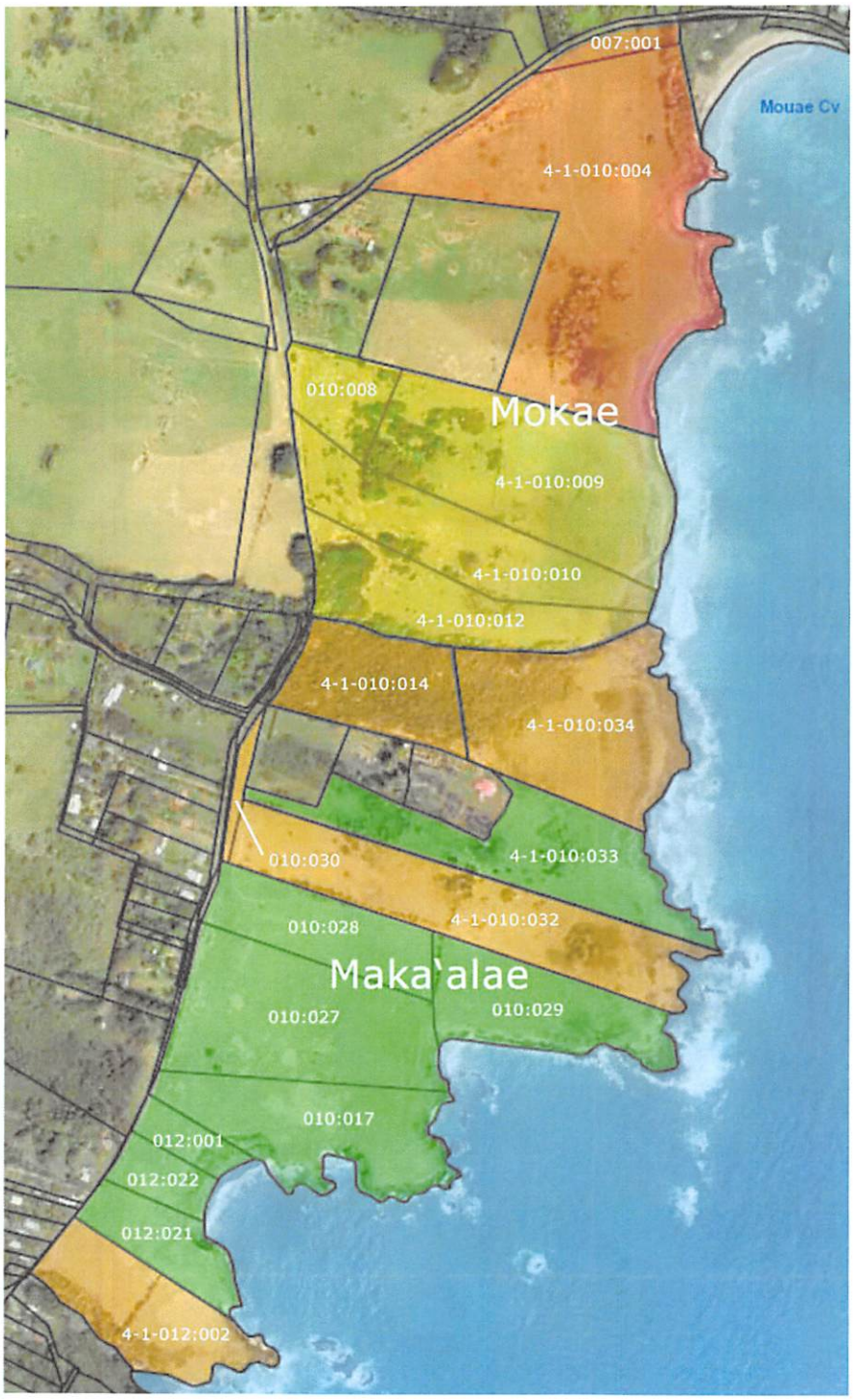
Scope — Project Site Description, Location, Boundaries and Ownership

The scope of this plan includes all of the contiguous, undeveloped lands makai of Hana Highway from Haneoʻo Road to Waiohonu Stream, in the ahupuaʻa of Mokae and Kakio (ʻili of Makaʻalae) in the moku of Hāna.

Map 1: Google Earth view of management area with features labeled

Management area TMK numbers: (2)1-4-007:001; (2)1-4-010:004, 008, 009, 010, 012, 014, 017, 027, 028, 030, 032, 033 & 034; (2)1-4-012:001, 002, 021 & 022.

Map 2: TMK and Parcel Groupings



Map 2 Key:

Green = Conservation Easement currently (to be donated by Seller)

Red = Parcel Group 1, goal to acquire by end of 2019

Orange = Parcel Group 2, goal to acquire in first half of 2020

Yellow = Parcel Group 3, goal to acquired by end of 2020

Eight of these parcels—(2)1-4-010:017, 027, 028 & 033 and (2)1-4-012:001, 002, 021 & 022—are already protected under conservation easements held by the Hawaiian Islands Land Trust, with a focus primarily on the conservation values of (a) "...ensuring that the views of the coastline and ocean… remain unobstructed," and (b) "Retaining the … current open-space condition for agricultural activities." All management of these specific parcels will be consistent with upholding the requirements of the existing easements.

As a requirement of the acquisition of the rest of the lands with public funds from the Hawaii state Legacy Land Conservation Program and the Maui County Open Space, Natural Resources, Cultural Resources and Scenic Views Preservation Fund, all of the other parcels will also be placed under conservation easements, to be held jointly by Hawaiian Islands Land Trust and the County of Maui. The new easements will be substantially similar to the existing easements, although may include minor variations depending on the specific conditions of each parcel.

All of these parcels are currently owned by HRP Hana LLC ("HRP"). HRP has stated that they are willing to sell the lands that are not currently under conservation easement to KAH for conservation purposes, and that they are willing to donate the lands that are currently under conservation easement to KAH as part of the overall transaction. Thus the ultimate goal is for KAH to hold fee title to all of the lands, and each parcel to be protected under conservation easement.

The process for KAH to acquire the complete stretch of land is a multi-year effort. We will focus detailed development of our planning and management efforts initially on the lands that we plan to acquire earlier in the process, with Mokae 004 likely being the first, but with the long-term goal in mind to manage all of the land within this scope in an integrated and comprehensive fashion.

In addition to the land itself, our management goals also include the shoreline and intertidal zone that is directly adjacent to the subject properties, and this area and its resources and uses will also be addressed in more detail in future versions of this management plan.

Community Plan Advancement

The proposed purchase and management of these lands will directly advance the objectives and policies set forth in the 1994 *Hana Community Plan* as follows:

Land Use Goal - An efficient distribution of urban, rural and agricultural land uses in order to provide for the social and economic well-being of residents in the Hana Community Plan region. Preservation and enhancement of the current land use patterns which establish and enrich the Hana Community Plan region's unique and diverse qualities.

- Objective and Policy 1: Preserve [...] existing coastal open space vistas by discouraging linear development along the highways traversing the Hana District.
- Objective and Policy 7: Discourage developing or subdividing land under agricultural use or agriculturally designated lands for passive agricultural, estate residential uses.

Environment Goal - Protection and management of Hana's land, water and ocean resources to ensure that future generations can enjoy the region's exceptional environmental qualities.

- Objective and Policy 1: Protect, preserve and increase the Hana region's natural marine, coastal and inland resources, encouraging comprehensive resource management programs.
- Objective and Policy 2: Recognize residents' traditional uses of the region's natural resources which balance environmental protection and self-sufficiency.
- Objective and Policy 3: Manage, protect, and where appropriate, restore areas which have significant indigenous flora and fauna habitat resource value.
- Objective and Policy 4: Discourage water or land development and activities which threaten the biological diversity of the Hana region and degrade the existing quality of the region's (1) air and noise character, (2) marine, surface and ground water and (3) scenic resources and vistas.

Cultural Resources Goal - Identification, preservation, protection, and where appropriate, restoration of significant cultural resources and practices, that provide a sense of history and identity for the Hana region.

- Objective and Policy 1: Identify, preserve and protect historically, archaeologically and culturally significant areas, sites, and features within the Hana District.
- Objective and Policy 2: Acknowledge and respect family ancestral ties to cultural resources. Objective and Policy 3: Encourage community stewardship of historic sites [...].
- Objective and Policy 4: Promote the cultural resources of the Hana region as an identifying characteristic of the people and the place.
- Objective and Policy 6: Encourage and protect traditional [...] makai accesses for traditional cultural uses and practices.

Economic Activity Goal - A balanced local economy which provides long-term viability and sustainability while meeting residents' needs and respecting the cultural and natural resources of Hana.

- Objective and Policy 4: Protect traditional [...] makai access for subsistence activities that supplement family food sources.
- Objective and Policy 5: Promote and maintain agriculture as a major economic activity with emphasis on a regional diversified agricultural industry.

Urban Design Goal - Harmony between the natural and man-made environments through building, infrastructure and landscaping design which ensures that the natural beauty and character of the Hana region is preserved.

- Objective and Policy 4: Preserve significant view corridors.

Historical Context and Cultural Significance

Maui Island's political divisions occurred during Kaka'alaneo rule (15 century). Hana was one of 12 districts identified at that time. The current project area is on the windward flank of Haleakalā in the moku of Hana & ahupua'a of Mokae & Kāki'o and the 'ili of Maka'alae.

Hana moku is considered one of Hawai'i's "wahi pana" (legendary places) due to the volume & significance of local myths. Accounts specific to Hana include: Noenoe & Ka'uiki; Hina climbs the moonbow; many stories of Maui the Trickster including pushing up the sky from Ka'uiki, pulling the Hawaiian Islands from the sea, and finding the secret of making fire. From the Mokae/Hamoa area are the important legends of Pu'u Ka'lwi O Pele, Alau Island, and Kū'ula the fishing god and his son 'Ai'ai.

Local legend also claims Pu'u Hele in Mokae as a place where the spirits of men, after death, were believed to plunge into Po (eternity). "There dwell our ancestors, spiritual parents; our aumakua."

Pre-contact: Hana is regarded as one of Maui's major centers of late prehistoric population concentration and political development. It is also home to Pi'ilani Heiau, considered the largest intact sacred sites in the Hawaiian islands (12th century).The importance of Hana during ancient times can be attributed to the productivity of the ocean enhanced by fishponds, the relatively gentle slope of the Hana plains and fertile volcanic soils, and abundant rain reducing the need for irrigation. All this made Hana one of the richer resource areas within the Hawaiian Islands during ancient times.

Hana was considered a favored residence of the ali'i whose location offered "an abundance of useful woods for making scaffolds and ladders (for scaling fortresses) and where warriors could procure the best round smooth stones for making slingstones." Hamoa was also a playground for the ali'i who enjoyed water sports and surfing.

Traditional accounts concerning the Hana area focus mainly on armed strife between Hawai'i & Maui Islands. During the last half of the 18th Century the high chiefs Kahekili of Maui & Kalani'ōpu'u of Hawai'i carried on the battles between Maui & Hawai'i. Kalani'ōpu'u was in control of the Hana & Kipahulu areas from 1759 to 1765 until Kahekili won the area in a battle. However, the Hawai'i forces were able to regain control from 1775 to 1783. In November 1778, Kalani'ōpu'u & Kamehameha were entertained on the British ship Resolution (Cpt. James Cook), while anchored off the Hana coast & were assumed to be chiefs of Hana region. With the death of Kalani'ōpu'u in 1782, Kahekili regained control of Hana, which he retained until his death in 1794, though not without further battles with Hawai'i Island forces. With the death of Kahekili, Kamehameha, whose birth place is 32 miles directly across the 'Alenuihāhā Channel from Mokae, gained control of Hana & Maui by 1795.

Hana is also the birthplace of Queen Ka'ahumanu, favored wife of Kamehameha I. Hana was her father's land, the ali'i nui Ke'eaumoku Papaiaheahe, a close ally of Kamehameha. Upon Kamehameha's death, she became Queen Regent & ruled the Hawaiian Islands until her death in 1832.

Conservation Values and Attributes

1. Public Outdoor recreation and education

The land includes points of access to two popular surf break spots, known locally as "Rock Pile" (on an old map as Waikanonono) and "Sand Bar." The lands contain two areas that have customarily been used for camping and family gatherings ("Kolaiti" and "Pine Trees"). Parcel 012:002 adjacent to Waiohonu Stream is the primary access to Waioka Pond (incorrectly known as "Venus Pool"), a pool connected to the ocean located at the mouth of Waiohonu Stream, which is increasingly popular as a visitor destination, as a stunningly beautiful and relatively safe area for swimming and cliff jumping.

2. Preservation of historic or culturally important land areas

'Iwi kupuna are known to be buried on some portions of this property extensively, and where the shoreline is eroding, 'iwi, ili'ili and charcoal are exposed in layers showing evidence of historic periods of heavy habitation. There is evidence and mo'olelo that this was once the site of a large battle.

While the history of sugar and cattle ranching on the property has disturbed much of the surface archaeology on the land, the property contains some significant and relatively undisturbed pre-contact archaeological sites, mainly within and protected by an ancient grove of hala trees. Remnants from the sugar era, including the foundation and walls of the Mokae Mill and several Portuguese ovens, still exist in a state of disrepair.

3. Protection of significant habitat or ecosystems

Due to many decades of use of this area by sugar production followed by cattle ranching, most of the native habitat has been significantly disrupted. However, the intertidal and nearshore habitat of this area is very important, with tide pools and reefs supporting an abundance of marine life, including what are described by locals as the most important limu beds in Hana, fed by freshwater seeps.

The Maui Nui Seabird Recovery Project has surveyed the Property and determined that while no seabirds are presently nesting there due to alien grasses and cattle, "the site would be an excellent location for seabird restoration." With predator control fencing and native coastal strand vegetation restoration, several sites on the property would provide high quality nesting habitat for several seabird species. "The offshore islet, Alau, is a short distance offshore. Alau is a predator free islet and 'ua'u kani nest there in large numbers. Recruiting into the breeding population, young birds will explore new sites close to their natal site if the available nesting space where they hatched is filled." (See MNSRP site visit report and recommendations.)

We have also been advised by Keahi Bustamente, state Department of Land and Natural Resources Division of Forestry and Wildlife biologist and geologist, of the potential for reintroduction of a native Hawaiian bee *Hylaeus anthracinus* through planting of native flora as habitat for the bee.

4. Preserving forests, beaches, coastal areas and agricultural lands

Local families of the area commonly use the shoreline for fishing, throwing net, and gathering 'opihi, limu and other intertidal resources, with several points of access through the undeveloped land.

Hamoa Beach, located directly adjacent to the subject lands by Haneo'o Road is a crown jewel of Maui, enjoyed by residents and visitors. Hamoa is frequently rated as of the top beaches in America. For example, "Dr. Beach" (Dr. Stephen P. Leatherman, Professor and Director of the Laboratory for Coastal Research at Florida International University, generally considered the country's foremost authority on beaches) has consistently rated Hamoa in his top 5 beaches in America. Author James Michener wrote about it, and Ernest Hemmingway once said that Hamoa Beach was the world's best beach. The view from the beach, as well as from Haneo'o Road above Hamoa Beach, is of the subject property, and the stunning open landspace and coastline is one of the reasons why Hamoa Beach is so beautiful and special, and so appreciated as a profoundly important place of natural rejuvenation and recreation for locals and visitors alike.

Waioka Pond at the mouth of Waiohonu Stream is an increasingly popular recreational area enjoyed by residents and visitors. The adjacent parcel is the primary access point to the pond. The rocky cliff coastline and point on the eastern end of the property presents stunning views of Waioka Bay and Pohakuloa Bay, the latter which contains a beautiful black sand beach which is accessible from land only by a very steep, unmaintained trail.

The agricultural use of the land is currently rotational cattle grazing. This use maintains the open space view plane from Hana Highway to the ocean in the areas with existing conservation easements, and protect this conservation value.

Land Use and Zoning Information

Shown here only for the parcels not currently under conservation easement.

TMK	Acres	State Land Use	Maui Island Plan	Community Plan	County Zoning	Flood	SMA
2-1-4-7-1	1.36	Ag, Conserv	Outside growth boundaries, outside protected area	Rural, Ag	Ag	A	In
2-1-4-10-4	26.98	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, X	In
2-1-4-10-8	3.36	Ag	Outside growth boundaries, outside protected area	Rural, Ag	Ag, Interim	X	In
2-1-4-10-9	12.50	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, A, X	In
2-1-4-10-10	8.35	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, A, X	In
2-1-4-10-12	8.50	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, A, X	In
2-1-4-10-14	7.02	Ag	Outside growth boundaries, outside protected area	Ag	Ag	A, X	In
2-1-4-10-30	1.18	Ag	Outside growth boundaries, outside protected area	Ag	Ag	X	In
2-1-4-10-32	12.80	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, X	In
2-1-4-10-34	10.76	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, A, X	In
2-1-4-12-2	5.60	Ag, Conserv	Outside growth boundaries, outside protected area	Ag, Conserv	Ag, Interim	VE 16, A, X	In

Potential Threats

1. Invasive flora and fauna
    a. Plants: Ironwood trees, Norfolk Pike, African Tulips, Kolomona, IP grasses, fire weed
        i. Invasive plants displace and outcompete native plants resulting in poor soil health, increased erosion, loss of open space, acidification/anoxia, and loss of native plant biota and overall biodiversity.
        ii. Successful invasive plants may also disturb historical sites and prevent successful habitat restoration for birds, etc.
    b. Animals: feral cats, mongoose, rats, mosquitoes
        i. Invasive animals threaten native seabirds through predation and habitat displacement, reducing guano and thus a rich nutrient source (nitrogen and phosphorus) for nearshore fisheries.
        iii. These animals also compete with native animals for space and resources.
    c. Cattle: while not considered invasive, they can be a useful management tool, but they can have negative impacts that also must be taken into consideration.
        i. Overgrazing may increase soil erosion and sedimentation, impacting nearshore marine ecology and fisheries.
        ii. Cattle can disturb archeological sites.
        iii. Cattle can disturb native plant and/or seabird nesting habitat restoration, and would need to be excluded from such areas.
2. Loss of traditional knowledge
    a. Education
        Traditional knowledge is absent from the western education curriculum. Loss of direct connection to the land through historical and cultural lessons and traditional activities, especially by multigenerational families including kūpuna, can lead to failure to pass on cultural knowledge and traditional practices to future generations.
3. A'ole pono harvest
    a. Out of season take
        Taking fish when state regulations deem them "out of season" can have negative impacts on their reproduction and population size. Seasons are usually closed when animals are spawning, thus protecting them and ensuring they can reproduce and replenish populations. Local spawning seasons can sometimes vary from state regulations, and increasingly so with the effects of climate change.
    b. Improper size harvest

Small individuals will not have the chance to reproduce; larger individuals, which are the most successful reproducers (by number and vitality of offspring), are removed from the population, lessening the spawning success of that fishery and leading to an overall decrease in average size and age of spawning maturity through selective pressure over time.

c. Overharvesting

Harvesting individuals at an unsustainable rate relative to their reproduction capacity can have adverse impacts on the population and fishery.

d. Lack of communication

Lack of communication between community members and others who use the land for gathering resources can lead to increased pressure, with inability for areas to rest and replenish between harvesting.

4. Overuse (too much access)
   a. Tourist traffic (pedestrian)

      Increased popularity of important sites (e.g. Waioka Pond) have led to illegal parking on streets, overcrowding, off-trail exploration, and increasingly revealing social media exposure. Off-trail exploration by visitors can have negative impacts on archaeological sites and can be dangerous.

   b. Debris and waste

      Visitors leave behind trash or waste (e.g. feces). Trash can end up in the ocean, harming marine life. Germs found in feces, including *E. coli* and Hepatitis A virus, can be harmful for fellow beach goers and marine life.

   c. Current user pushback

      Current users may have certain expectations for vehicular access to lands for camping. Pushback from some community members in the light of changes in access policy is possible.

   d. Liability

      Increased number of visitors also increases the risk and probability of injury. We must prevent liability for injury or damage to others accessing or using the lands. (See Liability Statute 520-528)

   e. Also contributes to section 3 above.
5. Shoreline Erosion

   a. Sea level rise is a large contributor to shoreline erosion. This process is also exposing ʻiwi, resulting in potential disturbance, displacement, and discovery by land users.

Major Management Priorities

Cultural / Historical Sites

Background

There have been a number of archaeological surveys with specific references to the project area. These include Walker (1931); Nakkim (1970); State Survey (1973); Cleghorn & Rogers (1987); Estioko-Griffin (1987); Kolb & Orr (1993); Sterling (1998); and Dockall, Lee-Greig & Hammatt (2005).

Noteworthy Mokae and Maka'alae areas: Cleghorn & Kolb identify three Heiaus in close proximity: Hale O Lono Heiau, Kaluanui Heiau and Pakiokio Heiau, all in various states of disrepair.

In addition, Donham (1991) reported the recovery of human remains in the vicinity of Mokae Cove. The location is referred to as the Kaholaiki Burial Site (SIHP 50-13-2385) and is just south of Mokae Cove and Pu'u Hele. Dr. Hunt also documents this area in a letter (2017) with photos. Dr. Fariss commented on the same area: "The reason this matters for this particular project is that if there is a site that includes the burials, then the burials are part of a larger site. This designation conveys the protections of a historic property on a much larger geographic scale, as opposed to just the immediate area where the burials are located." Many older maps also note burials or cemeteries on the Mokae and adjacent parcels.

The other area of significance on the Mokae land is identified in Cleghorn as rock shelter near the wooded area. This location needs further investigation but a number of rock enclosures, terraces and view planes to Hawai'i Island are still evident today.

Inventoried survey fieldwork of the broader area resulted in the identification and documentation of an array of historic properties comprising multiple features related to pre-contact and historic temporary habitation and agriculture, as well as pre-contact ceremonial functions.

Sadly, lineal descendants of the Mokae and Maka'alae lands talk about the ranch owners not just covering over the wahi pana (sacred sites) and graves, but literally carrying the stones off site to conceal the evidence. Thus, much of the pre-contact sites that may have existed at one time are no longer present on the surface.

Goal: Protect burials and cultural and historical sites, and learn from them about the history of the place

Objective 1: Develop a protocol for 'iwi uncovered through coastal erosion

Action Steps:

- Lineal descendents register as such.
- At this time, the instructions from the lineal descendants, based on guidance from SHPD, is to leave any exposed 'iwi in place, cover it if it has become dislodged, offer a pule, and let the ocean take it.
- Review this protocol to determine if any other action needs to take place, such as conditions in which reporting of exposed 'iwi should take place, based on the guidance of the lineal descendants, Hawai'i State Historic Preservation Division (SHPD), and the Maui County Burial Council.
- Determine how to communicate this protocol to community members who may come across exposed 'iwi in this area.

Objective 2: Protect cultural sites

Action Steps:

- Consult archaeologists to determine if any historical sites are in need of protection.
- If necessary, develop and implement preservation measures to protect sites from grazing cattle (fencing) or invasive plants manual (removal).
- Register any sites that are significant enough to warrant it.

Objective 3: Learn more about the history

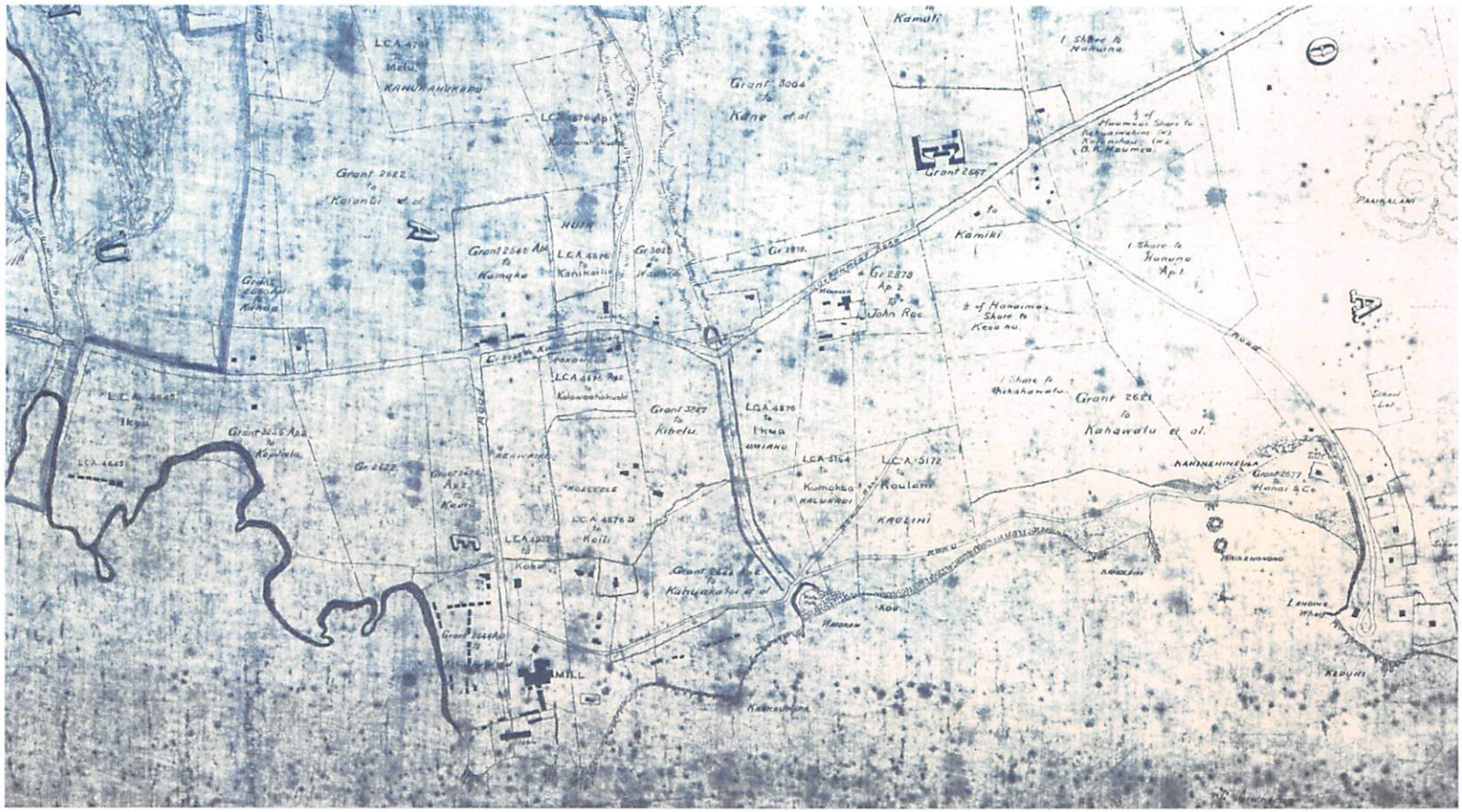
Action Steps:

- Conduct carbon dating of charcoal found in layers in eroded shoreline to discover the historical time periods of settlement and habitation.
- Work with archaeologists to conduct preliminary surveys of cultural sites, to determine if any of them are worthy of more in-depth study.
- Consult with archaeologists to determine if other noninvasive methods (e.g. LIDAR) may be helpful to map and learn from historical sites on the property.
- Conduct oral history interviews with kupuna from the area.
- Conduct archival research (e.g. nupepa) to uncover documentation and stories about the area.

Open Space, Scenic View Planes and Pasture Management

Background

Sugar was first cultivated as an indigenous crop by early polynesian settlers. In the 1850's small farmers began to raise cane crops within LCAs and land grants, and sell cane to local mills. Beginning with Kauiki, six sugar mills were constructed in East Maui between 1849 to 1883. Larger scale cultivation began when a "Mr. Lindgren cultivated 60 acres of cane and ground it with a mill erected in a grass shack in the Haneo'o-Hāmoa flats makai of the Hana Hwy" (Condé and Best, 1973:247). In the 1860s sugar cultivation was begun at Maka'alae where today the remnants of a large concrete mill foundation are still present in field overgrowth.


Kamuli
1 Share to Nahuina
Grant 3064 to Kane et al
Grant 2697
Grant 2662 to Kaiani et al
Grant 2546 Ap to Kamoku
L.C.A. 4876 to Kanikaiki
Gr 3012 to Kaaiakala
Gr 2878
Gr 2878 Ap 2 to John Roe
Kamiki
1 Share to Hununa Ap 1
Grant 2621 to Kahawalu et al
L.C.A. 4876 to Ihua
L.C.A. 5164 to Kumoku
L.C.A. 5172 to Kaulani
Grant 3243 to Kibolu
Grant 3556 Ap 2 to Kapiola
Gr 2622
Grant 2546 Ap 2 to Kaai
L.C.A. 4876 B to Keili
Grant 2546 Ap 2 to Kahuakaloi et al
KAOLINI
NAHINEHINEULA
Grant 2577 to Hanai & Co
MILL
KAPUNI

Mokae plantation. ABH 78700 16

49

The records of the Hawaii Sugar Planters' Association noted the liquidation of the company on December 31, 1945.

The 14,000 or so acres of Hana Plantation were purchased in 1946 by Paul Fagan, who had previously owned Pu'u o Hoku Ranch on Moloka'i, as well as Maunawili Ranch on O'ahu. Fagan converted the plantation to a cattle ranch and began Hotel Hana-Maui. In conjunction with the ranch, construction of the Hotel Hana-Maui was completed in 1947. The conversion from sugar to pasture lands was accomplished, for the most part, by the cattle themselves. Cattle were put in the abandoned cane fields to graze, and thus destroyed the cane (Borthwick et al. 1992: 16). Pasturage was improved over the years through the use of a variety of grasses, including the now dominating pangola.

In 1984 Hana Ranch and Hotel Hana Maui were sold to Rosewood Partners. This began a series of land sales and hotel ventures including purchases in 1989 by Keola Investment Group, and in 2000 by Meridian Financial Resources. In 2001 Meridian divided its assets selling the hotel properties to Passport Resorts and the ranch properties (4,500 acres, including 200 acres at Mokae-Maka'alae) to Hana Ranch Partners (HRP), a mainland investment group based in San Francisco and Montana. In 2002 HRP sold 102 acres of coastal pasture land to Oprah Winfrey and Bob Green (Kingdom Come LLC), and also placed 41 acres at Maka'alae and 4 acres designated as Kakio I under conservation easement, held by the Maui Coastal Land Trust and its successor Hawaiian Islands Land Trust . In 2013, HRP sold the Hana Ranch facilities, including 3,600 acres of ranch land and two water supply companies, to Bio-Logical Capital of Colorado. In 2014 HRP placed an additional 10 acres at Kakio II under conservation easement.

Today, all of the subject lands in the Mokae and Kakio/Maka'alae areas currently owned by HRP are managed through a Grazing License with Hana Ranch/Bio-Logical Capital, which strives to "employ a holistic approach to land management through regenerative agricultural land use." (See Letter of Support, Duane Lammers, Hana Ranch Manager, July 10, 2019) Hana Ranch continues to "graze cattle in each paddock on a rotational basis, perform regular regular maintenance and repairs on existing fence and water infrastructure, and provide support to the current landowners with the vegetation management of some invasive plants that encroach onto the parcels from time to time."

Ke Ao Hāli'i is fortunate that Hana Ranch Manager Duane Lammers has expressed complete willingness to cooperate with KAH's management of the land, to support KAH's goals, and to contribute their experience, expertise and resources in the long-term planning and conservation management of these lands.

Thus, while KAH recognizes the limits or downsides of cattle grazing, and may choose to designate certain areas for uses other that cattle in the future—for example, coastal strand revegetation and seabird and native bee habitat restoration—for the foreseeable future we can continue our partnership with Hana Ranch to keep the land in pasture, maintaining healthy forage for the cattle, while also maintaining the conservation values of open space, view plane to the ocean, and agriculture required in the existing conservation easements.

Goals: Open space, view planes from Hana Highway to ocean
Healthy pastures

Objective 1: Enter into Grazing License with Hana Ranch within three months of acquisition of property

Action Steps:

- Review existing Grazing License with HRP Hana LLC
- Consult with other local expertise and partners (e.g. NRCS) to revise license to best meet KAH's needs
- Continue to work with Hana Ranch to control invasive weeds and maintain/improve existing fence and water infrastructure
- Collaborate in the development of a long-term plan for pasture management, including transitioning to community control and management

Objective 2: Maintain a healthy pasture, manage invasive weeds

Action Steps:

- Survey and map pasture paddocks, with consideration for protection of cultural sites and potential habitat restoration areas for native plants, seabirds and bees
- Develop a plan for management of invasive weeds, targeting priority species and locations based on survey and map
- Acquire equipment that may be needed to support weed management
- Coordinate community work days for volunteer removal of invasive weeds
- Develop herbicide use policy; if needed use herbicides in a very limited and targeted way
- Consider alternative livestock, e.g. goats within electric fences (currently used by Hana Ranch in other areas) specifically for control of invasive weed areas after removal.
- Consider planting of beneficial trees, especially canoe plants (e.g. niu, ulu, milo, kamani, kou) as part of a silviculture integration to provide shade for cattle and useful forest/orchard crops in appropriate areas.

Ecological Integrity and Habitat Restoration

Background

The evolutionary story of Hawaii's flora and fauna is one of the most incredible in the world. Single species arrived by chance, one every 10,000 years. The newcomers colonized and adapted, dispersing and evolving into numerous diverse, specialized and unique species, thriving on the most isolated volcanic masses in the world. 150 distinct ecosystems came to cover those most recently formed geological formations, making Hawaii one of the richest environments on the planet.

Humans arrived and with them a barrage of attacks disturbing the composition of these native communities such that Hawaii now is referred to as the "endangered species capital of the world." 89% of Hawaii's native species are endemic and half of these are at risk (Luna, 2003). 100 plant taxa have gone into extinction, 200 have fewer than fifty plants remaining and 366 plant taxa are now listed as endangered (Bruegmann, Caraway and Maunder, 2002), leaving Hawaii with the highest number of threatened, endangered, and species of concern in the United States.

Of Hawaii's native communities, the coastal strand ecosystem is one of the most devastated, with only small isolated patches intact across the Hawaiian islands. The composition of this ecosystem included nesting shoreline birds and seabirds, specialized insects, salt tolerant plants and the now rare 'ōhai shrub (Sesbania tomentosa spp.). It ran from the shoreline beyond the top of the cliffs contiguous to a low land system that flourished in Mokae in pre-human times.

Ethnographic evidence and modern informants indicate that the early Hawaiians conducted family farming in the Hamoa area (Colb, Orr and Conte, 1993). Traditional subsistence crops of wet and dry taro, sweet potatoes and sugar cane were farmed and pigs kept at what is now the Mokae site. This first human impact was followed by a major disturbance of farm lands and the surrounding natural ecology by the commercialization of sugar cane in the 1850s. The first plantation in East Maui was the Hana Plantation established in 1851 by ex-whaler and sea captain George W. Wilfong (Colb, Orr and Conte). The sugar plantation passed through a series of hands, expanding and drastically changing its lifestyle and landscape, as described above.

A more thorough and lasting disturbance occurred with the purchase of 14,000 acres of land in 1941 by entrepreneur Paul I. Fagan. With the implementation of Fagan's dream to create a cattle ranch and tourist resort the landscape again was transformed. As the cattle ate through the sugar cane, new varieties of grasses were introduced and bull dozing occurred as part of maintenance of the land. Exotic plants such as lantana and Christmas berry were also planted (Colb, Orr and Conte) and the composition of the coastal strand with its blooming flora and their

pollinators along with the seabirds disappeared. The adjacent low lying system also was displaced and a new structure composed of invasive species took its place.

Native Bee Reintroduction

One of the most exciting and vital goals of our work will be the restoration of the coastal strand to its pre-disturbance condition. Our propagation and restoration efforts will focus first on those rare and endangered flora that will most benefit the local fauna at risk of extinction on our island chain. For Ke Ao Hali'i (KAH) this includes the *Hylaeus anthracinus*, a coastal yellow-faced bee endemic to the islands of Oahu, Molokai, Kahoolawe, Maui, Hawaii, and formerly Lanai. The *Hylaius* is an important pollinator of the naupaka (*Scaevola taccada*), 'ohai (*Sesbania tomentosa*), pā'ū o Hi'iaka (*Jacquemontia ovalifolia*), 'ilima (*Sida fallax*), akoko (*Chamaesyce spp.*), pua kala (*Argemone glauca*) and naio (*Myoporum sanwicense*) flora of the coastal strand.

The conservation status of *Hylaeus anthracinus is* critically imperiled. It was listed as endangered in 2016. Once "found widely in the early period of Hawaiian insect collection" between 1892 and 1930 (Magnacca,...), vulnerable populations are now restricted to small patches of habitat. This is due to the decline of its native coastal strand ecology the result of development and the introduction of non-native plants. The reclaiming of coastal strand ecology is now paramount for the survival of this rare and unique bee. Ke Ao Hali'i's efforts to establish zones on the property where flora and fauna are returned to their pre-disturbed state, can play a vital role in this species recovery.

Seabird Recovery

Taken from the Maui Nui Seabird Recovery Project report of September 19, 2018, the following is a description of seabirds and their role in laying the foundation for our island chain prior to the arrival of humankind.

Seabirds are the ecological engineers responsible for transporting marine nutrients to the terrestrial ecosystem. They brought the organic basis of Hawaiian soils to the mineral lava soils to form the rich matrix within which our unique floral community evolved. When Polynesians first arrived to Hawaii, seabirds were the most numerous animals in the islands. The runoff from the islands was rich in nutrients for the near shore environment; feeding the corals, marine invertebrates, and fishes.

With the displacement of the vibrant coastal strand ecology by human activity (commercialization of sugar and introduction of grazing grasses) shorebird and seabird numbers significantly declined due to loss of their nesting sites. Populations also declined due to predation by introduced non-native mammals, the Small Indian Mongoose, Feral Cats and Rats.

In September 2018, at the request of KAH, the Maui Nui Seabird Recovery Project (MNSRP) visited the site to survey the presence of seabirds and shorebirds and assess potential nesting

sites. While no species were found, five sites were located as having the potential to support a multi species seabird colony. With the removal of grazing grasses and other introduced non-native plants, the use of predator proof fencing, trapping, and implementation of propagation and outplanting strategies, we believe the native ecology can be restored at these sites. This will benefit not only the recovery of Maui seabird populations but those of the low lying atolls and islands of Papahanaumokuakea whose millions of seabirds are now threatened by rising waters due to climate change.

Name	Linnean	English	Type	Observed on site 9/19/2018	Currently Nest on Maui
'Ou	*Bulweria bulwarii*	Bulwer's petrel	Seabird	No	Yes
Akē'akē	*Oceanodroma castro*	Band-rumped storm petrel	Seabird	No	Yes
Ua u kani	*Ardenna pacifica*	Wedge-tailed shearwater	Seabird	No	Yes
'Ā	*Sula dactylatra*	Masked Booby	Seabird	No	Yes
'Ā	*Sula sula*	Red-footed booby	Seabird	No	No
Koa e kea	*Phaethon lepturus*	White-tailed tropicbird	Seabird	No	Yes
Koa e ula	*Phaethon rubricauda*	Red-tailed tropicbird	Seabird	No	Yes
Noio	*Anous minutus*	Black noddy	Seabird	No	Yes
Moli	*Phoebastria immutabalis*	Laysan albatross	Seabird	No	No
Ka'upu	*Phoebastria nigripes*	Black -footed albatross	Seabird	No	No
Kōlea	*Pluvialis fulva*	Pacific golden plover	Shorebird	Yes	Off-breeding season resident
'Ūlili	*Tringa incana*	Wandering tattler	Shorebird	Yes	Off-breeding season resident
'Akekeke	*Arenaria interpres*	Ruddy turnstone	Shorebird	Yes	Off-breeding season resident
Hunakai	*Calidris alba*	Sanderling	Shorebird	No	Off-breeding season resident

Seabirds & shorebirds that could benefit from this property being permanently placed in conservation use with predators excluded.

Restoration Strategies

One of the most important goals of KAH is to eradicate the composition of the dominant pasture grasslands and other introduced species on selected cliff ridges and shoreline in favor of a return to the pre-disturbance indigenous flora and fauna function, structure and composition of the coastal strand ecosytem. For Ke Ao Hali'i's purposes this will require first the selection of small financially and practically manageable spaces that would lend themselves to the successful reestablishment of a rich coastal strand ecology. During their site survey MNSRP identified five spaces as good seabird nesting sites. These are the most probable candidates as zones for initial restoration efforts.

Restoration of the coastal strand ecology at the Mokae site will require our commitment to join in an interagency collaboration. Specialized knowledge of propagation techniques and the knowledge of each species as well as potential problems is needed. This requires consultation, joint planning and problem solving, a process we have already begun. A Mokae site visit and plant survey was conducted by Bill Haus, Haleakala National Park in Recourses Management in Vegetation Management on September 15, 2018 along with Patti Welton, Biologist at Haleakala National Park. A bird survey was conducted by Jay Penniman (Manager), Jenni Learned (Operations/GIS Specialist), & Martin Frye (Field Crew Leader) of the Maui Nui Seabird Recovery Project on September 19, 2018. Consultation with Keahi Bustamente (Resource

Management/Endangered Species recovery) was conducted on August 27, 2019. We are now looking to utilize the expertise of the Maui Nui Botanical Gardens for propagation. Our collaboration with these agencies and organizations will formulate the success of our restoration efforts.

Our first steps toward establishing the ecological integrity of our site will be to replace site perimeter fencing with sturdy predator proof fencing to keep the cattle in and feral cats, mongooses and pigs out. Grazing of cattle will continue as a means of controlling pasture grasses and other invasive plants.

Surveys will be made of the entire property as well as our five small targeted zones. Photographs, descriptive annotations and the survey itself will be used to establish a baseline. A timeline with projections will be made. Photographs will record our fauna at the time of outplanting along with notations to be added to the timeline. Observations will be made of the new plant community and data collected over time.

During our first phase of preparation for outplanting, predator proof fencing will be laid incrementally with the restoration of our five targeted zones. These spaces will be monitored on a daily basis. Predators will be immediately removed. With the establishment of a predator eradication committee, we will rely on volunteer support who will lead, plan and navigate predator control. Recruitment will be via word of mouth, community email and posters.

Our first phase will also include the removal of non-native plants. We will use machines where we can (flat areas) and manual labor where we cannot. Picks, metal bars, shovels, axes and machetes will be put to use. A possibility may arise when specifically controlled single plant use of poisons will be considered depending on environmental impact.

Our second phase will include the propagation of the rare flora for our coastal native community. We will work jointly with Maui Nui Botanical Gardens as a source of plants as well as to learn and assist with propagation techniques. We look forward to the possibility of including students in this process. We look to Kahanu Garden, Mehele Garden as well as the Ma Ka Hana Ka 'Ike program at Hana Elementary and High School to establish local nursery sites. As we mature and develop our long term goal is to conditionally establish a nursery at the KAH site.

Volunteer groups are essential to the success of our third phase of restoration; outplanting, and monitoring. We will use volunteers from youth organizations such as the Hana Canoe Club Youth Program, Hana Elementary and High School, and from the Ma Ka Hana Ka 'Ike program to help us plant, maintain, and monitor target sites. We will invite conservation organizations (e.g. The Nature Conservancy), partner agencies (the Maui Nui Seabird Restoration Project) and others to gather together as one hui, connecting reverently and gratefully with the land we are so definitely intertwined.

Goal: Restore the condition of biological diversity of the coastal strand community on cliff ridges and shoreline in selected areas to their pre-disturbance indigenous flora and fauna function, structure and composition

Objective 1: Long term propagation and incremental outplanting of rare coastal strand flora to benefit native fauna

Action Steps:

- Consultation with interagency experts Jay Penniman of the Maui Nui Seabird Recovery Project (MNSRP) and Keahi Bustamante (Endangered Species and Recovery Specialist) have been made to determine that *Hylaeus anthracinus* (an endangered endemic yellow face bee species) and multi-species of native seabirds might return and flourish in response to the removal of invasive species and restoration of native flora
- Surveying was done by Jay Penniman, Jenni Learned, & Martin Frye of the MNSRP and five potential nesting sites located
- Surveying of the composition of the existing plant community was taken by Bill Haus and biologist Patti Welton of Haleakala National Park (HNP)
- Survey and mapping of the targeted recovery zones will be conducted by Keahi Bustamante
- Establish a baseline for restoration using photographs and the survey and map
- Listing of rare plant species for propagation with input from (MNSRP) and Keahi Bustamante has been made; further input will be sought
- Consider propagation techniques with advise from Maui Nui Botanical Gardens and other experts in the field
- Develop a propagation plan in consultation with plant restoration experts and Maui Nui Botanical Gardens
- Consider need for seed collection and pollination of rare plants
- Pursue collaboration with Maui Nui Botanical Gardens for propagation of rare plants and seek contribution of plants for outplanting
- Pursue coordinated efforts with Hana's Kahanu Garden, Mehele Garden as well as the Ma Ka Hana Ka 'Ike program at Hana Elementary and High School to establish local nurseries for propagation at their sites
- Develop a long term plan to conditionally establish a nursery at the Ka Ao Hali'i site
- Develop an invasive species removal plan
- Plan joint community, organizational and interagency workdays for removal of invasives
- Remove invasive species using machines and manual labor on workdays
- Erection of predator proof fencing around targeted zones on workdays
- Develop predator eradication plan to include a volunteer community led committee formed for implementation
- Consider outplanting strategies consulting with experts

- Develop a plan for implementation of outplanting strategies along with site preparation, mapping layout and timing.
- Plan and organize work days for outplanting

Objective 2: Maintenance and management of coastal strand flora to protect and encourage augmentation over time

Action Steps:

- Consider maintenance strategies under the advisement of local experts and agencies
- Develop a plan of action including an organizational body within KAH to coordinate efforts to implement strategies
- Construct cattle proof exclosure
- Acquire tools and equipment for maintenance and management including protective caging for plants, water, predator traps
- Develop strategies for tracking health, growth and development of plant communities
- Seek to problem solve jointly with other organizations, agencies and individual experts
- Implement aggressively and daily the predator eradication plan

Marine Habitat

The shoreline areas of Mokae and Kakio/Maka'alae are important subsistence fishing and gathering areas for local families, an area known especially for its abundant and diverse limu beds, and maintaining the health of this intertidal and nearshore ecosystem is one of the management priorities for Ka Ao Hali'i. While we recognize that the shoreline is not part of the actual land parcels we are seeking to acquire and manage, as stewards of the adjacent lands through which the shoreline is accessed, we have an opportunity to play an active role in the management of the marine resources as well.

Shoreline management efforts will include 'opihi surveys and possibly an 'opihi "rest area" or replenishment area, based on the model established by Na Mamo O Mu'olea and Kipahulu 'Ohana. We will establish a pono fishing guideline as part of our "code of conduct" for all users who are granted vehicular access to the land for overnight camping or other uses. And we will work with partners like Hana Trash Club to sponsor beach cleanups to remove marine debris from the shoreline.

The marine management aspects will be updated with more details in future versions of this plan.

Public Access / Recreational Uses

Ka Ao Hāli'i recognizes the public outdoor recreational and educational uses as one of the highlights of the conservation values of this land.

It is the intention of Ke Ao Hali'i to manage the land to perpetuate the outdoor recreation and education opportunities, while also protecting it from overuse.

Vehicular Access and Overnight Camping

We do not intend to restrict pedestrian access, but we plan to manage vehicular access to allow for limited usage while preventing overuse. We will develop a fair and open policy for how access is granted, to whom and for what purposes, and a code of conduct for the use of the property for activities such as family and educational gatherings.

We recognize that it is a priority to develop a written policy in consultation with lineal descendants and community members who are traditional users of the area that will govern key management, vehicular access, educational and other group uses, and overnight camping.

We have requested a copy of HRP Hana LLC's existing policy for use of the key and overnight camping, so we have a baseline of how the land has been managed in the past, and what expectations may exist among users. And we will seek their insights into challenges and solutions that they may have encountered and developed in their management experience.

One model that we are also looking to for guidance is the management by Na Mamo O Mu'olea of a 70-acre parcel of land that is owned by the county and managed by the local nonprofit organization. Na Mamo O Mu'olea allows vehicular access for camping by maintaining a calendar reservation system to ensure coordination of uses of prime camping spots, and a chance for the areas to "rest" in between large camping groups or other gatherings. Na Mamo O Mu'olea also maintains a reciprocation agreement with users, so that anyone who camps there is expected to "give back" in the form of clearing, weed control, participating in 'opihi surveys, or other tasks to help maintain the area in a good condition for everyone; this is a policy that we will consider emulating, with a list of tasks that any group or overnight users can contribute as a way to give back to the place.

We will also consult with other resources, such as the state's Makai Watch program, for resources and ideas about how to effectively manage and balance recreational uses of popular areas, and examples of other locations around the state.

Code of Conduct

We will establish a "Code of Conduct" for users who have vehicular access for overnight camping or other uses, to sign at key check-out, and also a version may be posted as signage in the main camping areas.

The Code of Conduct will be refined through stakeholder input, with the following draft points to be considered. The Code of Conduct is an adaptive process that will continue to be refined with experience and feedback from users.

General

- Get involved and support – overnight/camping access may depend on participating in community workdays or otherwise volunteering and showing a commitment and connection to the cooperative management of the place.
- Reservation system – local family sponsor who is responsible for all in their party to understand and adhere to the Code of Conduct
- Consequence for violations of Code of Conduct may result in temporary or permanent loss of permission
- Liability waiver

Respect the Area and the Culture

- Carry out what you bring in, leave it as or better than you found it
- Clean up after yourself
- Doo doo from animals and people (no lua, nearest public restroom is Hāna Ball Park, bring own toilet)
- Respect cultural sites
- Follow protocol when 'iwi are found
- Use traditional place names (e.g. Waioka rather than "Venus Pond")
- Prevent invasive species – clean boots/tires if coming from other places
- Use reef safe sunscreen
- Walk on designated trails
- Park in designated areas (at your own risk)
- Camp fire in designated areas only, put fire out before leaving
- Limit social media ports/geotagging
- No golfing
- No fireworks

Respect others

- Share the space
- Keep clothes on
- Keep noise down, minimize loud music
- Quiet hours (after 10 pm)
- Respect local users/fishermen

- Curfew for access, no late night in-and-out
- No soliciting

Safety

- Maka'ala – stay alert, take responsibility for your actions
- Be aware for flash flood, high surf and other watches and warnings
- Maintain distance from grazing animals, keep pets under control
- Coordinate with emergency response and create a relationship with them, develop a protocol for emergency access if needed

Pono Fishing

- Harvest what you need and catch what you can carry
- Share catch report for data information
  - o Voluntarily contribute data so can manage better
  - o Install check station so know what's harvested
- No commercial harvest
- No night harvest/diving
- Abide by state fishing regulations
- Respect kapu/spawning periods for fishing
- Throw little ones back and leave very large one for reproduction
- Limu – trim, don't pull holdfast (roots)
- 'Opihi - take only what you will eat during your stay, take only between 2-¼" and 2-¾" sizes (leave the big ones), keep moving while picking and don't take too many from one area, respect the voluntary "rest area" if one is established

Waioka Pond Access

With the acquisition of parcel (2)4-1-012-002 adjacent to Waiohonu Stream, we will inherit the responsibility to manage what is currently used as the primary access trail to Waioka Pond, a trail with heavy pedestrian traffic daily, based on listings in various tourist guidebooks and social media platforms.

Our purpose is not to attempt to manage or regulate the use of the pond itself, which is on state land. Nevertheless, we recognized that we will need to develop policies for access to the pond across the land that we manage and steward.

The following is a basic outline of management considerations that we will take into account with regards to the Waioka access trail.

- Baseline survey
  - # visitors and cars per day
  - during seasons, weather, stream flow

    - carrying capacity
- Research
    - Liability, parking, access (DLNR)
    - Other examples of people solving similar issues (e.g. Ha'ena)
    - History
- Communication and outreach - stakeholder engagement for developing a plan
    - Neighbors, DLNR, local kids, Makai Watch, police
- Develop a plan of action based on research and communication
    - Safety
    - Carrying capacity
    - Infrastructure
    - Code of conduct (e.g. loud music, alcohol)
    - Options for access points (DLNR easement on other side; or closer to river on state land?)
    - Rest periods, cultural use/kapu days
    - Parking regulation
    - Social media/guidebooks (outreach to them)
    - Communication to users (signage, pop up tent w person there, e.g. Makai Watch)

Education

Background

We must strengthen the connection to the land through historical and cultural lessons and activities, and encourage the traditional uses of the land by multigenerational families, to perpetuate our cultural knowledge and practices.

Goal: Our goals from an educational perspective are to involve the community in the management and preservation of Hana's coastal land; to strengthen connection to the land through historical and cultural lessons and activities; and to increase awareness of precious resources and the importance of protecting them, which will in turn create future leaders and stewards of the land.

Local School children
Objective 1: Integrate Hana's youth in the restoration, management and preservation of Hana's coastal land as they apply scientific methods and concepts to a living laboratory.

Action Steps:

- Collaborate to furnish teachers with knowledge and information about the coastal strand ecosystem (function, structure and composition) and decline for the creation and implementation of meaningful lesson plans that would support student understanding of "how ecosystems work"
- Collaborate by providing teachers with knowledge and information about the bio-history of Hawaii's endemic bees and the unique role of Hylaeus anthracinus as a pollinator of the coastal strand flora community for the creation and implementation of meaningful lesson plans that would support student understanding of their important role in our restoration efforts
- Collaborate by providing teachers with knowledge, information and resources of the role of seabirds in the creation of the Hawaiian Islands, their important function for healthy marine life and cause of their decline to support student understanding of their role as vital members of the human species empowered to take responsibility to reverse the ecological disruptions by mankind
- Provide teachers with information and online resources to create visual aides to provide students with the opportunity to sort plants found at the Mokae site according to their similarities and differences; to provide students the opportunity to think critically and pose the questions as to why these similarities and differences exist, to lay the ground work for student ability to identify the physical differences between native, endemic and invasive species
- Collaborate to allow students to work alongside experts in the field to use their knowledge to contribute meaningfully by conducting surveys of flora and fauna in selected areas, creating graphs identifying and classifying plants as either native, endemic native or invasive species
- Invite students to help eradicate invasive species lending manpower and technical and clerical support
- Invite teachers to select students to participate with KAH board and community members in a visit to Maui Nui Botanical Gardens to observe, learn and discuss propagations techniques including seed collection and manual pollination
- Collaborate with school site and classrooms to establish nurseries to learn and engage in rare plant propagation techniques under the guidance of experts and to create a connection to the fragility and living nature of plants

- Collaborate with teachers and their classrooms to recruit students to participate in the outplanting of endemic and natives plants and cultivation of canoe plants through field trips and after school activities and clubs, working alongside experts in the field in implementation of our restoration plan
- Promote student understanding of "what is a baseline and why we need one" by onsite participation
- Collaborate with teachers and their students to participate in maintenance by returning periodically to the site to track and record observations of the health and development of the flora they planted keeping a photographic or illustrated journals
- Invite students create a mural of the biological diversity of a healthy pre-disturbance coastal strand ecology to be displayed at our fund raising events, the library or other venues
- Invite students to write their own visions for the future of Hawaii

Objective 2: To develop a symbiotic relationship between educational institutions, the community and public now and in the future

Action Steps:

- Create a collaborative process to work with students and the community to develop a realistic plan to restore native, endemic and canoe species by way of incremental restoration projects on the lands purchased by Ke Ao Hali'i now and in the future
- Collaborate with Hana High and Elementary School and Youth Center to provide opportunities for project-based learning - This year Hana School is focusing on project based learning starting in the second semester. This will give those students who are interested in land preservation excellent opportunity to work directly with the aina.
- Make available the site to student learning by providing access for field trips-- Students in grades k-12 could visit the area for cultural and academic purposes.
- Allow access to the site for Marine Science exploration- This year Hana School has hired a new, experienced science teacher who has expressed interest in applying science concepts to real life experiences
- Provide access to students of Hana School to experience Mo'olelo of the ahupua'a on the Mokae site. As children are taught mo'olelo

from a very young age it is very powerful for them to hear the stories in the places they occur. This is an excellent way to bond our keiki to the land and make their interactions with the aina even more meaningful

- Collaborate with the University of Hawaii at Maui and even other college level classes, kumu, etc.
- Collaborate with teachers and students from local colleges in educational efforts in resource management, science, etc.

Objective 3: Recognize and respect the Kupuna and practitioners of the land in our community as great resources to help educate and strengthen the community's connection to the land and to preserve their knowledge by creating a record of the stories and personal anecdotes that are appropriate for the situation and that they are willing to share

Action Steps:

- Recognize that apart of the children's cultural and historical lessons will be to seek knowledge from their own kupuna and family members who have a connection to the land through cultural practices of ceremony, fishing, hunting, gathering or recreation
- Facilitate the opportunity for this interaction through a community camp on the Hana coast and/or dinner with story-telling
- Facilitate an opportunity to respectfully ask the elders of our community to share their insight as to the changes in the environment over the last 50 years (What plants used to grow in these areas, which animals used to live here and how they have seen things change in their lifetime)

Objective 5: To better inform the people who visit Hana, whether it is from the other side of the island or from the other side of the world, about the unique culture, history and ecology of the area, and their important role in respecting cultural values and limited resources, both by interacting with its people and places with integrity and through financial support of conservation efforts

Action Steps:

- Provide tour van companies with knowledge and information about our conservation efforts so that they may conduct informed narrations on our efforts and site history to their customers

- Provide tourists and tour van companies with educational pamphlets on our site's ecological and cultural history and highlighted KAH webpage address
- Pursue a strategic social media campaign to share who we are, what we are about (our goals, work and accomplishments), our next challenge and how they can get involved
- Consider the idea of sharing and posting signage around town; at the hotel, cultural center and other appropriate locations to inform and educate visitors and community members

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