

# Bill 10, CD1 Testimony

August 22, 2022

Council Chair Tommy Waters and Zoning and Planning Committee Chair Brandon Elefante  
City and County of Honolulu Council

**Subject: Bill 10 (2022), Relating to Use Regulations – Article 5**

Aloha Council Chair Waters and Committee Chair Elefante and Council Members,

As a professional community planner, land use planner and landscape architect practicing in Hawaii for over 40 years, I know how important the Land Use Ordinance (LUO) is in regulating land use on Oahu. Although I recognize the need to overhaul and update our land use regulations to make them relevant to today's community needs, I am honestly shocked by the piecemeal approach the City's Department of Planning and Permitting (DPP) has taken. From what I have been able to determine, there has been a lack of community engagement with land owners that will be impacted by these proposed modifications. And, to just be proposing amendments to just one of 11 articles of ROH Chapter 21 (Land Use Ordinance) in this effort does not provide anyone with a total overview of what the intended update of the LUO will ultimately involve.

As proposed, the amendments to Article 5 include some content taken from Article 3 and 10 but those articles have not yet been updated and provided for public review and comment. That is my frustration to this entire process; how do we address an update to one section of a very complex land use regulation system without knowing what the entire amended LUO addresses. I recognize DPP's limitations as they have stated them, but I do not feel that is an excuse to take this piecemeal approach. If a comprehensive overhaul of the LUO is to be done, it should be done to address the entire ROH Chapter 21. How can the City Council be expected to review and adopt modifications to just Article 5 without knowledge and consideration of the entire overhaul of the LUO?

However, under the City Council's current efforts to review and modify Bill 10 (2022) CD 1, my comments are provided for your consideration in an effort to improve the LUO.

Although I will highlight a few general areas of concern, I will focus my comments on one specific aspect of the LUO that has not been addressed in the proposed update of Article 5; Kuleana Lands and Non-conforming Agricultural Lots.

**Kuleana Lands and Non-conforming Agricultural Lots**

As an owner of a small kuleana lot (approximately 6,500 sq. ft.) with agricultural zoning, I consulted with DPP in 2020 to determine that, although considered non-conforming in lot size, an accessory farm dwelling is allowed if it complies with underlying agricultural zoning development standards specifically defined in Article 3 (Table 21-3.1). Based on that consultation and confirmation from DPP that the LUO does not address Kuleana Lands, I recommend that a section be added to Article 5 to address the unique

considerations for Kuleana Lands established during the Great Mahele (1848-1850). The four key considerations that should be addressed include:

1. **Acknowledgement of Kuleana Lands established during the Great Mahele.**  
The LUO should acknowledge this form of land ownership and historic land use that is unique in Hawaii. In addition, existing non-conforming lots, even if not established under the Great Mahele, should also be explicitly acknowledged and addressed in the updated LUO so that small landowners know what the limitations are related to the use of their lands.
2. **Consistency with State Law.** HRS Chapter 205-4.5 addresses permissible uses within the agricultural district. Under subsection (b), it provides for exceptions not expressly permitted in subsection (a). The specific exceptions are "uses permitted as provided in Section 205-6 (*Special Permits*) and 205-8 (*Non-conforming use*), and construction of single-family dwellings on lots existing before June 4, 1976. (emphasis added). For Kuleana lands, many of which are non-conforming in size to City and County zoning standards for Ag-1 (min. 5 acres) and Ag-2 (min. 2 acres), single-family dwellings should remain as a permitted use for Kuleana Lands established under Great Mahele.
3. **Reasonable Development Standards.** With many of the Kuleana lots being even below the State minimum agricultural lot size of 1 acre, reasonable development standards should be provided in Article 5 so that Kuleana Land owners understand the limitations being imposed on the utilization of their lands. The current applicable development standard are specified in Table 21-3.1 of Article 3. For lots over 2 acres, these standards are reasonable. However, for Kuleana lots (many less than 1 acre), some reasonable standards for the use of the lands should be modified in accordance with lot size. I will gladly offer my expertise and assistance in drafting reasonable development standards that maintain Kuleana Land rights and do not overly restrict the use of existing non-conforming Kuleana parcels of record. As noted below, the percentage of ag. use and related ag. dedication for real property tax purposes is unrealistic.
4. **Existing Single Family Dwellings on Ag. Land.** Considering there are likely numerous existing single family dwellings (including previously defined farm dwellings) have been permitted on ag. lots before the LUO and subsequently under the current LUO, including non-conforming lots, a grandfather clause should be included so that families living on their Kuleana Lands do not become "illegal" by adoption of Article 5 as drafted.

As an example of unintended impacts to small land owners, during the recent effort by DPP to designate Important Agricultural Lands (IAL), approximately 800 parcels were identified to be classified IAL. Of those parcels, almost 400 of them were existing non-conforming lots of less than the City's minimum 2 acres (most were likely Kuleana Lands). Once many of those land owners

were made aware of the City's IAL proposal and potential limitations on the use of their lands, including the proposed accessory farm dwelling standards, the Land Use Commission would not approve the petition and sent the proposal back to DPP for modifications to address the lack of community engagement and the need to clarify the State IAL law. There were numerous testifiers living on their ag. lots on the leeward coast that could technically become "illegal" farm dwellings under this legislation. With such a shortage of housing, we should not be considering legislation that could further exasperate our community's housing shortage.

#### **Additional Comments/ Concerns Related to Agricultural Land Use**

Without being exhaustive in my comments on other aspects of Bill 10(2022) CD 1, I am aware of other agricultural land owner concerns including:

- **Agritourism-** Proposed standards that would severely impact existing successful agritourism businesses. The agritourism businesses currently operating under DPP's existing permit system should be consulted so that their operations will not be impacted.
- **Assumes All Ag. Zoned Land is Suitable for Agriculture-** The underlying assumption being made by DPP is that if lands are zoned for agriculture, they are all suitable for agriculture. That assumption is far from reality! Of the approximately 128,000 acres of ag. land on Oahu, about 10% of it was designated as IAL voluntarily by land owners to ensure they got to designate which of their lands would be designated IAL and, in some cases, to take advantage of the financial incentives the State was offering. Subsequently, DPP undertook their IAL study and concluded that another 45,000 acres (utilizing only 2 of the 8 criteria for IAL established by the State) should be designated IAL. Thus, in total, only about 45% of the ag. zoned lands were considered to be of a quality to be designated IAL; even when using the much lower number of IAL criteria to determine candidate quality ag. lands under the IAL law. That leaves about 70,000 acres of ag. lands (approximately 55%) that may not be suitable for intensive ag. use. The LUO needs to recognize this reality under these land use regulations.
- **Required Ag. Use for Various Uses, Including Accessory Farm Dwellings.** A 50% requirement for ag. use for conforming lots with quality soils and adequate ag. water is probably reasonable. But if the land is not suitable for an economic ag. use or may not have access to ag. water sources, how does that impact the ability of the land owner to live on his land? The proposed CD 1 revision to 75% is definitely unrealistic and would have significant unintended consequences on land owners, especially Kuleana Land owners.
- **Ag. Dedication for Real Property Tax-** The proposed provisions to have the land owner using his land for ag. uses be required to seek a formal ag. dedication to confirm the amount of land being utilized adds another burden being imposed

on the landowner/ farmer. This would likely add a significant administrative burden to the City's tax department to inspect and verify ag. dedication compliance that the proposed LUO amendments are requiring. Has the real property tax department been consulted on this requirement?

- **Leasing or Licensing Land to Farmers-** This common practice of larger land owners to be able to lease or license their ag. land (typically at below market rates) to farmers to put the land to productive use should be encouraged (not prohibited as an ag. use). This practice allowed statewide, is probably the foundation of where and how small farmers currently operate with a chance of economic success. From my observations, diversified crop farming is a very challenging business. Without access to below market rate quality lands with access to ag. water (compared to financing/ purchasing fee simple land), these existing agribusiness enterprises would likely be eliminated. We should be finding ways to encourage commercial farming, including family subsistence farming...not putting unreasonable standards and limitations on them.
- **Crop Theft-** Crop theft has been in the news regularly recently. Most farmers would prefer to be live on their lands to help provide 24/7 security. The State has enacted laws that allow accessory ag. structures to be constructed without permits...in support of agricultural use. Similarly, the City should find ways to streamline the process to obtain accessory farm dwelling permits.
- **"Gentleman Farmers"** – DPP has expressed their desire to eliminate/ regulate ag. land owners from living on their lands...with large estates. But the current LUO regulations have already limited that potential abuse by imposing the development standard of only 5,000 sq. feet of the lot area can be utilized for the farm dwelling and associated improvements. In many cases, I have seen examples on the neighbor islands where these "gentleman farmers" are the land owners that are making their quality lands and ag. water available to qualified farmers at below market rates.

Thank you for considering my testimony and I would welcome the opportunity to help improve the LUO in a more comprehensive effort to address the entirety of the proposed update to the LUO, especially related to protecting the legacy of our unique Kuleana Lands.

Mahalo,

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August 25, 2022

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Councilmember Brandon Elefante, Chair  
Councilmember Ester Kia'aina, Vice Chair  
Zoning and Planning Committee, Honolulu City Council

Re: Comments on Bill 10 CD1 (2022) – Land Use Ordinance (“LUO”) Amendments Relating to Use Regulations; Bill 41 (2022) – Shoreline Setbacks; Bill 42 (2022) – Special Management Area (“SMA”)

Aloha Chair Elefante, Vice Chair Kia'aina, and members of the Zoning and Planning Committee,

Thank you for taking on the challenge of updating Honolulu's land use, shoreline, and SMA ordinances. We agree that provisions in these ordinances should be revised to reflect new realities and objectives in Honolulu. As an attorney who has been involved in land use in Honolulu for more than 20 years, I offer the following comments on Bills 10, 41, and 42 for your consideration.

I. Bill 10 (2022) CD1 – LUO Amendments Relating to Use Regulations

1. Changes to Farm Dwellings

Bill 10 requires that 50 percent of the lot area of a lot containing a farm dwelling be occupied by crop production or livestock keeping. This requirement would increase to 75 percent under the proposed CD1. CD1 makes other changes as well. Further proposed amendments would return the minimum area requirement to 50 percent.

I am concerned that these collective changes will make it difficult to keep land in agriculture and instead force owners to seek to redistrict and rezone their lands. The dual use of agricultural lands—being able to conduct other uses, such as renewable energy, tourism and weddings, has allowed us to retain large areas of land within the agricultural district. We should be encouraging dual uses rather than making them more difficult.

I am also concerned that the minimum area requirement cannot be equitably applied. Agricultural lots have a wide variety of sizes, soil qualities and usable areas. While it may be practicable to put 50 or even 75 percent of many lots in active agriculture, smaller lots and lots with areas of limited utility, such as gulches, may

not be able to meet either threshold. It would be inequitable to deny this latter class of lots a farm dwelling.

Nor is it clear how the law would be enforced. The Department of Planning and Permitting cannot be expected to survey every agricultural lot in the City.

Hawai'i Revised Statutes ("HRS") 205-4.5(a)(4) already requires that a farm dwelling in the Agricultural Land Use district be located on and used in connection with a farm or where agricultural activity provides income to the family occupying the dwelling. This limitation is enforceable by a fine of up to \$5,000.

It would be prudent to enforce existing standards before new standards are adopted. It would be prudent to determine whether there will be unintended consequences for any new standards that are adopted.

## 2. Multi-Unit Dwellings

The inclusion of multi-unit dwellings in the B-1 and B-2 districts is a welcome change. The change will facilitate the creation of mixed-use walkable neighborhoods throughout our community. DPP's previously-submitted testimony implied that the Proposed CD1's changes to the multi-unit dwelling standards will allow residential units on the ground floor of spaces that contain sufficient commercial uses. While that appears to be the intent of the new subsection (B) in the Proposed CD1, we recommend revising the standards provision to clarify that subsections (A) and (B) are not overlapping requirements as follows:

"(2) Standards:

(A) In the B-1 and B-2 zoning districts, multi-unit dwellings are permitted;

- (i) if located above the first floor of a building occupied by a permitted principal non-residential use. A residential lobby of up to 1,500 square feet of floor area and other necessary points of ingress or egress may be located on the ground floor. All other residential uses must be located above the non-residential use;

~~[(B) In the B-1 and B-2 zoning districts, multi-unit dwellings are permitted on:]~~

- (ii) on Zoning lots larger than 4 acres, but smaller than 7 acres, with a minimum of 10,000 square feet of nonresidential floor area developed on the lot;

(iii) on Zoning lots larger than 7 acres with a minimum of 40,000 square feet of nonresidential floor area developed on the lot;  
or

(iv~~ii~~) on Zoning lots with a minimum nonresidential floor area ratio of 0.3;

provided that a pedestrian and bicycle access path a minimum of 8 feet in width is provided from adjacent rights-of-way to both residential and nonresidential uses on the zoning lot.”

## II. Bill 41 (2022) – Shoreline Setbacks

### 1. Repairs to Nonconforming Structures

Bill 41 amends ROH Section 23-1.6 to limit repairs to nonconforming structures to a cumulative value of fifty percent or less of the replacement cost of the structure over a ten-year period. Previously, this provision only required that the repairs not increase the nonconformity.

Owners should be able to repair and maintain their structures as long as they do not increase the nonconformity. Forced dilapidation of existing structures is not in the best interest of our community.

### 2. Sea Level Rise Exposure Area

Bill 41 and Bill 42 incorporate the Sea Level Rise Exposure Area (“SLR-XA”) in developing shoreline setback standards. SLR-XA uses the projected sea-level rise modeling that was adopted by the Hawai‘i Climate Change Mitigation and Adaptation Commission as part of the 2017 Hawai‘i Sea Level Rise Vulnerability and Adaptation Report. The modeling is depicted on the Hawai‘i Sea Level Rise Viewer.

The model on which the SLR-XA is based was not designed for Honolulu’s complex shorelines and coastlines. The SLR-XA is an overlay of three models: passive flooding, annual high wave flooding and coastal erosion. To develop the coastal erosion modeling, the modeling begins with historical erosion rates measured from individual transects located 20 meters apart along the coastline. The model then makes two critical assumptions. First, the model assumes erosion will continue at the same rate through the year 2100 even in areas where erosion is or could be inhibited by natural or engineered conditions, like seawalls or cliffs. Second, the model assumes



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an all-sand environment, which responds much differently to sea level rise than environments with elements like reefs and rocky headlands.

The result of these assumptions is an inaccurate prediction of the impact that sea level rise will have on Honolulu when considered at the parcel-level scale. The limitations of the coastal erosion modeling are carried over to the SLR-XA.

With respect, SLR-XA should be used as a policy tool as it was originally intended and not enshrined as regulation.

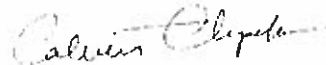
### III. Bill 42 (2022) – Special Management Area

#### Concurrent Processing of Environmental Disclosure Documents

Bill 42 discontinues the practice of allowing concurrent processing of environmental disclosure documents with SMA major permits as provided in ROH Section 25-3.3(c)(1). Concurrent processing helps to streamline the development process. Eliminating concurrent processing will only make approvals take longer to complete and cost more to complete. We do not need changes that slow down the process.

Please let us know if you would like to discuss any of our comments or proposed revisions further. Thank you again for your time.

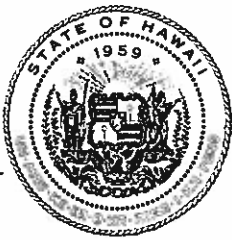
Very truly yours,



Calvert G. Chipchase  
for

CADES SCHUTTE

A Limited Liability Law Partnership



# **HAWAII STATE ENERGY OFFICE STATE OF HAWAII**

DAVID Y. IGE  
GOVERNOR

SCOTT J. GLENN  
CHIEF ENERGY OFFICER

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## **Testimony of SCOTT J. GLENN, Chief Energy Officer**

**before the  
CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
Regular Meeting  
Wednesday, September 7, 2022  
10:00 A.M.**

## **Comments on BILL 10 (22), Proposed CD1 RELATING TO USE REGULATIONS.**

The Hawai'i State Energy Office (HSEO) offers the following comments on Bill 10 (22), Proposed CD1, which amends and updates Chapter 21, Revised Ordinances of Honolulu 1990 (Land Use Ordinance or LUO) Article 5 Use Regulations.

HSEO's comments are guided by its statutory purpose under Hawai'i Revised Statutes (HRS) Section 196-71 and its mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy, and carbon negative economy by 2045. The island of O'ahu achieved 26% electricity generation from renewable energy in 2021. The execution of the City and County of Honolulu's climate action policy to transition to 100% renewable energy and achieve net negative carbon emissions by 2045 will require replacing the remaining 74% of O'ahu's electricity with non-fossil sources over the next 23 years. Importantly, Hawai'i's renewable energy and energy independence goals must be achieved in ways that prioritize the health and well-being of Hawai'i's people.

The LUO is important as it will help plan and regulate O'ahu's future land use, including the siting of projects and compatible land uses. HSEO appreciates the work done to date by O'ahu's engaged citizens, the Council, the Department of Planning and Permitting, Hawaiian Electric, and other organizations. HSEO offers the following recommendations for the Council's consideration.

### Establish a Setback of One Mile for Large Wind Energy Generation Facilities

Onshore wind is needed in some capacity for O'ahu to reach 100% renewable energy generation given O'ahu's limited land space and high electricity consumption; however, a sufficient setback distance must be in place for O'ahu communities to consider hosting large wind energy projects in their areas. HSEO believes a setback of one (1) mile from residences and communities in Country, Residential, Apartment, Apartment Mixed Use, and Resort Districts is appropriate.

For the Council's and public's consideration, Attachment 1 provides information on the three existing O'ahu wind energy projects. Attachment 2 provides maps of the existing wind turbines on O'ahu overlaid with various setbacks from the Country, Residential, Apartment, Apartment Mixed Use, and Resort Districts.<sup>1</sup>

HSEO recommends clarifying the language in Proposed CD1 that setbacks for each district are clear and that setbacks apply to individual wind machines. HSEO offers the following language for large wind energy generation facilities to replace Sec. 21-5.60-6(c)(2)(B)(v) on Page 55:

In country, residential, apartment, apartment mixed use, and resort zoning districts large wind energy generation facilities must be set back from the property lines of any zoning lot a minimum of one (1) mile. In all other zoning districts, large wind energy generation facilities must be set back from the property lines of any zoning lot a minimum distance equal to the height of the individual wind energy generation facilities measured from the highest vertical extension of the wind machine. Height includes the height of the tower or its vertical support structure and the farthest vertical extension of the tower. Wind energy generation facilities refers to individual wind machines or turbines.

### Clarify Medium Wind Machines Are Up to 99 Kilowatts

The Standards for medium wind energy generation facilities conflict with the definition of large wind energy generation facilities as both include 100 kilowatts. HSEO recommends keeping 100 kilowatts as the low threshold for large wind energy generation facilities. Small wind generation facilities in the Proposed CD1 would go up

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<sup>1</sup> Maps were presented to the Zoning and Planning Committee October 2021.

to 15 kilowatts in the allowed districts (see HSEO comments below), medium wind generation facilities would be between 16 kilowatts and 99 kilowatts under this proposal. HSEO offers the following language to amend Sec. 21-5.60-6(b)(2)(C)(i) on Page 53:

A wind energy generation facility is considered a medium utility if it is located within the agricultural, country, industrial, or industrial mixed use zoning districts, and has a rated capacity of up to 99 [400] kilowatts.

Permit Small Wind Machines (Up to 15 Kilowatts) in the Agricultural District

The Proposed CD1 precludes small wind energy generation from occurring in the agricultural district, which precludes the use of small wind energy facilities to provide on-site power to local farming operations. HSEO suggests adding the agricultural zone to the districts in which small wind energy generation facilities are permitted as farms could benefit from small scale wind generation. HSEO offers the following language to amend Sec. 21-5.60-6 (a)(2)(C)(i) on Page 51:

A wind energy generation facility is considered a small utility if it is within the agricultural, residential, apartment, apartment mixed use, business, business mixed use, resort, or preservation zoning districts, and has a rated capacity of no more than 15 kilowatts.

Fix Clerical Error Regarding Medium Wind Generation Facilities' Distance to the Ground

There appears to be a clerical error that would allow for the blade tips of medium wind generation facilities to be closer than 15 feet from the ground, which could be a safety concern. HSEO believes the word "not" is missing and offers the following language to amend Sec. 21-5.60-6(b)(2)(C)(ii) on Page 53:

For any ground-mounted wind energy generation facility, the tower climbing apparatus and blade tips of the facility may not be lower than 15 feet from ground level, unless enclosed by a 6-foot high fence, and may not be within 7 feet of any roof or structure, unless the blades are completely enclosed by a protective screen or fence.

Remove Condition that Feedstocks for Biofuel Processing Facilities in the Preservation or Agricultural Zoning Districts Be Grown On-Site

For biofuel processing facilities in the preservation or agricultural districts, HSEO believes the condition that all energy feedstocks must be grown onsite is too restrictive and could limit the use of other preferable feedstocks sourced off-site. On O'ahu, it could be reasonable and possibly preferred in some cases for biofuel feedstocks to be located off-site from the facilities at which the feedstocks are converted or refined into biofuel. Some sites may not be able to accommodate both active crop cultivation and industrial biofuel processing for a variety of reasons. This requirement may also prohibit a biofuel processing facility from providing important services such as the conversion of invasive flora or plants, waste oils and greases (restaurants), or agricultural wastes into biofuels.

HSEO recommends deleting this requirement in Sec. 21-5.40-4(d)(2)(A) (Accessory agricultural uses; Biofuel processing facility) on Page 22:

~~(A) — All energy feedstocks must be grown onsite in the preservation or agricultural zoning districts.~~

Alternatively, should the Council decide to keep this condition in some manner HSEO offers the following language:

For facilities sited in agricultural or preservation districts, the dominant feedstock (e.g., more than 50%) must be grown onsite, with the exception of feedstocks sourced from waste (e.g., agricultural waste or restaurant waste) or invasive species.

HSEO appreciates the opportunity to testify on this important bill and looks forward to continued dialogue with all stakeholders.

**Attachment 1**

**Information on Existing O'ahu Wind Energy Generation Facilities**

- Collective contribution to O'ahu generation in 2021: 3.6%

**Kahuku Wind**

- In Service: 3/23/2011
- Project Size (megawatts): 30
- Power Purchase Agreement Duration (years): 20
- Power Purchase Agreement Expiration: 5/31/2031
- Number of Turbines: 12
- Size of Each Turbine (MW): 2.5
- Height of Each Turbine (feet): 453
- Average FY2021 PPA Price: \$0.2144/kWh

**Kawailoa Wind**

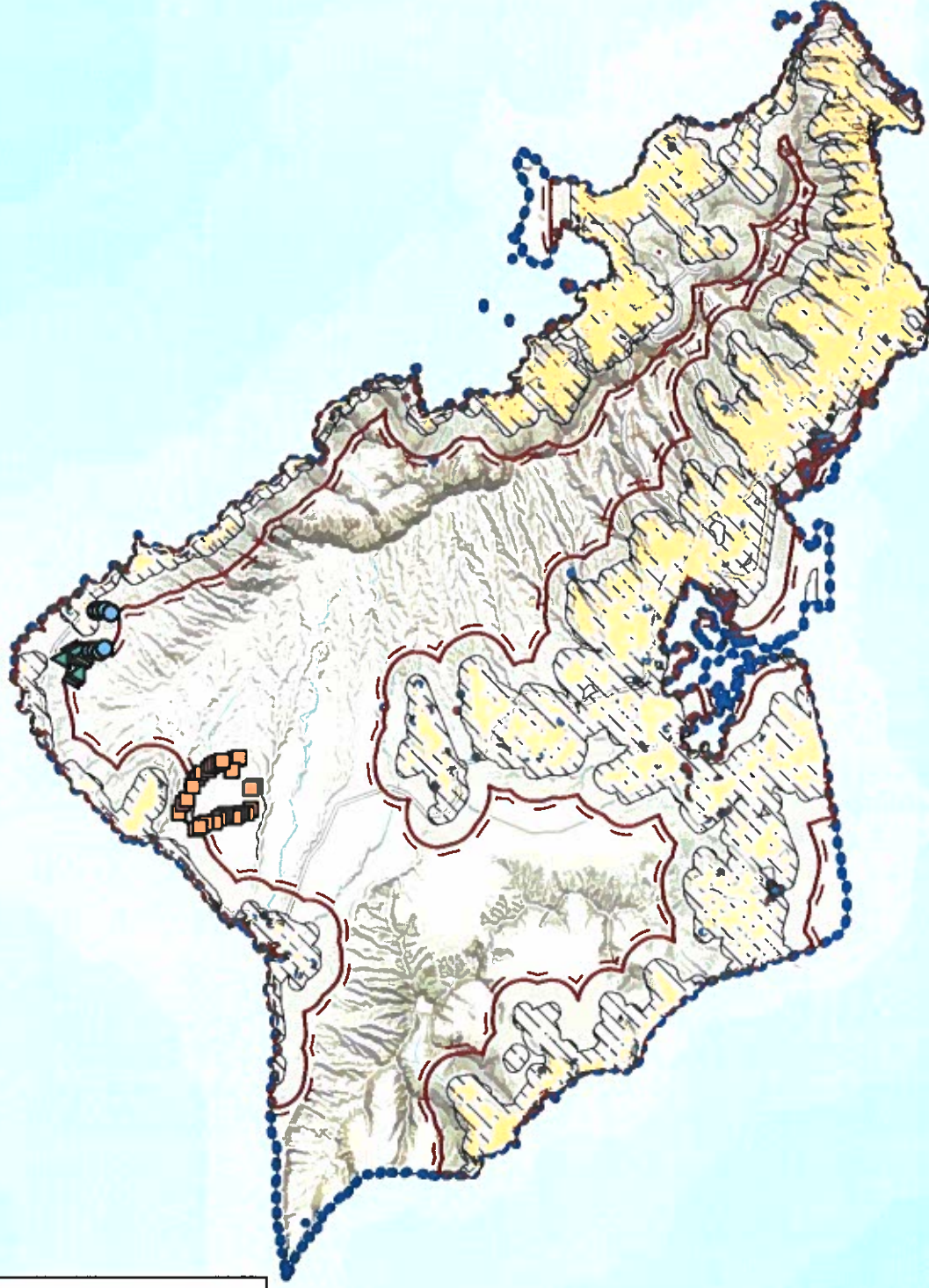
- In Service: 11/2/2012
- Project Size (megawatts): 69
- Power Purchase Agreement Duration (years): 20
- Power Purchase Agreement Expiration: 11/30/2032
- Number of Turbines: 30
- Size of Each Turbine (MW): 2.3
- Height of Each Turbine (feet): 493
- Average FY2021 PPA Price: \$0.1273/kWh

**Na Pua Makani**

- In Service: 12/11/2020
- Project Size (megawatts): 24
- Power Purchase Agreement Duration (years): 20
- Power Purchase Agreement Expiration: 12/11/2040
- Number of Turbines: 8
- Size of Turbines (MW): 3
- Height of Each Turbine (feet): 568
- Average FY2021 PPA Price: \$0.1393/kWh

# Attachment 2

- Kahuku Wind Farm
- Kawailoa Wind
- Nā Pua Makani
- Selected Residential Zones
- 1500 Foot Setback Distance
- 1 Mile Setback Distance
- 1.25 Mile Setback Distance
- 5 mile Setback



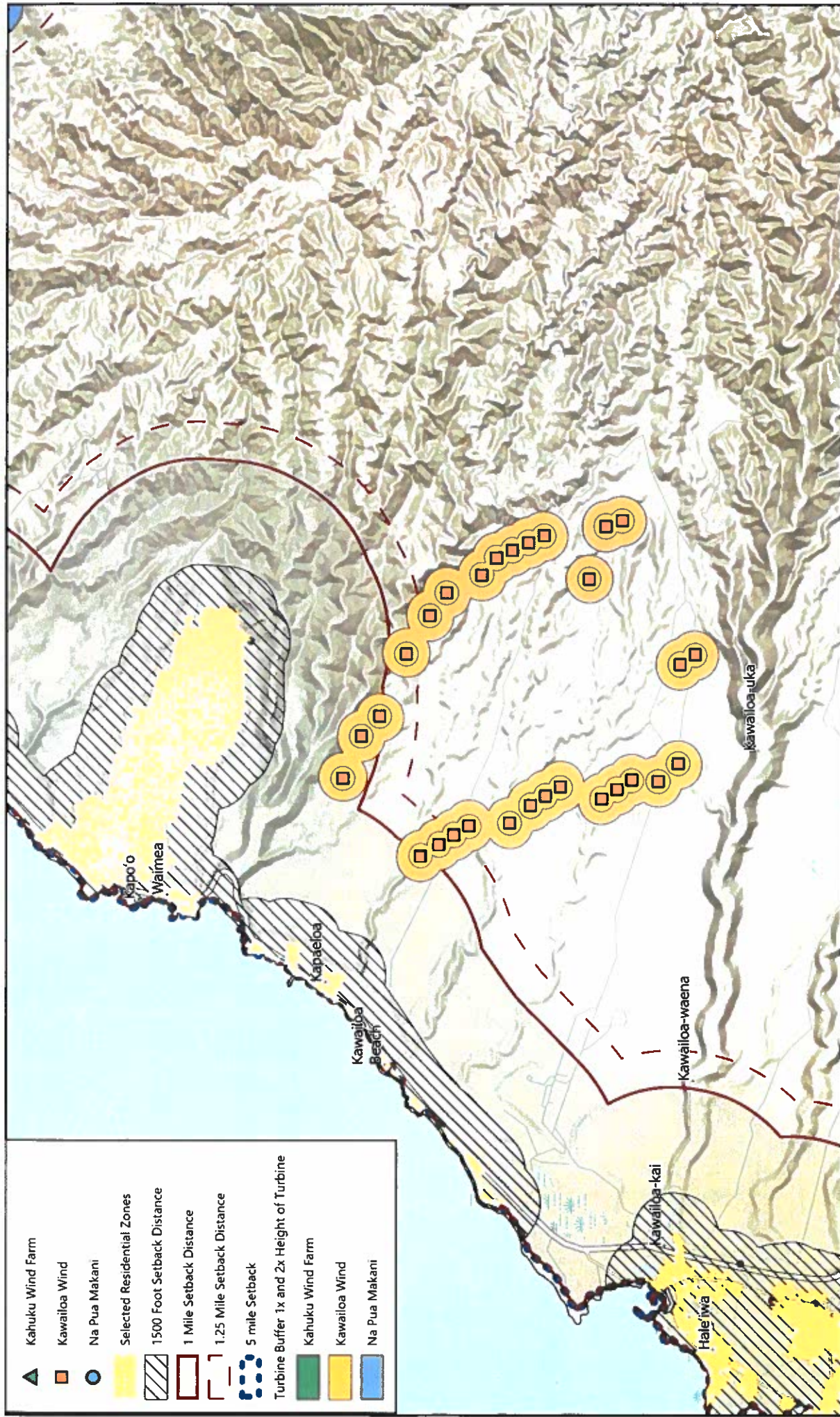
Setback distances 1500 ft, 1 mile, and 1.25 Mile, and 5 mile  
Setback buffer from Residential, Apartment, Apartment Mixed-Use, and Resort Zones

Hawaii State Energy Office, National Renewable Energy Laboratory, Setback from areas zoned: Country, Residential, Apartment, Apartment Mixed-Use, or Resort Districts Honolulu Land Information System (HOLIS), C&C of Honolulu, Sept. 2020 Service Layer: Esri, NASA, NGA, USGS, Esri, HIRI, Garmin, FAO, NOAA, USGS, EPA, Esri, HIRI, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, Esri, USGS

Coordinate System: GCS WGS 1984







**Setback distances 1500 ft, 1 mile, and 1.25 Mile, and 5 mile. Setback buffer from Residential, Apartment, Apartment Mixed-Use, and Resort Zones.**

**Existing turbine locations with buffers showing 1x height and 2x height.**

**HAWAII STATE Energy Office**

**2021**

Hawaii State Energy Office, National Renewable Energy Laboratory, Setback from areas zoned: Country, Residential, Apartment, Apartment Mixed-Use, or Resort Districts Honolulu Land Information System (HOLIS) C&C of Honolulu, Sept. 2020 Service Layer: Esri, HERE, Garmin, SafeGraph, MFTI/NASA, USGS, EPA, USDA, NGA, USGS, FEMA, Esri, CGIAR, USGS, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

Coordinate System: GCS WGS 1984

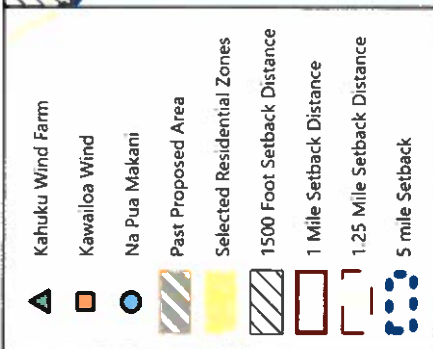
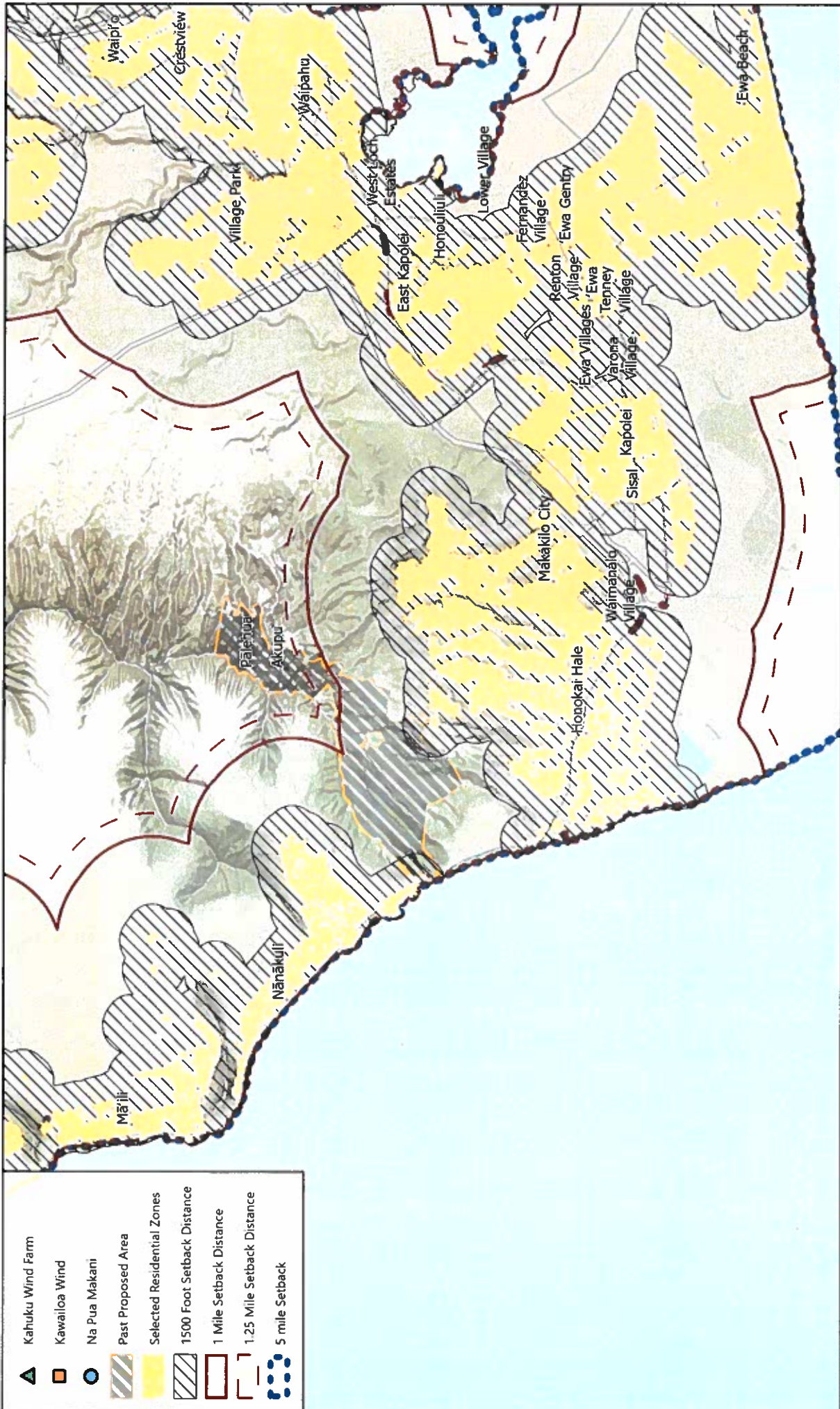
Scale: 0 to 1.5 Miles

North Arrow









Setback distances 1500 ft, 1 mile, and 1.25 Mile, and 5 mile. Setback buffer from Residential, Apartment, Apartment Mixed-Use, and Resort Zones. Wind turbines proposed within 1mile and 1.25 mile setback distances. Past proposed parcel TMK for Palehua.

Hawaii State Energy Office, National Renewable Energy Laboratory, Setback from areas zoned: Country, Residential, Apartment, Apartment Mixed-Use, or Resort Districts Honolulu Land Information System (HOLIS), C&C of Honolulu, Sept. 2020 Service Layer: Esri, HERE, Garmin, SafeGraph, MFTI/NASA, USGS, EPA, USDA, Esri, NASA, NGA, USGS, FEMA, Esri, CGIAR, USGS, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

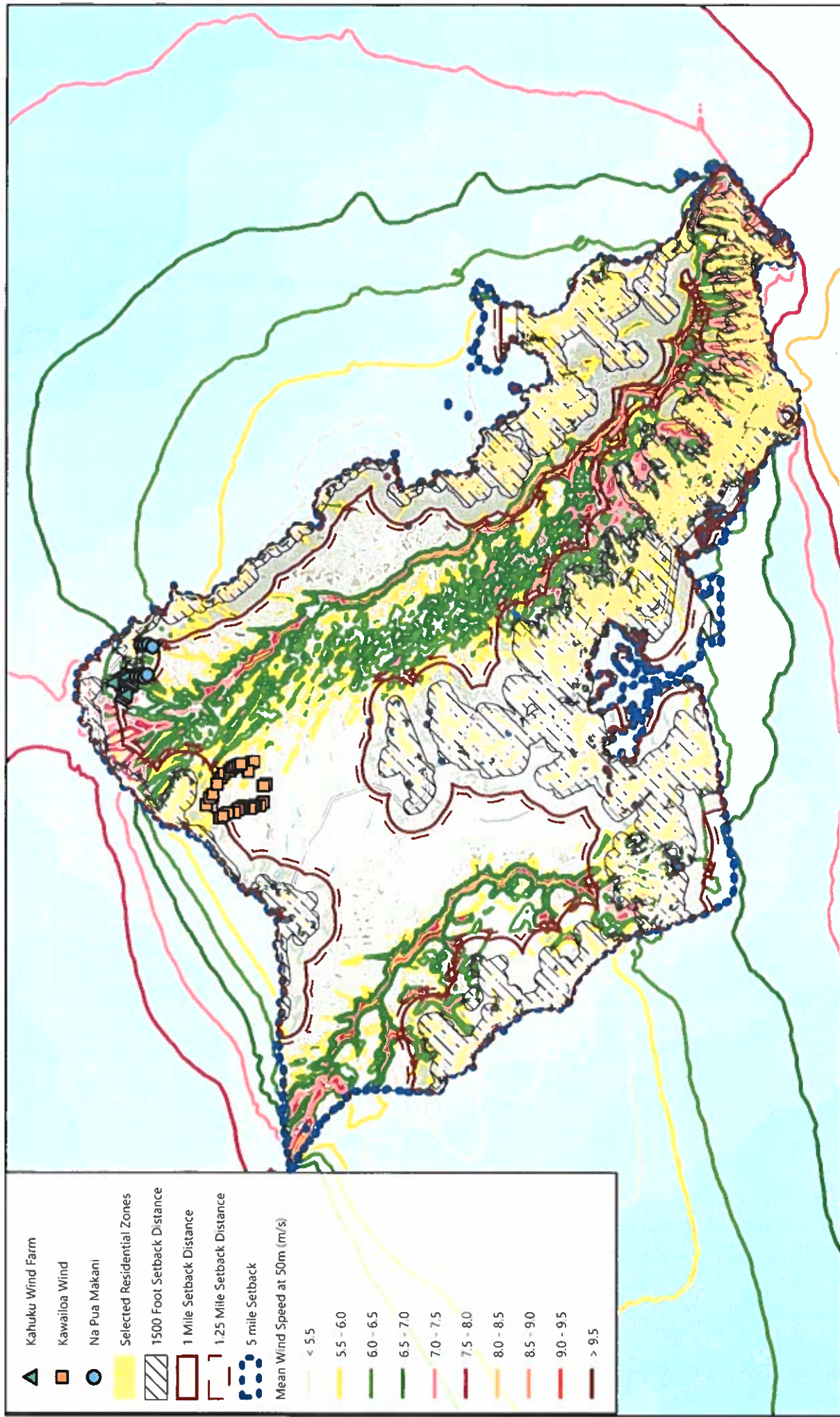
Coordinate System: GCS WGS 1984

HAWAII STATE  
**Energy Office**

N

0 1.1 2.3 mi





Kahuku Wind Farm

Kawaihoa Wind

Na Pua Makani

Selected Residential Zones

1500 Foot Setback Distance

1 Mile Setback Distance

1.25 Mile Setback Distance

5 mile Setback

Mean Wind Speed at 50m (m/s)

< 5.5

5.5 - 6.0

6.0 - 6.5

6.5 - 7.0

7.0 - 7.5

7.5 - 8.0

8.0 - 8.5

8.5 - 9.0

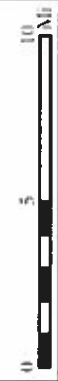
9.0 - 9.5

> 9.5

Setback distances 1500 ft, 1 mile, and 1.25 Mile, and 5 mile  
Setback buffer from Residential, Apartment, Apartment Mixed-Use, and Resort Zones and Mean  
Wind Speed MesoMap AWS Truewind, LLC, June 30, 2004

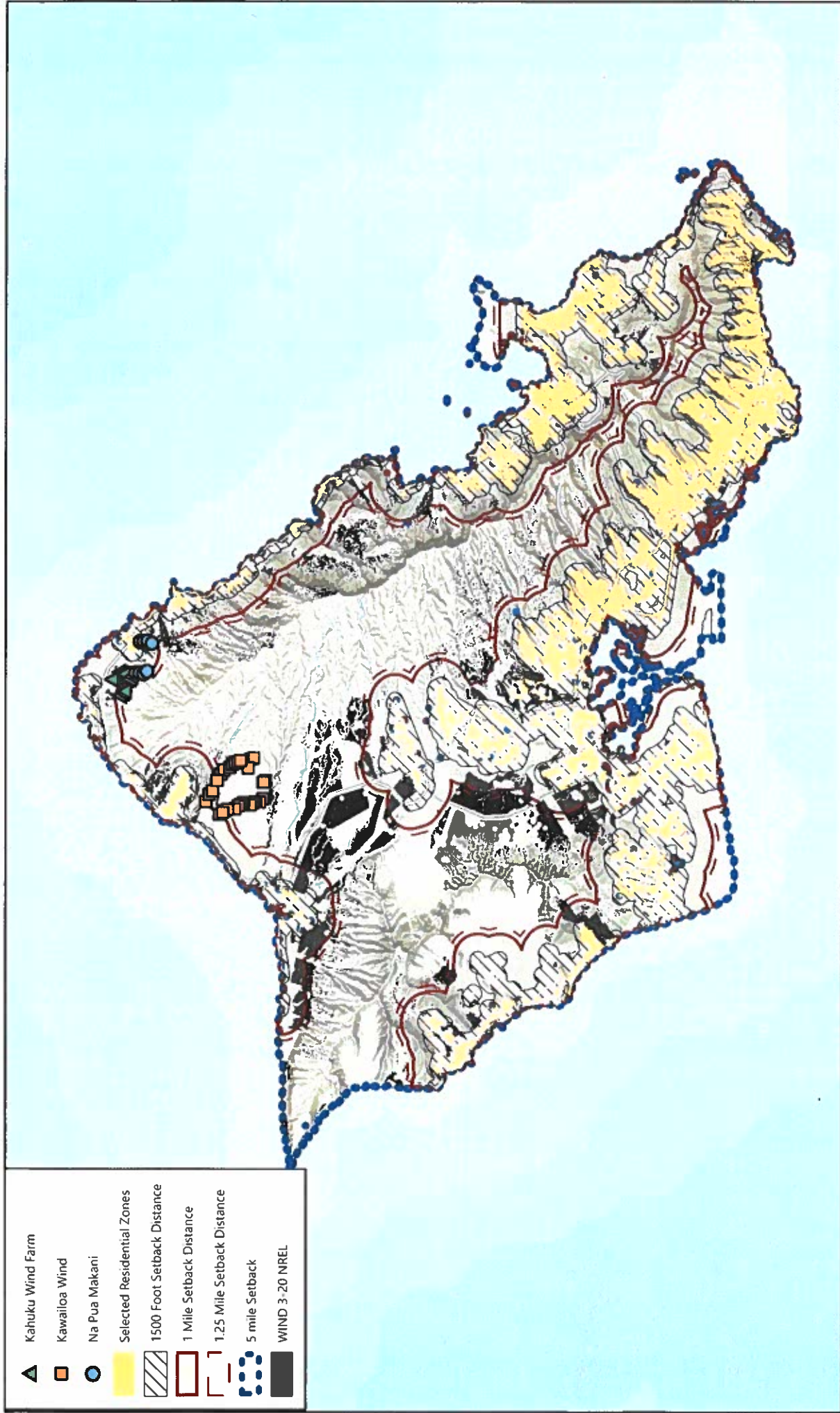
Hawaii State Energy Office; National Renewable Energy Laboratory; Setback from areas zoned: Country, Residential, Apartment,  
Apartment Mixed-Use, or Resort Districts Honolulu Land Information System (HLIS), C&C of Honolulu, Sept. 2020 Service  
Layer: Esri, NASA, NGA, USGS, Esri, HI-RI, Garmin, FAO, NOAA, USGS, EPA, Esri, USGS  
MDE/NAASA, USGS, EPA, Esri, USGS

Coordinate System: GCS WGS 1984



2021





**Setback distances 1500 ft, 1 mile, and 1.25 Mile, and 5 mile. Setback buffer from Residential, Apartment, Apartment Mixed-Use, and Resort Zones. NREL 3-20 Technically Suitable Land for Wind (slopes <20%, windspeed threshold >6.5m/s). Exclusions applied for areas zoned as urban, DOD lands, areas with "A" level flood zones; wetlands; IAL lands; SLR areas (6ft scenario); tsunami zones; and road, building, and transmission right-of-way setbacks.**

Hawaii State Energy Office, National Renewable Energy Laboratory, Setback from areas zoned: Country, Residential, Apartment, Apartment Mixed-Use, or Resort Districts Honolulu Land Information System (HOLIS), C&C of Honolulu, Sept. 2020 Service Layer: Esri, NASA, NGA, USGS, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, Esri, USGS

Coordinate System: GCS WGS 1984

**HAWAII STATE Energy Office**

**2021**

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# SIERRA CLUB

## O'AHU GROUP

HONOLULU CITY COUNCIL

**Comments on Bill 10 CD1: Relating to use regulations. [Addressing the regulation of uses throughout Chapter 21, Revised Ordinances of Honolulu 1990**

September 7, 2022-10 a.m.

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Aloha Chair Waters, Vice Chair Kia'āina, and members of the Honolulu City Council,

On behalf of our 8,000 members and supporters, the Sierra Club, O'ahu Group offers **comments on Bill 10** to ensure a just transition includes the voices and concerns of communities on the frontline of industrial-scale energy projects, specifically wind turbines.

The Land Use Ordinance is a critical tool to help shape and appropriately regulate O'ahu's electrical grid of today and the future. **Sierra Club O'ahu would like to express concern regarding the exclusion of the 1.25 mile setback requirement for wind turbines from the property line in the current version of the proposed revision of the Land Use Ordinance.** There have been previous testimonies given from the Hawai'i State Energy Office and Honolulu's Department of Planning and Permitting that recommended at least a 1 mile setback and have publicly supported a 1.25mile setback at the Planning Commission.

There can never be a truly equitable and resilient energy future on O'ahu if certain communities or regions of the island become sacrifice zones for the energy grid. Creating a 1.25mile setback will protect the well-being of the residents, cultural practitioners, and native ecosystems of areas impacted by wind turbines. The AES Na Pua Makani wind project showcased the imperative need for community and species well-being to be prioritized. Notably, there has been no public statements by Hawaiian Electric that condemns the 1.25 mile setback, demonstrating that the LUO change would not impede current or future projects. This is ultimately a matter of environmental and restorative justice.

**Please include the 1.25 mile setback for wind turbines that would protect communities and restore trust between government and residents in the renewable energy transition.**

Mahalo,

Sierra Club, O'ahu Group  
Executive Committee