

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Forestry and Wildlife  
Honolulu, Hawaii 96813

March 24, 2023

Chairperson and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

Land Board Members:

SUBJECT: ACCEPTANCE OF HEARING MASTER'S REPORT, SET ASIDE LANDS  
AS FOREST RESERVES, NATURAL AREA RESERVES, AND WILDLIFE  
SANCTUARIES STATEWIDE:

FOREST RESERVES ON:

KAUAI: (4) 4-4-001:002, (4) 5-6-002:001

OAHU: (1) 4-8-013:013, (1) 6-9-001:004, (1) 9-1-017:158, (1) 9-9-010:052, and (1) 9-9-011:002

MAUI: (2) 1-1-001:001, (2) 1-1-001:021, (2) 1-1-001:031, (2) 1-1-001:052, (2) 1-1-002:005, (2) 1-1-002:006, (2) 1-1-008:001, (2) 1-1-008:005, (2) 1-2-001:039, (2) 1-3-003:017, (2) 1-3-006:007, (2) 1-4-011:003, (2) 1-4-011:004, (2) 1-4-012:019, (2) 1-5-002:004, (2) 1-5-008:004, (2) 1-5-010:008, (2) 1-5-011:007, (2) 1-5-011:012, (2) 1-5-011:014, (2) 1-5-011:015, (2) 1-5-011:029, (2) 1-6-002:009, (2) 1-7-002:011, (2) 1-7-002:044, (2) 1-7-003:013, (2) 2-4-016:001, (2) 2-9-001:020, (2) 2-9-001:033, (2) 2-9-002:012, (2) 2-9-010:008, (2) 2-9-010:009, (2) 2-9-010:012, (2) 2-9-010:021, (2) 2-9-010:022, (2) 2-9-011:008, (2) 2-9-011:013, (2) 2-9-013:004, (2) 2-9-013:012, (2) 2-9-013:014, (2) 2-9-013:016, (2) 2-9-013:017, (2) 2-9-013:018, (2) 2-9-013:020, (2) 3-1-001:001, (2) 3-1-001:021, (2) 3-1-001:029, (2) 3-1-006:003, (2) 3-6-001:014 (por.), (2) 4-4-004:002, (2) 4-4-004:006, (2) 4-4-004:009, (2) 4-4-004:011, (2) 4-4-004:019, (2) 4-4-007:006, (2) 4-5-021:004, (2) 4-5-021:023, (2) 4-8-001:001 (por.), (2) 4-8-002:002, (2) 4-8-002:008, (2) 4-8-002:039, (2) 4-8-003:008 (por.), (2) 4-8-003:040

HAWAII: (3) 2-4-008:035, (3) 5-1-001:006, (3) 8-7-014:015, (3) 4-4:014:004, (3) 6-2:001:003 (por.), and (3) 9-6-007:002

ITEM C-3

NATURAL AREA RESERVES ON:

MOLOKAI: (2) 6-1-001:002 (por.)

MAUI: (2) 1-3-003:026, (2) 1-3-005:002, (2) 1-3-003:001, (2) 1-8-001:005, (2) 2-1-003:050 (por.), (2) 2-1-004:075, (2) 2-1-004:110, (2) 2-1-006:010, (2) 2-1-006:077, (2) 2-1-006:078

WILDLIFE SANCTUARIES ON:

MAUI: (2) 3-1-001:014 and (2) 3-1-002:011

BACKGROUND:

On May 27, 2022, The Board authorized a memorandum of understanding between the Division of Forestry and Wildlife and the Land Division for increased collaboration and assistance. This included the following agreement:

*The parties will collaborate on the Land Division Strategic Plan to identify parcels ... that can provide areas for conservation, preservation, recreation, and sustainable forest products; areas to be transferred to DOFAW for management; and parcels that have other resource or public recreational value, such as for public access easements.*

The Division of Forestry and Wildlife (Division) has identified parcels that are appropriate to set aside as Forest Reserves, Wildlife Sanctuaries, and Natural Area Reserves (NARs). The parcels recommended for set aside contain significant forestry and wildlife resources and values, including:

- Connectivity of streams and reserves from the summit to the sea
- Connectivity to existing reserves
- Public access to shorelines and public trust reserves
- Native species and their habitats
- Native ecosystems
- Critical habitat for endangered species
- Watersheds
- Opportunities for reforestation and habitat restoration to enhance ecosystem services and climate change resilience

Set aside of these lands will facilitate opportunities for long-term management, apply rules for their respective designation, and provide the Division authority to manage these areas directly. Exhibit 1 lists these parcels and summarizes the proposed designation and justification and contains maps. Exhibit 2 includes the proposals for Natural Area Reserves that were recommended by the Natural Area Reserves System

Commission on August 18, 2022. Due to the large number of individual parcels, the Division has created an interactive public web-map where viewers can locate the parcels: <https://arcg.is/1ieizz>. Viewers can also click on each individual parcel and see a summary of the resource values.

Pursuant to Sections 183-12 and 195-4, Hawaii Revised Statutes (HRS), public hearings must be held on proposed set asides to Forest Reserves and Natural Area Reserves. While public hearings are not required to set aside Wildlife Sanctuaries, the Division collected testimony for the Board on the proposed Sanctuary as well. The Board authorized the Department to hold public hearings on these proposed set-asides on November 10, 2022, Item C-3.

Legal ads announcing the public hearings were published in accordance with Section 183-12 and 195-4, HRS in the Hawaii Tribune Herald, West Hawaii Today, The Garden Island, Honolulu Star-Advertiser on December 22, 2022, and The Maui News on December 26, 2022. The Department also issued a press release on January 5, 2023, announcing the public hearings. The Department issued a second press release announcing additional in-person hearings for Maui and Molokai on February 7, 2023. Finally, the Division published a website with an interactive map of the parcels, information on the proposals, and a direct form to submit comments. A letter to various interested parties announcing the public hearing was also sent. On Molokai, flyers advertising the public hearing were posted in various locations.

Separate public hearings were held in early 2023 to focus on the proposals of each district: O'ahu (January 9), Hawai'i Island (January 17 and 18), Kaua'i (January 19), Maui District (February 15), Molokai (February 23), Maui (March 2). Written comments were due on March 1, 2023.

In addition to the formal press releases and public hearings conducted pursuant to statute, the Division conducted considerable informal outreach and consultation that included notification and meetings with community groups and interested individuals. Included among those were four "talk story" sessions on Molokai to discuss Natural Area Reserve issues, including the proposed Reserve in Waikolu that is part of this submittal, as well as other issues that will be in separate submittals regarding 'Ilio Point and the Natural Area Reserve Rule designations. A summary of early consultation and outreach on this initiative is provided in Exhibit 3.

## DISCUSSION

The proposed additions to Forest Reserves, Natural Area Reserves, and Wildlife Sanctuaries was widely supported by most of the constituents we engaged with during formal and informal consultations. The Division received twenty testimonies in support, six comments, and five in opposition. The supportive public testimony mainly cited benefits for public access and ecosystem protection. Below is a list of the comments or opposition that were received, as well as the Division's response.

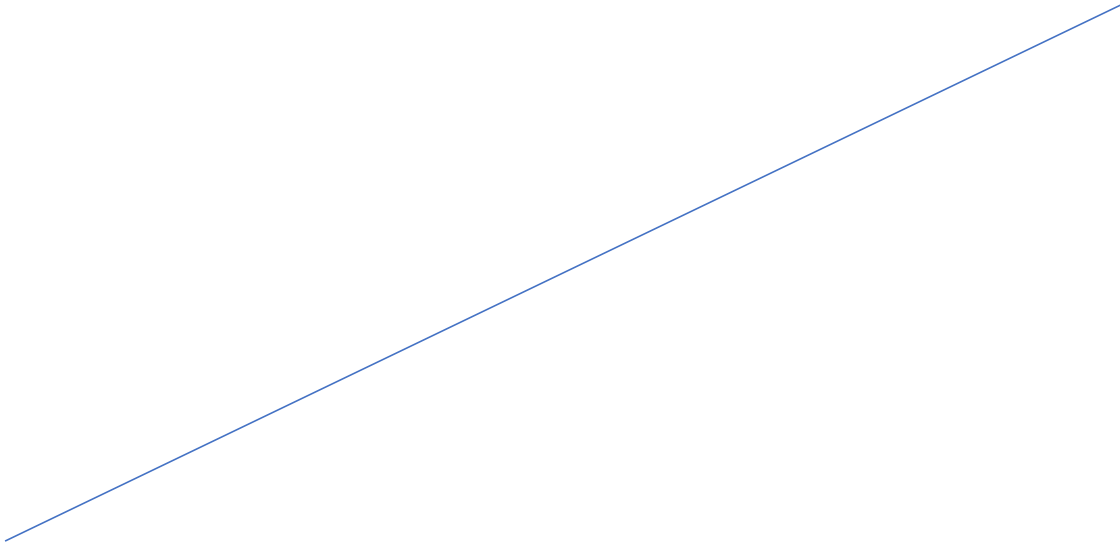
1. A public hearing in East Moloka'i is requested.
  - a. The Division held a public hearing in Kaunakakai, Molokai on the proposed extension of the Pu'u Ali'i NAR into Waikolu valley as well as the designation of five additional parcels in East Molokai which were proposed to be designated as part of the Molokai Forest Reserve: (2) 5-7-005:026, (2) 5-7-005:031, (2) 5-8-003:023, (2) 5-8-015:007, and (2) 5-8-015:009. The two Molokai testimonies in opposition were specifically about these proposed Forest Reserves in East Molokai. Since the community requested more meetings on this topic, we have removed the proposed Molokai Forest Reserve additions from this submittal to provide more opportunity for public comment in future meetings.
2. Lack of public notice, hearings, too little time to provide written comments, and the need for an environmental assessment to be done on these set-asides to provide more information and an additional opportunity to comment.
  - a. The Division notes that there were approximately two months provided to provide written comments. The Division met with anyone who sought to receive more information on the proposal. See Exhibit 4 as well as the prior discussion about the press releases, websites, legal advertisements, letters, individual meetings, and public hearings offered regarding these set asides. Those who sought additional public comment were Molokai residents. As a result of these comments, the Division has withdrawn the proposed Forest Reserve additions in East Molokai from this submittal to allow for additional discussions.
3. Wailua beach (Maui) should not be accessible to the public.
  - a. This comment relates to parcel (2) 1-5:010:008 in Wailua valley in the Hana district, Maui. The comment expressed concerns about shoreline access in sensitive areas and requested this parcel not be included in the set aside. The Division is sensitive to the large visitor presence in the region and is seeking to manage those visitation issues. The Division does not anticipate development or improvement of trails and access to the shoreline at this site in the foreseeable future.
4. Interest in doing community co-management on Reserves and requests for cultural access.
  - a. The Department welcomes community groups or individuals who seek to help manage these areas or engage in cultural practice. The Division already has multiple co-management agreements with private entities and has programs that offer other support such as financial assistance.
5. Additional regulations from the NARS reduces public access.
  - a. In general, the Natural Area Reserves are open to public access. However, public access is managed more closely in a NAR and certain portions of a NAR may be restricted to prevent damage to natural or cultural resources.

The Division of Forestry and Wildlife recommends these areas for set aside because they contain forest, watershed, native species, and recreational resources that warrant a higher level of management. In some smaller parcels, these resources are lacking, however the parcels provide improved access for the public or to manage threats. In a few other cases, some parcels are proposed for designation because they are adjacent to an existing Reserve, and it would simplify management designation and rule applicability to include these areas within that adjacent Reserve.

Prior to set aside, survey maps will be required per the Department of Accounting and General Services Survey Division.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

This action before the Board represents a transfer in management jurisdiction and does not constitute a use of State lands or funds, and therefore, this action is exempt from the provisions of Chapter 343, HRS, relating to environmental impact statements.



RECOMMENDATIONS: That the Board:

- 1) Accept the Hearing Master's Report (Exhibit 3).
- 2) Approve of and recommend to the Governor the issuance of an executive order setting aside subject lands as Forest Reserves, Natural Area Reserves, and Wildlife Sanctuaries, subject to:
  - a. The standard terms and conditions of the most current executive order form, as may be amended from time to time,
  - b. Disapproval by the Legislature by two-thirds vote of either the House of Representatives or the Senate or by a majority vote by both in any regular or special session next following the date of the setting aside,
  - c. Review and approval by the Department of the Attorney General, and
  - d. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully Submitted,



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David G. Smith, Administrator  
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:



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Dawn N.S. Chang, Chairperson

Attachments

Exhibit I

Proposal	Island	TMK	Justification	Acres
Proposed Forest Reserve	Oahu	148013013	Add to Waiahole FR	0.1
Proposed Forest Reserve	Oahu	169001004	Designate as FR; parcel contains dry forest remnants; cultural sites; high fire threat.	650.9
Proposed Forest Reserve	Oahu	191017158	Potential baseyard site and plant sanctuary (abutilon)	34.8
Proposed Forest Reserve	Oahu	199010052	Cultural Sites; Hunting Area; FR	15.0
Proposed Forest Reserve	Oahu	199011002	Parcel contains forest resources, cultural sites; could be a potential hunting area.	2,563.9
Proposed Forest Reserve	Maui	211001001	Parcel provides summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	28.4
Proposed Forest Reserve	Maui	211001021	Parcel provides summit to sea connectivity, endangered species critical habitat, cons district, shoreline access, forest reserve access, stream connectivity, reserve connectivity, high value coastal vegetation, seabird nesting, trails and access	19.9
Proposed Forest Reserve	Maui	211001031	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	86.8
Proposed Forest Reserve	Maui	211001052	Parcel provides summit to sea connectivity, endangered species critical habitat, conservation district, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and ac	87.8
Proposed Forest Reserve	Maui	211002005	Parcel provides summit to sea connectivity, endangered species critical habitat, conservation district, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, alaloe, trail	10.0
Proposed Forest Reserve	Maui	211002006	Forest reserve access, conservation district, stream and estuary, reserve connectivity, trails and access, recreation.	8.1
Proposed Forest Reserve	Maui	211002007	Parcel provides summit to sea connectivity, endangered species critical habitat, cons district, shoreline access, forest reserve access, stream connectivity, reserve connectivity, high value coastal vegetation, seabird nesting, alaloe, trails and access	30.6
Proposed Forest Reserve	Maui	211008001	Shoreline access, conservation district, reserve connectivity, high value coastal vegetation, recreation.	168.0
Proposed Forest Reserve	Maui	211008005	Forest reserve access, conservation district, stream, reserve connectivity, trails and access, recreation, hunter access.	142.2
Proposed Forest Reserve	Maui	212001039	Endangered species critical habitat, conservation district, Shoreline access, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation	35.0
Proposed Natural Area Reserve	Maui	213003001	Parcel contains high value coastal hala forest ecosystem, conservation district, shoreline access, and historic Ke Alaloe O Maui (Piilani Trail) and access. Protection as a NAR provides connectivity to adjacent conservation lands of Kahanu Garden.	291.8
Proposed Forest Reserve	Maui	213003017	Forest reserve access, reserve connectivity, trails and access, recreation, hunter access.	555.7
Proposed Natural Area Reserve	Maui	213003026	Parcel contains high value coastal hala forest ecosystem, endangered species critical habitat, conservation district, shoreline access, and historic Ke Alaloe O Maui (Piilani Trail) and access.	241.5
Proposed Natural Area Reserve	Maui	213005002	Parcel contains high value coastal hala forest ecosystem, anchaline pools and caves, endangered species critical habitat, conservation district, shoreline access, and historic Ke Alaloe O Maui (Piilani Trail) and access.	180.8
Proposed Forest Reserve	Maui	213006007	Coastal hala forest, conservation district, shoreline access, coastal vegetation, trails and access, recreation	260.8
Proposed Forest Reserve	Maui	214011003	Parcel connects forest reserve and stream summit to sea, hunter access, trails and access	18.9
Proposed Forest Reserve	Maui	214011004	Parcel connects forest reserve and stream summit to sea, hunter access, trails and access	40.4
Proposed Forest Reserve	Maui	214012019	Parcel connects forest reserve and stream summit to sea, hunter access, trails and access	4.5
Proposed Forest Reserve	Maui	215002004	Parcel connects forest reserve and stream summit to sea, hunter access, trails and access	14.5
Proposed Forest Reserve	Maui	215008004	Connects forest reserve and stream summit to sea, conservation district, forest reserve access, trails and access, recreation, hunter access.	104.3
Proposed Forest Reserve	Maui	215010008	Shoreline access, connects forest reserve and stream summit to sea, conservation district, forest reserve access, trails and access, recreation, hunter access, very high value coastal vegetation, seabird nesting.	16.2
Proposed Forest Reserve	Maui	215011007	Forest reserve connectivity, NPS connectivity, FR access	70.7
Proposed Forest Reserve	Maui	215011012	Connectivity to forest reserve, potential hunter access	17.4
Proposed Forest Reserve	Maui	215011014	Connectivity to forest reserve, potential hunter access	19.6
Proposed Forest Reserve	Maui	215011015	Shoreline access, potential connectivity to forest reserve, potential hunter access	8.1
Proposed Forest Reserve	Maui	215011029	Connectivity to forest reserve, potential hunter access, brings access closer to public highway	20.8
Proposed Forest Reserve	Maui	216002009	Forest reserve connectivity, FR access, NPS connectivity	40.3
Proposed Forest Reserve	Maui	217002011	Forest reserve access, dry forest restoration, reserve connectivity, potential trails and access, recreation, erosion management	281.2
Proposed Forest Reserve	Maui	217002044	Possible connectivity from public highway, possible stream management, possible connectivity to mauka parcel located adjacent to forest reserve	0.4
Proposed Forest Reserve	Maui	217003013	Possible connectivity to shoreline, possible stream management	2.3
Proposed Natural Area Reserve	Maui	218001005	Lands adjacent to the Na Kula NAR where native forest restoration is in progress. Contains endangered species critical habitat and potential opportunities for trails and access and recreation.	402.9
Proposed Natural Area Reserve	Maui	221003050 (por)	Dryland forest restoration potential, regional invasive species control. See proposal.	504.4
Proposed Natural Area Reserve	Maui	221004075	Lands and waters near Ahihi-Kinau NAR containing cultural sites, historic Hoapili trail, conservation district, and shoreline access.	15.4
Proposed Natural Area Reserve	Maui	221004110	Lands and waters near Ahihi-Kinau NAR containing cultural sites, historic Hoapili trail, conservation district, and shoreline access.	5.2
Proposed Natural Area Reserve	Maui	221006010	Proposed NAR for connectivity and improved management of Ahihi Kinau NAR.	4.0
Proposed Natural Area Reserve	Maui	221006077	Connectivity to NAR, historic Hoapili Trail, conservation district, Shoreline access, reserve connectivity, trails and access, recreation	1.1
Proposed Natural Area Reserve	Maui	221006078	Parcel is adjacent to lands and waters of Ahihi-Kinau NAR, including conservation district and shoreline access. High visitor use impacts NAR resources. Inclusion in the NAR will improve management of impacts to NAR resources.	0.3
Proposed Forest Reserve	Maui	224016001	Koa silviculture, reforestation, forest reserve access, reserve connectivity, trails and access, recreation, hunter access	171.6
Proposed Forest Reserve	Maui	229001020	Shoreline access to historic Hoolawa Landing, stream corridor and estuary, riparian habitat, high value coastal vegetation, recreation.	10.8
Proposed Forest Reserve	Maui	229001033	Shoreline access to historic Hoolawa Landing, stream corridor and estuary, riparian habitat, high value coastal vegetation, recreation.	1.8
Proposed Forest Reserve	Maui	229002012	Shoreline access to historic Hoolawa Landing, stream corridor and estuary, riparian habitat, high value coastal vegetation, recreation.	2.2
Proposed Forest Reserve	Maui	229010008	Parcel provides summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation.	2.3
Proposed Forest Reserve	Maui	229010009	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	1.5
Proposed Forest Reserve	Maui	229010012	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	21.5
Proposed Forest Reserve	Maui	229010012	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	1.8
Proposed Forest Reserve	Maui	229010022	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	11.1
Proposed Forest Reserve	Maui	229011008	Shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation, public hunting	26.8

Proposed Forest Reserve	Maui	229011013	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	40.6
Proposed Forest Reserve	Maui	229013004	Parcel provides summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation.	1.2
Proposed Forest Reserve	Maui	229013012	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	57.7
Proposed Forest Reserve	Maui	229013014	Parcel provide summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation.	93.6
Proposed Forest Reserve	Maui	229013016	Corridor, need to access across for shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access	1.1
Proposed Forest Reserve	Maui	229013017	Parcel provides summit to sea connectivity, shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation.	7.0
Proposed Forest Reserve	Maui	229013018	Shoreline access, forest reserve access, stream connectivity, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation, public hunting	0.7
Proposed Forest Reserve	Maui	229013020	Corridor, need to access across for shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access	0.1
Proposed Forest Reserve	Maui	231001001	Forest reserve access, reserve connectivity, trails and access, recreation. Approve set aside upon expiration or termination of current lease.	194.5
Proposed Wildlife Sanctuary	Maui	231001014	Endangered species critical habitat, shoreline access, reserve connectivity, very high value coastal vegetation, seabird nesting, trails and access, recreation	95.9
Proposed Forest Reserve	Maui	231001021	Shoreline access, forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, erosion control	107.3
Proposed Forest Reserve	Maui	231001029	Forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, erosion mitigation. Approve set aside upon expiration or termination of current lease.	47.7
Proposed Wildlife Sanctuary	Maui	231002011	Shoreline access, endangered species critical habitat, conservation district, seabird nesting area	100.8
Proposed Forest Reserve	Maui	231006003	Conservation district, forest reserve access, reserve connectivity, trails and access, recreation	158.2
Proposed Forest Reserve	Maui	236001014 (por)*	Endangered species critical habitat, conservation district, forest reserve access, reserve connectivity, trails and access, recreation, very high fire risk, very high erosion problem, dry forest restoration. Set aside to exclude wind turbine lease area.	3,325.2
Proposed Forest Reserve	Maui	244004002	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	268.8
Proposed Forest Reserve	Maui	244004006	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	68.1
Proposed Forest Reserve	Maui	244004009	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	156.1
Proposed Forest Reserve	Maui	244004011	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	11.8
Proposed Forest Reserve	Maui	244004019	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	6.9
Proposed Forest Reserve	Maui	244007006	Mahinahina Section (West Maui Forest Reserve) access & NAR, conservation district, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	194.2
Proposed Forest Reserve	Maui	245021004	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management.	773.0
Proposed Forest Reserve	Maui	245021023	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	309.4
Proposed Forest Reserve	Maui	248001001 (por)*	Endangered species critical habitat, conservation district, forest reserve access, reserve connectivity, trails and access, recreation, very high fire risk, very high erosion problem, dry forest restoration. Set aside to exclude wind turbine lease area.	2,205.9
Proposed Forest Reserve	Maui	248002002	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	210.5
Proposed Forest Reserve	Maui	248002008	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	452.3
Proposed Forest Reserve	Maui	248002039	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	6.4
Proposed Forest Reserve	Maui	248003008 (por)	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management. Set aside portion to exclude the disjunct linear segment along the hwy.	712.6
Proposed Forest Reserve	Maui	248003040	Forest reserve access, dry forest restoration, reserve connectivity, trails and access, recreation, erosion management	143.3
Proposed Forest Reserve	Molokai	257005026	Forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, hunter access, erosion mitigation	156.6
Proposed Forest Reserve	Molokai	257005031	Forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, hunter access, erosion mitigation	69.3
Proposed Forest Reserve	Molokai	258003023	Set aside to connect mauka Forest Reserve to makai.	0.3
Proposed Forest Reserve	Molokai	258015007	Forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, public hunting, erosion mitigation	950.1
Proposed Forest Reserve	Molokai	258015009	Forest reserve access, stream connectivity, reserve connectivity, trails and access, recreation, public hunting, erosion mitigation	629.5
Proposed Natural Area Reserve	Molokai	261001002 (por)	Adjacent to Puu Aalii NAR, high quality stream, native wet cliff and coastal vegetation.	545.3
Proposed Forest Reserve	Hawaii	324008035	Adjacent to Forest Reserve	1.1
Proposed Forest Reserve	Hawaii	351001006	Transfer to FR, Good for waterbirds	151.4
Proposed Forest Reserve	Hawaii	387014015	Access to FR	32.7
Proposed Forest Reserve	Hawaii	396007002	Forest Reserve Connectivity	235.3
Proposed Forest Reserve	Kauai	444001002	Parcel is forested and surrounded by other Forest Reserves.	418.6
Proposed Forest Reserve	Kauai	454002026	Designate as FR; provides option for alternate access into Hanalei valley.	15.6
Proposed Forest Reserve	Kauai	456002001	Adjacent to existing Forest Reserve, could provide good hunting and public access opportunities if access issue is resolved.	807.3

\*The proposed set aside excludes the approximately 226-acre encumbrances to Kaheawa Wind Power LLC (GLs 5731 and 6004)

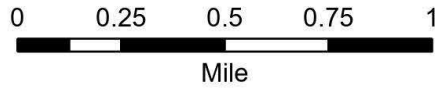
\*Parcel 454002026 (Kauai) was originally proposed to be set aside as a Forest Reserve, however due to buildings found present on the property it was decided not to proceed. The proposed Forest Reserve additions on Molokai were removed from this submittal to provide additional opportunities for public comment and will be heard at a later date.



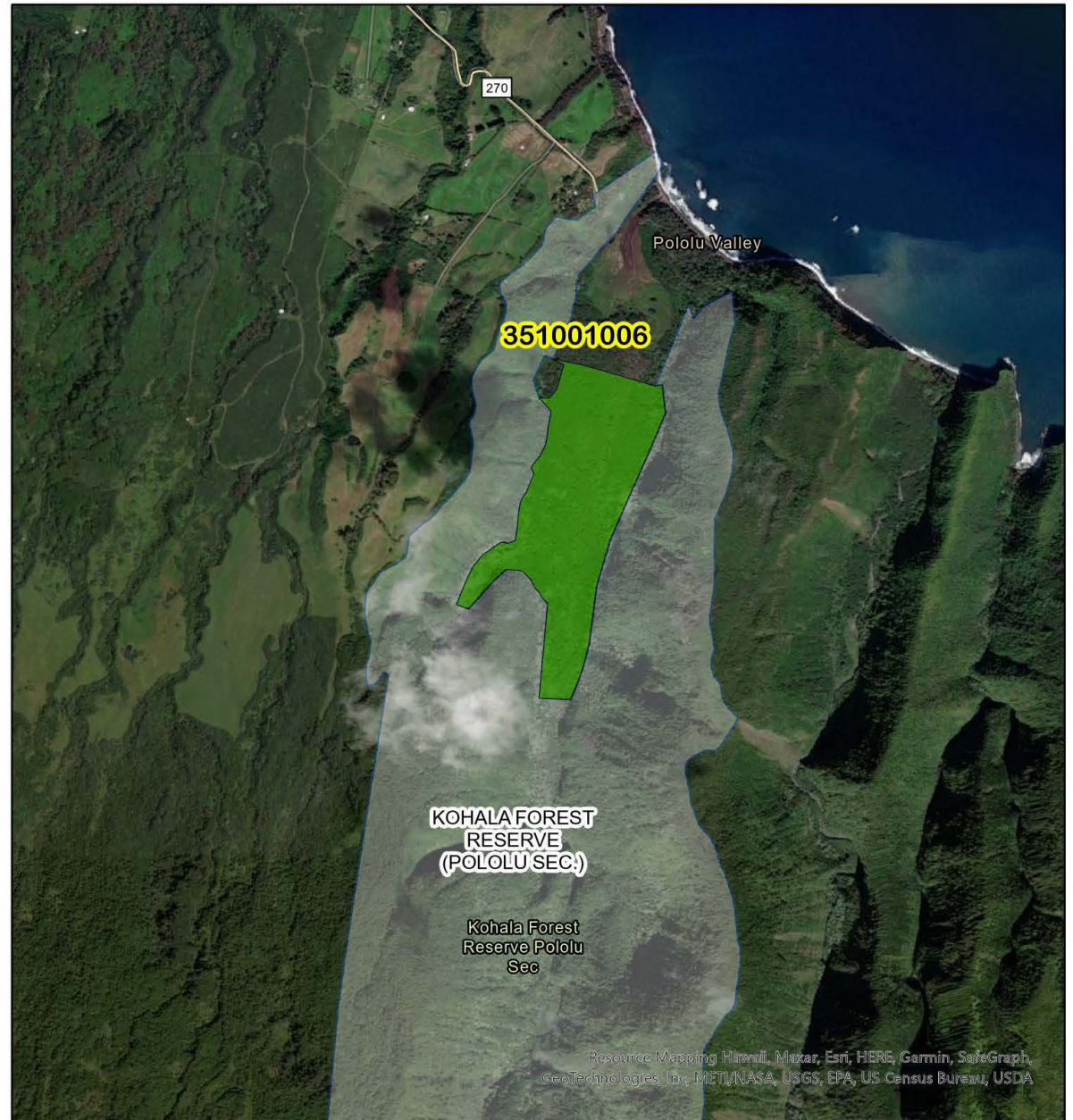
# Pololu Valley

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



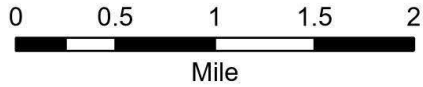
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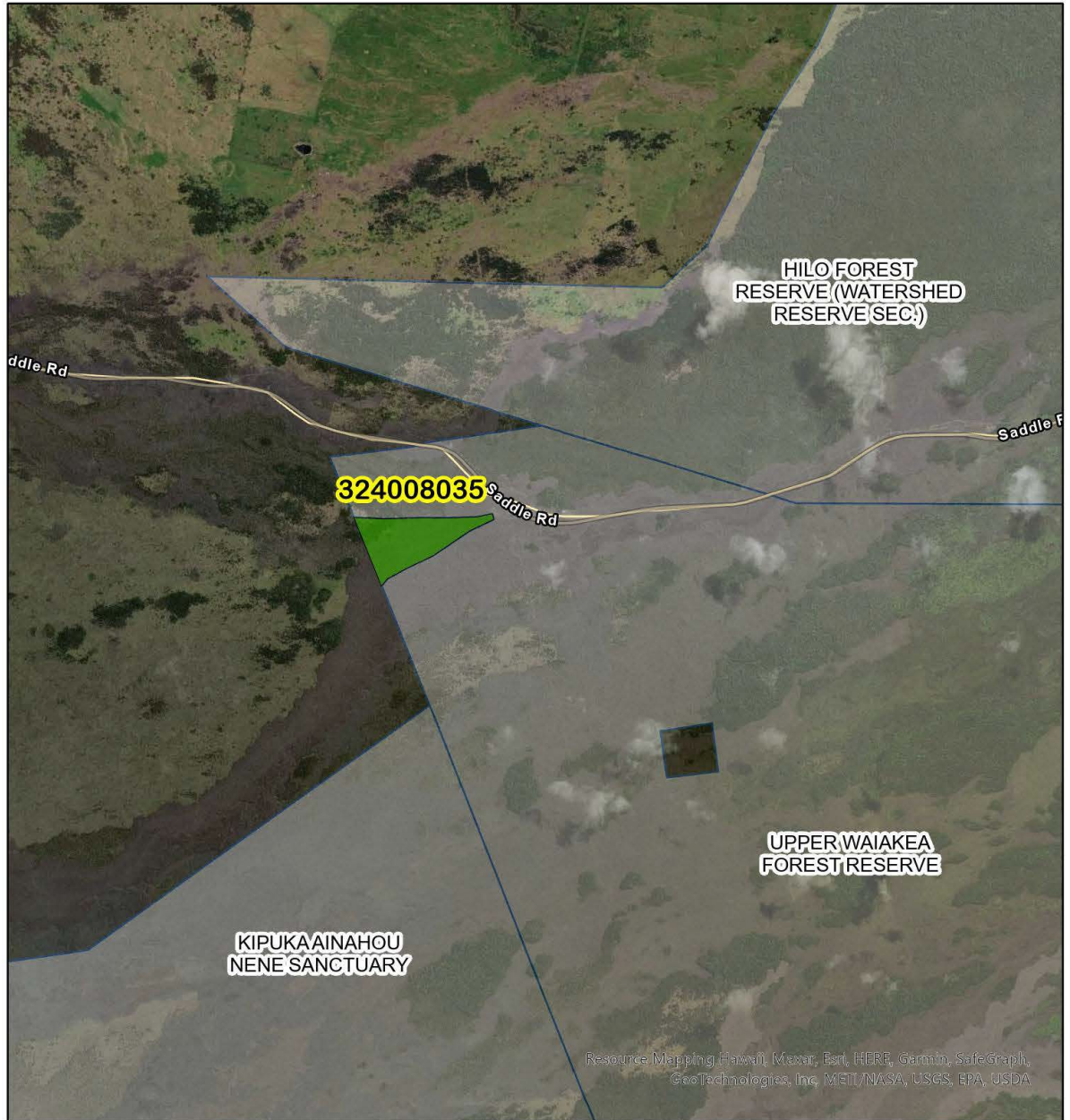
# Upper Waiakea

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



January 2023



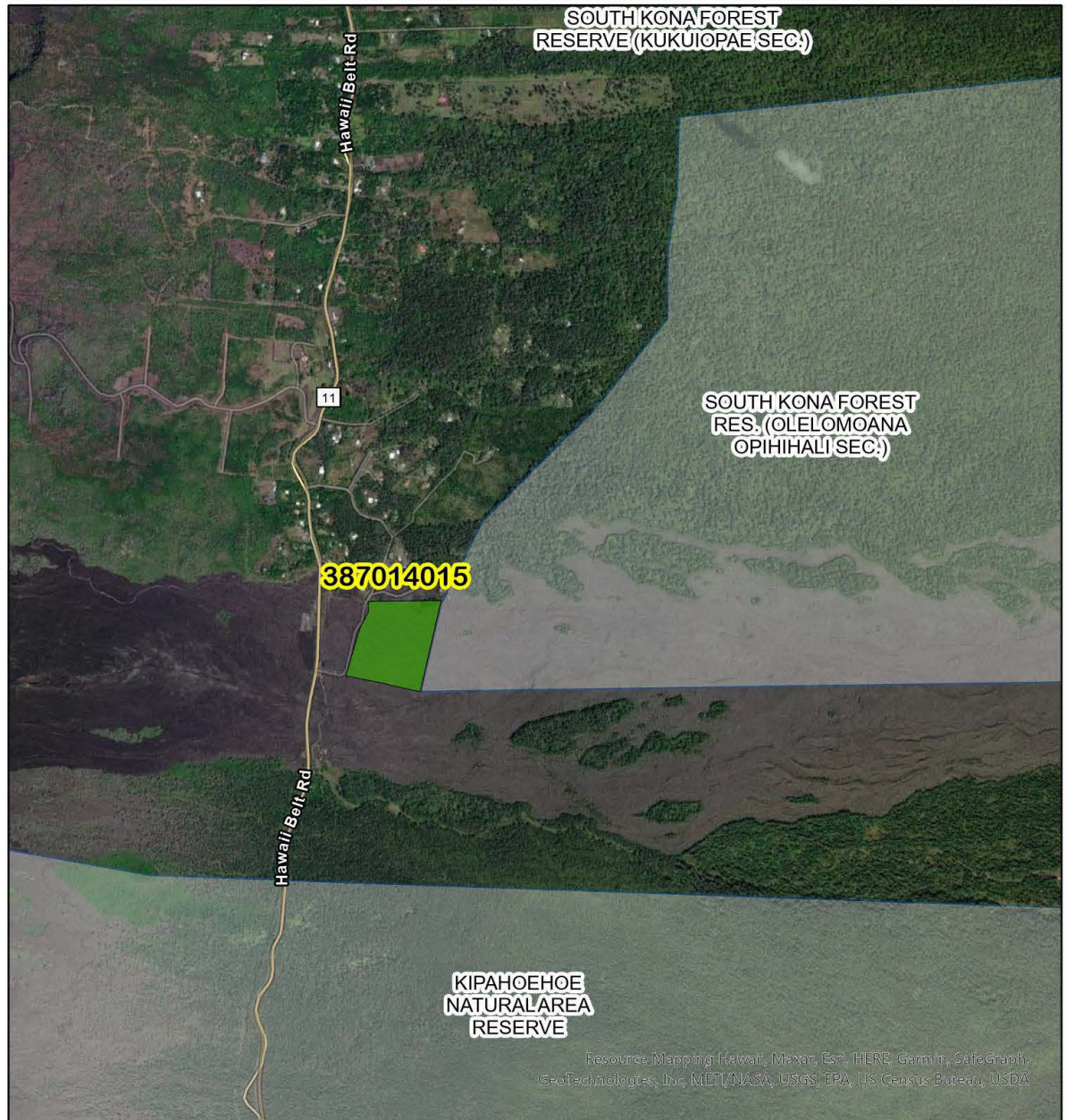
# South Kona

## Proposed Land Designation

-  Proposed Forest Reserve
-  Existing DOFAW Reserves
-  Major Roads



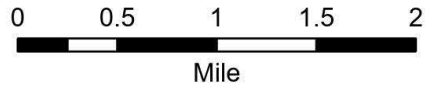
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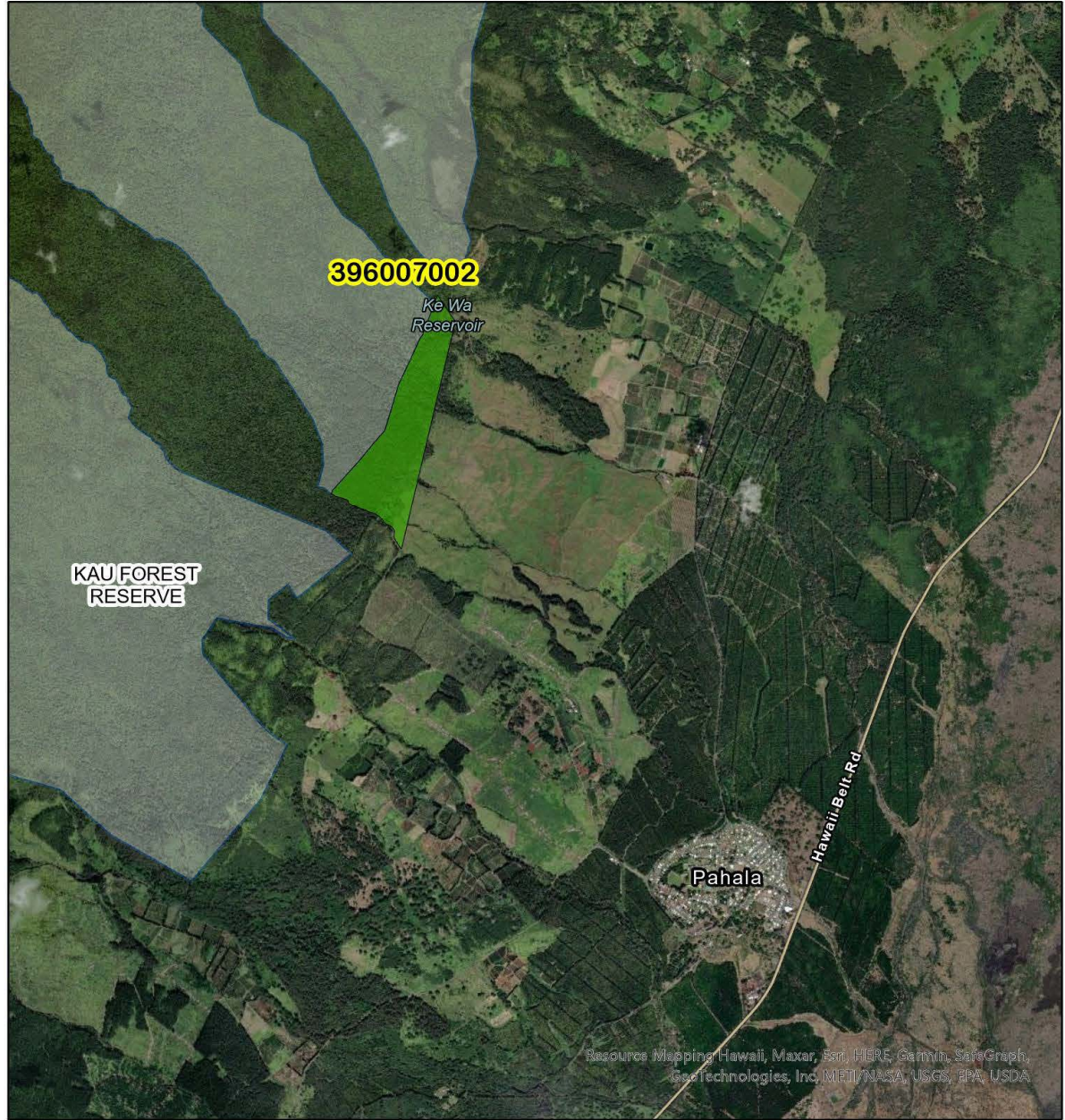
# Kau

## Proposed Land Designation

-  Proposed Forest Reserve
-  Existing DOFAW Reserves
-  Major Roads



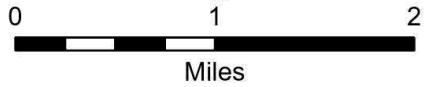
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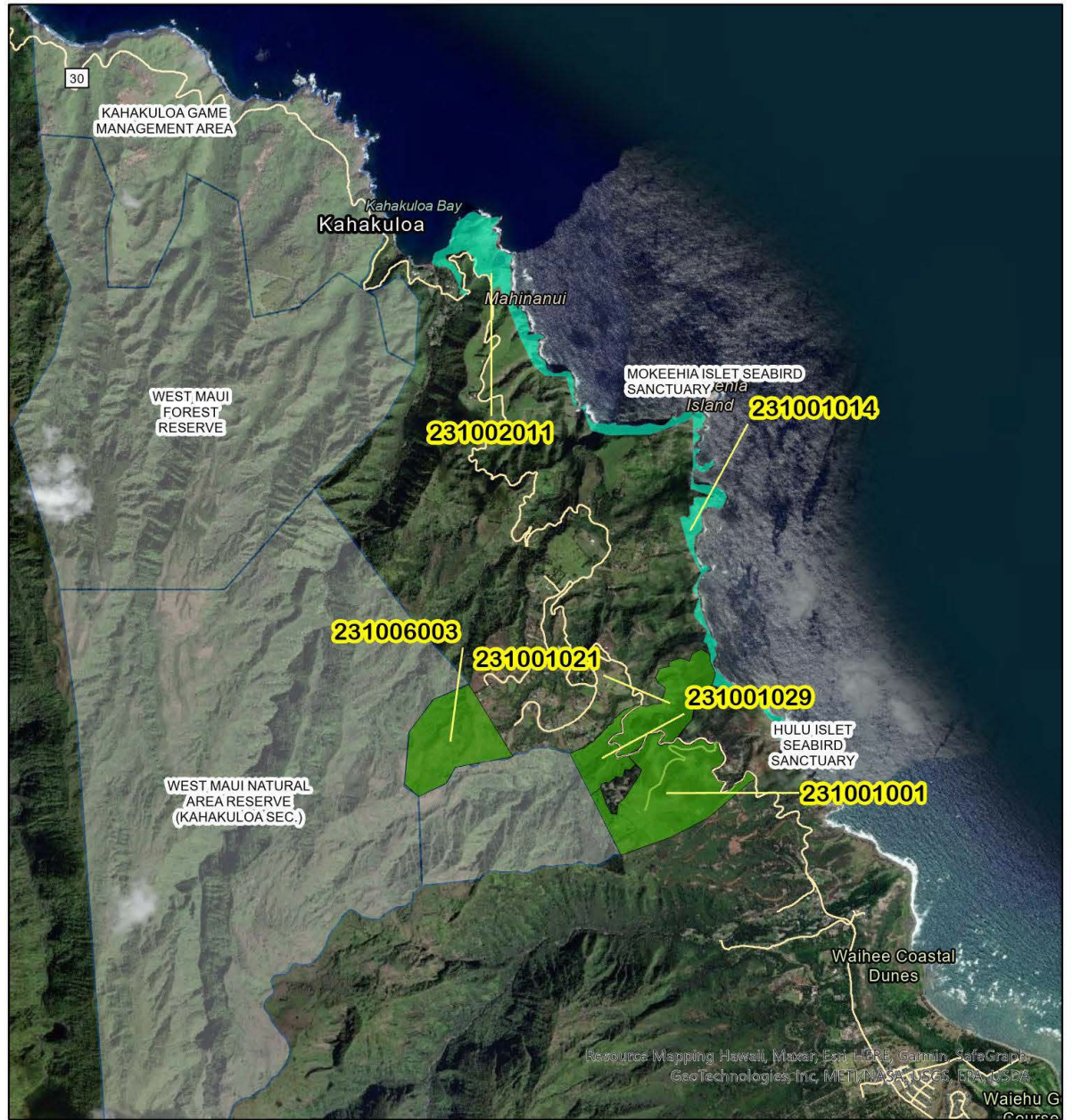
# West Maui (Northeast)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



January 2023



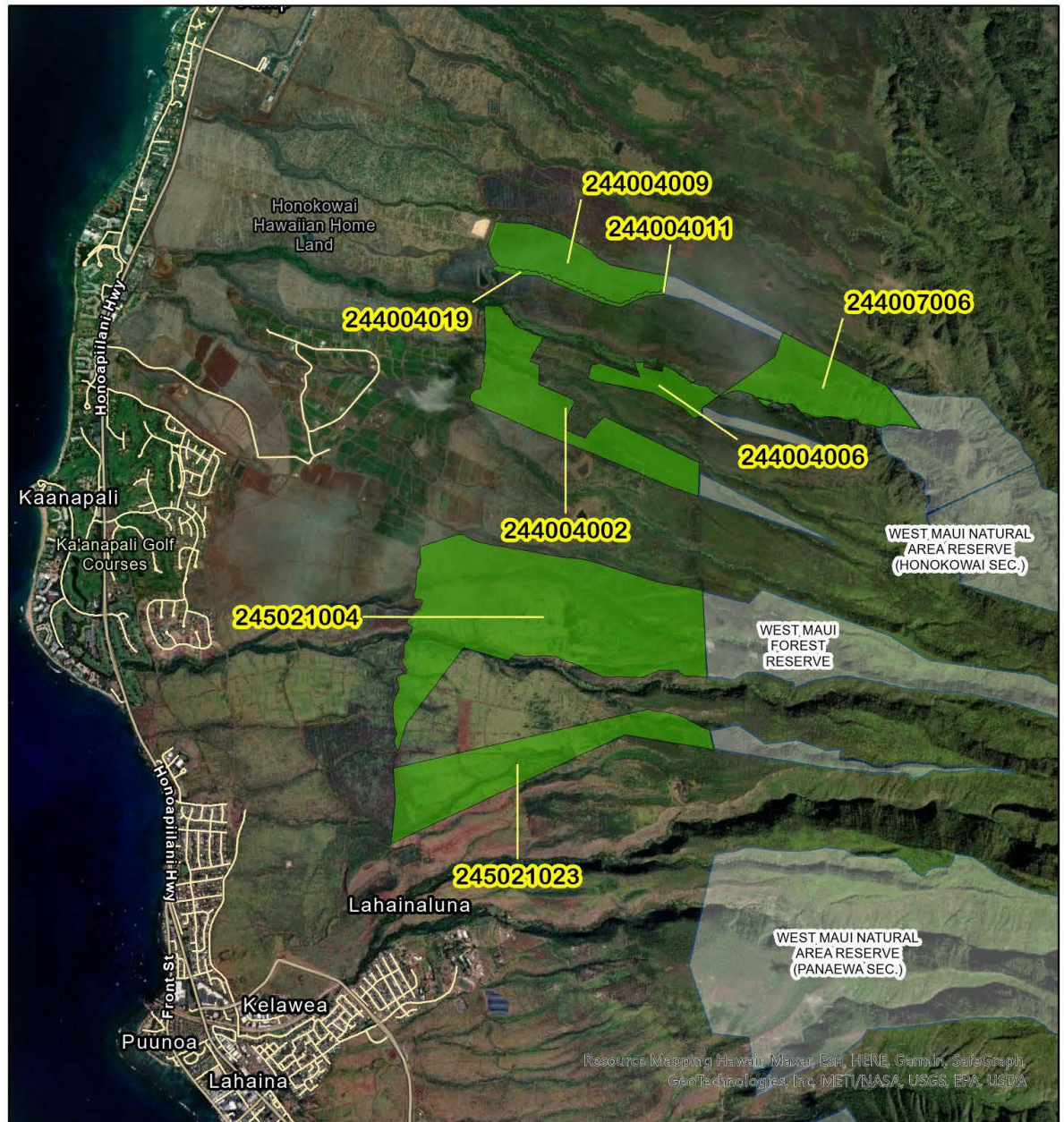
## West Maui (West)

### Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



January 2023



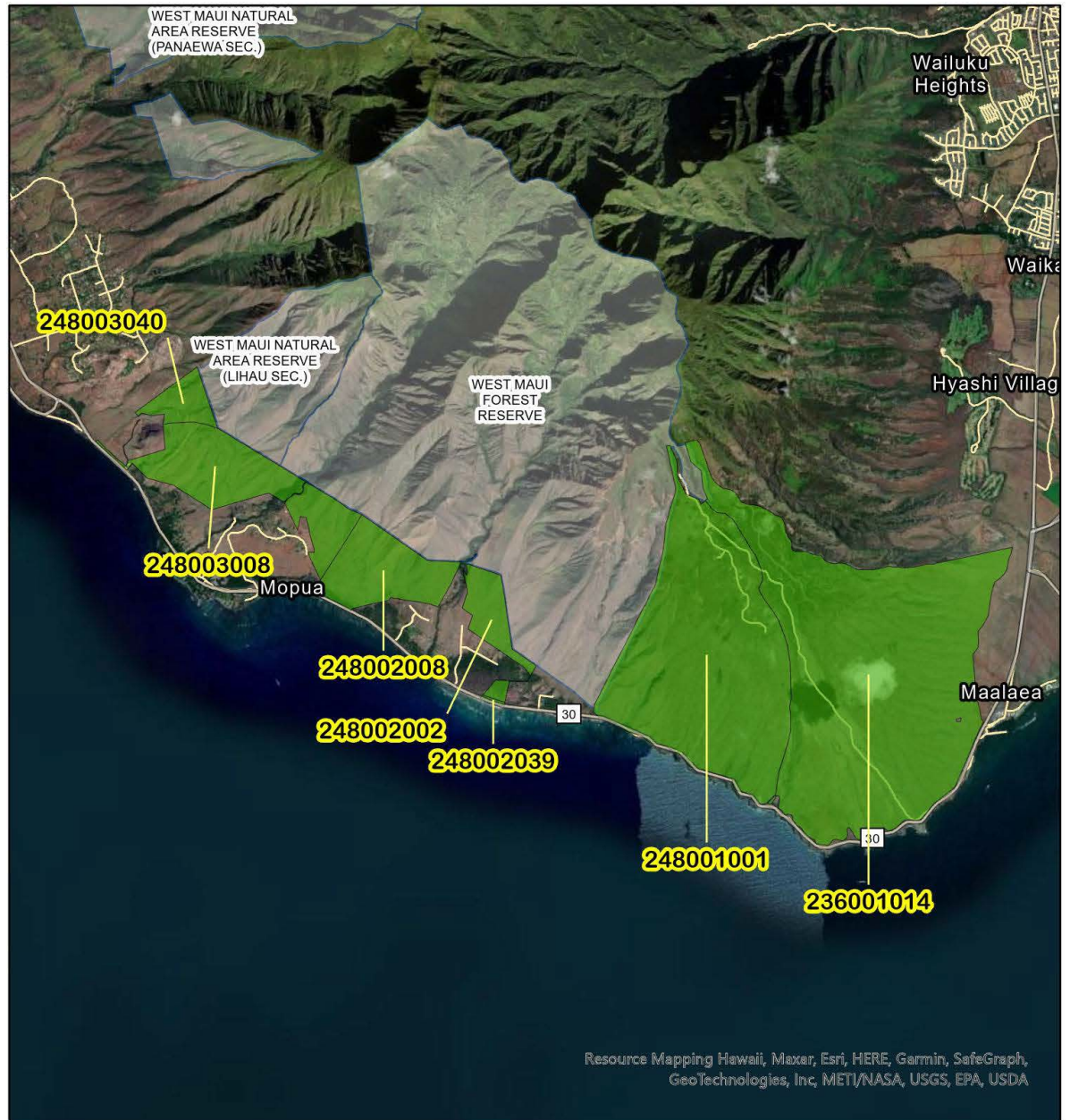
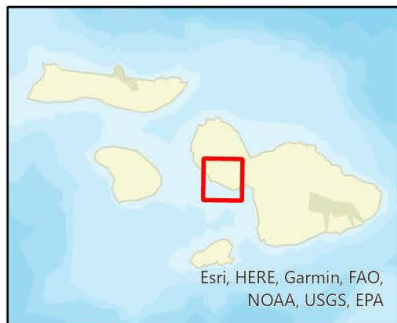
# West Maui (South)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



January 2023



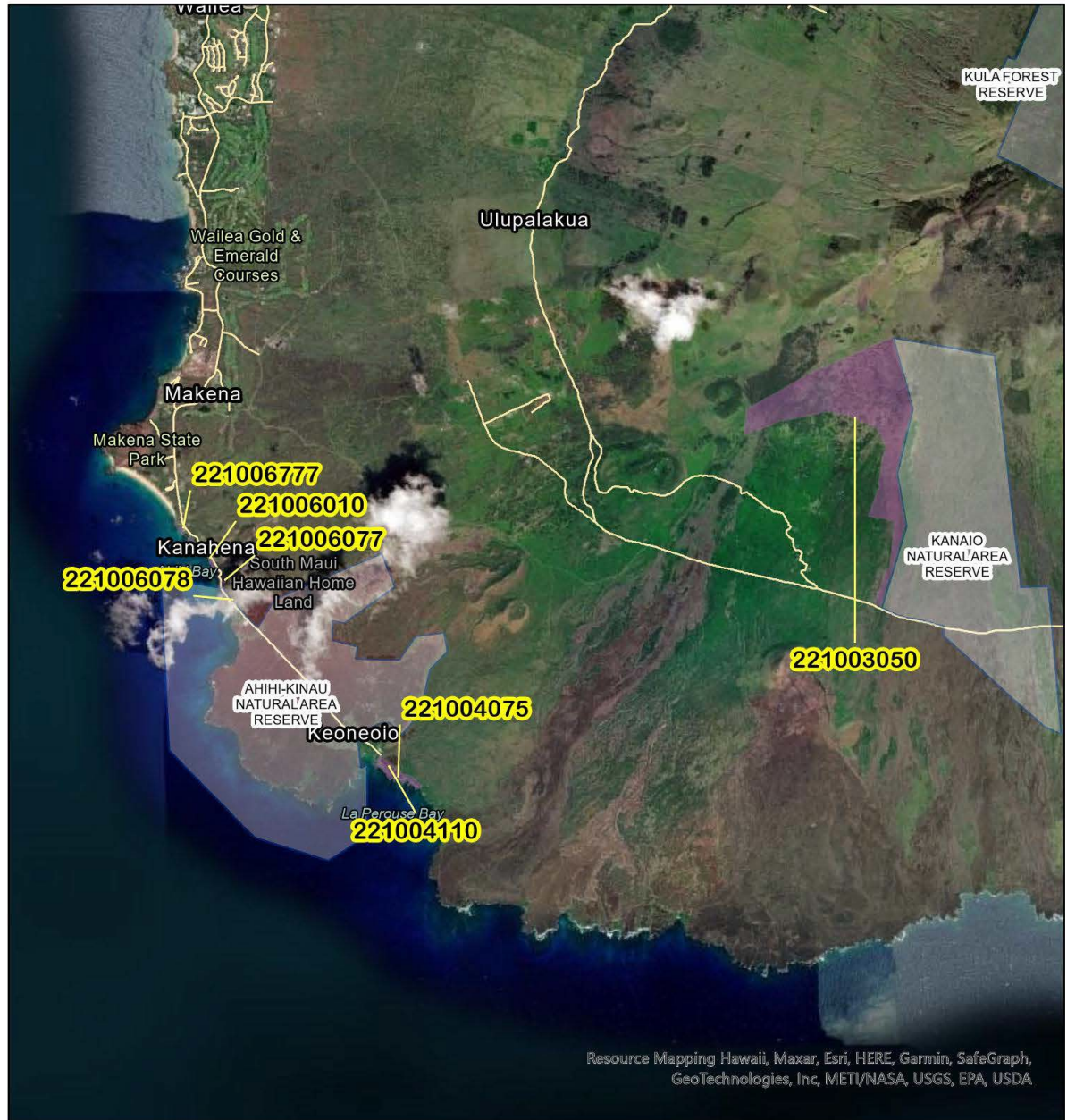
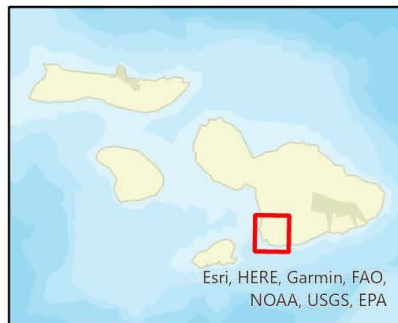
# East Maui (Makena)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



January 2023





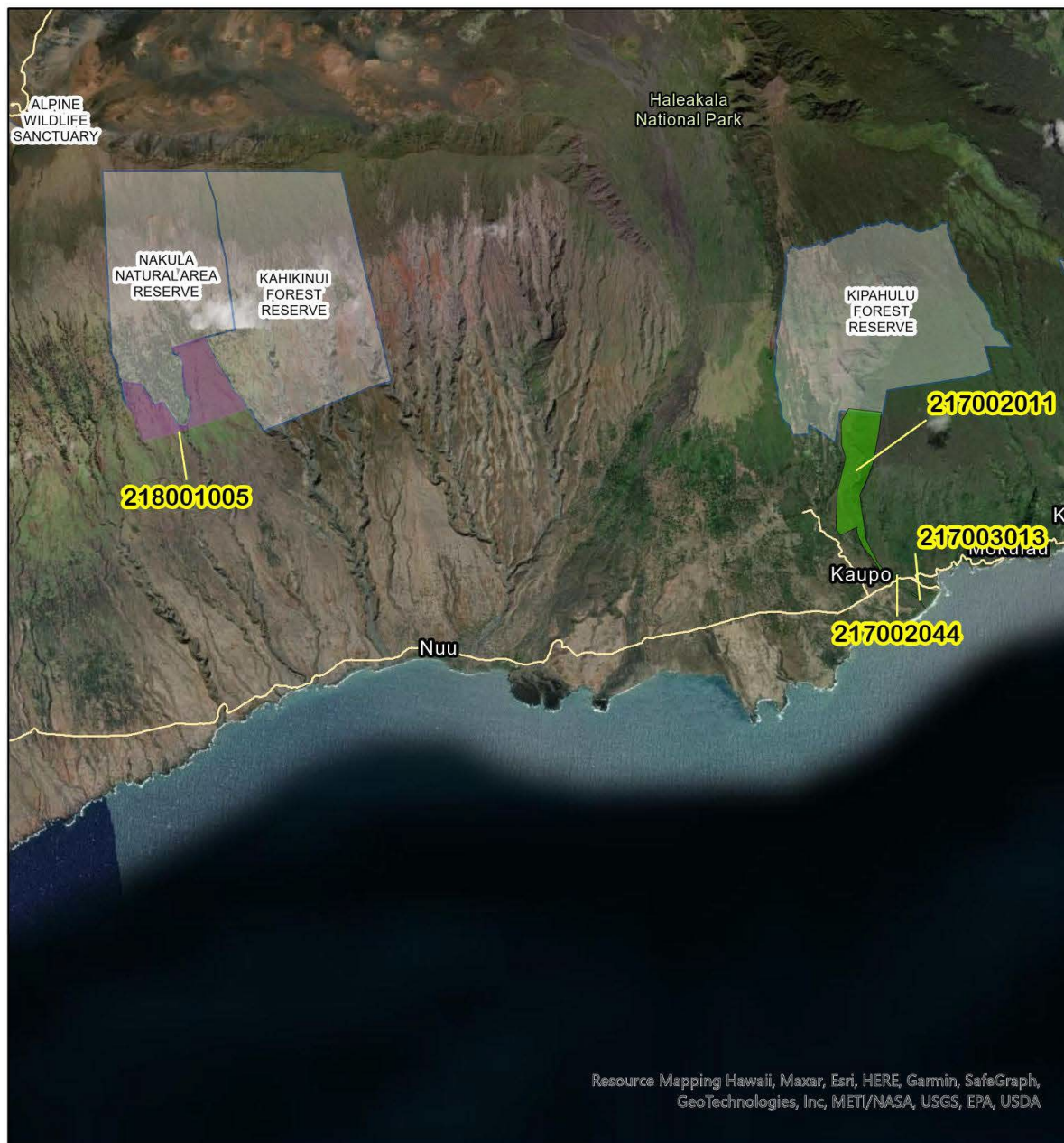
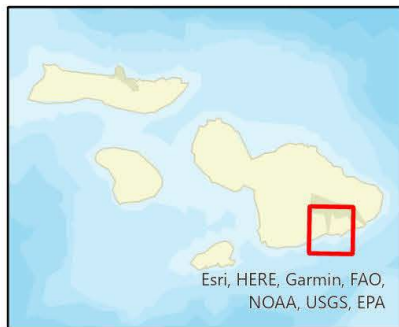
# East Maui (South)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



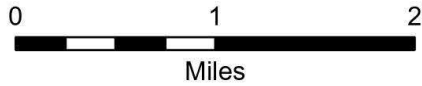
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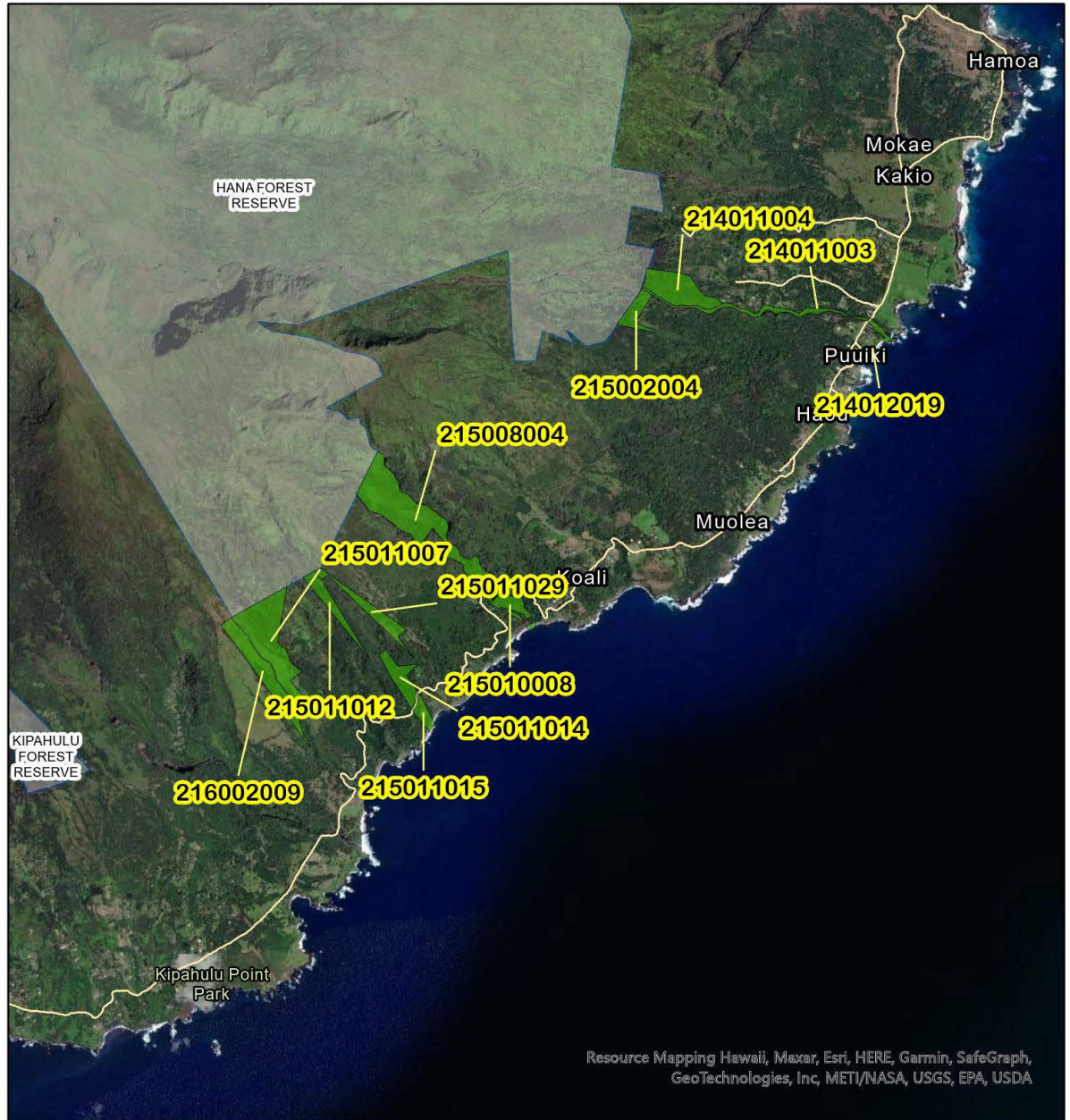
# East Maui (Southeast)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



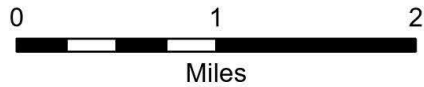
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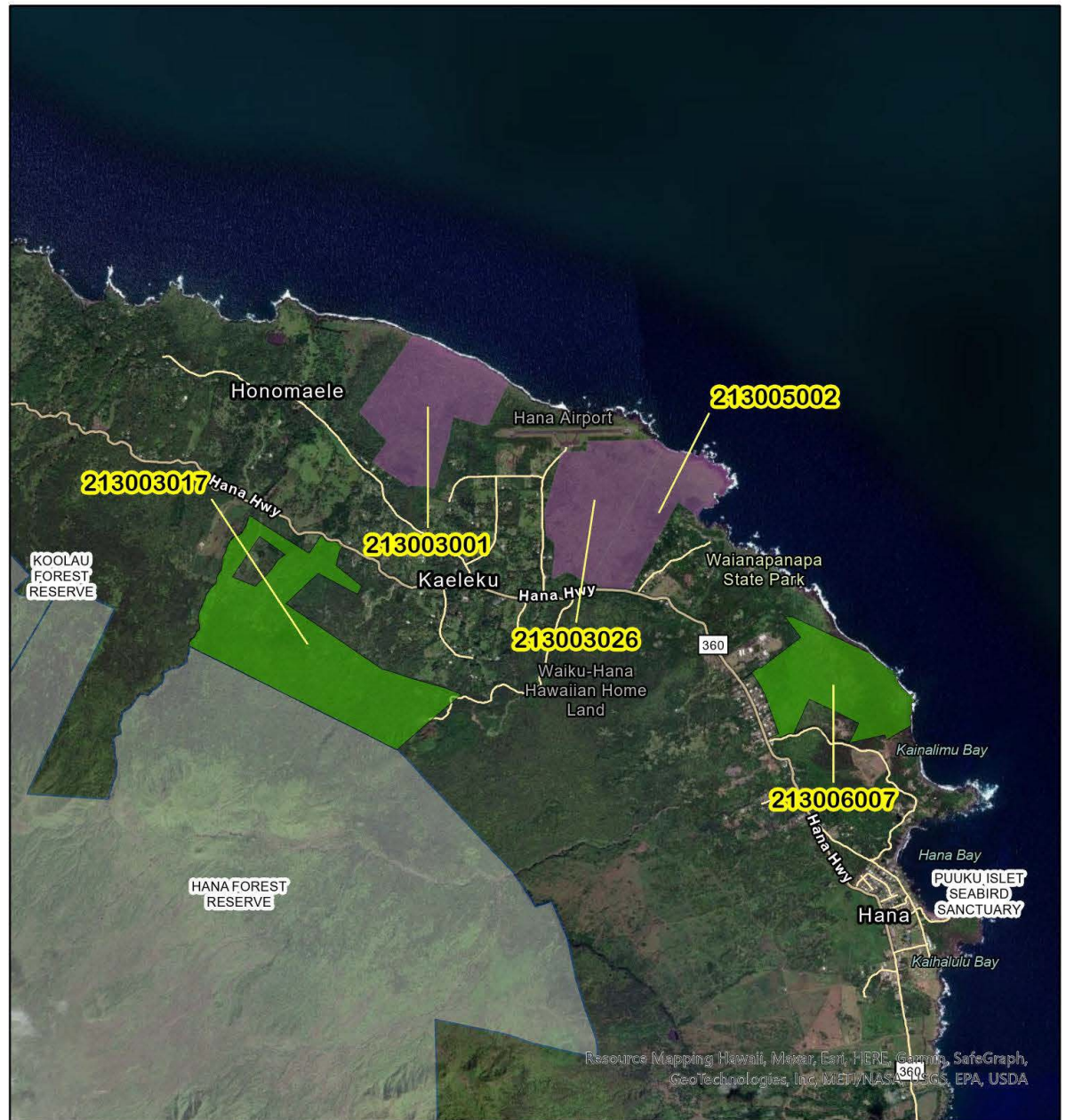
# East Maui (Hana)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



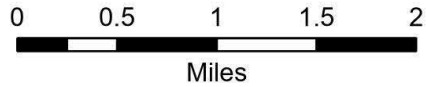
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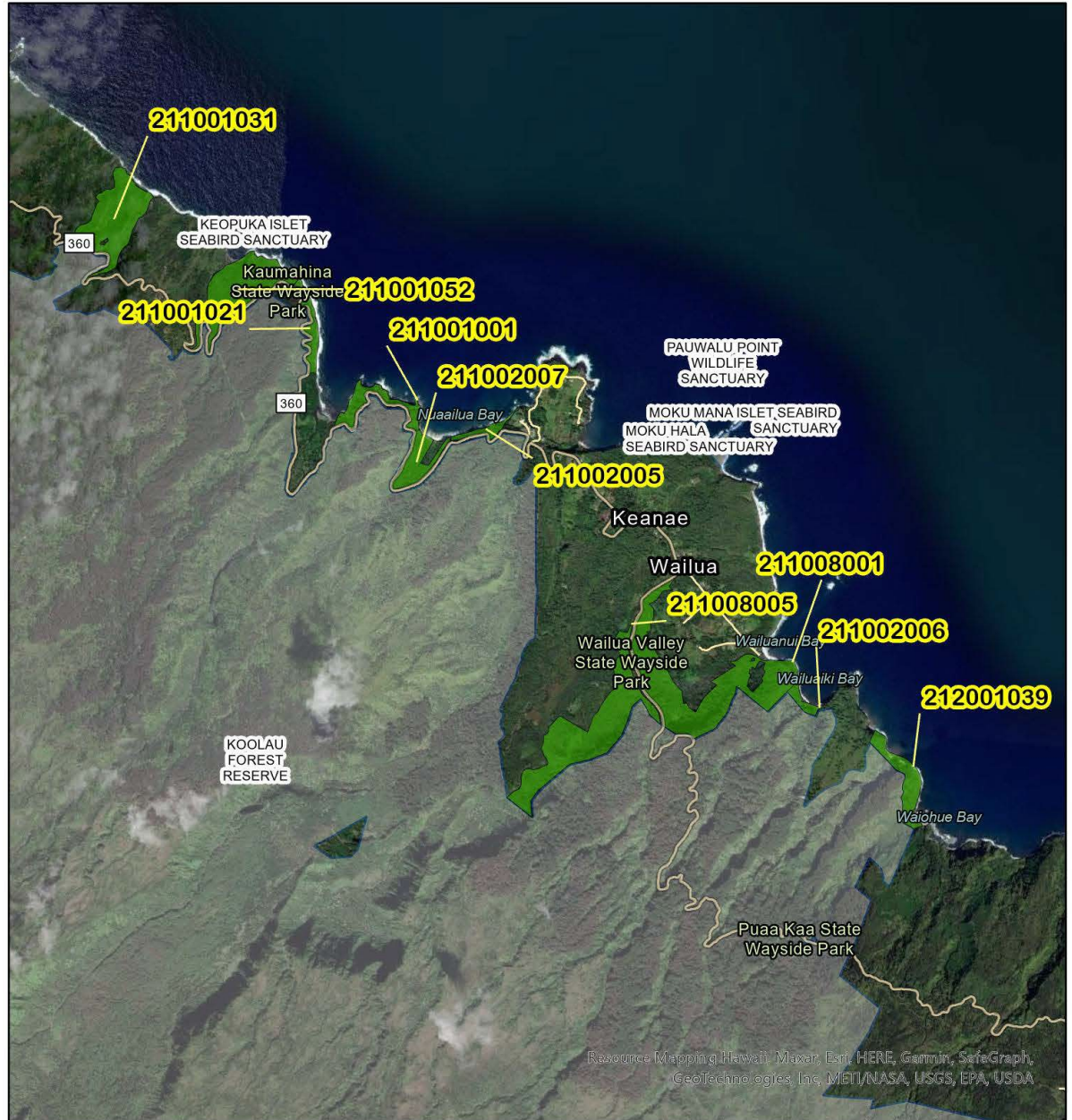
# East Maui (Keanae Area)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



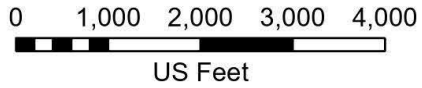
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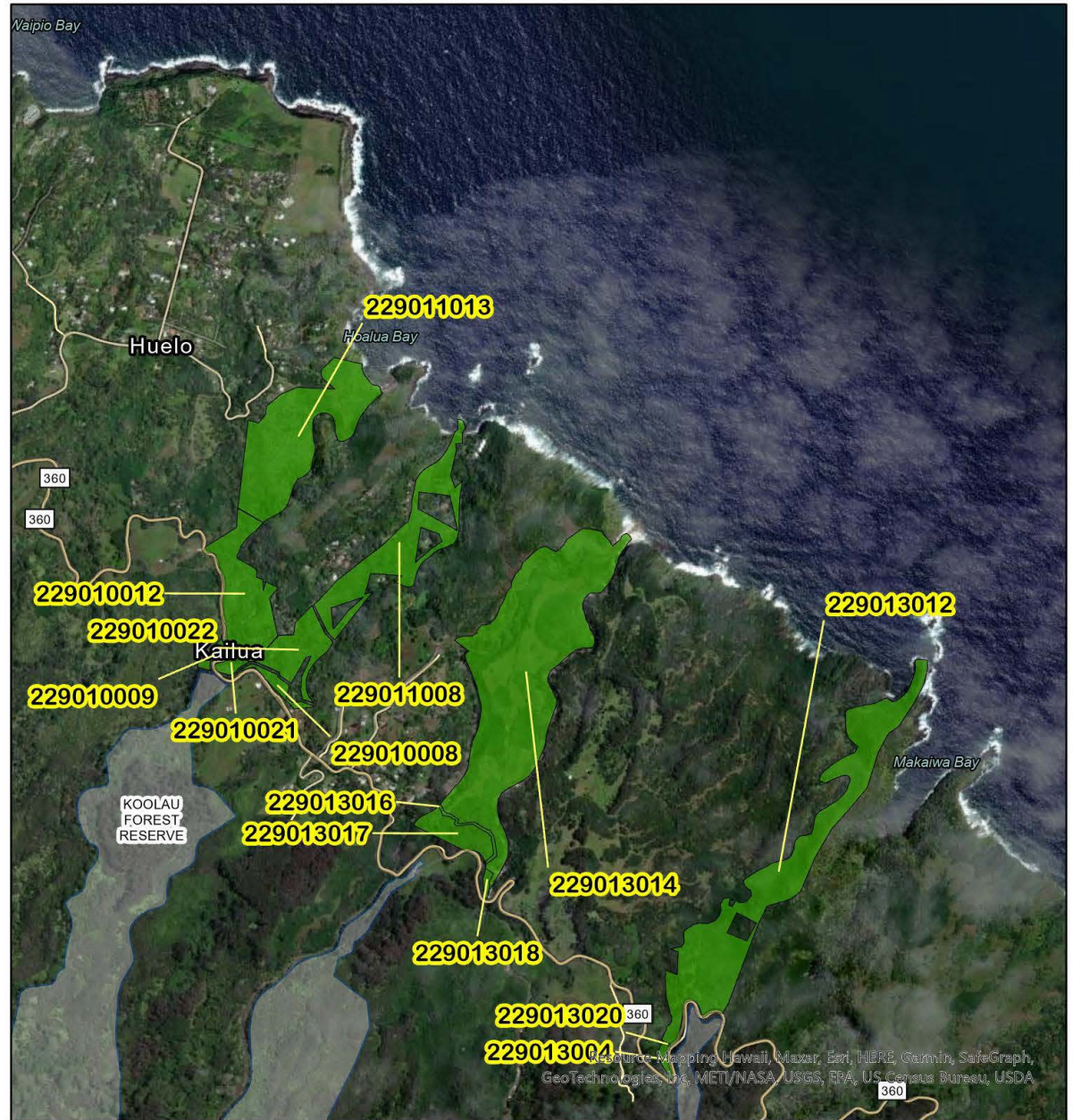
# East Maui (Kailua Area)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



January 2023



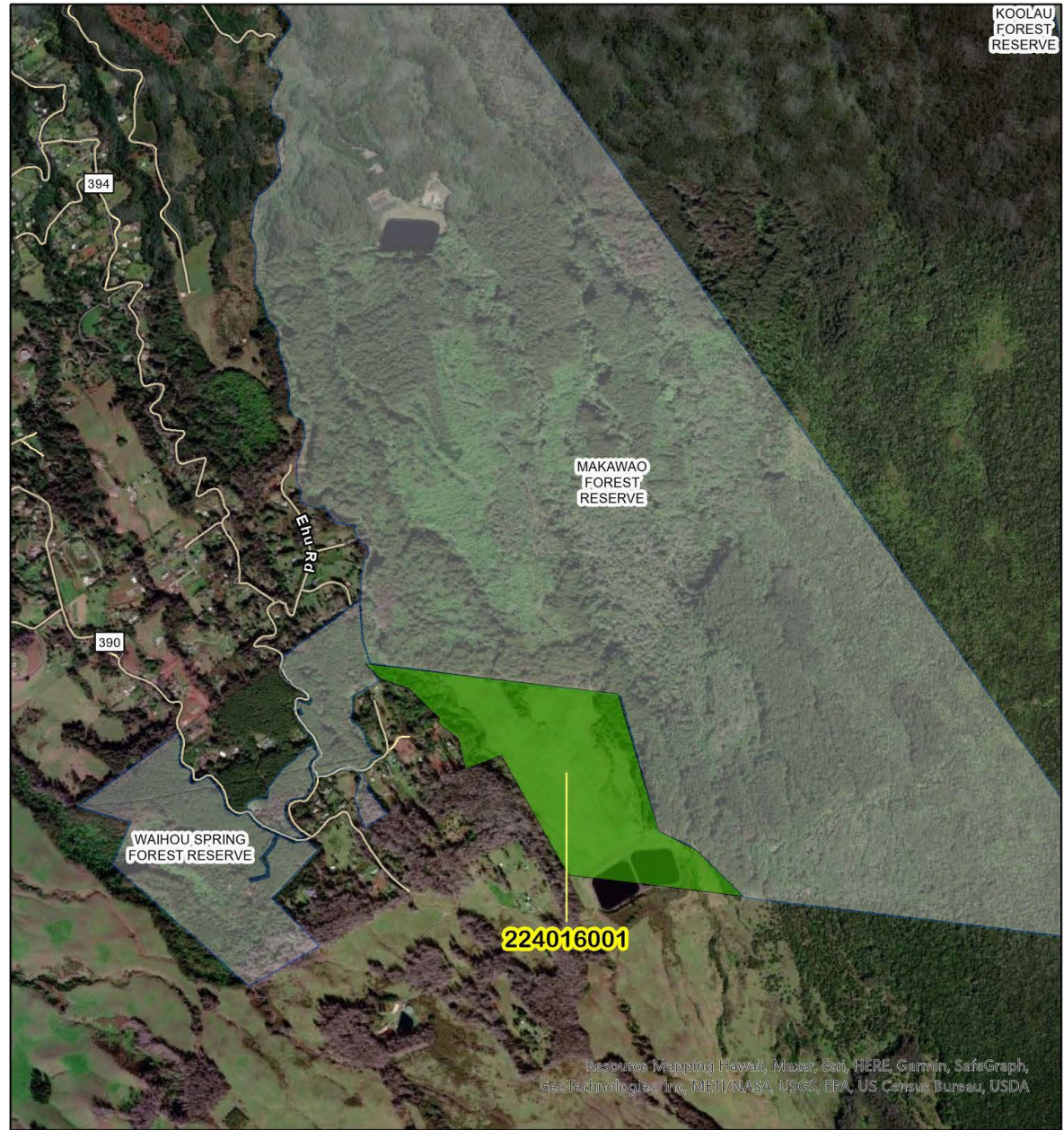
# East Maui (Makawao)

## Proposed Land Designation

- Proposed Forest Reserve
- Proposed Natural Area Reserve
- Proposed Wildlife Sanctuary
- Existing DOFAW Reserves
- Maui Roads



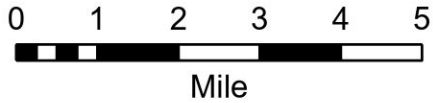
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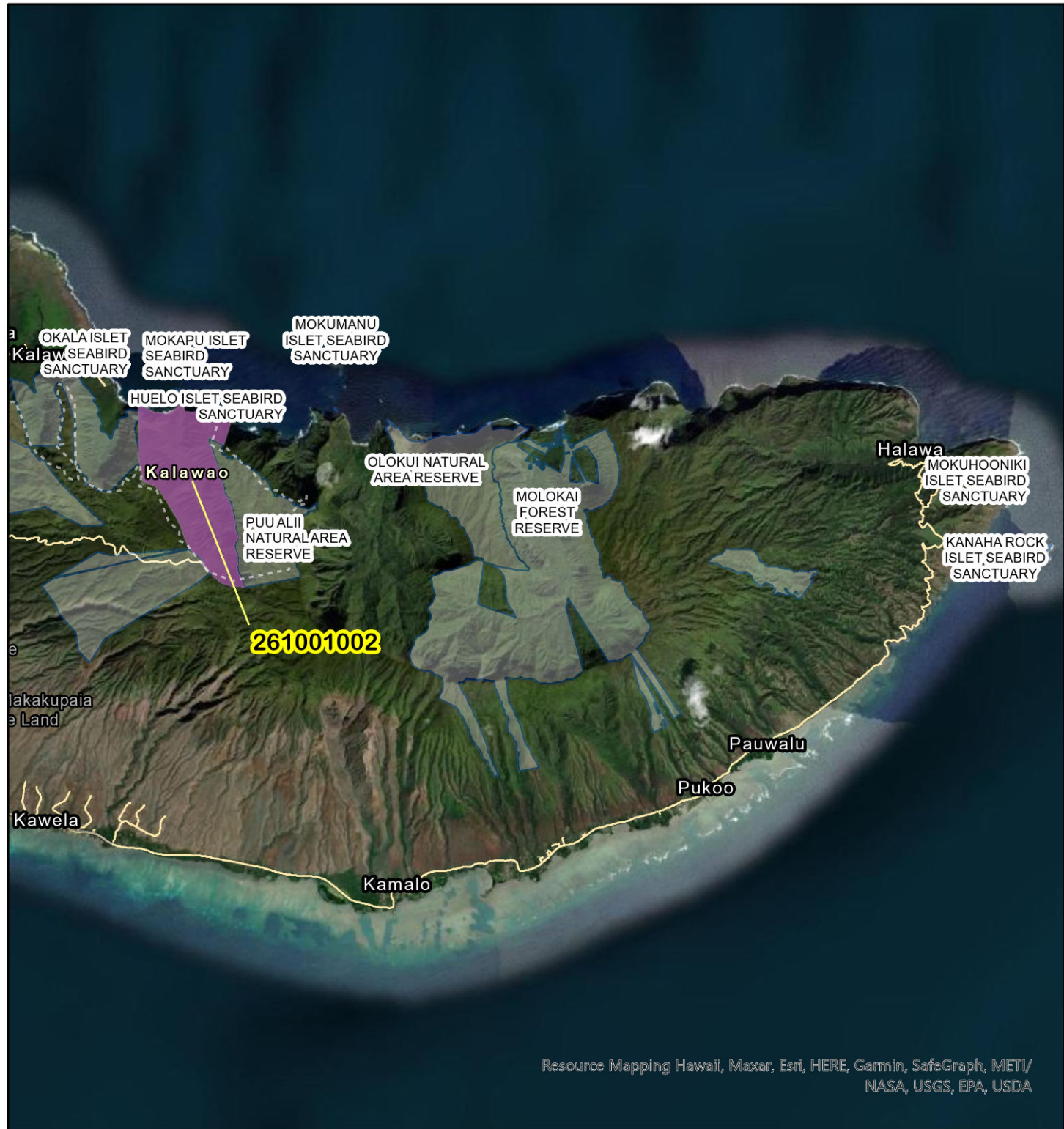
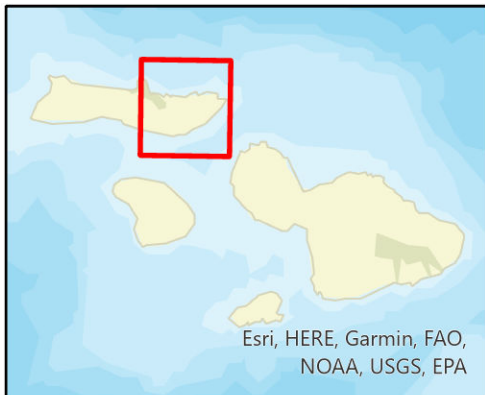
# Molokai

## Proposed Land Designation

- Proposed Natural Area Reserve
- Existing DOFAW Reserves
- Maui Roads



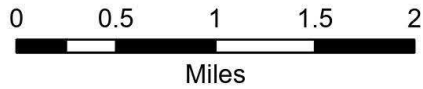
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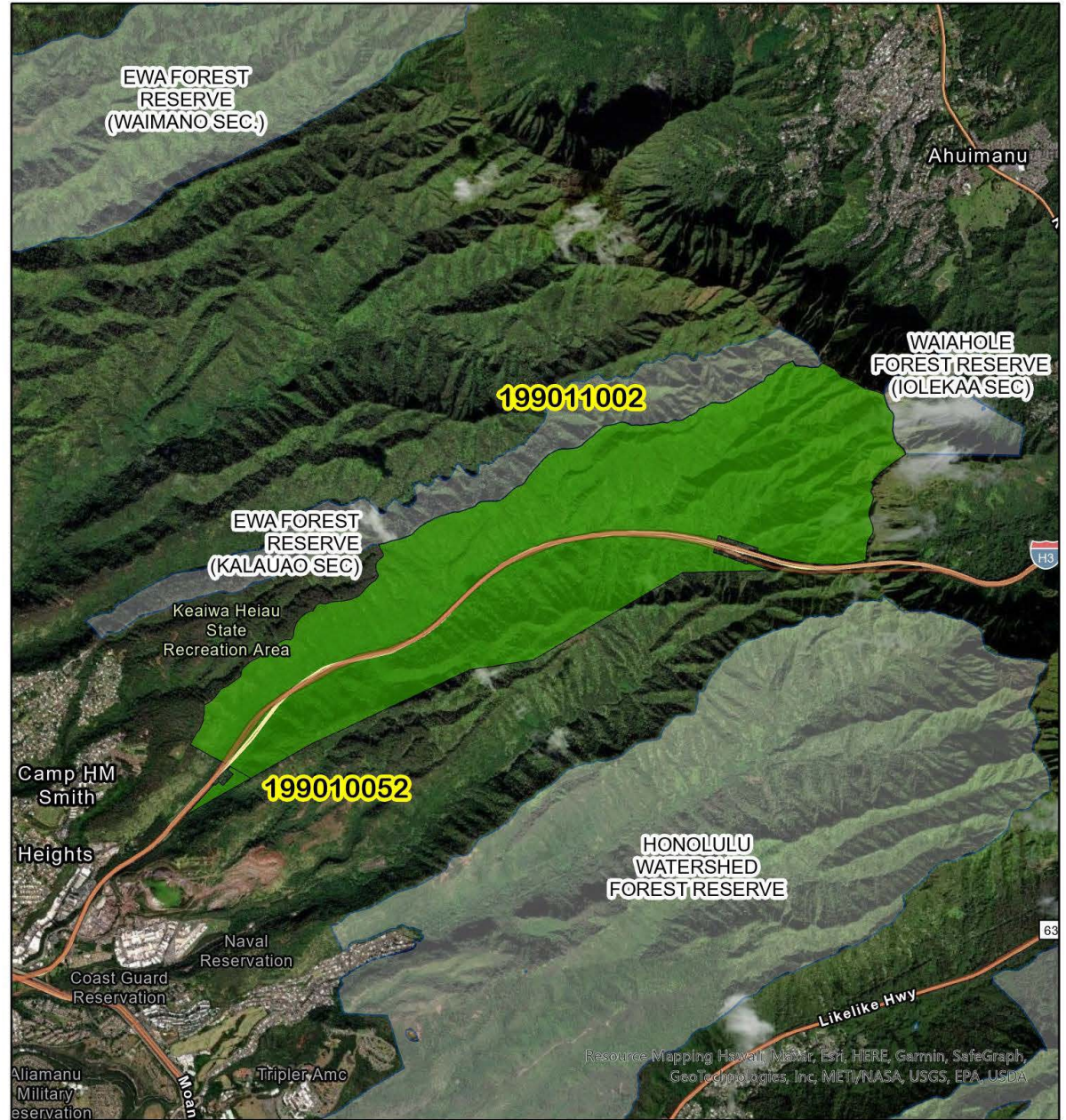
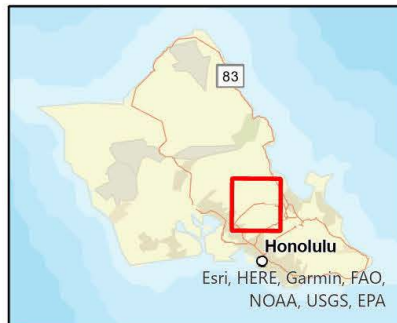
# Halawa Valley

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



January 2023



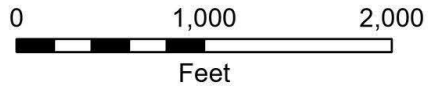
Resource Mapping Hawaii, Maui, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, USDA



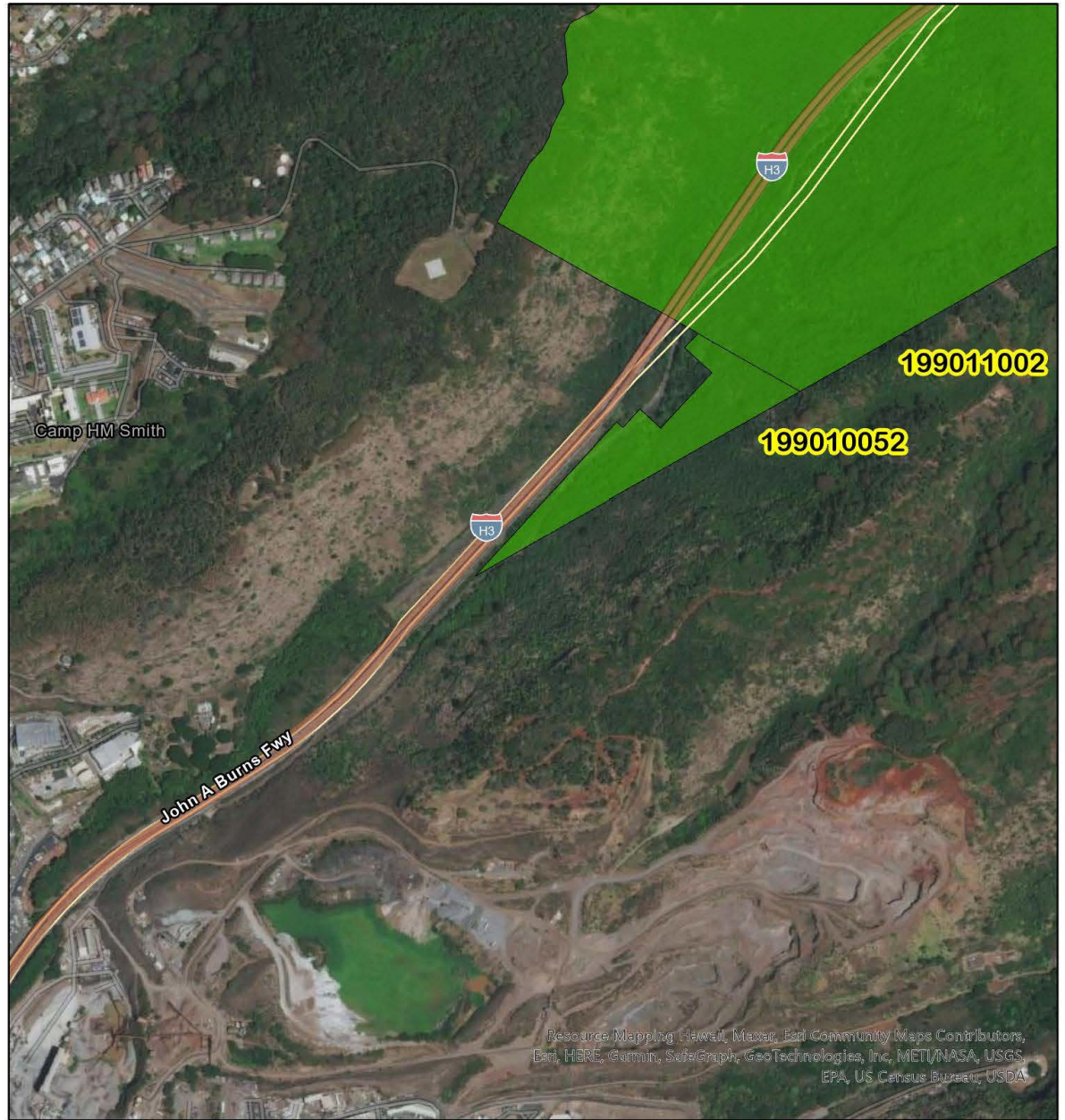
# Halawa Valley (Detailed Parcels)

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



January 2023



Resource Mapping Hawaii, Maxar, Esri Community Maps Contributors,  
Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS,  
EPA, US Census Bureau, USDA

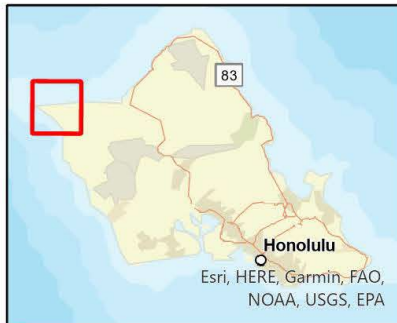
# Kaena Point

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



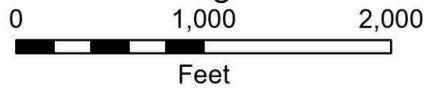
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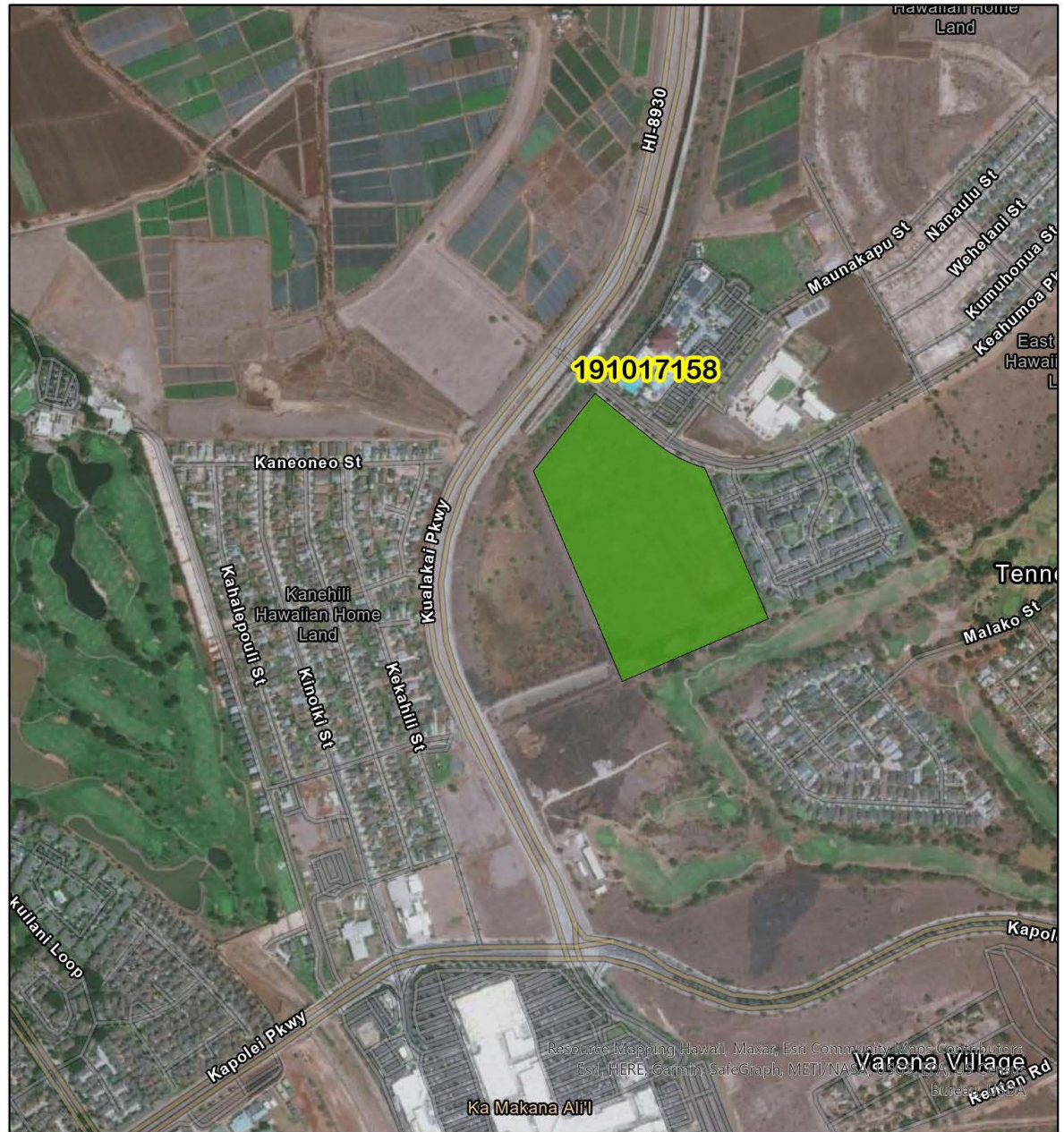
# Abutilon Menziesii Conservation Reserve Area

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Major Roads



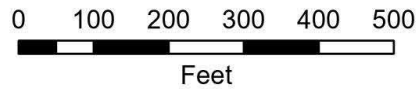
January 2023



# Waikane Portion of Waiahole Forest Reserve

## Proposed Land Designation

-  Proposed Forest Reserve
-  Existing DOFAW Reserves
-  Major Roads



January 2023



Esri Community Maps Contributors, City and County of Honolulu, ©  
OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph,  
GeoTechnologies, Inc, METU/NASA, USGS, EPA, US Census Bureau, USDA,  
Resource Mapping Hawaii

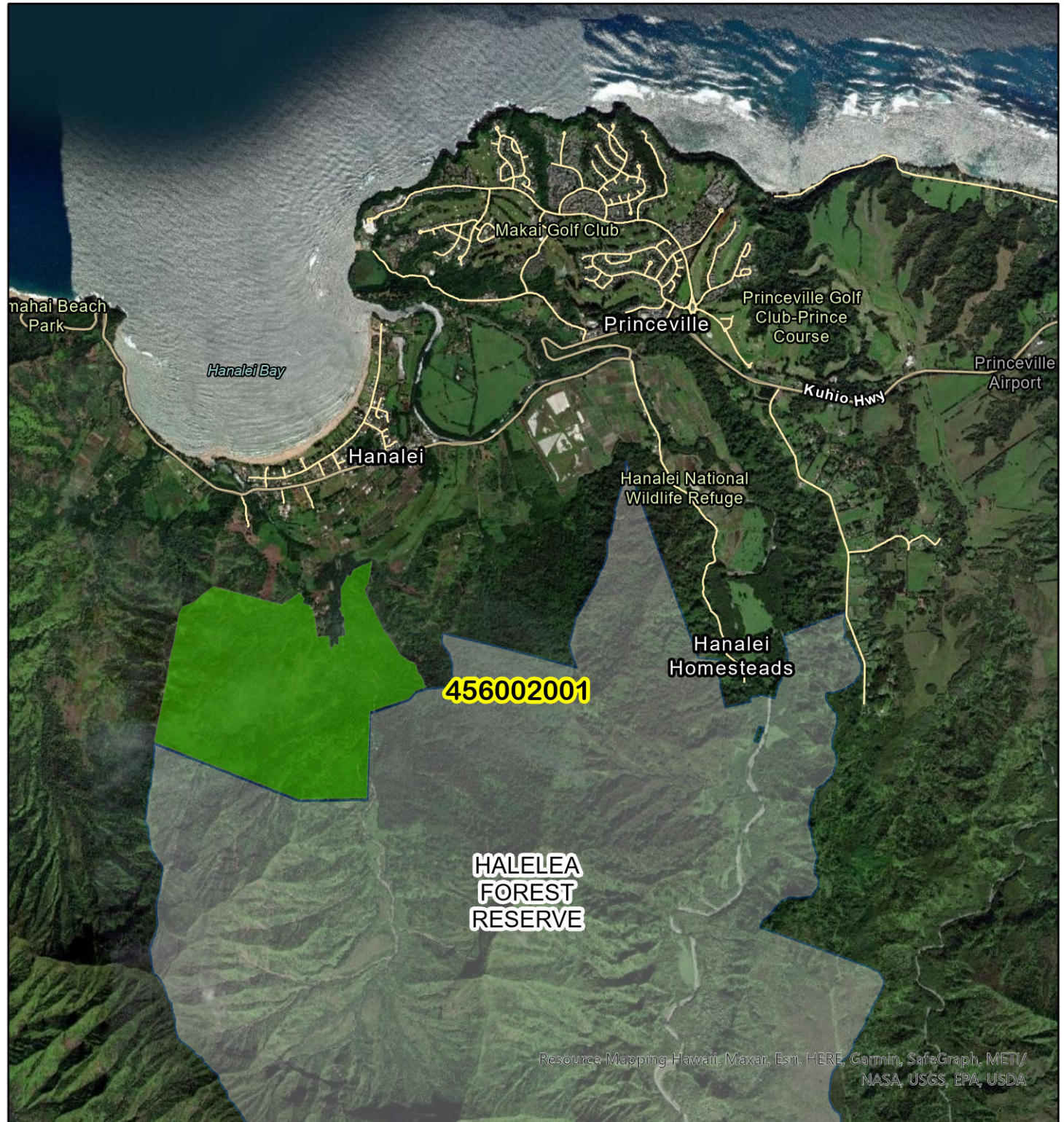
# Hanalei

## Proposed Land Designation

-  Proposed Forest Reserve
-  Existing DOFAW Reserves
-  Roads



January 2023



# Wailua Area

## Proposed Land Designation

- Proposed Forest Reserve
- Existing DOFAW Reserves
- Roads



January 2023

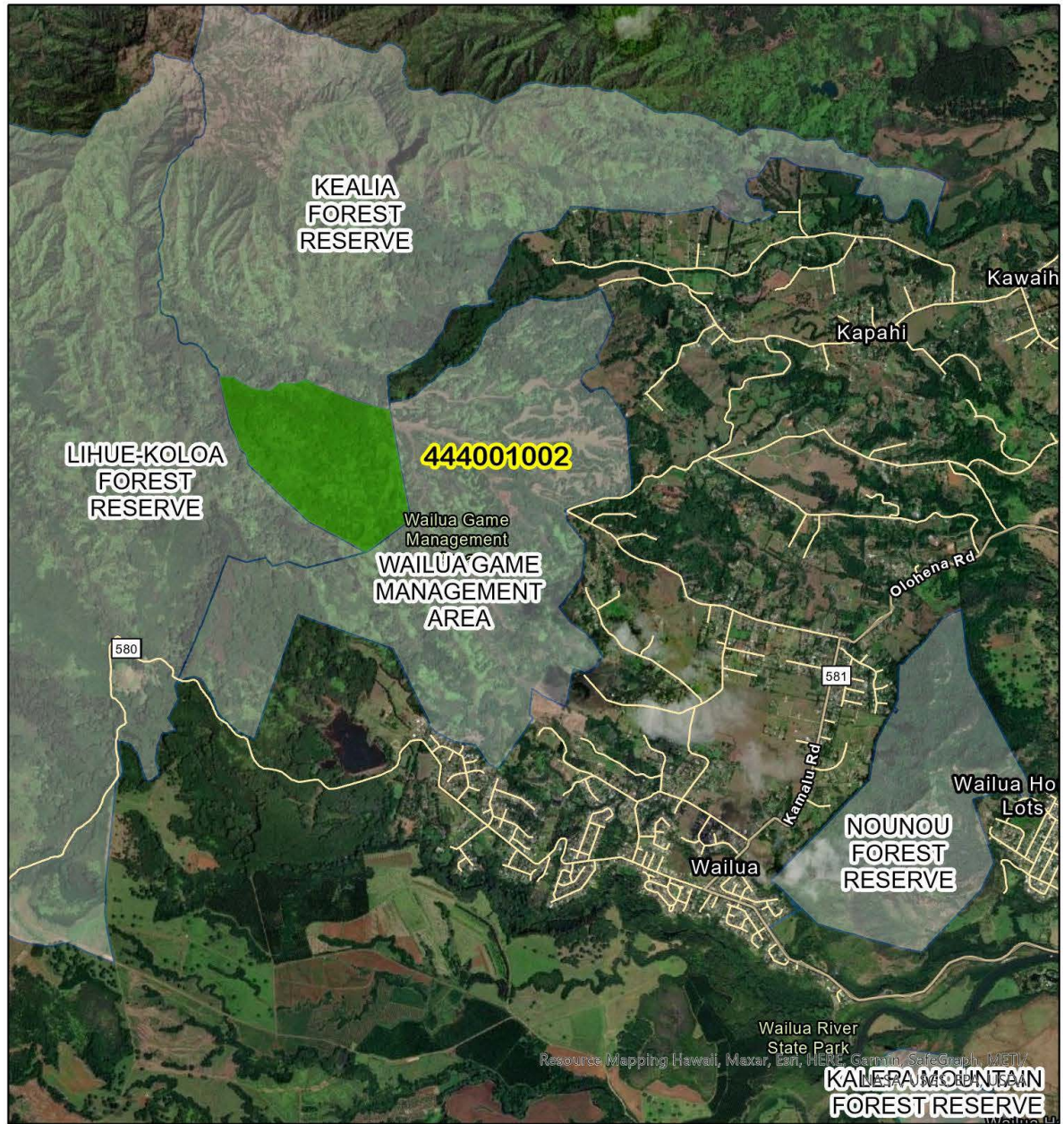
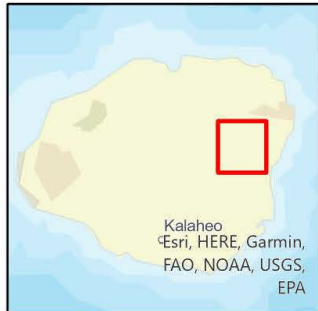
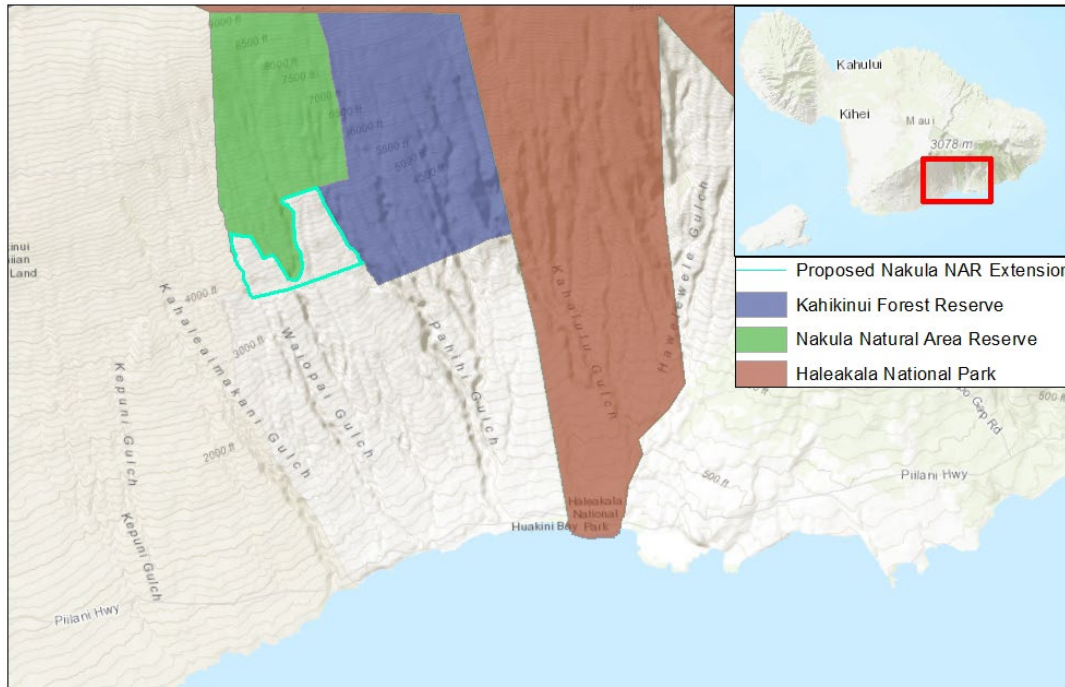


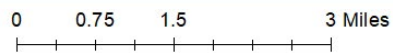
Exhibit 2

PROPOSAL FOR THE EXTENSION OF THE NAKULA NATURAL AREA RESERVE  
2022

Nakula Natural Area Reserve  
Proposed Extension



DOFAW 587-4170. 2021. Features approximate and subject to change.



I EXECUTIVE SUMMARY

An approximately 361-acre parcel in leeward Haleakalā on the island of Maui, is proposed for inclusion in the State of Hawai'i Natural Area Reserve System (NARS). This area is adjacent to the existing Nakula NAR, and designation will expand a successful reforestation project that will benefit water recharge, carbon sequestration, and protection of endangered plants and wildlife.

II INTRODUCTION (General)

This State land is within the montane mesic *koa-`ōhi`a* climatic zone with fertile soils and good potential for reforestation. Since being fenced from hooved animals in 2012, the adjacent Nakula NAR and Kahikinui Forest Reserve have had extensive reforestation success. More than 450,000 trees have been planted, and countless more seedlings have naturally regrown after hooved animals were removed from the area. Additionally, endangered seabirds have also begun to recolonize the restoration area, and predator control efforts are resulting in nesting success for this rare species. While this proposed extension has been extensively grazed and is primarily composed on non-native grasslands, DOFAW intends to fence and replant it, mirroring the success of the adjacent lands above. Fences exist along the north and eastern boundary of this area, so protecting this area will require relatively small amounts of new infrastructure.

Leeward Haleakala's *koa* forest is a unique resource that is rapidly disappearing, and extending the NAR and area managed for restoration will protect a significant portion of what remains.

### III BACKGROUND AND HISTORY

#### *Past Land Use*

This area was historically part of a *koa-`ōhi`a* forest that stretched around Haleakalā mountain, covering 40,000 acres from Makawao to Kaupō. Unfortunately over 95% of this forest has disappeared, so efforts to expand existing forests are critical for regaining the benefits of this forest. Native Hawaiian forests are far better at collecting moisture than grasslands in these upland, cloudy areas due to their thick vegetation condensing passing cloud moisture.<sup>1,2</sup> Ancient Hawaiians observed that the forest affected weather patterns and generated clouds, that would then be blown to the island of Kaho`olawe on the *naulu* wind along a “cloud bridge,” thus making these forests in leeward Haleakalā important for bringing rain and cloud moisture to that dry island.<sup>3</sup> The ability for these forests to collect moisture is reflected in an ancient Hawaiian proverb: *Hahai no ka ua i ka ululā`au* (The rain follows the forest). This ancient proverb shows how early Hawaiians clearly understood that water – and their survival – depended on the forests. In the late 1800s, this proverb was proven true after widespread clearing and enormous herds of wild cattle, goats, sheep, and pigs destroyed vast tracts of forests. The result: rivers and springs dried up, followed by water shortages, devastating droughts, and fires.

Correspondence dating from the early 1900s repeatedly mentions that large herds of feral goats, as well as cattle, were considered a critical threat to the survival of this forest. During that time, lands above approximately the 3,500' elevation were designated Forest Reserves and efforts to protect these lands from feral hooved animals were conducted. However, this parcel, which is also above that 3,500' elevation, was excluded from the Forest Reserve, and was designated as part of the agricultural district. This proposed NAR has been grazed under a revocable permit. Under the grazing permit, the lands were not available to public hunting or access.

Prior to the 1990s, within the existing Nakula NAR and Kahikinui Forest Reserve, some level of goat control was achieved through public hunting; primarily via a road and trail that started near the lower Skyline Trail above Polipoli State Park and ended at



Waiopai Gulch 3.5 miles away. Access was managed and maintained by DOFAW through a cooperative agreement with the Department of Hawaiian Homelands (DHHL) that established the Kahikinui Game Management Area. In 1984, 8,747 acres of DHHL land was withdrawn from the Forest Reserve in accordance with Attorney General opinion No. 75-3, dated March 21, 1975.

In 1994, the DHHL rescinded its access and management agreement with DOFAW. While the intent of this action was to allow DHHL to manage forest lands for the benefit of settlers on Hawaiian Homelands, it has restricted DOFAW's ability to manage State lands at Nakula and Kahikinui since the only feasible hunter access to these areas involves crossing DHHL lands by jeep and foot trail. After the withdrawal, this access was closed to the general public. Nakula and Kahikinui have become landlocked, and public hunting has essentially ceased again leaving goats and other feral animals in the region to be largely left uncontrolled.

Results from the decade of management of the adjacent NAR and Forest Reserve indicate what recovery could occur in this proposed extension. In 2012, State Capitol Improvement Project funds for the Watershed Initiative supported construction of fences that protected approximately 2,700 acres across the NAR and Forest Reserve from hooved animals, directly upland (*mauka*) of the proposed extension. After removal of the feral cattle, deer, goats, and pigs from that unit around 2014, extensive recovery began. DOFAW applied for Federal funds from the U.S. Forest Service, which supported large outplanting efforts. Outplanting survivorship was high in most species, exceeding 80% after two years in five of seven species.<sup>4</sup> After having just small pockets of trees remaining, within four years of extensive outplanting, vegetation surveys indicated over 40% native species cover.<sup>5</sup>

Nakula NAR was proposed as an area to translocate the *kiwikiu*, an endangered forest bird (*Pseudonestor xanthophrys*). Unfortunately, birds that were released there largely succumbed to avian malaria, which was prevalent at much higher elevations than expected, likely due to increasing temperatures expanding the range of mosquitoes.

Endangered seabird recovery has been successful in the reserve. Seabird monitoring began in 2016, where there were five burrows detected of the critically endangered *ʻuaʻu* (Hawaiian petrel, *Pterodroma sandwichesis*). That year, only one of these nests resulted in a successful fledging. However, later results after predator control and restoration led to increasing success, and in 2019, 67 burrows were located and twenty of those successfully fledged.

In DHHL lands to the west, community interest in forest restoration has also occurred. In 1995, the Kahikinui Forest Partnership Working Group submitted a community forest management plan to the DHHL. This group later took the name Living Indigenous Forest Ecosystems (LIFE) and assumed a lease over a portion of the DHHL owned forest lands. Their goal is to involve settlers on Hawaiian Homelands with the stewardship of the Kahikinui Forest. One ongoing LIFE project involves construction of a fence to protect the most intact forested area on DHHL lands. This project is adjacent to the proposed Nakula NAR extension.

In 2003, ten land owners, including the State of Hawai'i, signed a memorandum of understanding for the Leeward Haleakala Watershed Restoration Partnership. The intent of the partnership is to support restoration of native ecosystems [primarily *koa*

forests] on 43,000 acres of leeward Haleakala above 3500' elevation, creating framework for regional cooperation and fund raising.

#### *Present Land Use*

The proposed extension is currently under a month-to-month revocable permit for grazing, and DOFAW is working with the permittee to negotiate a transfer of this land that is supported by the permittee. The NAR designation would only occur after the permit ended.

#### *Cultural/Recreational Uses*

An archaeological reconnaissance study and cultural practices assessment occurred in adjacent areas, documenting no historic sites. The report also states that due to the steep terrain and high elevation in the area, it would be "expected to contain few sites, especially given the rugged topography of the area. If present, sites would include rock shelters, cairns, quarry sites, petroglyphs, ridge trails or other temporary-use sites." No ongoing cultural practices were identified.

The area is extremely remote, and there is no public access across the private and leased lands that surround it. DOFAW does not maintain check stations or other means to monitor hunting or other activity in the area.

The region continues to have an abundance of game animals, primarily goats as was noted from the 1920's. Currently, ingress and reproduction of Axis deer (*Axis axis*) is becoming more of an issue. There are no developed trails or roads to the area; it can only be traversed by following rugged cross-country routes.

#### *Previous Studies*

Biological surveys have been conducted in adjacent areas. Medeiros, et al. (1986) surveyed Nakula as part of a larger survey of South Haleakala's native vegetation. Over the course of his career, Robert Hobdy, retired Maui Forester, often spent time in the area and documented numerous rare plants. No inventory of the area specifically proposed for NAR designation has been conducted. The gulches, not so easily impacted by ungulate foraging, will contain the most native Hawaiian plant species.

## IV JUSTIFICATION (Specifics)

#### *Scientific Value*

The primary reason for designation of the Nakula NAR is to restore the leeward Haleakala *koa* dominated forest.

Leeward *koa* dominated forests on slopes of the larger Hawaiian volcanoes are unique in that the forest depends largely on precipitation and fog drip from afternoon clouds created by convection and diurnal heating. They differ markedly from *koa* forest that occurs on the windward slopes of the islands (an example is present at Hanawi NAR). Those forests are affected by the trade winds, and are much wetter, with a different suite of associated species.

Another important natural attribute of the proposed NAR are the numerous small gullies that incise the mountain slope. These sheltered gulches provide moist, shady

habitat for several rare plant species in what is otherwise a harsh, dry environment. The steep walls of the gulches have provided refuges in which the plants have been saved from goat browsing till now, but may not last for much longer.

The proposed NAR supports several different native habitats that could serve as reintroduction sites for rare plants.

Invertebrates in the area are poorly studied, but it is likely to be important habitat for native insects. For example, the mesic *koa* forest is habitat for native Carabid beetles. Recent surveys of relict *koa* elsewhere on Haleakala revealed surprising beetle diversity, including new species and rediscoveries of insects thought to be extinct. The *koa* at Nakula, which has never been inventoried, has a potentially rich beetle fauna as well.

### *Representativeness*

While the often severe alteration of natural conditions in some areas might be seen as a reason to preclude NAR designation, the potential for recovery makes this parcel desirable for inclusion.

HRS Chapter 195 specifically allows for the preservation of areas “as relatively unmodified as possible”, and “as natural a condition as practicable.” Given that the Nakula tract contains the best potential for restoration of a unique ecosystem as yet unprotected on Maui, some level of degradation can be accepted. All of the lands within the NAR system can be said to be altered from their natural condition to some degree.

### *Natural Communities and their Status*

Plant community classifications follow Gagne and Cuddihy in Wagner et al., 1999.

A few scattered trees remain from an area that used to be *koa/`ōhi`a* montane mesic forest. Due to ungulate grazing, the natural forest understory has been largely eliminated and replaced by introduced pasture grasses. The *olopua* montane mesic forest is found in a very small area at the lower extent of the proposed Reserve; within the canyon of Wailaulau gulch.

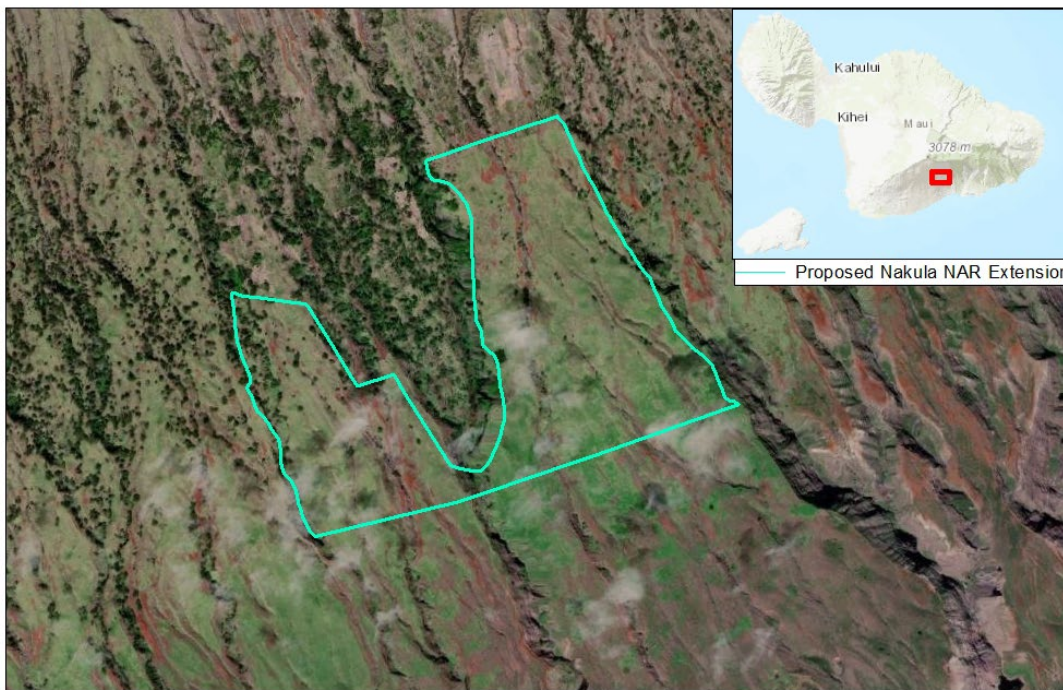
### *Rarity*

See table 1 and 2 for a list of plants and wildlife found in areas adjacent to the proposed NAR.

### *Biological/Ecological Design*

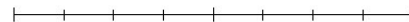
The boundaries of the proposed Nakula NAR follow the extent of a parcel that surrounds the existing NAR. The proposed new area will provide an excellent buffer, boundary to the existing more intact forested location of the NAR. This will allow for contiguous vegetation to begin natural spreading outwards and downslope of the existing forest resources enhancing the Nakula ecosystem.

## Nakula Natural Area Reserve Proposed Extension - Aerial Imagery



DOFAW 587-4170. 2021. Features approximate and subject to change.

0 0.25 0.5 1 Miles



### *Location and Size, Administrative*

The proposed Nakula NAR extension is located on the southern slope of Haleakala on Maui in the Hana District, and includes approximately 361 acres. The area is identified as (2) 1-8-001:005. The parcel spans from approximately 3,500' to 5,000' above sea level.

### *Threats (Human/Biological)*

The greatest immediate threat to the proposed Nakula NAR extension is continued grazing and trampling by feral ungulates, including goats, cattle, deer and pigs.

Secondary threats include fire, and invasion by non-native weeds, including pasture grasses, as well as trees such as *Bocconia*, and *Grevillea*.

Tertiary threats include the loss of genetic diversity as population of native plants, birds and invertebrates decline.

### *Present Level of Protection*

The land is within the agricultural district and has little regulatory protections.

### *Long-term Ecological Viability*

Despite being degraded by years of cattle and goat activity, the forest has great potential for natural regeneration. This has been demonstrated in the existing efforts to expand the "lei" of forest that is being restored back to leeward Haleakalā.

### *Environmental Consequences of No Action*

The environmental consequences of no action will likely be the continued degradation and eventual loss of this unique remnant of Maui's natural heritage.

### *Urgency*

Degradation of this area by cattle and goats is well documented and has been happening for almost 200 years.

Sequestering carbon emissions is an urgent global need; this location would provide lands that have a high potential for carbon storage, retaining, and also enhancing biodiversity, if reforested.

## V. MANAGEMENT NEEDS

### *Threats Requiring Management*

As noted earlier, threats to the proposed addition to the proposed Nakula NAR extension include:

- Grazing and trampling by feral ungulates, including goats, cattle, deer, and pigs.
- Invasion by non-native plants, including pasture grasses and non-native weeds.
- Fire.
- Loss of genetic diversity.

Protective management would primarily entail the construction of fences (on-going) to exclude feral ungulates from the reserve, and the removal of any animals within the fences.

Weed control would focus primarily on eradicating incipient populations of non-native tree species. Natural regrowth/replanting may provide a natural control for pasture grasses as increased canopy cover may shade them out.

Fire threats could be mitigated by developing fuel breaks or shade belts to slow fire spread, as well as developing infrastructure such as reservoirs and helicopter dip tanks.

Outplanting, predator control, and translocation of native wildlife would address the loss of native biodiversity.

Currently, a Revocable Permit to Haleakala Ranch provides access to a spring on the property. The permit allows the Ranch to maintain a system of pipes and associated infrastructure that carries water to a reservoir on the Ranch's lands to the south of the parcel. DOFAW intends to continue to offer that permitted use under the NAR designation as the water source is beneficial to both agriculture as well as natural resources.

## VI. PUBLIC OUTREACH

The following agencies, organizations, and individuals will be notified during a public hearing process that will include a public hearing and legal ad announcing the proposed addition.

**Federal**

Haleakala National Park  
US Fish and Wildlife Service

**State**

Department of Hawaiian Home Lands  
DLNR, Division of Conservation and Resources Enforcement  
DLNR, Land Division  
DLNR, Aha Kiole Council  
Na Ala Hele Advisory Council  
Office of Hawaiian Affairs  
Representative of the 12th Representative District  
Senator of the 6<sup>th</sup> Senatorial District

**County**

County of Maui -Planning Department

**Organizations**

Conservation Council for Hawaii  
Environment Hawaii, Inc.  
Haleakala Ranch  
Kahikinui Game and Land Management `Ohana  
Kahikinui Homesteads Association  
Kaupo Wildlife Club  
Leeward Haleakala Watershed Restoration Partnership  
Maui Invasive Species Committee  
Sierra Club, Maui Chapter  
Ulupalakua Ranch  
Friends of Haleakala National Park  
The Nature Conservancy, Maui

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## Appendices

**Table 1**  
**Rare Plants Recorded From Vicinity of Proposed Nakula NAR Extension**

Scientific Name	Common Name	Federal Status	CH info	Location Info
<u>Argyroxiphium sandwicense ssp. macrocephalum</u>	'ahinahina, Haleakala silversword	E	B	2
<i>Bidens micrantha</i> ssp. <i>kaleaha</i>	ko'oko'olau	E	B	1
<i>Canavalia pubescens</i>	'awikiwiki	C		2
<i>Clermontia lindseyana</i>	'ohawai	E	B	1
<i>Cyanea arborea</i>	haha	SOC		2
<i>Cyanea obtusa</i>	haha	C		2
<i>Cyrtandra bisserata</i>	ha'iwale	SOC		1
<i>Cyrtandra oxybapha</i>	ha'iwale	C		2

Diellia erecta		E	B	2
Diplazium molokaiense		E	B	1
Geranium multiflorum	nohoanu	E	B	2
Huperzia mannii		E	B	2
Neraudia sericea		E	B	2
Ochrosia haleakalae	holei	C		2
Phyllostegia haliakalae		SOC	B	1
Portulaca villosa		SOC		2
Ranunculus mauianensis	makou	C		2
Schidea diffusa ssp. diffusa		SOC		2
Stenogyne haleakalae		SOC		?
Zanthoxylum hawaiiense	'a'e	E		2

**Federal Status** E = Endangered, C = Candidate for Listing, SOC = Species of concern

**CH Info** Critical plant habitat designated: A = within proposed NAR, B = Adjacent lands with identical habitat

**Location info** 1 = recently recorded from within proposed NAR, 2 = recently recorded from lands adjacent to proposed NAR with identical habitat; could occur within NAR, ? = possibly extinct, recorded from vicinity of NAR

**Table 2**

**Rare Animals Found in Vicinity of Proposed Nakula NAR Extension**

Hawaiian Petrel 'u'a'u, Pterodroma sandwichensis

Hawaiian Goose, *nene*, Nesochen sandwichensis

Hawaiian Bat, 'ope'ape'a, Lasiurus semotus cinereus

Blackburn's Sphinx Moth, Manduca blackburni





*1 The forests of leeward Haleakala have been converted to barren areas or grasslands, largely due to grazing by non-native hoofed animals.*



*2 Small pockets of native forests exist in gullies where feral animals were less likely to*

*graze vegetation.*



*3 Fence crews building fence in the adjacent Nakula NAR in 2012. This fence was the first step towards ecosystem recovery.*



*4 Before fencing and hoofed animal removal, the Nakula NAR was largely grassland.*



*5 The same location was photographed four years later, after extensive planting and natural regeneration.*



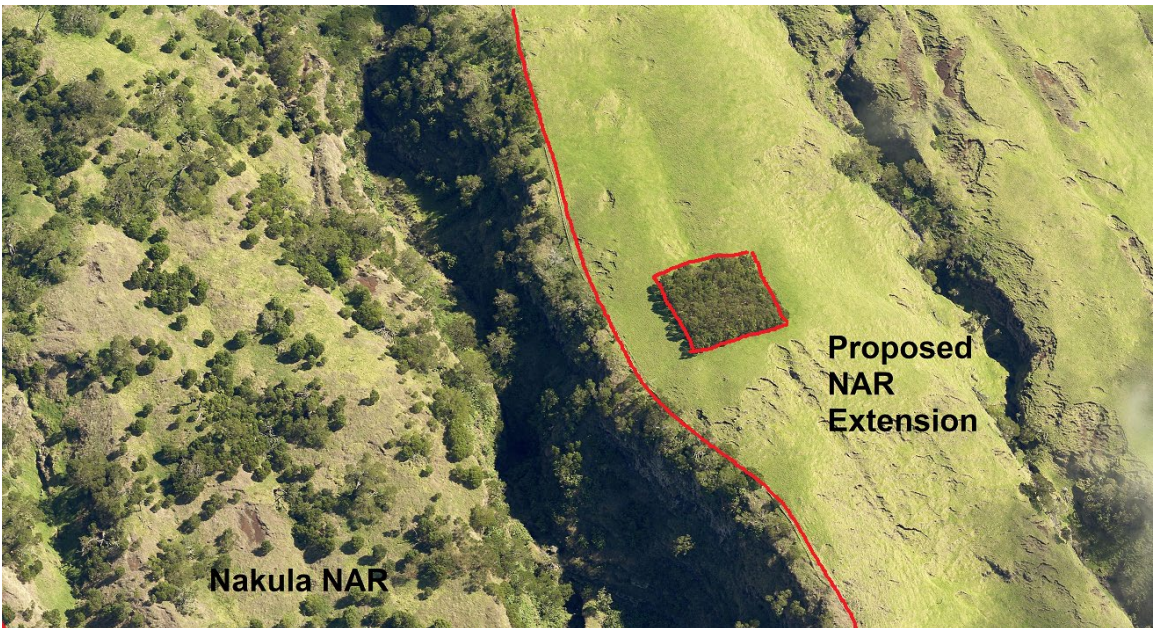
*6 Extensive reforestation has occurred in areas that were previously barren or grasslands. The proposed extension is in the bottom right corner of this photo.*



*7 The fencing and outplanting projects have attracted federal funding to create green jobs and provide job training. Here, youth conservation corps interns learn tree planting skills.*



8 In a 2010 aerial image of the center of this proposed NAR, the NAR (on left) is almost indistinguishable from the pasture area. The locations of hoofed animal fences that would be installed later are indicated in red. Photo: Pictometry.



9 In 2020, the same area has restored dramatically after fences (red lines) have been installed. Photo: Pictometry.

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<sup>1</sup> Giambelluca, T. W., R. E. Martin, G. P. Asner, M. Huang, R. G. Mudd, M. A. Nullet, J. K. DeLay, D. Foote. 2008. Evapotranspiration and Energy Balance of Native Wet Montane Cloud Forest in Hawai'i. *Agricultural and Forest Meteorology*. DOI:10.1016/j.agrformet.2008.08.004.

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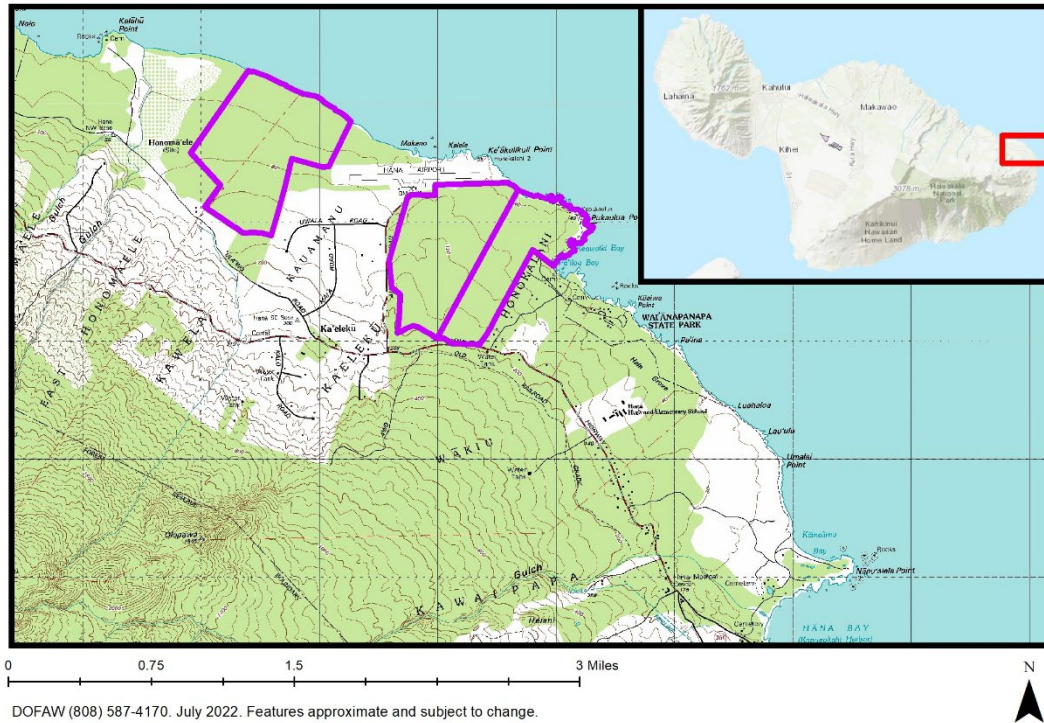
<sup>3</sup> Young, P. T. Kaho'olawe – Images of Old Hawaii. <https://imagesofoldhawaii.com/kaho'olawe/>

<sup>4</sup> Warren, C.C., H.L. Mounce, L.K. Berthold, C. Farmer, D.L. Leonard, and F. Duvall. 2019. Experimental restoration trials in Nakula Natural Area Reserve in preparation for reintroduction of Kiwikiu (*Pseudonestor xanthophrys*). Pacific Cooperative Studies Unit Technical Report #199. University of Hawai'i at Mānoa, Department of Botany. Honolulu, HI. 102 pages.

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PROPOSAL FOR THE KAUMANU NATURAL AREA RESERVE  
2022

Proposed Kaumanu NAR  Proposed Kaumanu NAR



I EXECUTIVE SUMMARY

Approximately 620 acres near Hana airport and Waianapanapa State Park on the island of Maui, is proposed for inclusion in the State of Hawai'i Natural Area Reserve System (NARS). Designation is meant to expand protections for a windward coastal forest of hala (*Pandanus tectorius*), a large population of the endangered *Ischaemum byrone* grass, and other native plants and wildlife.

II INTRODUCTION (General)



This unencumbered State land contains a sizable stand of hala-dominated native forest in good condition. While coastal hala forests likely covered most windward shores in Hawai'i before human contact, these accessible areas have been almost entirely replaced by development and agriculture. Few larger tracts of this coastal forest type remain, and many forests that still exist were spared due to their remoteness or by clinging to steep cliffs. This coastal hala forest in Kaumanu provides an opportunity for active management because it is in an accessible and relatively flat. It also presents opportunities for nature education and community co-stewardship to reconnect with and restore plants and animals unique to Hawai'i.

### III BACKGROUND AND HISTORY

#### *Past Land Use*

This area was historically part of a hala forest that likely stretched around the mesic and wet coastline of Maui. Unfortunately, most of this forest has disappeared.

This area of Waianapanapa was inhabited before European contact, and rich collections of archeological sites remain. The nearby Ohala heiau in the state park is the most prominent, with a platform approximately 110 feet long and 75 feet wide. The general area was likely inhabited by fishers, and while the coastal hala forests were not usable for crops, hala and other coastal plants were gathered for many material and spiritual purposes. Ancient footpaths connected the coastline, such as the Pi'ilani trail. The area of the proposed NAR was used as a burial complex from pre- to proto-historic times that contains numerous burial sites and various structures.

After European contact, the flatter lowlands around Hana were largely converted to sugar cane plantations. However, this area was not targeted, likely because it was covered by more recent lava flows and did not have adequate soil.

After the Hana highway was built, this area became a popular visitor destination due to the black sand beach and caves at Waianapanapa, and the State Park was established.

#### *Present Land Use and Cultural/Recreational Uses*

The proposed NAR is currently unencumbered State land and visitation is primarily via the coastal Pi'ilani trail. The area is primarily used by fishers and hikers. There is ongoing cultural activities such as the gathering of marine and plant resources. Marine resources include kupe'e, limu, and a variety of fish. The neighboring area offers plants such as kukui, banana, coconut, ulu, wauke, mamaki, noni, false kamani, mango, guava, fern, and ti. Waianapanapa has also preserved cultural resources, offering the community a connection to the early, pre-history of Hana, particularly the burial grounds of ancestors. The proposed NAR is also the location of Wainapanapa Cave which is associated with a local legend. Community members visit the cave to perform prayers or provide offerings for special occasions in addition to using the pool for recreation. However, there is a statutory prohibition on entering all caves.

### IV JUSTIFICATION (Specifics)

### *Representativeness and Scientific Value*

Coastal hala forests exist in the Pu'u O 'Umi (Hawai'i), Oloku'i (Moloka'i), and Hono O Na Pali (Kaua'i) NARS. No representative areas on Maui are protected in the system. Further, these forests in the other NARS are located in very remote areas that are difficult to manage, so the Kaumanu NAR would provide an opportunity to conduct active management of this ecosystem.

### *Natural Communities and their Status*

This area is within a mesic climatic zone with a'a (Hana volcanics) basalt substrate and dominated by strong northeast trade winds. The harsh conditions have discouraged invasion of non-native species. However, non-native plants, particularly *Casuarina* (ironwoods) have largely infiltrated the coastal areas exposed to salt spray, and *Shinus* and *Schefflera* are prominent in the inland areas.

Fourteen species of native plants were noted in the area, which is a moderate-high amount compared to other coastal sites on Maui.

*Endemic and indigenous fauna observed in the State area include the endangered Hawaiian hoary bat, 'ōpe'ape'a, (Lasirus cinereus semotus); the Pacific Golden-Plover, kolea (Pluvialis fulva); and Ruddy Turnstone, 'akekeke (Arenaria interpres). The threatened Green Sea Turtle (Chelonia mydas) has also been observed offshore. An anchialine pond shrimp, Metabetaus lohena can be found in the area's caves. Rarity*

The area has a large population of the endangered *Ischaemum byrone* grass, which is extremely salt-tolerant and occurs along the lava coastline.

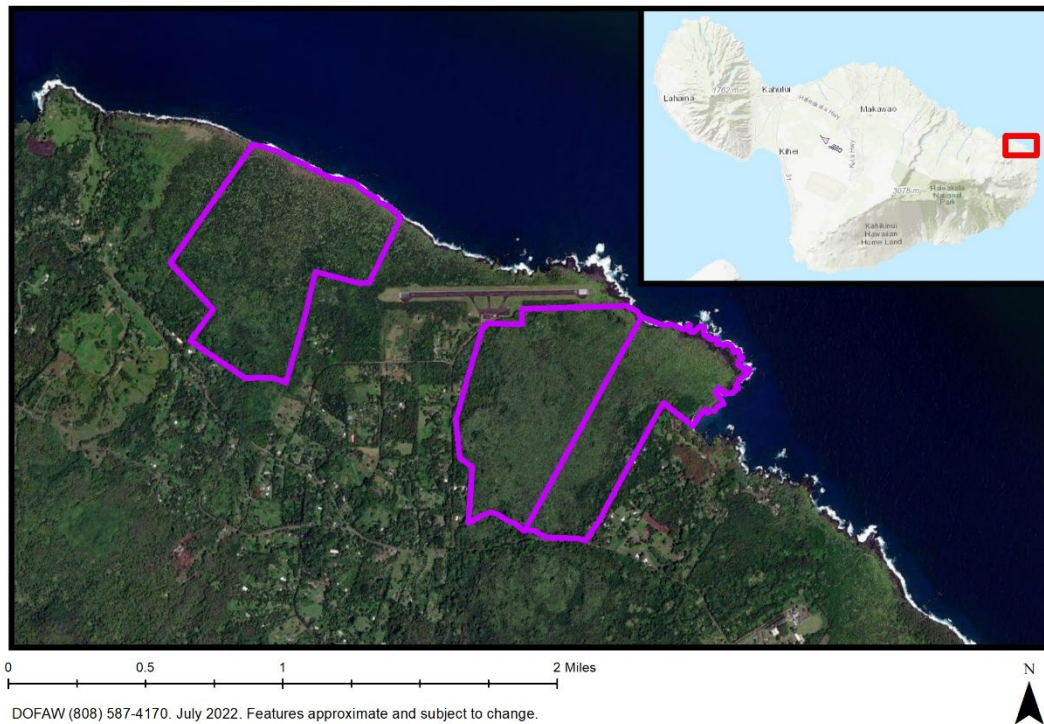
Invertebrates in the area are poorly studied, but it is likely to be important habitat for native insects such as yellow-faced bees. Various species of these bees have been listed as endangered. *Megalagrion* sp. (damselflies) have also been observed in the area.

In addition to the endangered Hawaiian hoary bat and threatened Green Sea Turtle, other endangered and threatened species that may be affected by this area include the endangered, endemic Hawaiian Petrel, 'ua' u (*Pterodroma sandwichensis*) and the threatened Newell's Shearwater, 'a'o (*Puffinus auricularis newelli*) that have both been reported to fly over the area.

### *Biological/Ecological Design*

The boundaries of the proposed Kaumanu NAR follow the extent of three parcels to the west of Waianapanapa State Park. The Hana airport bisects the proposed NAR, however DLNR could partner with the Department of Transportation to co-manage their section of the coastline and potentially use the fencing already constructed for the airport.

## Proposed Kaumanu NAR Proposed Kaumanu NAR



### *Location and Size, Administrative*

The proposed Kaumanu NAR is located on the eastern slope of Haleakala on Maui in the Hana District, and includes approximately 620 acres. The area is identified as TMKs (2) 1-3:005:002; (2) 1-3:003:026; (2) 1-3:003:001.

### *Threats (Human/Biological)*

The greatest immediate threat to the proposed Kaumanu NAR is continued invasion by alien plants.

Secondary threats include feral pig damage. Staff have noted extensive pig digging in the forest which will further serve to spread weeds.

### *Present Level of Protection*

The land is within the Conservation District. As it is unencumbered State land, it is more vulnerable to be set aside for other uses, and also lacks natural resource management staff capacity.

### *Long-term Ecological Viability*

This coastal forest, if protected from development, is generally resilient. However, over time, invasive plants will continue to replace the natives without active management.

*Environmental Consequences of No Action/Urgency*

The environmental consequences of no action will likely be the continued degradation and eventual loss of this unique remnant of Maui's natural heritage.

V. MANAGEMENT NEEDS

*Threats Requiring Management*

Staff will explore strategies to fence the area from feral pigs. Fences will include step-overs to permit continued public access into the area for fishing, hiking, and other activities.

Weed control would focus primarily on eradicating stands of *Casurina*, *Shinus*, and *Shefflera*. As the areas near the coast are the most intact, a weeding strategy from *makai* to *mauka* may be employed.

Outplanting, predator control, and translocation of native wildlife would address the loss of native biodiversity. This could help encourage populations of native bees, as well as create new protected populations of rare plants.

VI. PUBLIC OUTREACH

The following agencies, organizations, and individuals will be notified during a public hearing process that will include a public hearing and legal ad announcing the proposed addition.

**Federal**

US Fish and Wildlife Service

**State**

Department of Hawaiian Home Lands  
DLNR, Division of Conservation and Resources Enforcement  
DLNR, Division of State Parks  
DLNR, Land Division  
DLNR, Aha Kiole Council  
Na Ala Hele Advisory Council  
Office of Hawaiian Affairs  
Representative of the 13th Representative District  
Senator of the 6<sup>th</sup> Senatorial District

**County**

County of Maui -Planning Department

**Organizations**

Aha Kiole Council  
Conservation Council for Hawaii  
Environment Hawaii, Inc.  
Hana Ranch

Hawaii Audubon Society  
 Hawaii Conservation Alliance  
 Hawaiian Botanical Society  
 National Tropical Botanical Garden, Kahanu  
 Maui Invasive Species Committee  
 Sierra Club, Maui Chapter  
 Ke Ao Hali'i  
 The Nature Conservancy, Maui  
 Hawaii Land Trust

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**Appendices**

**Table 1  
 Native Plants Recorded From Vicinity of Proposed Kaumanu NAR**

Scientific Name	Federal Status
<i>Cassytha filiformis</i>	
<i>Cocculus orbiculatus</i>	
<i>Cyperus polystachyos</i>	
<i>Fimbristylis cymosa</i>	
<i>Ipomoea pes-caprae</i>	
<i>Ipomoea tuboides</i>	
<i>Ischaemum byrone</i>	E
<i>Metrosideros polymorpha</i>	

<i>Mucuna sloanei</i> var. <i>persericea</i>	E
<i>Nephrolepis exaltata</i>	
<i>Pandanus tectorius</i>	
<i>Portulaca lutea</i>	
<i>Psilotum nudum</i>	
<i>Scaevola taccada</i>	
<i>Vigna marina</i>	

**Federal Status** E = Endangered

(Table based on results from Warshauer *et al.* 2006.)

PROPOSAL FOR THE EXPANSION OF THE `ĀHIHI KINA `U  
NATURAL AREA RESERVE

August 2022

I EXECUTIVE SUMMARY

Six parcels, totaling approximately 23.43 acres in the Makawao district, on the island of Maui, are proposed as additions to the `Āhihi Kina `u Natural Area Reserve (NAR). The proposed expansion contains parcels, both *mauka* and *makai* (upland and below), of Makena Road. Adding these parcels will increase access and strengthen strategic management for the area and will provide a buffer to the NAR. Set aside of these parcels into the NAR system will enable the division to protect and restore resources through establishing visiting hours, managing parking, signage, preventing trampling of sites, and enabling the presence of ranger and docents.

II INTRODUCTION

This addition is situated on the southern shoreline of Maui, in the moku (traditional land district) of Honua'ula, on the southwest flank of Haleakala. It is within the County of Maui administrative district of Makawao near the town of Kīhei and resort areas of Wailea and Makena (Fig. 1).<sup>1</sup> These additions are crucial to the strategic management of the area and will provide increased access and protection from the increasing human impacts to the NAR and development of the surrounding areas.

Geologically, the area encompasses young rugged lava flows on Haleakala volcano's southwest rift zone and consists of 'a'a (rough, slow moving lava) lava.<sup>1</sup> Biologically, the lowland dry ecotype of area leaves the land comprised of small shrubs. The small size of the parcels and proximity to development make the presence of rare species unlikely. There are many historic sites and archaeological features on some of the parcels.



Figure 1: Map of the `Āhihi Kina`u Natural Area Reserve and proposed additions.

The proposed additions to the NAR are generally divided into the region northwest of the NAR (Kanahena and Pa`ako) and the parcels southeast of the NAR (Keone`o`io).

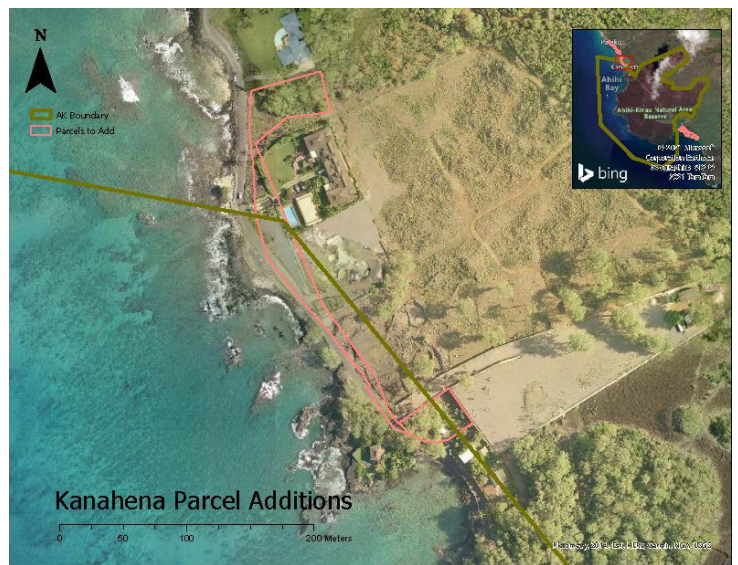
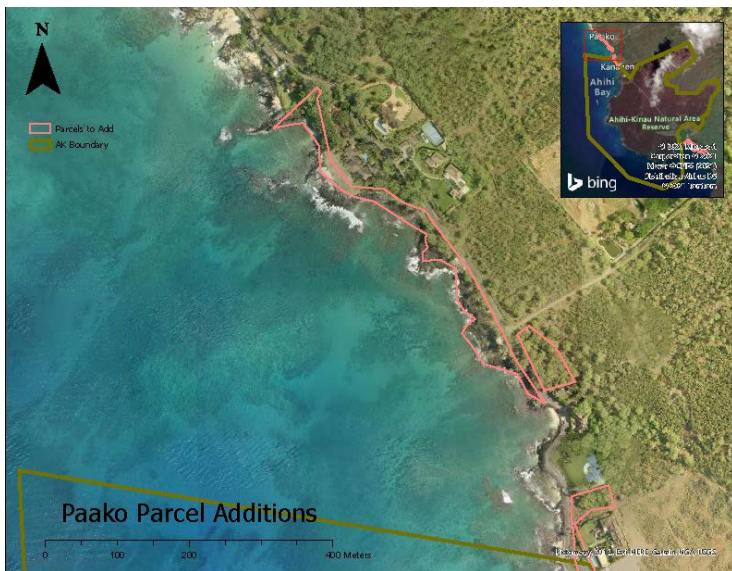
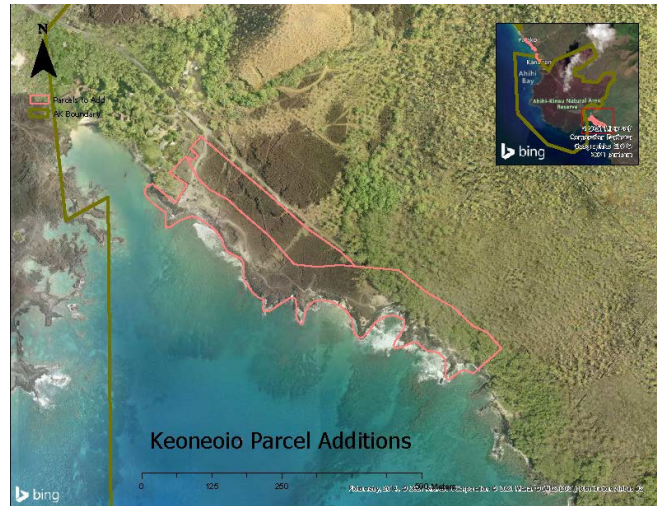




Figure 2: Expanded maps of the additional parcels to the northwest of the existing NAR (Paako and Kanahena).

Figure 3: Expanded map of the additional parcels to the southeast of the existing NAR (Keoneoio).



### III BACKGROUND AND HISTORY

#### *Past Land Use, Previous Studies, and Conservation History*

A Comprehensive Resource Management Plan for the Reserve and Keone'o'io was completed in March 2007 (Desilets et al. 2007). It focuses on the management of cultural resources along the most heavily visited trail corridors. It found that the southeastern portion of the Reserve contains the highest density of archeological features. The area includes trail networks, rock shelters, habitation complexes, modified anchialine and marine pools, and heiau, clearly illustrating the importance of this area and the significant fishing grounds for this region of the island. The Reserve contains a variety of traditional Hawaiian and early historical cultural resource sites; some, such as Ma'onakala Village Complex in Kanahena, are well known. In 1971 a team from the Bernice Pauahi Bishop Museum cleared and mapped the ruins at Ma'onakala (Desilets et al. 2007). In general, lands within the proposed NAR expansion have been traditionally used in cattle ranching, and military operations during WWII (Lee-Grieg et al. 2020).

The Kanahena parking area was once a World War II-era dumpsite, and was cleaned up sometime between the late 1960s and 1973. After the war, the Army Corp of Engineers removed the wire from the Makena area and dumped it at the location of what is currently the Reserve's Kanahena Parking Area. As a result of this initial dumping, people began dumping material there that could not burn, however, the site has since been cleaned and is now used as a parking area/ field office (Warnecke, et al.).

### *Present Land Use and Access*

These parcels are unencumbered land in the Conservation District. Proximity to Makena Road makes public access available, however, the parcels consist of small open spaces with little to no development. Currently, a large sign with the name of the Reserve and a map of the boundaries is located at the coastal entry on the Makena-Keone'o'io government road. About 100 meters further down the coast is a parking area in Kanahena. Within the parking area are smaller trailers within a barbed wire fence meant to function as an on-site Ranger office. Signs stating Reserve restrictions, access restrictions, UXO threat and other information are located along the road, at the Kanahena parking area, at restricted access trailheads, and at La Perouse Bay/Keone'o'io, which is within the southern parcels. Keone'o'io is currently a parking area and used as a staging for people wanting to hike the Hoapili trail. Keone`o`io and Pa`ako areas are also used by fisherman for coastal access and a temporary camp for some homeless. Portable toilets are provided at Pa`ako, Kanahena, and La Perouse Bay/Keone'o'io parking areas.

### *Cultural/Recreational Uses*

Currently, there is fishing and general tourism visitation to these areas, particularly in the Keone'o'io side.

This submittal is for a change in designation from unencumbered land to a Natural Area Reserve. The current rules for unencumbered State lands (HAR 13-221) would be replaced by rules for NARS (HAR Ch. 13-209). While the rules are generally similar, the NAR rules are generally more restrictive, such as a prohibition on taking any natural resource items, as well as entering the reserve in groups larger in ten. Additionally, the current amendments of the NAR rules prohibit the following:

To have or possess the following tools, equipment, or implements: fishing gear or devices within `Āhihi-Kina`u natural area reserve, including but not limited to any hook-and-line, rod, reel, spear, trap, net, crowbar, or other device that may be used for the taking, injuring, or killing of marine life; cutting or harvesting tools or gear, including but not limited to chainsaws, axes, loppers, any mechanized or manual sawtooth tool, seed pickers, or machete, that may be used for the taking, injuring, or killing of plant life; and hunting gear or tools that may be used for the taking, injuring, or killing of wildlife, except as permitted by the hunting rules of the department.

A special-use permit is required to violate any rules of the NARS. This may require approval by the Natural Area Reserves System Commission and/or the Board of Land and Natural Resources, based on the magnitude of the activity.

## IV JUSTIFICATION

The criteria for Scientific Value, Representativeness, Natural Communities and their

Status, Rarity, and Biological/Ecological Design are not applicable as these parcels do not contain these resources. Instead, the parcels are strategic for management of other areas of the NAR that do contain these resources.

#### *Location and Size*

These parcels are approximately 23.43-acres of coastal lowland dry terrain. It is situated in the Makawao District, and along Makena Rd. The parcels include the following TMKs:

221004075

221004110

221006010

221006077

221006078

*Threats (Human/Biological)* High-priority threats to `Āhihi Kina`u ecosystems are impacts from human incursion, loss of biological/cultural resources to development and overuse, as well as potential negative effects caused by climate change. These impacts pose some of the highest threats to the resources of the proposed NAR and its nearby areas. This includes the marine ecosystem, cultural sites, and historic trails. The addition of these parcels will provide DOFAW more access for landscape-scale management, and monitoring of terrestrial activities that can potentially create issues in the marine ecosystem, such as erosion/sedimentation.

#### *Present Level of Protection*

These areas are within the Conservation District, which regulates various types of development but does not require active management. If designated a NAR, there would likely be a higher level of activity for landscape-scale conservation planning, management, and a permanent status prohibiting uses inconsistent with conservation of native ecosystems.

#### *Long-term Ecological Viability/Environmental Consequences of No Action/Urgency*

Adding these lands to the NAR will help to support existing objectives found within the `Āhihi Kina`u Management Plan, specifically:

##### **Objective L2 - Reduce Upland Development Impacts**

By 2015, negative upland development impacts on the Reserve's natural and cultural resources will be largely reduced or fully mitigated through the use of various strategies to restrict or mitigate land use.

##### ***Strategic Actions***

**Action L2 (a) - Designate and prevent development within a Reserve buffer**

**zone.**

Tasks include: (i) review, amend, or establish BMP for land use practices within the lands adjacent to the Reserve's boundaries; (ii) assess the land ownership interests within a 1-mile radius surrounding the Reserve's boundaries by Tax Map Key and land use zoning status **{Figure 25}**; (iii) prioritize land management actions according to proximity, feasibility, and potential for impact to resources; (iv) design and propose a 1-mile buffer zone surrounding the Reserve's boundaries within which land development activities are minimized and seek to have this accepted and approved by state and county authorities; (v) where possible, purchase, seek conservation easements on, or rezone lands encompassed within proposed 1-mile buffer zone; and (vi) work with state and county authorities to ensure a high level of scrutiny on Special Management Area permit applications in the buffer zone.

**Action L2 (c) -Acquire and hold adjacent lands and infrastructure.**

Tasks include: (i) seek the support of the NARS Commission and BLNR to advocate for NAR addition or expansion into eligible adjacent lands; (ii) through purchase, trade, and/or conservation easements, acquire and hold lands important to the Reserve in order to prevent development from occurring; and (iii) begin discussions with landowners within the Reserve to acquire in-holdings, and with owners of infrastructure (e.g. electric lines) about the possible return to a more natural state over time.

The addition of these important parcels to the NAR would improve and protect access as well as enhance the ability of the System to participate and contribute to conservation and restoration actions across the entire region. It could mitigate poaching, as well as potentially reduce pollution and particulates entering coastal waters due to the effects of erosion and human impacts. This could reduce sedimentation and reduce the stress put on the marine ecosystem.

As these areas are coastal and under threat from the effect of climate change, it is projected that no management action could potentially lead to loss of access to the NAR. These parcels are critical to continued access to the NAR in the face of climate change and development.

## V. MANAGEMENT NEEDS

### *Threats Requiring Management*

Management planning for `Āhihi Kina`u NAR involved an intensive public consultation process. A working group was formed in 2008 and guided the publication of the plan in

2012. One of the objectives of the plan was the goal of acquiring lands adjacent to the NAR and creating a buffer from development along with implementing management to control land-based pollution. These goals have been shared by both Reserve Managers and the public and most recently were supported by the community during an introductory meeting on the proposed parcel additions with our strategic group made up of neighbors, representatives from stakeholder groups such as fishermen and the `Aha Moku, along with representatives from the original advisory group that was involved with the creation of the management plan. There was general support for keeping the lands as open space in the face of development approaching from Kīhei and Wailea. The Department intends on conducting a public consultation process to develop additional management plans for these new areas after the formal designation.

Threats to this area include ingress from invasive species, particulate pollution entering the marine ecosystem (from erosion and human impacts), and overuse/overcrowding and its effects on the archaeological sites present. Feral ungulates threaten the resources of the proposed NAR and if these parcels are set aside, will enable the division to eliminate them. This could be potentially implemented by extending the existing permits that permit hunting in the NAR to include these areas, particularly in Keone'o'io. Human impacts caused by erosion and sedimentation can put undue stress on the coral reefs that are present. Finally, the `Āhihi Kina'u NAR coastal areas are threatened by climate change and retreating shorelines. The addition of these parcels to the NAR system will enable the division to control and manage uses consistent with coastal resilience, ensuring native habitats are maintained.

If added to the NAR, these areas may be covered by the existing visiting hour regulation, which would assist with regulating illegal camping and homeless issues. Additionally, the parking at Keone'o'io could be improved to reduce trampling and erosion that affects the nearshore reef.

## VI. PUBLIC SUPPORT

A public meeting with a stakeholder group made up of members of the community living in close proximity to the reserve, regular users, local fishermen, past advisory group members and other concerned citizens was hosted by DOFAW on March 5, 2021. There was general support for adding the parcels. Concerns were centered around continued access and management of the areas to lessen human impacts and to mitigate illegal uses such as homeless encampments.

*Agencies, Organizations, and Individuals Contacted\**

\*Interested parties will be notified and a formal public hearing and comment period will occur for this nomination pursuant to Hawai'i Revised Statutes § 195-4.

**Federal**

US Fish and Wildlife Service

**State**

Department of Hawaiian Home Lands  
DLNR, Division of Conservation and Resources Enforcement  
DLNR, Land Division  
DLNR, Aha Kiole Council  
Office of Hawaiian Affairs  
Representative of the 12th Representative District  
Senator of the 6<sup>th</sup> Senatorial District

**County**

County of Maui -Planning Department

**Organizations**

`Āhihi Kina`u NAR/Keone`o`io Advisory Group  
Conservation Council for Hawaii  
Environment Hawaii, Inc.  
Ulupalakua Ranch  
Hawaii Audubon Society  
Hawaiian Botanical Society  
Maui Invasive Species Committee  
Sierra Club, Maui Chapter  
The Nature Conservancy, Maui

**References**

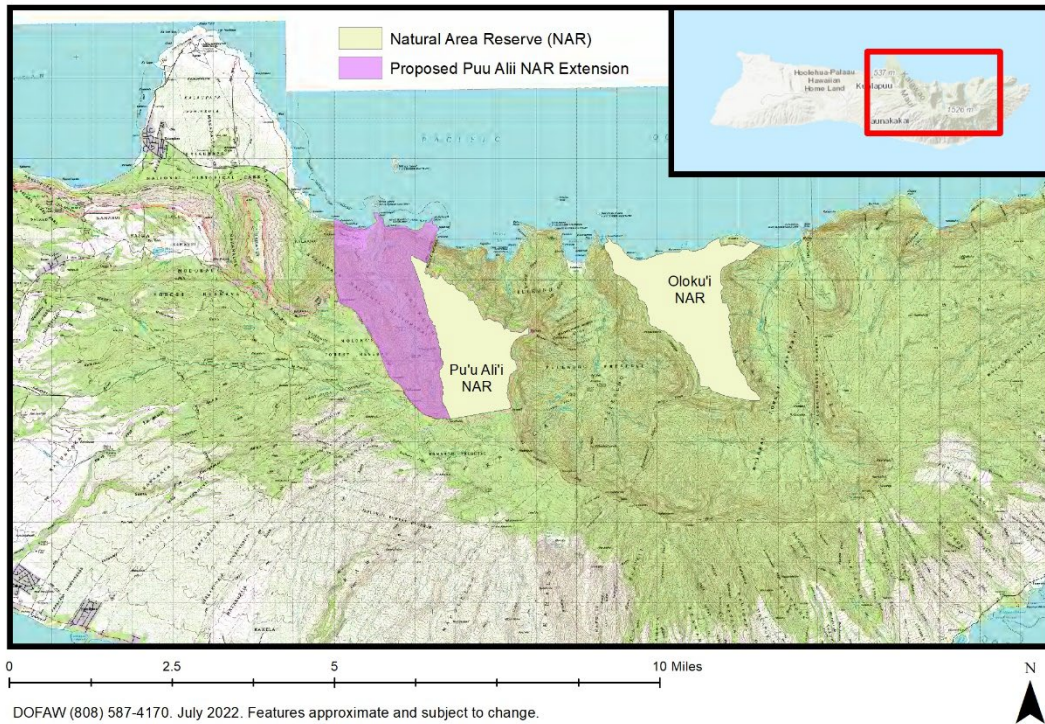
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PROPOSAL FOR THE EXTENSION OF THE PU'U ALI'I NATURAL AREA RESERVE, TO BE WITHDRAWN FROM THE MOLOKA'I FOREST RESERVE  
2022

## Proposed Pu'u Ali'i NAR Extension



### I EXECUTIVE SUMMARY

An approximately 2,000-acre section of land comprising Waikolu valley on the north shore of Moloka'i, is proposed for inclusion in the State of Hawai'i Natural Area Reserve System (NARS). This area is adjacent to the existing Pu'u Ali'i NAR, and contains an outstanding native Hawaiian stream, and native wet cliff and coastal vegetation.

### II INTRODUCTION (General)

Designation of this area would include multiple streams from *mauka* to *makai* in the Natural Area Reserves from the existing Pu'u Ali'i NAR into the valley of Waikolu. The designation does not include the Moloka'i tunnel diversion and is not anticipated to affect the operation of the tunnel.

### III BACKGROUND AND HISTORY

#### *Past Land Use*

This land, like other valleys of the Moloka`i north shore, was settled by ancient Hawaiians. The valley bottom was likely densely populated, supported by the perennial stream that irrigated taro lo`i and other crops.

After European contact, this portion of Moloka`i Forest Reserve was set aside by Governor`s proclamation of September 11, 1916. It is part of Kalawao county.

In 1955, a use permit was granted to the Hawai`i Irrigation Authority to create a horse trail into the back of the valley to facilitate construction of a tunnel. The trail began at the upper rim of the valley at Pu`u Kaeo.

In 1958, Governor`s Executive Order 1814 withdrew approximately 7 acres from the Forest Reserve to make the lands available for the Moloka`i Irrigation Tunnel System.

In 1969, the tunnel was finalized to divert water from the back wall of the valley at approximately 925 ft elevation into the interior of Molokai, feeding the Kualapu`u Reservoir. The tunnel, which is approximately 25,000 ft, also functions as a road. The road extends partway into Waikolu valley. Infrastructure associated with the water diversions and tunnels remain, such as flumes, dams, gages, and buildings. Much of the infrastructure is unmaintained and in various states of decay.

Public Law 96-565 of 1980 established the Kalaupapa National Historical Park which included all of Kalawao County (including the Pu`u Ali`i NAR and Waikolu). A cooperative agreement between the Park and the Division of Forestry and Wildlife was ratified in 1989 and the two entities have conducted surveys and occasional management of the valley.

#### *Present Land Use*

The water diversion easement (which is not part of the proposed NAR) continues and the United States Geological Survey operates a stream gage in the valley.

The Division of Forestry and Wildlife is almost finished with a fence along the rim of Waikolu valley which is meant to exclude hooved animals from the valley and the existing Pu`u Ali`i NAR.

#### *Cultural/Recreational Uses*

The area is extremely remote. Waikolu can be walked to along a boulder strip along the coast to from Kalaupapa, however access is highly restricted by the Park and unaccompanied public access is not permitted from the Park. Leinopapa point at the west end of Waikolu provides a sheltered cove that is occasionally used as a mooring location



for boats. The visitation of Waikolu from boaters is not known. It is likely that fishers may also visit the area, likely by boat.

The area is within hunting unit C, however the valley bottom is seldomly visited due to visitation restrictions imposed by the Park.

#### IV JUSTIFICATION (Specifics)

##### *Scientific Value*

The primary reason for designation of the extension of the Pu'u Ali'i NAR into Waikolu valley is to represent the stream, which is discussed in the following section.

##### *Representativeness*

The Hawaii Stream Assessment of 1990 ranked Waikolu an "Outstanding" stream. The DLNR-Division of Aquatic Resources ranked Waikolu as a 9 out of 10, primarily because it had a high number of native species, including endangered species, and the absence of priority 1 introduced species.

##### **Species List**

###### **Native Species**

**Crustaceans** *Atyoida bisulcata*  
*Macrobrachium grandimanus*

**Fish** *Awaous guamensis*  
*Eleotris sandwicensis*  
*Kuhlia sandvicensis*  
*Lentipes concolor*  
*Sicyopterus stimpsoni*  
*Stenogobius hawaiiensis*

**Snails** *Neritina granosa*

###### **Native Species**

**Insects** *Anax junius*  
*Megalagrion blackburni*  
*Megalagrion calliphya*  
*Megalagrion hawaiiense*  
*Megalagrion nigrohamatum nigrohamatum*  
*Megalagrion pacificum*  
*Megalagrion xanthomelas*

###### **Introduced Species**

**Crustaceans** *Macrobrachium lar*  
**Snails** Lymnaeid sp.

##### *Natural Communities and their Status*

The native wet cliff ecosystems found within the Pu'u Ali'i NAR extend into the upper cliffs of Waikolu, however in lower elevations that ecosystem degrades into primarily non-native landcover. The stream, however, largely remains high quality across all elevations. There also exists a band of native coastal vegetation.

##### *Rarity*

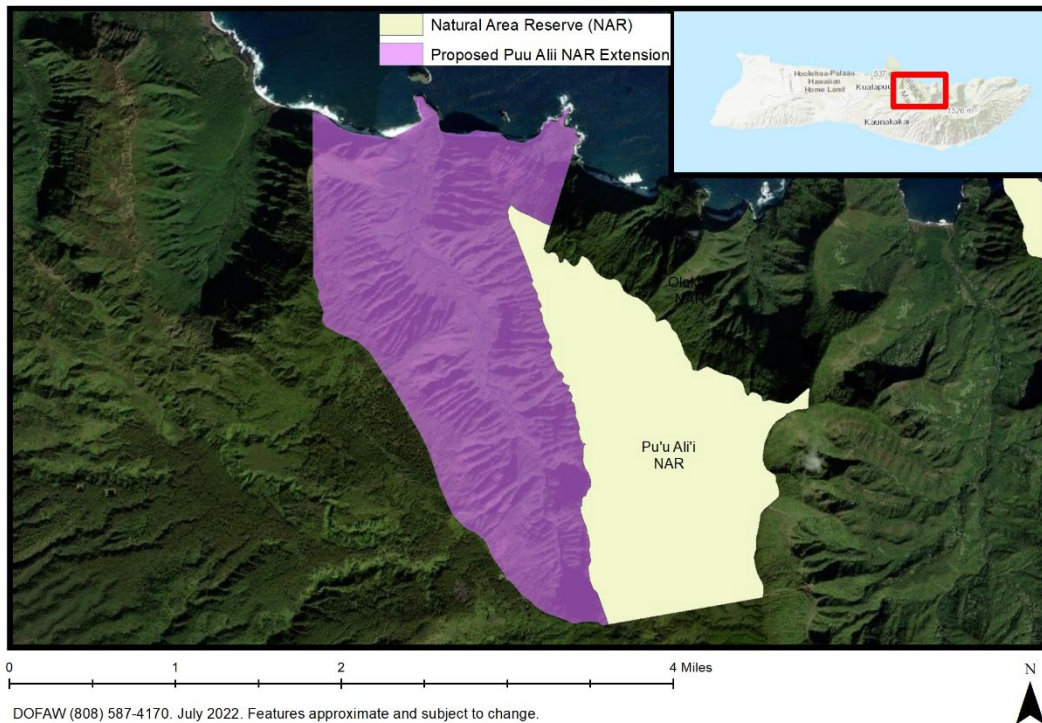
*Megalagrion nigrohamatum nigrohamatum* has been a candidate for listing as an endangered species.

*Megalagrion pacificum* and *xanthomelas* are listed endangered.

*Biological/Ecological Design*

The boundaries of the proposed extension follow Waikolu valley and terminate roughly at the ridge that separates Waikolu from Waialeia, the valley to the east. The highest point of the extension is near Hanalilililo.

## Proposed Pu'u Ali'i NAR Extension



*Location and Size, Administrative*

The proposed NAR extension is located on the northern coastline of Moloka'i in Kalawao County, including approximately 2,000 acres. The area is identified as a portion of (2) 6 -1-001:002. The parcel spans from the coast to approximately 3,750 ft above sea level.

*Threats (Human/Biological)*

The greatest immediate threat to the proposed NAR extension is continued grazing and trampling by feral ungulates, including goats, deer and pigs. These threaten terrestrial native plants and animals, and also pollute the stream by causing erosion and through their feces.

Secondary threats include continued invasion by non-native weeds, which are being spread by ungulates.

Tertiary threats include the loss of genetic diversity as population of native plants, fish, and invertebrates decline.

#### *Present Level of Protection*

The land is currently designated as a National Historical Park and as a Forest Reserve. It is in the Conservation District.

#### *Long-term Ecological Viability*

Despite the landcover being degraded, the stream has remained relatively resilient. Additionally, upland sections remain vegetated with native species, which may persist if hooved animals are removed.

#### *Environmental Consequences of No Action*

The environmental consequences of no action will likely be the continued degradation and eventual loss of this unique remnant of native cliff vegetation and stream.

## V. MANAGEMENT NEEDS

#### *Threats Requiring Management*

As noted earlier, the main threats to the proposed addition to the proposed NAR extension include:

- Grazing and trampling by feral ungulates, including goats, deer and pigs.
- Invasion by non-native plants.

Protective management would primarily entail construction of fences (on-going) to exclude feral ungulates from the reserve, and the removal of any animals within the fences.

Weed control would focus primarily on eradicating incipient populations of non-native species that have not already become dominant.

## VI. PUBLIC OUTREACH

The following agencies, organizations, and individuals will be notified during a public hearing process that will include a public hearing and legal ad announcing the proposed addition.

## **Federal**

US Fish and Wildlife Service  
Kalaupapa National Historical Park

## **State**

Department of Hawaiian Home Lands  
DLNR, Division of Conservation and Resources Enforcement  
DLNR, Land Division  
DLNR, Aha Kiole Council  
Office of Hawaiian Affairs  
Representative of the 13th Representative District  
Senator of the 6<sup>th</sup> Senatorial District

## **County**

County of Maui -Planning Department

## **Organizations**

Conservation Council for Hawaii  
Environment Hawaii, Inc.  
East Moloka`i Watershed Partnership/The Nature Conservancy  
Moloka`i-Maui Invasive Species Committee  
Sierra Club, Maui Chapter

## VII. BIBLIOGRAPHY/REFERENCES

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<https://www.hawaiiwatershedatlas.com/>

Warshauer, F., J. Jacobi, J. Price. 2006. Native Coastal Flora and Plant Communities in Hawa`i: Their Composition, Distribution, and Status. Final Report.

**Table 1. Native Plants Recorded From Vicinity of Waikolu**

<i>Argemone glauca glauca</i>
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<i>Artemisia australis</i>
<i>Bidens molokaiensis</i>
<i>Canavalia molokaiensis</i>
<i>Chenopodium oahuense</i>
<i>Cyperus javanicus</i>
<i>Cyperus phleoides phleoides</i>
<i>Cyperus polystachyos miser</i>
<i>Fimbristylis cymosa</i>
<i>Lipochaeta succulenta</i>
<i>Lycium sandwicense</i>
<i>Lysimachia mauritiana</i>
<i>Osteomeles anthyllidifolia</i>
<i>Pandanus tectorius</i>
<i>Plectranthus parviflorus</i>
<i>Pseudognaphalium sandwicense</i> <i>sandwicense</i>
<i>Scaevola taccada</i>
<i>Sida fallax</i>
<i>Solanum americanum</i>
<i>Tetramolopium sylvae</i>
<i>Vigna marina</i>
<i>Wikstroemia oahuensis</i>
<i>Wikstroemia uva-ursi uva-ursi</i>

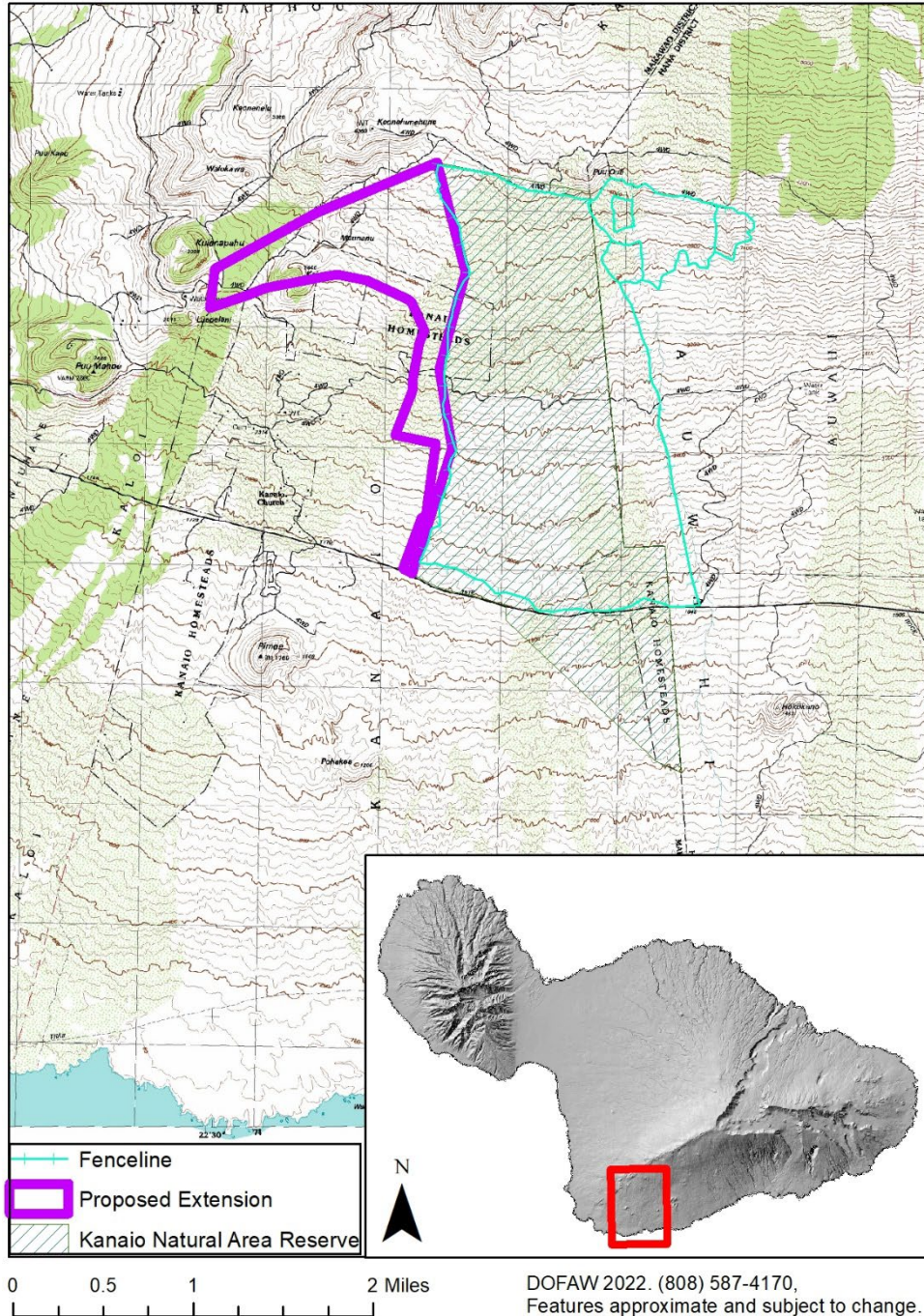
(Table based on results from Warshauer *et al.* 2006.)



*1 The back wall of Waikolu valley, facing south.*

**PROPOSAL FOR THE EXTENSION OF KANAIO NATURAL AREA RESERVE**  
July 2022

# Proposed Extension of the Kanaio NAR



## 1. EXECUTIVE SUMMARY

The Division of Forestry and Wildlife proposes to expand the existing Kanaio Natural Area Reserve by approximately 440 acres to protect native resources found on adjacent unencumbered State land. The area proposed for addition is the remaining portion of a single parcel (TMK 2-1-003-050). The expansion area includes upland grasslands to the west of the existing NAR and hosts intact native shrubland, pioneer vegetation on lava flow, and may include lava tubes and caves. Dryland forests of Hawaii, formerly extensive, are arguably the most depleted and threatened plant communities in the State. Expanding the existing NAR to include this area would be strategic to enhance invasive plant removal efforts and provide additional dryland areas that could be restored.

## 2. BACKGROUND/HISTORY

### *Past Land Use*

The area described is State unencumbered land located in the Agricultural District. The entire tax map key parcel was leased to Ulupalakua Ranch for cattle grazing until 1994. However, much of the area proposed for addition to the Reserve was of limited value as pasture due to the rocky terrain.

### *Present Land Use*

The area proposed for addition to the Natural Area Reserve is currently not under lease and is vacant.

### *Cultural/Recreational Uses*

An archaeological reconnaissance study was conducted by US Fish & Wildlife staff as part of the environmental assessment process for the Kanaio fencing project. This report includes the results of field surveys that covered the western section and the lower portion of the northern section of the proposed addition. The study reported:

Archaeological research in the uplands of Kanaio ahupua‘a has been too limited to contribute substantially to an understanding of the area’s settlement patterns. Nearby, an extensive inventory of the adjacent moku of Kahikinui exhibited dense site distribution in the upland zone, with few sites observed in the intermediate region and virtually no archaeological remains above 2800 feet above sea level. That study also noted a correlation between upland archaeological features and the substrate on which they were located, with a higher density of structures located on pahoehoe lava substrates where sparse soil development resulted in limited agricultural value. Such a building strategy may have been practices to keep clear for agricultural purposes those areas where soil was more fertile (i.e. the older, weathered a‘a substrates with suitable solid deposition). On the NAR, the substrate is predominantly rough a‘a lava with some



overlying soil, but only on its eastern boundary and the adjacent Ulupalakua Ranch has significant soil development occurred. Because Kanaio has experienced different geological processes than the neighboring Kahikinui moku and the available body of archaeological data is still relatively small, the value in applying the settlement pattern established at Kahikinui as a model for site distribution within the NAR is limited.

(Parks, 2003).

The study reported observing a remnant of an old east-west trending trail to the west of the fencing corridor. Other cultural features observed in the area include stacked rock cattle walls associated with ranching operations, some of which could date to the mid-1800s.

A cultural assessment conducted by CKM Cultural Resources recognized that the area from ‘Ulupalakua to Kahikinui supported a population of 3,000 to 4,000 during pre-contact, who used the natural resources of the area for building materials, medicine, spiritual offerings, musical instruments, and weapons. After the introduction of cattle, many of the forested areas were destroyed.

Little legal recreational use currently occurs on the area proposed for addition to the Natural Area Reserve due to the limited access to the area and the restrictions on public activities on unencumbered land. Hunting is not allowed in this area, but poaching is likely to occur. In addition, all-terrain vehicle (ATV) riding and dirt bike riding is occurring illegally.

#### *Conservation History*

There has been limited conservation effort focused on the proposed expansion area. However, a few areas to the east have been managed. Historically, the leeward dryland forest of Maui was one of the richest areas in native tree species in the State. Dr. Joseph Rock, in “The Indigenous Trees of the Hawaiian Islands,” identified the Auwahi region on the southern slope of Haleakala as one of the most important botanical sites in the islands, even though it had been seriously degraded by browsing by goats and cattle and by fire when he first saw it in 1910.

The Nature Conservancy, with cooperation from Ulupalakua Ranch, undertook one of the first efforts of conservation of Maui’s dryland forest in the late 1960s, fencing an enclosure of several acres in Auwahi.

In 1990, building on this work and through the involvement and support of the Native Hawaiian Plant Society, Kanaio Natural Area Reserve was parceled out from TMK 2-1-003-050 to protect a large tract of dryland forest. Records from that time indicate that the main threat to the dryland forest was the presence of goats and pigs. In 2012, a deer-proof fence was built around the area of Kanaio NAR *mauka* (upland) of the highway. Extensive invasive weed control has also occurred.

#### *Previous Studies*

There are no known studies specifically involving the area currently proposed for addition to the

NAR.

### 3. JUSTIFICATION (Specifics)

#### *Scientific Value, Representativeness, and Rarity*

The area is adjacent to designated critical habitat for eight threatened and endangered plants on Maui (*Bonamia menziesii*; *Alectryon macrococcus*; *Cenchrus agrimonioides*; *Colubrina oppositifolia*; *Melicope mucronulata*; *Melicope adscendens*; *Melicope knudsenii*; *Flueggea neowawraea*); and the Blackburn's Sphinx Moth (*Manduca blackburni*).

Similar native shrublands are found in The Nature Conservancy of Hawai'i's Kamakou Preserve on Moloka'i, and at Kaupo Gap in Haleakala National Park on Maui, as well as other locations. While the proposed addition to the NAR might be viewed as a "duplicate," dryland forest and shrublands are some of the most depleted and threatened plant communities in the State. Protecting these communities in multiple areas would mitigate the loss to the natural environment if one of the areas should burn.

#### *Biological/Ecological Design*

Adding this area to the existing Natural Area Reserve is important from a regional perspective, as it will facilitate management for invasive plants, particularly black wattle (*Acacia mearnsii*). The area within the NAR has had extensive wattle control, however, this proposed area has sizable wattle populations which blow seeds into the existing NAR areas.

For conservation of the endangered plants/ecosystems of south Haleakala to be successful, a large, contiguous block of secure habitat must be provided. While the parcel has been degraded, it provides additional restoration areas.

The entire parcel is proposed to be designated a NAR. That area is largely made up of an upland section where remnant 'ōhi'a forest is being invaded by black wattle (but could be restored), and the west end includes an a'a lava flow that also has remnant native species. The a'a lava has little value for other land uses, such as pasture. There are inholdings within the central part of the parcel which are sparsely populated.

Biological features of the area proposed for addition include native-dominated dry/mesic shrubland with scattered native trees. The vegetation in the a'a areas includes shrubland comprised primarily of pukiawe (*Styphelia*), a'ali'i (*Dodonaea*) and ulei (*Osteomeles*). Trees such as 'ohi'a (*Metrosideros*), olopua (*Nestegis*), 'ala'a (*Pouteria*), lama (*Diospyros*), kauila (*Alphitonia*) and naio (*Myoporum*) are scattered across the area, inhabiting sheltered sites such as the bottoms of lava channels. Native shrubs such as akoko (*Chamaesyce*) and 'akia (*Wikstroemia*) are locally common; an understory of native sedges and ferns persists in undisturbed areas.

#### *Present Level of Protection*

The area proposed for addition to the Reserve is within the Agricultural District and under the administration of the Land Division.

Many land uses are permitted in the Agricultural District that could harm the existing natural resources.

#### *Long-term Ecological Viability*

Expanding the existing NAR would increase its long-term ecological viability. By protecting additional native shrubland, the long-term ecological viability of this natural community is enhanced and better protected against the threat of fire.

#### *Environmental Consequences of No Action*

The environmental consequence of no action would result in no protection for a declining native shrubland community; could limit future conservation efforts in partnership with Ulupalakua Ranch or with the Leeward Haleakala Watershed Restoration Partnership, and could increase costs associated with protecting the existing NAR.

#### *Urgency*

Fire and invasive plant populations need to be managed in the near term.

### **4. MANAGEMENT NEEDS**

#### *Threats Requiring Management*

Threats to the proposed addition to the Kanaio NAR include:

- grazing and trampling by feral ungulates, including goats, cattle, deer, and pigs;
- invasion by non-native plants, including pasture grasses and the non-native tree species *Acacia mearnsii*, *Schinus*, and *Bocconia*; and
- fire.

#### *Administrative (size, boundaries, access: roads & trails, maps more specific than in introduction, TMKs)*

The overall size of the proposed addition to Kanaio NAR is approximately 440 acres. The entire area proposed for addition is State-owned, unencumbered lands currently under the administration of DLNR, Land Division as part of TMK 2-1-3-50.

Access to the area proposed for addition is from Highway 11 and by existing four-wheel drive roads through Ulupalakua Ranch land.

### **5. PUBLIC SUPPORT**

#### *Agencies, Organizations, and Individuals Contacted*

The following agencies, organizations, and individuals will be contacted by mail, and informed about the public hearing when scheduled. Additionally, DOFAW will announce the opportunity to testify pursuant to the Sunshine law and HRS 195.

#### **Federal**

US Fish and Wildlife Service

**State**

DLNR, Division of Conservation and Resources Enforcement  
DLNR, Land Division  
DLNR, Aha Kiole Council  
Na Ala Hele Advisory Council  
Office of Hawaiian Affairs  
Representative of the 12th Representative District  
Senator of the 6<sup>th</sup> Senatorial District

**County**

County of Maui -Planning Department

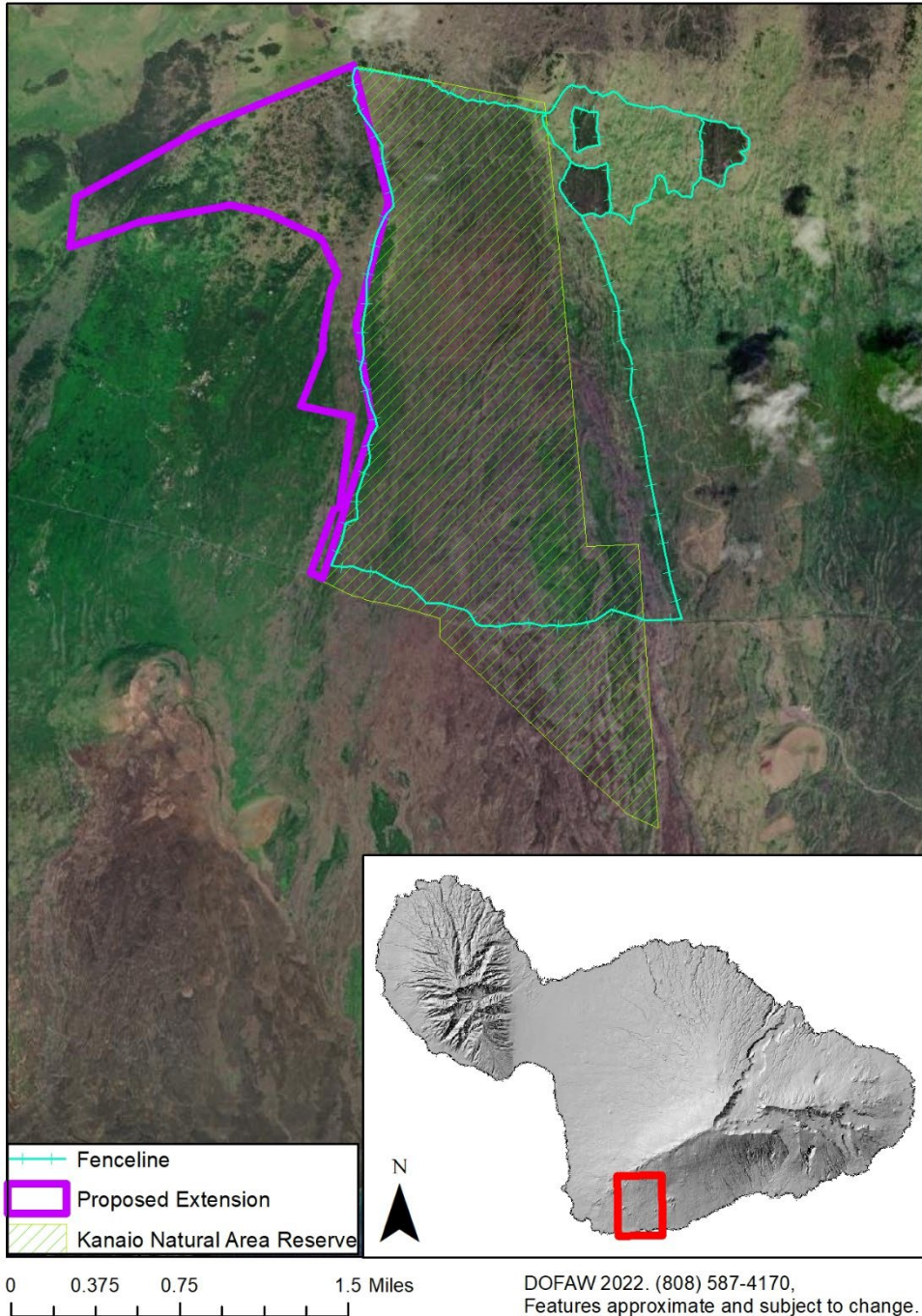
**Organizations**

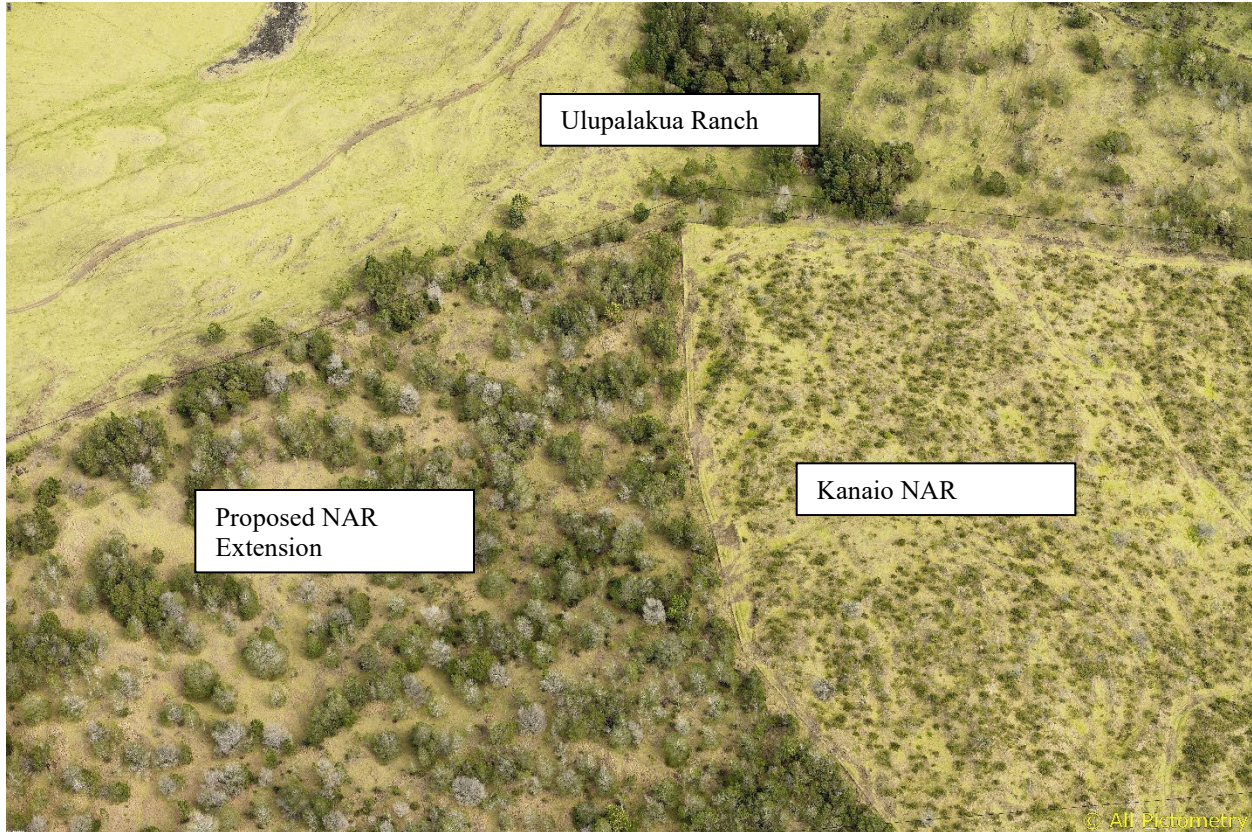
Conservation Council for Hawaii  
Environment Hawaii, Inc.  
Leeward Haleakala Watershed Restoration Partnership  
Maui Invasive Species Committee  
Sierra Club, Maui Chapter  
Ulupalakua Ranch  
The Nature Conservancy, Maui  
Conservation Council for Hawaii  
Environment Hawaii, Inc.

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- \_\_. Undated (1989?). Proposal for Kanaio Natural Area Reserve. Available from Department of Land and Natural Resources, Division of Forestry and Wildlife.

# Proposed Extension of the Kanaio NAR





The northeastern corner of the proposed extension of the Natural Area Reserve has large black wattle trees. In the NAR, staff have been controlling those trees for many years, so the difference is stark. Removing wattle in the proposed NAR extension will improve both areas. Photo: Pictometry.

Exhibit 3

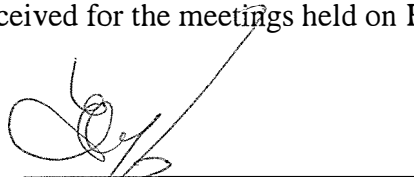
March 24, 2023

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

Land Board Members:

**SUBJECT:            MASTER'S REPORT ON PUBLIC HEARING**

In accordance with 183-12 and 195-4, Hawaii Revised Statutes, Notices of Public Hearings were published in newspapers on December 22, 2023, December 26, 2023, and February 9, 2023 and as authorized by the Board of Land and Natural Resources on November 10, 2022, I have conducted public hearings relating to the proposed set-asides. Below is a report of the hearings held for Maui County (online) and Molokai. As indicated in the submittal, no attendees or substantive comments were received for the meetings held on Kaua'i, O'ahu, Maui and Hawai'i.



---

Emma Yuen  
Natural Resources Mgmt. Program Spec.  
Division of Forestry and Wildlife

## **HEARING MASTER REPORT**

**O`ahu – Honolulu - January 9, 2023:** No attendees.

**Hawai`i – Hilo – January 17, 2023:** No attendees.

**Hawai`i (online) – January 18, 2023:** One attendee indicated via chat that he was not interested in testifying and had joined the meeting to see what other members of the public had to say. When he learned that he was the only attendee from the public, he said that we did not need to proceed with the hearing, thanked DOFAW, and left.

**Kaua`i – Līhu`e – January 19, 2023:** No attendees.

**Maui County (online)- February 15, 2023:** Six members of the public attended.

**Molokai – Kaunakakai – February 23, 2023:** Twenty-nine members of the public attended.

**Maui – Kahului – March 2, 2023:** A member of the public showed up late asking to learn about plants, but did not want to testify formally and staff met with him informally.

### **Public Hearing – Maui County Online via Zoom**

**Wednesday, February 15, 2023**

**5:00 pm-7:15 pm**

**Staff Present:** Scott Fretz, Emma Yuen, Lance DeSilva, Peter Landon, Jeff Bagshaw, Shane DeMattos, John Medeiros

**Public Present:** Lori Buchannan, Keomailani Hanapi Hirata, Mahina Poepoe, La`a Poepoe, Shane Sinenci, Ka`uiki Lind

Staff Fretz starts the meeting summarizing the subject of the hearing regarding NARS and introduces the staff, Emma Yuen who will be running the meeting, Lance DeSilva, Peter Landon, John Medeiros, Shane DeMattos, and Jeff Bagshaw.

Staff Yuen gave a presentation about Forest Reserves, NARS, Wildlife Sanctuaries, and explained what the DLNR is and what they do. Yuen also explained what parts of Maui and Molokai they intend to set aside as NARS, Forest Reserves, and Wildlife Sanctuaries.

### **Question and Answers**

Lori Buchannan asked, “In advance of that [upcoming Molokai in-person public hearing] meeting can you send out information on the different designations that the Department is



requesting with as much information as you can so we can be very prepared for when you guys come to Molokai." Staff Yuen responded, "I'll send you something and you can distribute it to whoever will be interested. Would be happy to do that."

Ka'uiki Lind asked, "Hunting in Kipahulu, you're landlocked, how will you provide access through private property through the State Reserves?" Staff DeSilva responded, "Some parcels have access and some don't have access to the State Reserves."

Ka'uiki Lind commented, "That Wailua parcel - my family, we are locked in a kalo patch, we are landlocked by the Aikaua and the Kokohana and we know how this is all going with us. We are not selling and I don't know how to talk about access to the ocean. The State does not have access to the ocean. I object to access to Wailua beach."

Staff Yuen gave another presentation about NARS and its rule revision. The purpose of the rule revision is to make it consistent with the other rules, explain prohibited activities, and allow longer-term use special use permits.

Ka'uiki Lind asked, "Would that affect native Hawaiian rights? Hunting and all that stuff?" Staff Yuen responded that these rules would only affect activities within NARS. There is a NARS commission that has expertise representing native Hawaiian culture and can make special access permits to do things on the NARS, if they are currently prohibited.

Lori Buchanan said, "I'm concerned about the process because we have until March 1st to provide [written comments] and it is less than 2 weeks. How come we are hearing about this now?" Staff Yuen responded that there was a press release and a legal advertisement on December 27, 2022. Another press release last month was issued regarding the Molokai public hearings a few weeks ago, indicating the deadline for written comments.

*[There was a discussion on the Natural Area Reserves System rule amendments, which will be covered in a separate submittal].*

La'a Poepoe asked, "The two east [Molokai] parcels are more of my concern which surrounds Kupekieokaloa which I am the Kukeaipeloa but America calls it an 'Executive Director' but I watch to make sure that no one takes too much. To the adjacent side Kupeke which Pukoa and 'Aha'ino have the two green highlighted areas that have slated for a Reserve. The purple is Waikolu and the green is Forest Reserves. All in the green segment are heavily hunted by my community. What types of activities for Forest Reserves for the downside towards the ocean? Ko'olau, Kawele, and Mana'e where would the community meeting take place once it's established, or the site is decided on?" Staff Yuen responded, there will be another hearing on Molokai Feb 23, in Mitchell Pau'ole Center. There will be management plans created within the

south slope areas which are within the Molokai Forest Reserve. Staff DeSilva added, "If it becomes a Reserve there will be a community meeting for community input. There will be several meetings regarding the management plan." Staff Fretz added, "The dark green areas are unencumbered and are not a legal hunting area. Putting those areas under a Forest Reserve will allow an opportunity to make a public hunting on the ground and watershed protection." Staff Yuen added that they are open to suggestions and to refer them to people to ensure that management of the south slope goes well once the land is designated. Staff Fretz further added that there are different degrees of restriction on how they manage the land but is willing to accommodate for Native Hawaiian activities.

Staff Yuen responded to a comment from Lori Buchannan regarding management over multiple parcels as well as a lack of community involvement within these parcels. Yuen said that there were multiple informal meetings regarding the parcels on Molokai but there were very few people showing up for these meetings except during the last one where 9 people attended. Yuen also added that she was willing to find methods on how to improve their process and that there is no environmental assessment for this because this is a name change from unencumbered land to Forest Reserve. Staff Fretz added that he is willing to listen to input and is willing to do more meetings.

Keomailani Hanapi Hirata asked, "How many of you folks that represent DOFAW and DLNR are going to be here in Molokai next week's Thursday's meeting in person?" Staff Fretz responded that four people will be coming to the meeting next Thursday.

Keomailani Hanapi Hirata asked, "How did you guys choose these land parcels in east Molokai, is there a process that you guys go through, can you guys share on that?" Staff Fretz responded that the main concern is that unencumbered lands are unprotected because they can be leased for commercial use and DOFAW management is more appropriate if that land has important traits like watershed protection and hunting opportunities.

Keomailani Hanapi Hirata asked, "How much work have you guys done on these land parcels you folks are talking about on Molokai? Any of you guys' own island workers, James, Justin, do they go out to these parcels and walk on them and share with you guys what is on it and talk to the people who live in and around those areas?" Staff DeSilva responded that he stays in contact with Justin but probably doesn't walk around those areas as of now because they are not direct management of those parcels but they talk about the issues on those parcels and the access. Staff Landon added that the Division has invested over a million dollars during his tenure within Waikolu valley and he would take trips down there to fence down the area and spent countless amounts of money keeping out goats. Designating that area would be the best because there was a lot of capacity invested to protecting this area. Designating these lands, in general, would provide opportunities for the public.

Keomailani Hanapi Hirata asked, “So I would like to hear from you folks, what is going on behind closed doors? What kind of partnerships are you guys having? What is your guys’ mana`o about fencing off and why do you guys want to fence and can you share about the partnership going on?” Staff Yuen responds that fencing is not the current issue right now and there is a long relationship between outreach on the fences since 2015. She is willing to talk about fencing after the meeting.

La’a Poepoe asked, “It seems that a Chinese national could go hunting in this unencumbered land because the United States people can go hunting in encumbered lands, is that right Peter?” Staff Landon responded that unencumbered lands have no hunting designation therefore it is illegal to hunt in those unencumbered lands, regardless of nationality of the hunter.

Ka’uiki Lind asked, “How does that affect the lease on that land?” Staff Yuen responded that he might be referring to a different parcel because to her knowledge none of them have leases.

Ka’uiki Lind asked, “Why would we as a community who draw water want everyone walking on the watershed for hunting? That’s a dangerous precedent. Another section in Wailua, I don't know what you’re doing up there. That's all watershed, what are guys doing up there?” Staff Fretz responds, “there is no intention of changing leases and no intention of changing how the land is being used. The leases will be looked into.”

La’a Poepoe asked if there was any community involvement regarding the land parcels on Molokai. Staff DeSilva said that there are people that do help out within the Reserves by doing stuff like saving `ōhi`a trees.

Staff Fretz addresses another part of La’a Poepoe’s question regarding the difference between leasing and cooperative agreements. A lease is a person going to the DLNR to manage the land while a cooperative agreement allows the DLNR to provide aid to the management and partner with the entity to manage the land. Staff Landon adds that unencumbered land is the state’s real estate. This is a large transfer of lands to DOFAW and they are a public access agency.

Mahina Poepoe asked, “Is the Pu`u Wa`awa`a community subsistence areas in a Forest Reserve?” Staff Yuen responds yes, that partnership is with Forestry and Wildlife.

La’a Poepoe asked, “Peter said something about selling and buying land and I noticed that the [Legislature] needed a super majority to sell the land, they sold State land to people back in the 80s. With that saying, you need a majority, what does co-management look like with the State, how would that work with the State and how do you include section 5F to improve the conditions of native Hawaiians within the State?” Staff Fretz responds that co-management

shows the roles and duties of both the State and the people who manage the land. Staff Yuen added that she wanted La'a Poepoe and Ka'uiki Lind to send their contact information to Staff Bagshaw.

### **Public Testimony**

**Shane Sinenci:** "I want to thank everyone for the meeting and I'm showing support for the East Maui unencumbered state lands to be added to the state Forest Reserve. If the DLNR could lease the land for private use and could deny public access that could harm the State. I'd like to ask for a Hana meeting for the use of the parcel within the east Maui community. DOFAW community partners can help with the overall health of the ecosystem."

*Note - since this meeting was online it was possible to transcribe and attribute comments to each person, which was not possible in other hearings that were held in-person.*

### **Public hearing – Molokai**

#### **Mitchell Pau`ole Center, Kaunakakai, Molokai**

**Thursday, February 23, 2023**

**5:00 pm – 7:30 pm**

**Staff Present:** Emma Yuen, James Espaniola, Jon Brito, Peter Landon, Justin Luafalemana

#### **Members of the public present:**

Raymond Pettigrew, Nani`ioana Kuahuia, Walter Rawlins, D. Aflis (?), Iwalani Kadowaki, Judy Caparita, Gina Kuahuia, Katherine Coelho, Palmer Naki, Walter Naki, Raymond Naki, Tammy Ross, Juanita Reyher-Colon, Kathy Tachibana, Russell K. Phifer, Kimolee K. Reeves, Keomailani Hanapi Hirata, Eddie Tanaka, G.R. (Hui Aloha Aina o Mana`e/Mahina Hou), Kristen Coelho, Kalani Johnston Sr., Barbara Kalipi, Jesica Parker, Heather Place, Ruth Yolanda Tanielu, Ruth Ann Howden, Walter Ritte, Lori Buchanan, Eddie Tanaka

The meeting opened with prayers from community members. Staff Yuen provided a powerpoint presentation on the proposed Reserves and gave an overview of the proposed NAR Rule changes.

Staff re-iterated that there would be a question-and-answer portion of the meeting, followed by official testimony, which would be transcribed and provided to the Board of Land and Natural Resources. Staff requested that participants not state their testimony during the question-and-answer session, and instead wait until the official testimony portion of the meeting began, where they could state their name and formally state their comments.

Participants voiced process-related concerns during the question-and-answer portion of the meeting. Multiple persons said that there should be a meeting held on the east side of Molokai,

and questioned why some of the informal pre-meetings were held on the west side of the island. Further, a participant indicated that representatives from the State Historic Preservation Division and the Office of Conservation and Coastal Lands should also be in attendance, as well as an Attorney General. That participant also stated that the meeting needed to be facilitated by a neutral third party and not by DLNR staff that had an agenda. That participant also suggested that the facilitator should be a Molokai resident, and questioned that the staff leading the meeting were not from Molokai. Another participant voiced their concerns that when government officials come to Molokai, they need to catch a flight later which limits the amount of time they can hear from Molokai residents. Another participant thought that the public testimony was not being recorded and thus that the meeting was not being held properly, and suggested that a contested case petition should be made when this item goes to the Board of Land and Natural Resources. [*Note – the entire meeting was recorded*]. While maps were provided, a participant thought they did not show all the State lands under consideration. Conversely, another participant stated that certain areas shown on the map as part of the Molokai Forest Reserve were not actually State land, and that they owned portions of an area in Kahananui. They questioned when that land was designated a Forest Reserve, and staff said that they would need to research that and get back to them later. A participant then said that the DLNR representatives were not able to answer their questions.

Multiple participants stated that they had only heard about the meeting very recently and that there should have been more outreach done to advertise the meetings. Two participants stated that the deadline to send in written comments was too soon. Another participant noted that they were offended that staff had said that the community was invited to this meeting, when, in fact, it was the other way around, and that the community was inviting staff to the meeting. Another participant said that the meeting should have a microphone and PA system to help the kupuna hear better. Another participant stated that public testimony does not seem to matter as she testified against projects and then the DLNR proceeded with the action anyway.

Other concerns that were voiced during the question-and-answer session included:

- A lack of State DLNR positions on Molokai.
- A fact that these were likely ceded lands.
- The lack of funding and capacity for DLNR, particularly an inability to manage deer and *Clidemia*, and a suggestion that the Legislature provide more funding. There was input that there needs to be management plans.

There was a question about whether community groups could help manage these lands and whether traditional practices would be able to continue on the land, particularly in Waikolu where lo'i kalo could provide food. Staff Yuen, Espaniola, and Landon explained that if the land was unencumbered or if the land was a NAR, there would be multiple permits required to restore lo'i. However, if the land was designated a NAR, there would be more staff capacity available to assist an individual or community group with the permitting process. Additionally, DOFAW has multiple formal and informal agreements for community co-management, and would like to encourage more partnerships.

Multiple participants sought to understand what the difference between the land remaining unencumbered versus being set aside as a Reserve. Some members disagreed with the way staff were portraying what could occur on the lands if they remained unencumbered. Staff discussed the various overlays in the area, which included areas both in the Conservation District as well as in the Agricultural District. Staff mentioned that without a land designation as a Forest Reserve or NAR, there was a possibility that the lands could be leased to generate revenue or set aside to another Department for other uses, however that was less possible in the portions of the areas zoned in the Conservation District near the Keopuka Loa section of the Molokai Forest Reserve or in Waikolu. Another participant asked whether the lands proposed in the Keopuka Loa area would be included in a fence that is being proposed in neighboring areas.

### **Public Testimony**

**Mahina Hou:** “Aloha nui kakou, o wao o Mahina Hou o kupa o ka `āina o Mana`e. This my oral testimony against the proposal, I definitely don't agree with this proposal. A lot of these lands claimed as encumbered are actually kuleana and kohohiki lands where a lot of people reside on and have house lots. If these lands become NARS or DOFAW Wildlife Preserves, or whatever the wordings are, and a lot of people will have to move out. My biggest concern is that we are talking about five ahupua`as in Mana`e and we haven't had a single meeting in Mana`e, so before we go ahead we need a meeting in Mana`e. This room would be full if it was held in Mana`e. The main concern is that these are ceded lands and these are lands gifted from kings. Mana`e is where you find your kuleana land owners, your konohiki landowners. These people living in Mana`e are descendants from the beginning of time. Most of them come from Mana`e from forever. Not your homesteaders. These are people who have been here since the monarchy and these peoples' voices needed to be heard and listened to, not just heard. Since I've been a little kid we've been coming to these meetings.”

“We don't have the big hotels like the other islands, but we also don't have ahupua`a management-based management plans. We have continental-based management on our island. Our island is very small. The other islands – Haleakalā – the distance between the mountain and the developments and ocean areas is vast. On Molokai we can walk from the ocean to the top of the mountain in one hour. We can see the impacts of fencing, we see the impacts of western management on our lands. We can see these last few rains these last couple of weeks, where the fence was, was the biggest piles of dirt. Below the fence we have the biggest erosion impacting our reefs that provide food for our people. We need to hear the people of Mana`e, we need to have a meeting in Mana`e. And the Mana`e people need to be part of the management plan. We have an East end policy statement for a long time, and it hasn't been followed. Things are being changed...in order to progress, I think we say no, and push back the timeline and have a meeting.”

**Eddie Tanaka:** “My name is Eddie Tanaka from Honouliwai, I just want to say that I'm open to whatever is good, but I've been meeting since the late 70's and early 80's with braddah Walter

and other people. and we know how long the meetings take. We did a project at Honouliwai for a fish pond. It took us 8 years to move one rock. We could have moved it but we wanted to do it right. It took us 8 months to finish the project. Dan Inouye came to put the last rock and said we made history. Hawai'i is the first to bring aquaculture with fishponds. The first thing they said was that we couldn't touch the rocks because it was a historical site. My part is that we are a part of history and we should be allowed to bring that back. Thanks to Walter again, I want to state how important that is and have a meeting at Mana'e, that would be better for everyone. It might be hard for the people on the West side, but we can take turns. I want to state that because there was a time when the uprising of the Hawaiian people came together, there were things we did not know about, I was not taught all the rights in school, no history, no Hawaiian language. Coming from Molokai, it was natural. I say thank you guys for coming, you guys are brave to be here. The people from the past who used to come to Molokai know that the people are going to come and say their mana'o. Sometimes harsh, but kala mai, we are passionate people, it isn't personal. I want to thank you for coming, thank Walter, many are not here today, you guys are the up and coming, and there are some other young ones here, glad to see them. I want them to continue to come."

"The State and DLNR allowed us to continue what we did. We are still in management there, whether it is documented or not. We are allowed to fix the streams, cut down trees and do restoration in the streams. I was allowed to do research in the stream on o'opu and hihiwai. The other thing I wanted to state is that a lot of the creatures are disappearing and a lot of Hawaiians are disappearing too. We are concerned about that for the next generation. For me, if God gives me twenty more years, I'm good. But I'm just looking at day by day now. I just want to explain how things work, so we don't have to spend 8 years to come to an answer about yes or no. I want to shake your hand again, braddah Walt, for being patient. Mahalo."

**Walter Ritte:** "My name is Walter Ritte and I have some concerns. I really support Oloku'i keeping it the way it should be. I'm kanalua about going into areas where future generations are going to need to provide food for themselves. I'm really concerned about that. If we make it difficult. The more difficult they make it, the less they're gonna go. Molokai is 'āina momona. So that means we can feed armies without going to wars because of our valleys and our reefs. Like I said earlier, I can support you guys up in the mountains. I'm really scared about putting more control in our food production. Before the meetings I was against it, but now I'm trying to figure out what is better to have an agency that actually cares and is connected rather than working with the other parts the agency that have control, that see but don't touch. That's what DLNR and us in DLNR come into contact with."

"When we talk about the fishponds, that is what DLNR says, 'you cannot touch the historic sites. You gotta do this and this. It's part of the coastline.' The federal government was in control. They called the fishponds 'navigable waters.' We didn't know what that meant, but it means that

if the tide goes up you cannot see the wall, and it belongs to the public, it is a private area, part of the coastline, it is not part of the ocean. We have been through all of that. If you guys want to make it a Natural Area Reserve, you gotta make it easier to go to our valleys. If we can't come into our valleys, we aren't going to make it on Molokai. We need to get into these valleys, we need to protect our reefs. We need to stop the erosion from coming on to our reefs. We have major problems. Everything is dying and it's gonna take the community to solve it. I don't know the structure with DLNR. I'm pretty much impressed with whoever you guys are. I'm not impressed with some of the DLNR staff, and I'm not impressed with the Legislature because they don't give you guys enough money. But that is because you arresting us when we try to protect the mountain. So why should we support those who arrest us? There are all these problem areas. So, Molokai is Molokai. This is real. You have a taste of Molokai. This is what happens for the past thirty years. What happens is all the agency sends all the bottom guys, because the top guys don't want to come. So you get all the hits. So my last statement is that. The way you are linked to the community through your employees here, there is a chance for us to support. Because they understand our needs to be `āina momona. Thank you."

**Barbara Kalipi:** "Aloha, my name is Barbara Kalipi, I am a resident of Ho`olehua, Molokai, I just want to go on record to show support for Natural Area Reserves within the Pu'u Ali'i area. I've been behind there many times. My girlfriend used to go behind that area, I recently went. I saw the difference when no one was taking care. Unencumbered means you just kind of leave it, no one is involved but no one is taking care of it. If it has historic sites it might be valuable, we won't know because it is unencumbered lands. I think there is opportunity with the Natural Area Reserve, because I trust the local staff. I've worked with both of these young men. I think it is important that we have young leaders that have the same passion as our communities do. I think they do. As Lori says, we need more staff. It's great that they are funding for additional DOFAW staff, who want to learn about it because they have a passion, but they are temporary and we have to hope that more funding is there. If we want to be proactive and the future generations to appreciate Molokai, then we need to have more active management. This is why I'm strongly in favor of Pu'u Ali'i becoming a Natural Area Reserve."

"It really is a privilege for folks to go behind side, to see the valleys, to enjoy them. I would like to make to make sure that our community, especially from a cultural standpoint, for people to see it and see what their kupuna do, and see what we are. I know that folks have suspicions about the government, so do I, sometimes, but I have also seen and experienced people that are just as committed to our culture and environment who happen to work for the State and I think that it's important to find those people and make those connections. I trust our local staff. If they say they have good leadership, maybe it is the time for us to enter into the community to enter into conversation. It's probably because I'm getting up in years and I would rather have conversation and discussion rather than tension. I think it's healthy to have disagreement, but not if it is disrespectful, and I'm saying from any side. I hope there will be strong consideration for Pu'u



Ali'i. I respect my friends in Mana'e side if they want to have more discussion to learn about it and have more of an opportunity to testify, I'm for that as well."

**Russell Phiefer:** "My name is Russell Phiefer, I'm a Molokai resident I have kuleana in Kamola and I'm really concerned about Pua'ahala and all of the directions taken on that `āina. I'm happy all of you guys came and to talk story to kūkā kūkā and hopefully we can build a better relationship with the water departments and the concerned parties, because we are in this together. Because if we coordinate together, work together, and understand the values of what we have, and what we are taking care of. It is important, Molokai is very unique, special to us, special island where the people are really blessed. Our concerns should be together with everyone. We want to work together with situations that need to be corrected to help restore the shoreline and bring back the native plants and the la'aus that are very important to us. Through education and connecting and working together we can learn and become the valuable protectors of our `āina. And thank you for coming and listening and it is a big challenge. Mahalo. Staff asked, "Pua'ahala?" He replied "Yes, Pua'ahala was dredged and killed, a big disaster. I seen the whole thing happen growing up. There is a lot of other things going on. Step by step, little by little, mahalo for the time."

**Tammy Ross:** "My name is Tammy Ross, I live in Waialua on the East side, but my family actually has kuleana property in Halawa and a konohiki property near `Ualapu'e called Kahananui. DOFAW a position that it has control of the top part of that property. For the record I think we should have a meeting in Mana'e because most of us come from there and it makes sense for it to be there, and there are a lot of parcels up there. The other thing was I'm still on the fence for any decision about the about the project. It's still in the earlier phases and I don't know much information about it and I'd like you hold more meetings and they be up in Mana'e."

**Keomailani Hanapi Hirata:** "First of all, I'd like to say, on the record, if you guys can host another meeting in East Molokai in Mana'e. It would be really great, I'm not sure what your timeline is. And at least be a little bit more prepared to answer multiple questions. In this testimony I'm going to give, I'm going to give it on behalf of `Aha`ino. So I'm going to represent `Aha`ino ahupua`a. My parents couldn't be here tonight, for medical reasons. I'm going to read a portion of my mom's testimony, but it will be under my name. Keomailani Hanapi Hirata, ko`u inoa. O Molokai ku`u kulaiwi o `Aha`ino ku`u `āina, o Waiopipi a me ku`u loli, ku`u pu`uloa, o ka hikina kulu, elua, ka`amoā, hu`ina, ka ili ula, ku`u pu`u mauna, o pu`u makani kea kau o uluwini `Aha`ino, ku`u na kahawai o pu`u `one nahi`ole, kiha loko, wai hilahila, ku ala mihi, kulu la loko `ia. I introduce in `Olelo Hawai`i the names of the mountains, the hills, our winds, our trails, the fresh water, our fish ponds in `Aha`ino they are our `āina kupuna so we acknowledge them in that. In the State of Hawai`i archives, under native testimony, foreign testimony, registered testimony of 1848. Shows my kupuna, Kupahea, declares lands in `Aha`ino 'I have always known these lands as my `ohana.' Our `ohana can

trace our genealogy in `Aha`ino to time immemorial. It is very important that we acknowledge that. When we are talking about cultural practices, when we talk about preservation, what are we preserving it for? So understanding the name of our ancestors, the names, the wind, the `āina, understanding is important to us. So , in that testimony I give that to you. Those lands in `Aha`ino, that you guys have listed, these lands is still in court. There's been a 28-year court case and my auntie was here tonight, she already gave testimony online. I'm a little bit concerned about that land that comes all the way down to the road that comes all the way to the highway, to make it a Forest Reserve. That, to me, doesn't make sense. I wanted to make the comment who made the decision to make that land parcel in `Aha`ino be made a Forest Reserve and not another Reserve? I strongly recommend that you come to East Molokai to actively participate and get educated, and it is very important for us to have you educate us and when you take that information and give it to the powers that be, it is a reminder that we are connected and I hope that the deadline can be pushed back. And not be on March 1<sup>st</sup>. But if it is, I will be at the March 24 BLNR meeting. Mahalo.”

**Lori Buchanan:** “Aloha, my name is Lori Buchanan from the island of Molokai. Thank you for the opportunity to provide testimony. With what was provided to me, the paraphernalia, I was able to retrieve that submittal to the Board and the rules for the NARS and the proposed rule changes but nothing for forestry. I tried clicking on all the online stuff. I oppose the exemption of Chapter 343, citing that it was *de minimis* and an EA was not required. I disagree because it minimizes the public input – another step. I also disagree with the EA not being required in lieu with the NAR Commission has not had meetings since prior covid and only 1 or 2 after with request from the NARS Commission with the disposal of the NARS Commission. That also adds the layer of no opportunity of the public to comment. And the lands are ceded lands, for the beneficiaries, and the two processes have been thwarted. And giving me not the opportunity but for today to respond. I testify that the Department needs to expand the comment period and reschedule the board meeting of March 24 because of due process not being met. We requested in the online meeting that the GIS map that includes all the holdings of the DLNR meetings and NARS, but it doesn't reflect all the areas for the land meeting by the next public meeting was not met. [*The rest of the testimony regarded proposed changes to the Natural Area Reserve Rules which will be presented to the Board in a separate submittal.*] So to get back to testimony of the actual encumbering of lands, I oppose the addition of the parcels in Kupeke. I represent the landowners of Namahana Buchanan estate, 356 acres, that is in the middle of the two parcels. Because Chapter 343 was deemed *de minimis*, because an EA was not done, I did not have the opportunity to clearly digest whether there would be cumulative impacts from the management of Forestry. Until we can be consulted as adjacent landowners, which, again, I know under the county, if you propose an action, you have a 500-ft buffer of the action. I did not get a proposal from DLNR, with my lands sitting in the middle. I'm going to oppose moving forward, until we can do some more in-depth outreach and education. I'm not sure I can support the other ones until the Department can do a holistic GIS Molokai plan, I don't know if the Molokai plan has

been updated in the statewide forestry plan. I don't think so, because of covid. I would be interested in the statewide plan. Thank you."

### **Summary of early consultation and notification for Maui Branch Proposed Set Asides**

*Since the majority of proposed Reserves are in Maui County, most outreach occurred in this district. Below is a list of the groups and individuals that staff contacted.*

1. Aha Moku Advisory Committee, Po'o – Notification of proposal and availability of staff to meet
2. Haleakala Ranch, CEO – Summary and discussion, 2022
3. Ke 'Ao Hali'i, Chair, – Notification of proposal and availability of staff to meet
4. Maui Conservation Alliance – Presentation and discussion at Alliance meeting, 2022
5. Maui County Conservation Planning Committee – Presentation and discussion at committee meeting, 2022
6. Maui Na Ala Hele Advisory Council – Presentation and discussion at council meetings, November 2022 and February 2023
7. Maui Nui Marine Resources Council, Representative – Notification of proposal and availability of staff to meet
8. Mauna Kahalawai Watershed Partnership – Presentation and discussion at partnership meeting, December 2022
9. Nobriga Ranch, Principle – West Maui discussions
10. Sierra Club, Maui Chapter, Representative – Summary and discussion
11. The Nature Conservancy, Marine and Terrestrial directors – Notification of proposal and availability of staff to meet
12. Trust for Public Lands, Hawaii Executive Director – Notification of proposal and availability of staff to meet
13. US Fish and Wildlife Service, Supervisor – Notification of proposal and availability of staff to meet
14. Molokai community informal public meetings were held in the Maunaloa Community Center (MCC) on the western side of the island, as well as in the Mitchell Pau'ole Center (MPC) in Kaunakakai.
  - a. December 21, 2022 – Meeting held at the MCC at 5:00 pm. Two community members attended and there was no opposition to the project. They agreed that there is a need for management in both areas.
  - b. December 22, 2022– Meeting held at the MPC at 5:30 pm. One community member attended and was interested in learning about management efforts and thought designation was a good idea.
  - c. January 18, 2023 – Meeting held at the MCC at 5:00 pm. No one attended and staff left at 7:00 pm.
  - d. January 19, 2023 – Meeting held at the MPC at 5:00 pm. Nine community members attended. Many sought a commitment from the State for funding for continued management, not just for initial management. Attendees wanted access to areas for camping and hiking, although they do not want it to become a tourist spot. Meeting attendees were supportive of the designation and project, with the exception of the points listed above being answered.

**Name**

Ann Wallace

**Input**

Aloha,

We use many of these areas for walking, cultural purposes and fishing, so we are very glad to see the areas preserved. We would like to see most of the parcels open for these purposes, rather than cut off from public usage.

We are interested in all the parcels being set aside, so that adjoining landowners can't block access by leasing the land. Ho'olawa and Honokala are bays that should be accessible to the public, along with the other parcels you have listed.

It would be helpful if adjoining landowners are made aware that there is public access to these parcels.

Let me know if there is anything else we can do to help with this process.

Mahalo, Ann

**Anonymous**

Aloha friends, as you were thinking about this land designation could you please consider having mixed trail access. That would allow hikers, wildlife enthusiast, and bicyclists to enjoy the nature reserve while discouraging access of the land not using trails. Thanks!

This is in response to the land parcels above Waimea

**Name**

chris Janiszewski

**Input**

While I generally support the protection of public lands I worry that making unencumbered lands part of an NAR will cloak them in a veil of regulation from the dlnr that will hinder access and make them less "public". We have seen this happen with restrictions on hiking in the west maui NAR a few years ago. I thus am against the expansion of the NAR system and would like unencumbered lands to remain as they are.

**Name**

Coral Asam

**Parcel name**

Makua Keaau Forest Reserve

**Input**

I think this would be a great idea but be weary of the area as it is around military sites.

Name
Christopher Brosius
Input
<p>The proposed land designations on the island of Maui would support the stated goals of access and environmental protection. Restoration or mitigation of environmental problems becomes more possible. The benefits may also include reduction on land based pollution to coastal areas from sedimentation. This is a key benefit to areas around Olowalu. Wetland restoration may also be a benefit in Ukumehame. Makamakaole provides an opportunity to more fully protect stream resources in one of the only places from mauka to makai. The designated Coastal areas do enhance environmental protection of imperiled ecological communities.</p> <p>In the long view, Maui is one of the fastest growing areas in the state and the balance of development and natural area access is inadequate. The few locations we do have access to are being overwhelmed by tourism. Surrounding development is increasingly land locking our natural lands and bringing these parcels into management will enhance the opportunities to ensure access for management and enjoyment by Maui's people.</p>

Name
John Starmer
Parcel name
TMK248001001, TMK236001014
Input
<p>Comments in support of Proposed Forest Reserves on the Island of Maui</p> <p>Aloha, I am presenting this comment on behalf of the Maui Nui Marine Resource Council to state our broad support for all Proposed Forest Reserves on the island of Maui and specifically support for the designation of TMK248001001 and TMK236001014.</p> <p>The current categorization of the state lands being proposed for forest reserve designation are unmanaged and vulnerable to potential dispositions inconsistent with the conservation of natural resources and public access. The proposed reserve lands contain important resource values, including watersheds, summit-to-sea connectivity, connectivity to reserves, forest and shoreline access, subsistence uses, traditional practice, hunting, recreation, and native and endangered species. We support DLNR's proposal to designate these unmanaged lands as forest reserves to protect them perpetually and incorporate them into ongoing management efforts to conserve natural resources and public access.</p> <p>The area included by TMK248001001 and TMK236001014 has recognized importance as an endangered species critical habitat, providing forest reserve access and reserve connectivity. It holds community and cultural value due to its trails, particularly the historic Pali Trail, and important upland access. The area is in great need of the management opportunities provided by forest reserve designation due to its very high wildfire risk and resulting high rate of erosion and runoff that negatively affects the adjacent and vulnerable coastal coral reefs in Ma'alaea Bay.</p> <p>The Maui Nui Marine Resources Council has been working, in collaboration with the state, towards restoring the Pohakea watershed TMK236001014 to protect the important coral reefs in Maalaea Bay. MNRMC has supported the development of a watershed management plan for Pohakea, improving infrastructure to control fire risk and manage erosion. The designation of TMK248001001 and TMK236001014 as Forest Reserves would ensure our continued support of efforts to restore the area to native habitat, reduce threats to erosion and mitigate wildland fires.</p> <p>Mahalo nui, John</p>

<b>Name</b>
Kanaka Maoli
<b>Parcel name</b>
All
<b>Input</b>
I support changing land designation if it helps better manage the areas. Could the land be designated to the Hawaiian Kingdom like Kahoolawe? Kahoolawe seems like a good model for land designations. Can the land be designated to OHA so they can lease and make money for kanakas? Can the land be designated to a new Hawaiian cultural division to manage for biocultural resources? DLNR might be best option but what about department of agriculture, seems appropriate to incorporate food and non-timber products on these lands. Are there any other options for these lands to let more Hawaiians be able to reconnect to the land? I recommend designating all these lands to Hawaiians any percentage. I recommend letting the homeless Hawaiians live on the land if they want to. Surprising we have homeless Hawaiians and all this land available. Some Hawaiians need and want to live in nature.

<b>Name</b>
Keely Kahana
<b>Input</b>
The Hawaiian land should be used to preserve our nature and wildlife. As it creates biodiversity in our world and protection for our creatures. Our wildlife has gone through so much since the foreigners had come with invasive animals and plants, making our wildlife decrease in population over time. Many of our plants, birds and other native animals have gone extinct due to the invasive things brought in by foreigners. I believe that the least that we can do as good citizens is provide these lands for our nature to strive and regrow their population size. No more human destruction and buildings because it creates pollution, takes away from nature, creates overpopulation on our islands, and makes it harder for our wildlife to live. Protecting this land and granting this land to be conserved and protected will create so much more opportunities for all of these native plants and animals to survive. Not to mention the number of endangered species Hawai'i has due to a lot of human destruction. These endangered species will finally be able to breathe and have a chance at life.

<b>Name</b>
Keomailani Hanapi Hirata
<b>Parcel name</b>
Land parcels Numbers: 257005026, 257005031, 258003012, 258015009, 258015007
<b>Input</b>
Aloha,  Requesting that an in-person meeting be held in East Moloka'i to give the community in Mana'e the chance to attend and provide comments and testimony regarding the five Mana'e land parcels that is being proposed to be put into a Forest Reserve. Requesting that the March 01, 2023 deadline for public comment and testimony be extended.  Mahalo

<b>Name</b>
Kyle Lanclos
<b>Parcel name</b>
351001006
<b>Input</b>
<p>Pololu Valley is one of my favorite places on the big island. Granted, I have a lot of favorite places here, but it's near the top of my list. I would dearly love to see as much of the valley as possible protected as open, public space, so that my children's children's children can experience the same sense of wonder and beauty as we do today.</p> <p>I'm thrilled that you're considering adding this parcel to Hawaii's network of forest reserves. Please keep up the good work.</p>

<b>Name</b>
Lyndon Ibele
<b>Parcel name</b>
236001014
<b>Input</b>
<p>Ma'alaea Village Association supports adding proposed state land parcels in the West Maui mountains to "Forest Reserves, Natural Area Reserves, and Wildlife Sanctuaries".</p> <p>In particular however, Parcel 236001014 is critical because of its location proximal to Ma'alaea Village and because it is largely within the Pohakea Watershed. Active management of this parcel is critical to reduce wildfire hazards and to manage stormwater to reduce run-off and sedimentation in Ma'alaea Bay.</p>

<b>Name</b>
Mary Metcalf
<b>Parcel name</b>
221003050
<b>Input</b>
<p>I am in full support of adding this parcel to the Kanaio Natural Area Reserve. There are just a few remnants of Maui's dry forests left, which historically spread across vast areas of leeward Haleakala. As the nearby Auwahi Forest Restoration Project has demonstrated, the Maui community truly values the dry forest and there is strong and committed support in the community to help restore this threatened ecosystem and bring it back from the edge of extinction. Adding this parcel to the protected and managed Kanaio NAR unit will help ensure this ecosystem and its unique and beautiful species will one day thrive again in the State of Hawaii.</p>

Name
Mary Metcalf
Parcel name
217002011
Input
<p>This parcel has numerous benefits which makes it highly worthy of being added to the Forest Reserve system. The first benefit is the improved access it will provide to the Kipahulu Forest Reserve, and the great potential this opens up for public benefit and recreation purposes. Another very important benefit is the opportunity for restoring and protecting more of the once vast dry forest ecosystem on leeward Haleakala. This ecosystem is highly threatened with many species of concern, and threatened or endangered species that inhabit the ecosystem. Hawaii must increase the quantity, quality and connectivity of remaining dry forest fragments in able for this ecosystem to once again flourish across its lands.</p> <p>The other major advantage to adding this parcel to the reserve is that it provides a migratory pathway for dry forest species that helps these species survive the impacts of climate change. Recent studies by Fortini et al found that many dry forest species will migrate mauka into mesic areas as the climate warms and rainfall patterns shift. Adding this parcel provides the needed connectivity that helps provide resiliency for this ecosystem given the onslaught of climate change.</p>

Name
Mary Metcalf
Parcel name
244004009, 244004002, 245021004, 245021023, 248003040, 248003008, 248002008, 248002002,
Input
<p>All of these parcels are excellent opportunities to restore the once vast and beautiful dry forest ecosystem in West Maui. The dry forest ecosystem has mostly disappeared in Maui and across the State of Hawaii as a result of human development and activity. Just a few isolated and disconnected fragments remain, which are highly threatened and even more so given the onslaught of climate change and invasive species. Maui and the State of Hawaii must increase the quantity, quality and connectivity of dry forest remnants to ensure this rare ecosystem will once again flourish here.</p> <p>These parcels are also highly beneficial because of their connectivity to existing mauka forest reserves. This vital connectivity provides necessary migration pathways for species as climate change increases temperatures and alters rainfall pattetns. Extending the forest reserves makai is also very beneficial for additional rain water infiltration into depleted aquifers, erosion control, providing windbreaks, reducing temperatures, and providing public access for cultural and recreation benefits.</p> <p>The addition of these parcels will enhance the beauty and serenity of West Maui, and provide much needed access to nature and Hawaiian culture in an area too over run with tourists and development.</p>



Name
Mary Metcalf
Parcel name
248001001, 236001014
Input
<p>I am strongly in favor of adding these two major parcels to the Forest Reserve system. The benefits of adding almost 5000 acres of protected forest are numerous. This area has the potential of being one of the largest dry forest areas in the State of Hawaii, which would help tremendously with securing the future of this very threatened ecosystem. A restored dry forest ecosystem at this location would provide numerous benefits, including providing critical habitat for endangered species and mitigation of the major erosion occurring on these slopes and the resultant destruction of offshore coral reefs.</p> <p>This land is also very scenic and could become an incredible natural area for the benefit of many living organisms, including humans. It could provide an important respite and grounding area for all who are driving through this area.</p>

Name
Michelle McLinden Nuijen
Parcel name
All parcels
Input
<p>I strongly support the addition of all new land parcels to the network of protected reserves to reduce future development and light pollution, and to grow our open spaces.</p>

<b>Name</b>
RICHARD A FURST
<b>Parcel name</b>
221003050 (and general comments)
<b>Input</b>
Mahalo for soliciting public comments. I am happy to see more lands being proposed for conservation / preservation in Hawaii, rather than sold off to the highest non-resident buyers. I would like to see more lands opened for public hunting opportunities, especially ones like TMK:221003050 that are in areas with axis deer populations. Please consider prioritizing public hunting opportunities for all NARS lands with wild game populations. Thank you.

<b>Name</b>
Rob Weltman
<b>Input</b>
I think it is a good idea to protect additional areas through the set-aside process. For Maui it is very appropriate to target parcels that connect mauka forest to lowland and coastline parcels and also parcels that can have mixed use - recreation and grazing, for example - for set-aside. I support the proposal overall and in particular as it relates to parcels on Maui island.

<b>Name</b>
Rosemond Keanuenue Pettigrew
<b>Parcel name</b>
Ahaino, Molokai
<b>Input</b>
I am a descendant and tenant of the original inhabitants of Ahaino. Ahupua'a O Ahaino was passed down from generation to generation to my family and then on to me and other family members. As a Kānaka 'Ōiwi tenant and steward (Konohiki) of Ahaino, why was I never notified or consulted last year, 2022, or currently, of the proposal to designate Ahaino, the aina of my Kupuna, as a reserve? The State of Hawaii, Attorney Generals Office is a party to in a lawsuit that I am a party to, presently in the Second Circuit Court for partition action. Furthermore, I have rights to the water, access rights and a right to live free from the government infringement upon my property and rights. At this time, I object to Ahaino being designated aa a reserve. I look forward to being contacted by your office regarding this matter. I can be reached at <a href="mailto:kahiki9801@yahoo.com">kahiki9801@yahoo.com</a> or by telephone at 808-658-0494.

**Name**

Steve Robertson

**Parcel name**

Comment for all the parcels in this proposal

**Input**

I support the modifications as proposed. DLNR has done a good job, with limited resources, of protecting sensitive species, providing public access when appropriate and providing hunting access when feasible. These lands are managed by DLNR on behalf of the public.

**Name**

Virginia Tincher

**Input**

Thank you for this opportunity to comment on the proposal to protect protect nearly 100 parcels by adding them to the network of Forest Reserves, Natural Area Reserves, and Wildlife Sanctuaries.

I support protecting all of the parcels. We now know from many scientific studies that there are multiple important reasons to protect our natural lands. To name some - biodiversity, support for clean water and air, soil health and reduction of excess CO2 in the atmosphere through continual absorption into the plants and down through the roots to the soil.

Mahalo,

Virginia

**Name**

William Modesitt

**Input**

Adding new land parcels to our network of protected reserves is akamai. I have lived in this state off and on for 35 years, and I have seen what the population growth does and how it impacts our natural resources. We need more protected land.

**Name**

Randy De Cambra

**Parcel name**

224016001, 248001001, 236001014

**Input**

I strongly support the inclusion of the above parcels into Maui's Forest Reserve inventory. I am hoping that the aforementioned parcels also become designated hunting areas that allow for public hunting. The stated parcels have suitable public access that can support and facilitate public hunting. Feral Goats, Feral Pigs, Axis Deer, and introduced Game Birds inhabit the subject parcels, in which regulated hunting would be a viable and effective method of managing those species.

From: Na Ala Hele Maui Advisory Council

Subject: Comments in support of 2022 Proposed Additions to Reserves

The Na Ala Hele Maui Advisory Council strongly supports the 2022 DOFAW proposal to add nearly 100 parcels to forest reserves and natural reserves in Hawaii.

The council discussed the proposal at our February 14th meeting and are unanimous in our support.

The three main reasons we support the proposal are:

- Protecting public access to these parcels
- Improving public access to adjacent forest reserve parcels and shorelines
- Protecting the natural resources on these parcels

Protecting public access is the main reason we support adding these parcels to the forest reserve system. If these parcels were leased or sold, public access would be lost. Once added to the forest reserve system, public access will be protected and recreation opportunities will increase for hunting and hiking. The access is also important for DLNR staff and related groups. It enables them to protect the native flora and fauna and manage invasive species.

Improving access to adjacent forests and shoreline is also important. As more land is developed, it is more difficult to access forests and shorelines on Maui. These parcels improve connectivity to adjacent forests and shorelines and add access to many that are not currently accessible. They also provide the important ability to manage ecosystems from mauka to makai (summit to sea)

This proposal also allows DLNR to protect and enhance the natural resources on these parcels. Many of the parcels contain important native and endangered species that need to be protected. Other parcels are areas that formerly contained important native ecosystems that should be restored.

Overall, we are very excited about how this proposal matches the goals of Na Ala Hele and the positive effects it will have in the future on the Na Ala Hele system.

Russell Reinertson, Chair, Na Ala Hele Maui Advisory Council

February 23, 2023

Division of Forestry and Wildlife  
Board of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, HI 96813

Re: 2022 Proposed Reserves

Dear Division of Forestry and Wildlife and Board of Land and Natural Resources,

The Nature Conservancy (TNC) strongly supports the Division of Forestry and Wildlife's proposal to designate nearly 100 parcels of state lands as Forest Reserve, Natural Area Reserves, or Wildlife Sanctuaries.

The parcels identified by the Division of Forestry and Wildlife (DOFAW) contain high conservation values and provide unique and important ecosystem services. Putting these parcels into managed forest reserves, natural area reserves (NAR), and wildlife sanctuaries would give them permanent protection and provide the enabling conditions for the state and partners to invest in conservation work that expands managed native watersheds, rare native ecosystems, and endangered species protections.

In West Maui, of particular importance are the lands of Olowalu and Ukumehame ahupua'a (TMK 248003040, 248003008, 248002008, 248002002, and 248001001). These lands have multiple forestry and wildlife values, including native forest restoration, wetland restoration, erosion control, and wildfire management. The lands are directly adjacent to West Maui Forest Reserves and the Lihau Section of the West Maui NAR, and directly upland from the Olowalu reef. In 2017, the Olowalu reef was declared a [Mission Blue Hope Spot](#)—a place that is critical to the health of our oceans. Spanning the coast from Olowalu to Pāpalaua, the 939-acre reef boasts a stunning diversity of coral, harbors the largest known manta ray population in the United States and is a primary source of coral larvae for the reefs of Lāna'i, Moloka'i and West Maui. Sadly, this national treasure is being degraded by sedimentation from upland areas. The lands from Pohakea Watershed in the north across Kaheawa ridge to Papalaua Valley (TMK 248001001 and 236001014) are critical to watershed management. Designating these lands as Forest Reserve would provide public benefits, community engagement, and the needed capacity to implement best management practices to mitigate erosion, protect coral reefs, and ultimately recover native ecosystems.

Also in West Maui, the addition of the seven parcels that are directly adjacent to West Maui NAR, West Maui Forest Reserve, and The Nature Conservancy's Kapunakea Preserve (TMK 244004011, 244004009, 244007006, 244004006, 244004002, 245021004 and 245021023) would provide opportunities for watershed management, native dry forest management, and connectivity to partnership lands that are currently being managed for restoration and erosion control that would protect nearshore reefs from damaging sedimentation. Including these lands in forest reserves and natural area reserves brings the much needed landscape-scale management capacity of the Division of Forestry and Wildlife and Mauna Kahalawai Watershed Partnership.

In East Maui, native coastal forests (TMK 213003026, 213003001 and 213006007) are an important addition to the State Natural Area Reserve System and Forest Reserve. These coastal ecosystems contain a unique hala forest ecotype, a historic trail, cultural resources, and numerous endangered species. We applaud the

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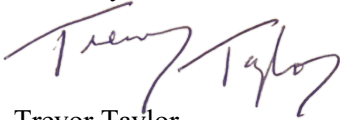
*Founders:* Samuel A. Cooke Herbert C. Cornuelle

proposed addition of land to Nakula and Kanaio NARs (TMK 218001005 and 221003050) that will enable expansion of mesic koa and high elevation dryland forests of leeward Haleakalā. The addition of five coastal parcels to 'Ahihi-Kīna'u NAR will expand the NAR north to Makena and south into Keone'ō'io Bay, where the exceptional natural coastal and extensive cultural resources would benefit from needed management and organization of public use (TMK 221006777, 221006010, 221006077, 221004110 and 221004075).

On Moloka'i, the addition of Waikolu Valley (TMK 261001002) to Pu'u Ali'i NAR, would contribute to the conservation of the native forest and exceptional native stream biota, important for larval export to the adjacent Molokai north shore streams.

The Nature Conservancy urges your approval of the addition of all of the more than 100 parcels proposed across four islands as DOFAW designations where they can be managed for public benefits. Mahalo for the opportunity to express our support for this innovative and visionary proposal.

Sincerely,



Trevor Taylor  
Director of Conservation

---

*The Nature Conservancy of Hawai'i and Palmyra is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and work in over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.*

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Dear DOFAW,

February 23, 2023

Thank you for taking into consideration the following testimony for future forestry development on Maui.

In Lahaina, State controlled properties recommended for forestry are Tax Map Key numbers 450210220000, 45021023000, 45021004000, 46018007000, 4601800400, and 46025002000. These parcels are an excellent area to promote forestry for a few good and strategic reasons.

- 1) Proximity to visitor industry for eco-tours and tourist income resources.
- 2) Future scenic byway for when highway bypass extension is developed.
- 3) Proximity to schools and university annex for educational purposes.
- 4) Opportunities for exposure, promotion, and education of forestry overall.
- 5) Protection of important watersheds and environmental impact of major income producing region in Hawaii.

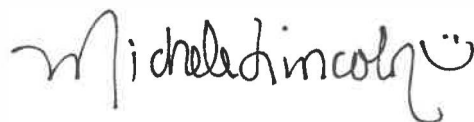
Growing native trees for future wood harvesting, educational purposes, tourist attractions, and preservation is preferable in this area.

Another suggestion is for the State to make a concerted effort in promoting the reforestation of sandalwood trees.

- 1) Sandalwood oil and wood have an international demand commanding astronomical prices.
- 2) Historical decimation of Hawaii's sandalwood forests makes it paramount to be grown in an effort to right the wrongs of the past.
- 3) For State land, the ten-to-thirty-year maturity rate is a reasonable time span for an investment in the future.
- 4) Sandalwood is a lucrative income producing commodity that will be beautiful and beneficial for Hawaii.

Thank you for your consideration as you expand forestry on Maui,

Michele Lincoln



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Dept. of Land & Natural Resources

FEB 28 2023

DIVISION OF FORESTRY & WILDLIFE  
MAUI OFFICE