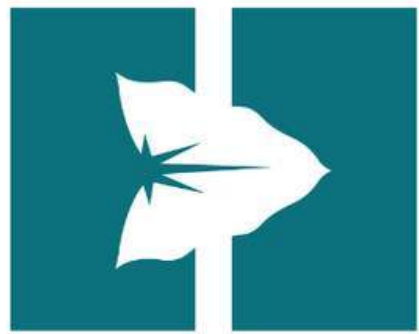


MOLOKAI COASTAL HOMESTEAD COMMUNITY RESILIENCE PLAN



DHHL

Sust'āinable Molokai

G70

Beneficiary Meeting #2

Problems & Opportunities

June 20, 2024



AGENDA:



- Aloha & Pule
- (15 min.): Recap of Introduction of Project slides

From Workshop #1- May 13, 2024

- (1 hr 45 min.): Ahupua'a Ha'awina:

Write down your thoughts, mo'olelo & and draw/mark on your Ahupua'a maps:

(1 hour)-

- a. **Pilikia**/Hihia/Hazard/Problem
- b. **Manawa**/Opportunities/Possibilities
- c. **Waiwai**/Benefits/Strengths/

i. (45 min.) Hui/Kākou: All Ahupua'a talk-story

ii. Kalama'ula, Kapa'akea, Kamiloloa One Ali'i

- (5 min): **Mahalo & Pau**

EXAMPLES OF RESILIENCE DEFINITIONS OR CONCEPTS

FEMA: **RESILIENCE**

***Resilience** is the ability of communities to **prepare** and **plan** for, **absorb, recover** from and more successfully **adapt** to adverse events*


HiEMA:

Lead and support Statewide efforts to **prepare for, mitigate against, respond** to, and **recover** from emergencies and disasters.

MEMA:

HAZMIT:

Note: This will be using this as an example



WHAT DOES
RESILIENCE
MEAN TO YOU?

RESILIENCE

the capacity to withstand or to recover quickly from difficulties; toughness.

SURVIVAL Kūpa'a
ADAPT GRIT RESILIENCE
HO'OMAU HOLU PREVENTION
GO GETTUM

FEMA: *The Community Resilience Framework Example*



WHOLE COMMUNITY RESILIENCE EXAMPLE



RESILIENT COMMUNITIES FRAMEWORK EXAMPLE



Community resilience requires building neighbor to neighbor reliance and organizational connection

RESILIENT COMMUNITIES FRAMEWORK EXAMPLE



COMMUNITY RESILIENCE SYSTEMS EXAMPLE



MOLOKAI SM-SEMP (2018 to 2022)

- Community-based Shoreline Erosion Management Plan
- Identify effective management strategies
- Educate community on causes & appropriate management responses



RELATED PLANS

Molokai DHHL Plans & Assessments

- Molokai Island Plan (2005)
- Molokai Regional Plan (2019)
- So. Molokai Shoreline Erosion Management Plan (2022)
- Malama Cultural Park Special Area Plan (2023)
- DHHL Cesspool Assessment (2023)
- DHHL South Molokai Drainage Study

Other Molokai Plans & Initiatives

- Molokai Water Use & Development Plan (CoM-Update underway)
 - Ho'olehua Water System & MIS included
- Molokai Clean Energy Resiliency Action Plan (MKK Clean Energy Hui)
 - DHHL Sites, identified
- Molokai Wetland Partnership: Various Coastal Wetland Prioritization & Restoration Projects (ongoing)-Ohi'apilo Restoration

County of Maui Plans (For Reference Only)

- COM Wastewater Infrastructure Inundation Study-MKK: KWRF (2021)
- Beach Parks Vulnerability and Adaptation Study-MKK sites (2021)
- COM Climate Action & Resiliency Plan (CARP) (2023)
- Molokai Climate Change and Sea-Level Rise Adaptation and Resiliency Plan (CCSLAR) (2024)
 - DHHL Sites & Overlap & Identified- Kalama'ula Landfill & Kapa'akea Cemetery
- Hazard Mitigation Plan Update (2020)
 - Implements FEMA (Pg 111-112: Vulnerability & Planning Areas)

FUNDING

This project is funded through the National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund (NCRF).



This stage funds a...**Resiliency Plan with nature-based solutions that provide Community Resilience and Fish and Wildlife benefits.**



On completion of the MCH-CRP, DHHL could apply for more funding for future phases.



OUR TEAM



Nancy
McPherson

DHHL
Climate Change
and Resilience
Project Planner



Barbara Natale
Cody Winchester
Kawika McKeague

G70
Primary Project
Consultant &
Plan Writer



Katy Mokuau
Heather Place

Community
Outreach
Consultant

Coastal Planners,
LLC

Thorne Abbott

Technical
Advisor

What is your role in MCH-CRP?



Nancy
McPherson

DHHL
Climate Change
and Resilience
Project Planner



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Cody Winchester
Kawika McKeague

G70
Primary Project Consultant & Plan
Writer

What is your role in MCH-CRP?



Katy Mokuau
Heather Place

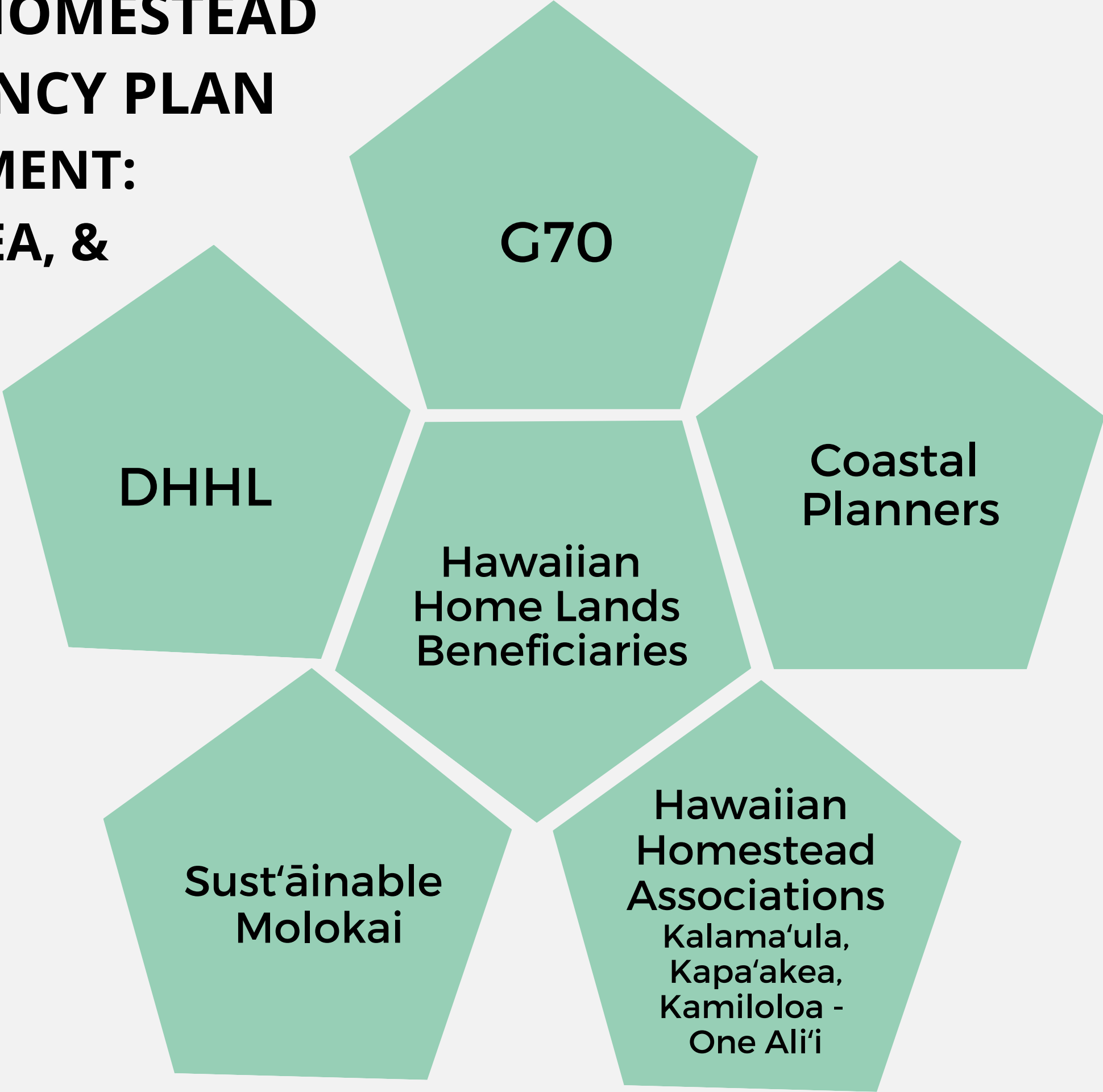
Community
Outreach
Consultant

Coastal Planners,
LLC

Thorne Abbott

Technical
Advisor

**MOLOKAI COASTAL HOMESTEAD
COMMUNITY RESILIENCY PLAN
BENEFICIARY ENGAGEMENT:
KALAMA'ULA, KAPA'AKEA, &
KAMILOLOA - ONE ALI'I**





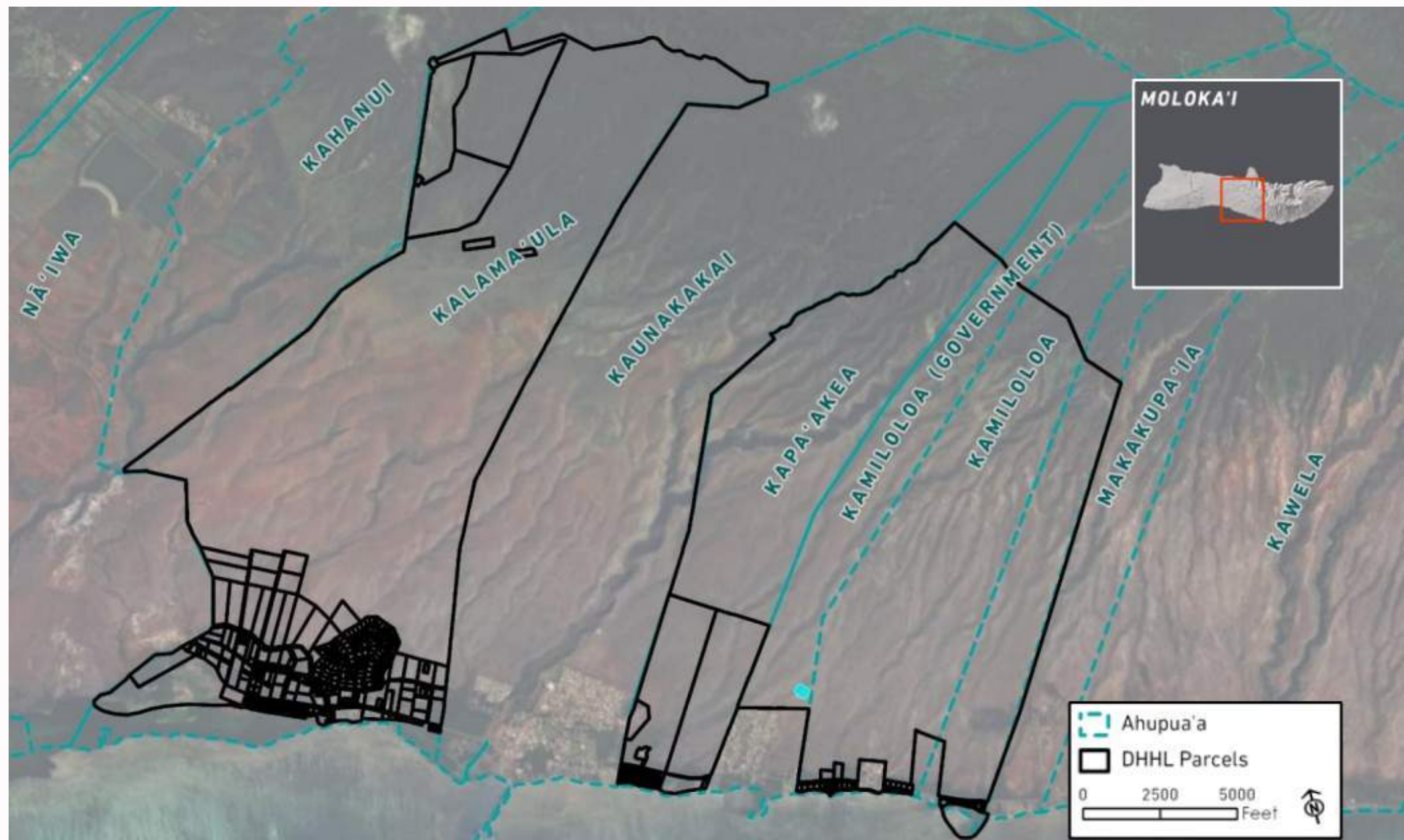
WHAT IS THE MOLOKAI COASTAL HOMESTEAD COMMUNITY RESILIENCY PLAN?

This project will produce a Molokai Coastal Homestead Community Resilience Plan for the DHHL Homestead communities of Kalama'ula, Kapa'akea, & Kamiloloa-One Ali'i

A community resilience plan...

WHAT AREA WILL THIS PLAN FOCUS ON?

From **MAUKA TO MAKAI!**
Ahupua'a of Kalama'ula, Kapa'akea,
Kamiloloa and Makakupa'ia (One Ali'i)



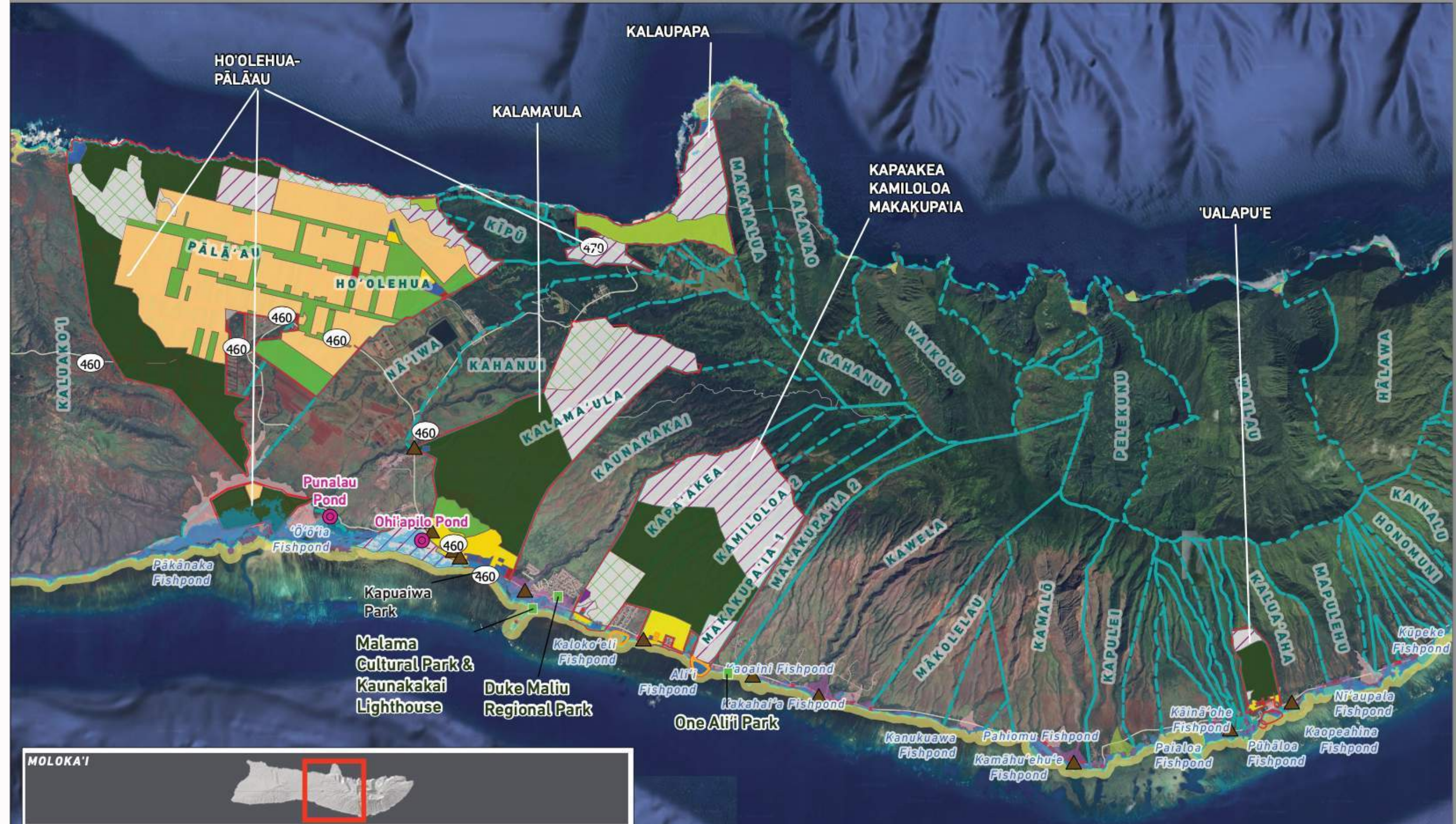
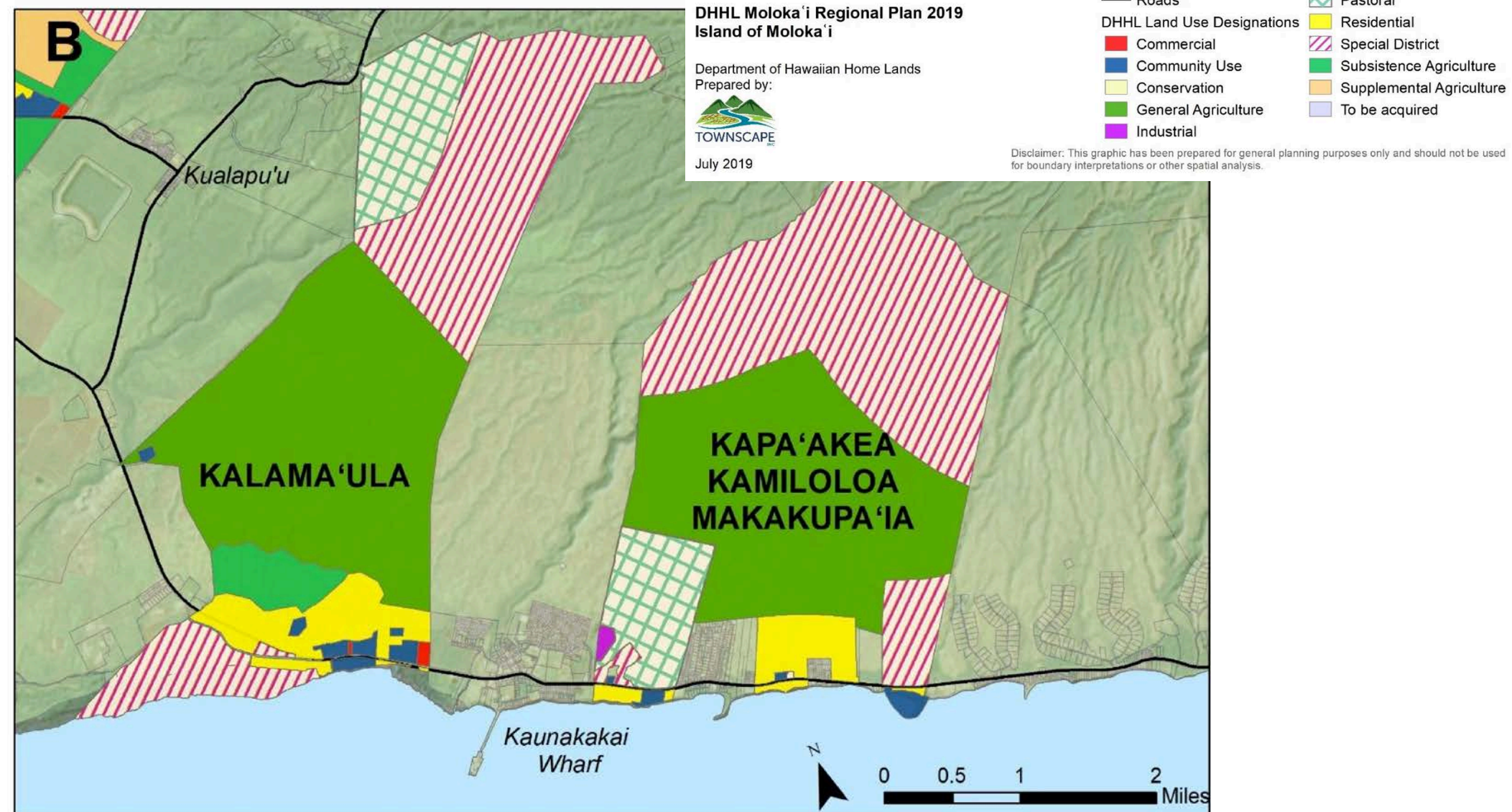
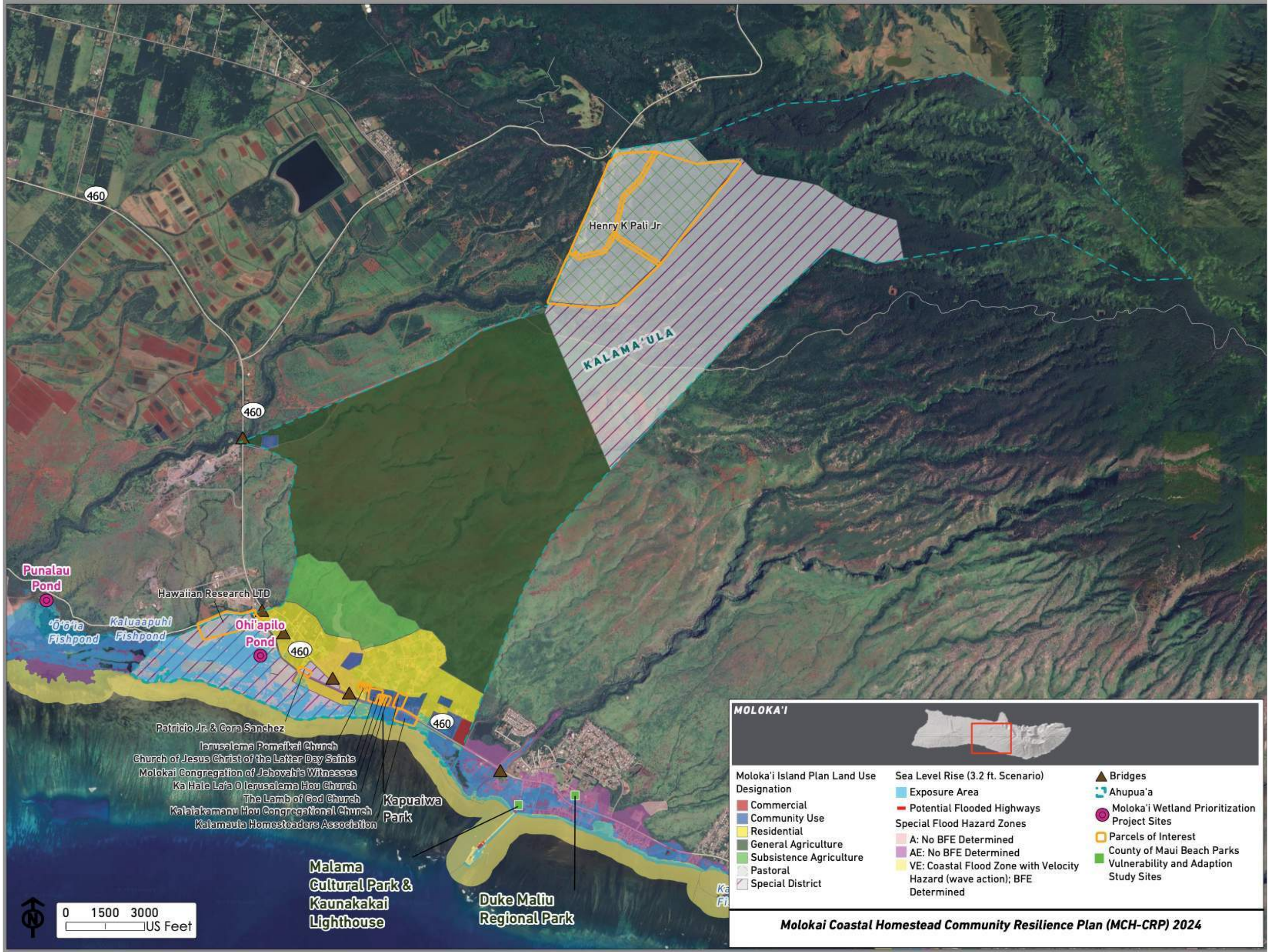



Figure 7. Moloka'i Island Plan Land Use Designations (continued)





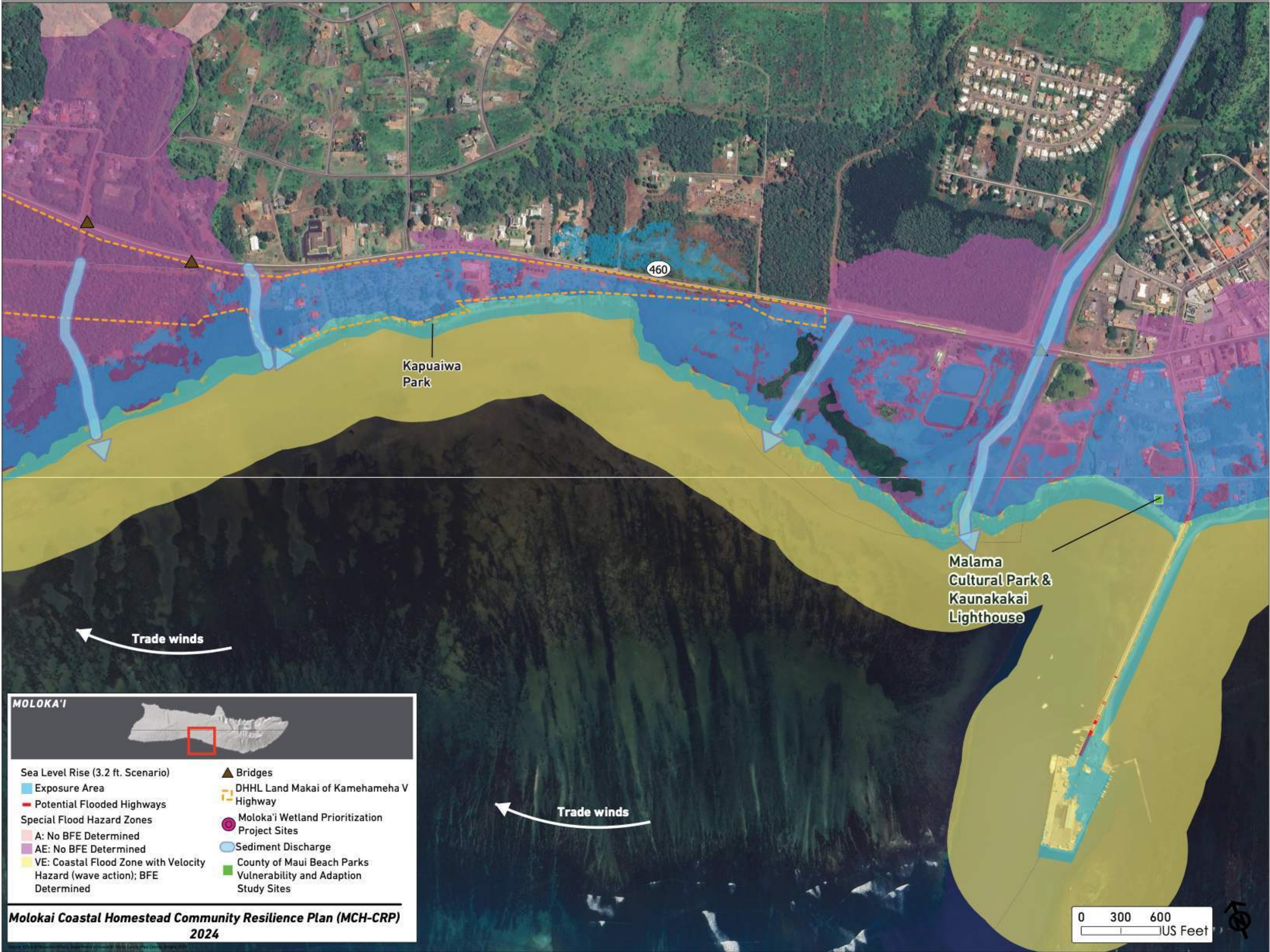
KALAMA'ULA



MOLOKA'I

Moloka'i Island Plan Land Use Designation <ul style="list-style-type: none">CommercialCommunity UseResidentialGeneral AgricultureSubsistence AgriculturePastoralSpecial District	Sea Level Rise (3.2 ft. Scenario) <ul style="list-style-type: none">Exposure AreaPotential Flooded Highways Special Flood Hazard Zones <ul style="list-style-type: none">A: No BFE DeterminedAE: No BFE DeterminedVE: Coastal Flood Zone with Velocity Hazard (wave action); BFE Determined	<ul style="list-style-type: none">BridgesAhupua'aMoloka'i Wetland Prioritization Project SitesParcels of InterestCounty of Maui Beach ParksVulnerability and Adaption Study Sites
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Molokai Coastal Homestead Community Resilience Plan (MCH-CRP) 2024



MOLOKA'I

Sea Level Rise (3.2 ft. Scenario)

- Exposure Area
- Potential Flooded Highways

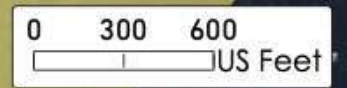
Special Flood Hazard Zones

- A: No BFE Determined
- AE: No BFE Determined
- VE: Coastal Flood Zone with Velocity Hazard (wave action); BFE Determined

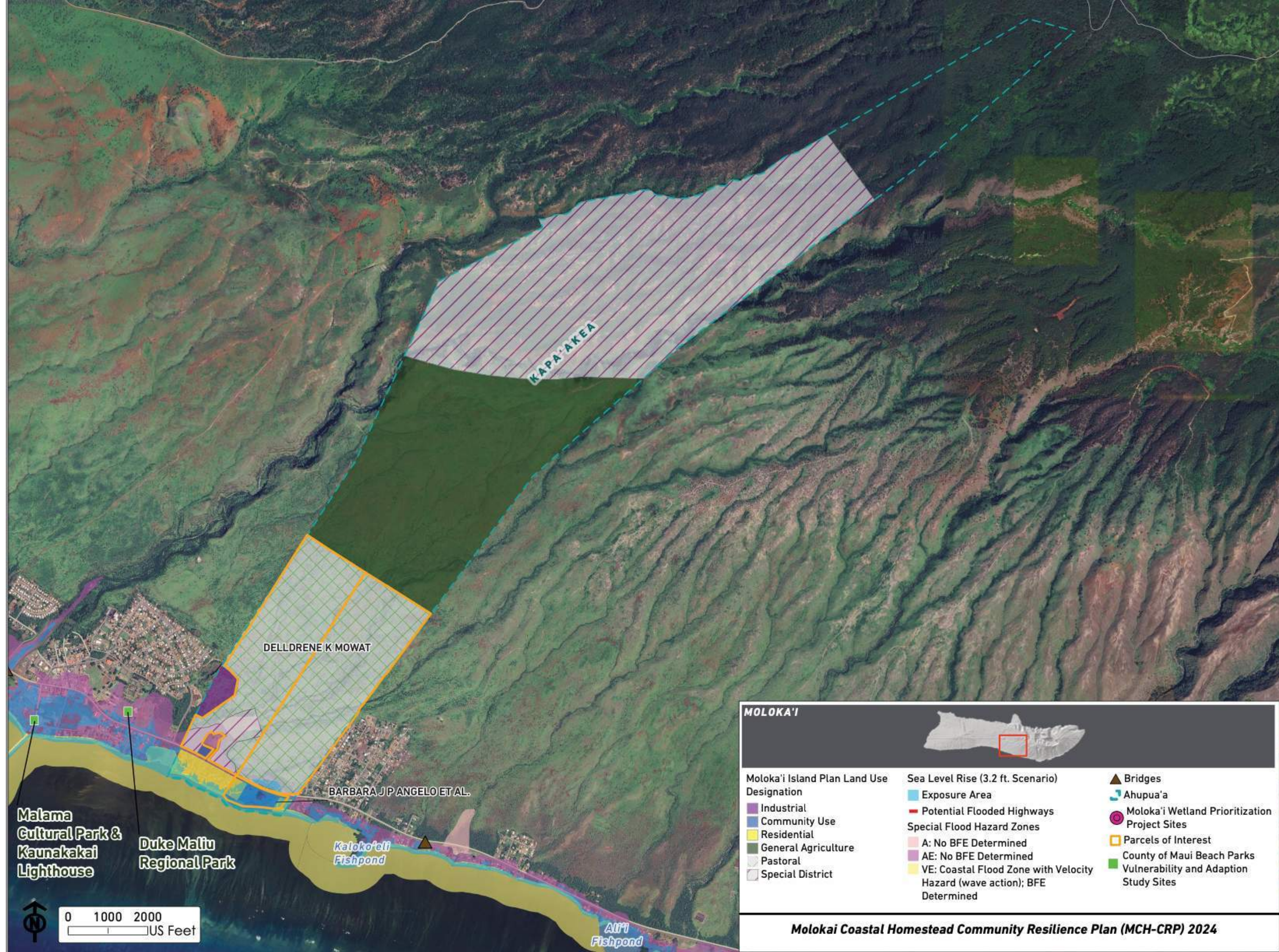
Legend:

- ▲ Bridges
- DHHL Land Makai of Kamehameha V Highway
- Moloka'i Wetland Prioritization Project Sites
- Sediment Discharge
- County of Maui Beach Parks Vulnerability and Adaption Study Sites

Molokai Coastal Homestead Community Resilience Plan (MCH-CRP) 2024



KAPA'AKEA





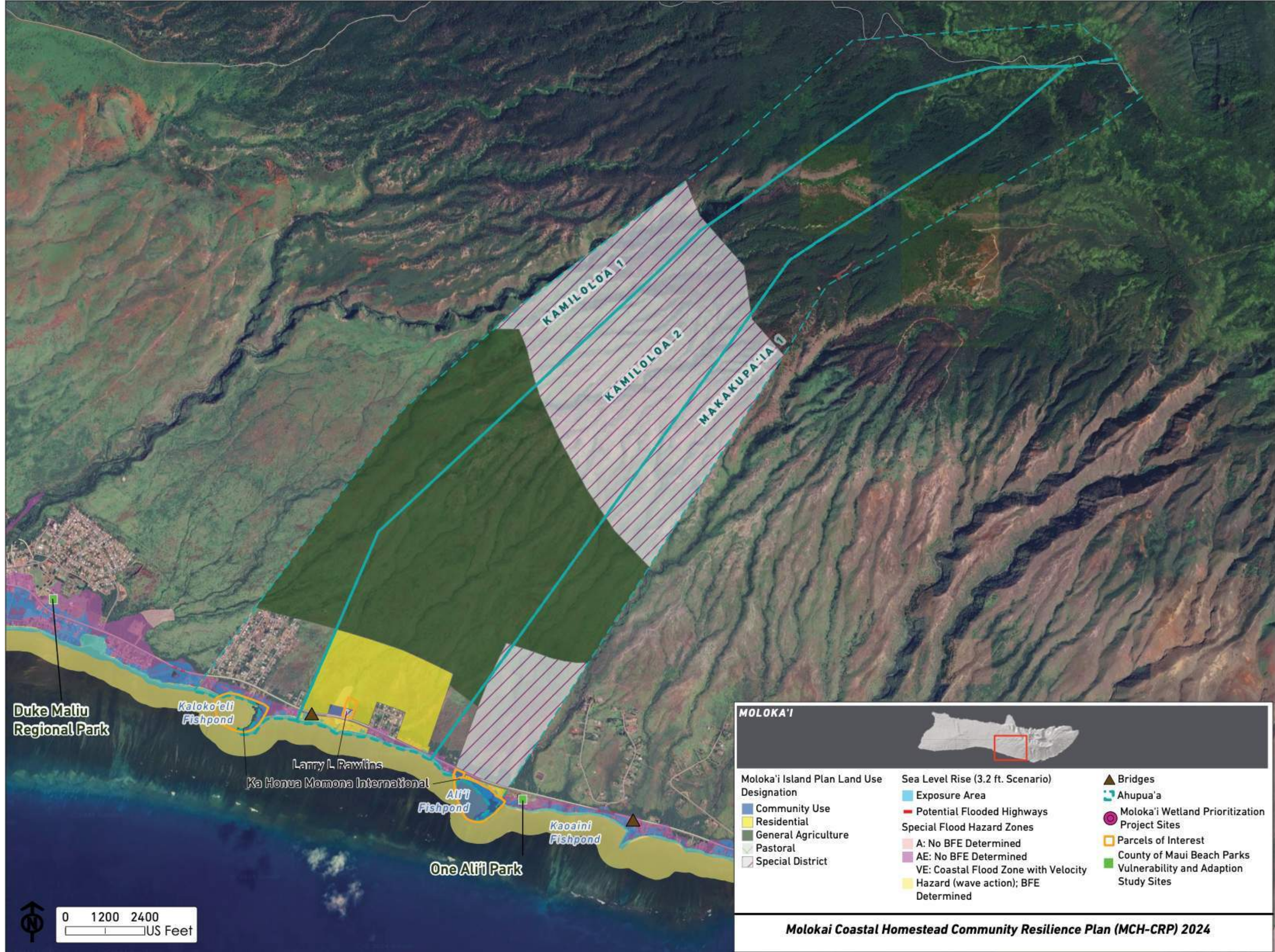
MOLOKA'I

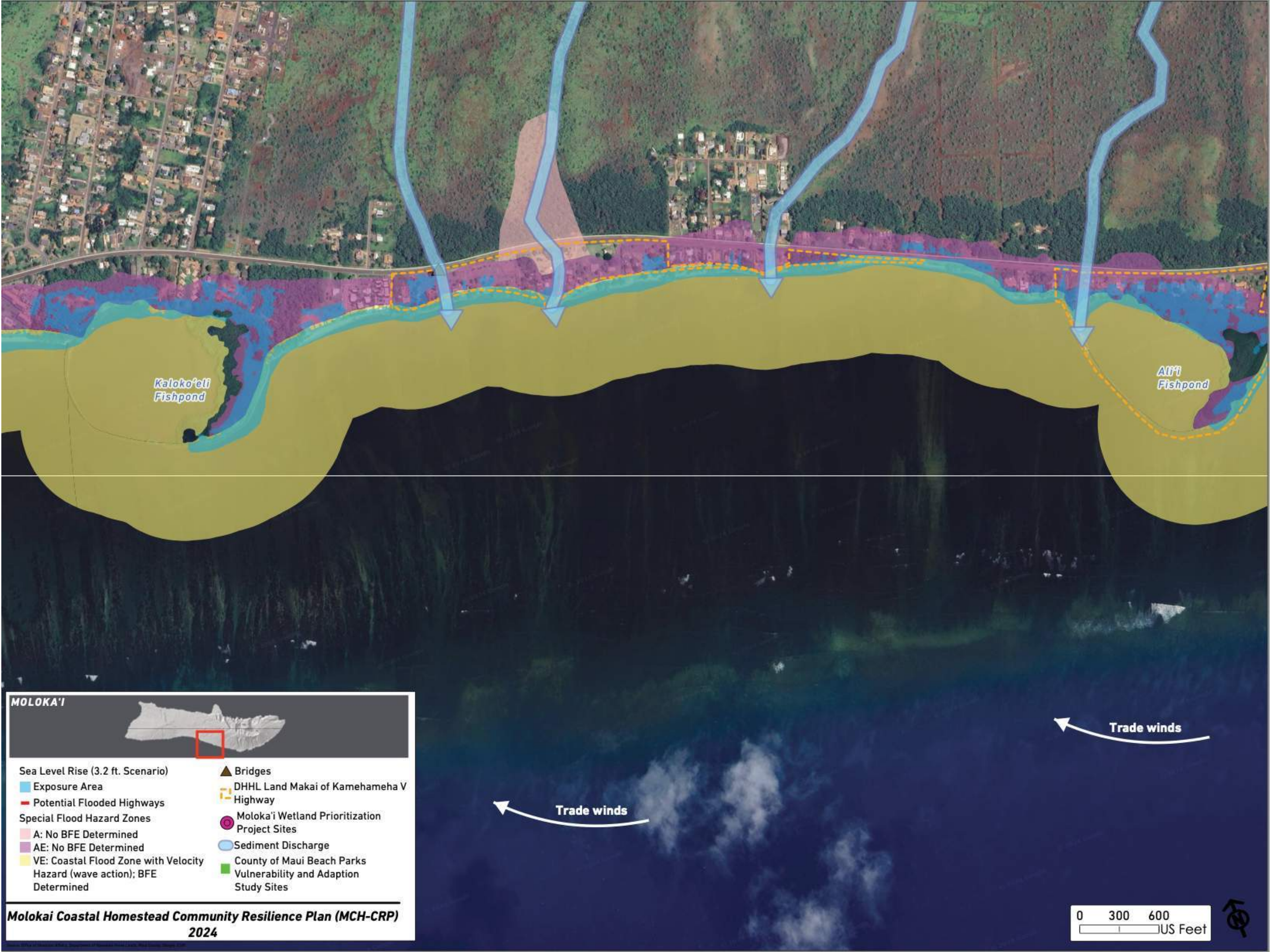
<p>Sea Level Rise (3.2 ft. Scenario)</p> <p>Exposure Area</p> <p>Potential Flooded Highways</p> <p>Special Flood Hazard Zones</p> <p>A: No BFE Determined</p> <p>AE: No BFE Determined</p> <p>VE: Coastal Flood Zone with Velocity Hazard (wave action); BFE Determined</p>	<p>Bridges</p> <p>DHHL Land Makai of Kamehameha V Highway</p> <p>Moloka'i Wetland Prioritization Project Sites</p> <p>Sediment Discharge</p> <p>County of Maui Beach Parks</p> <p>Vulnerability and Adaption Study Sites</p>
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Molokai Coastal Homestead Community Resilience Plan (MCH-CRP) 2024




KAMILOLOA ONE ALI'I



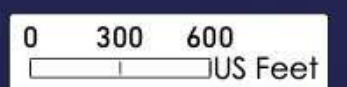


MOLOKA'I

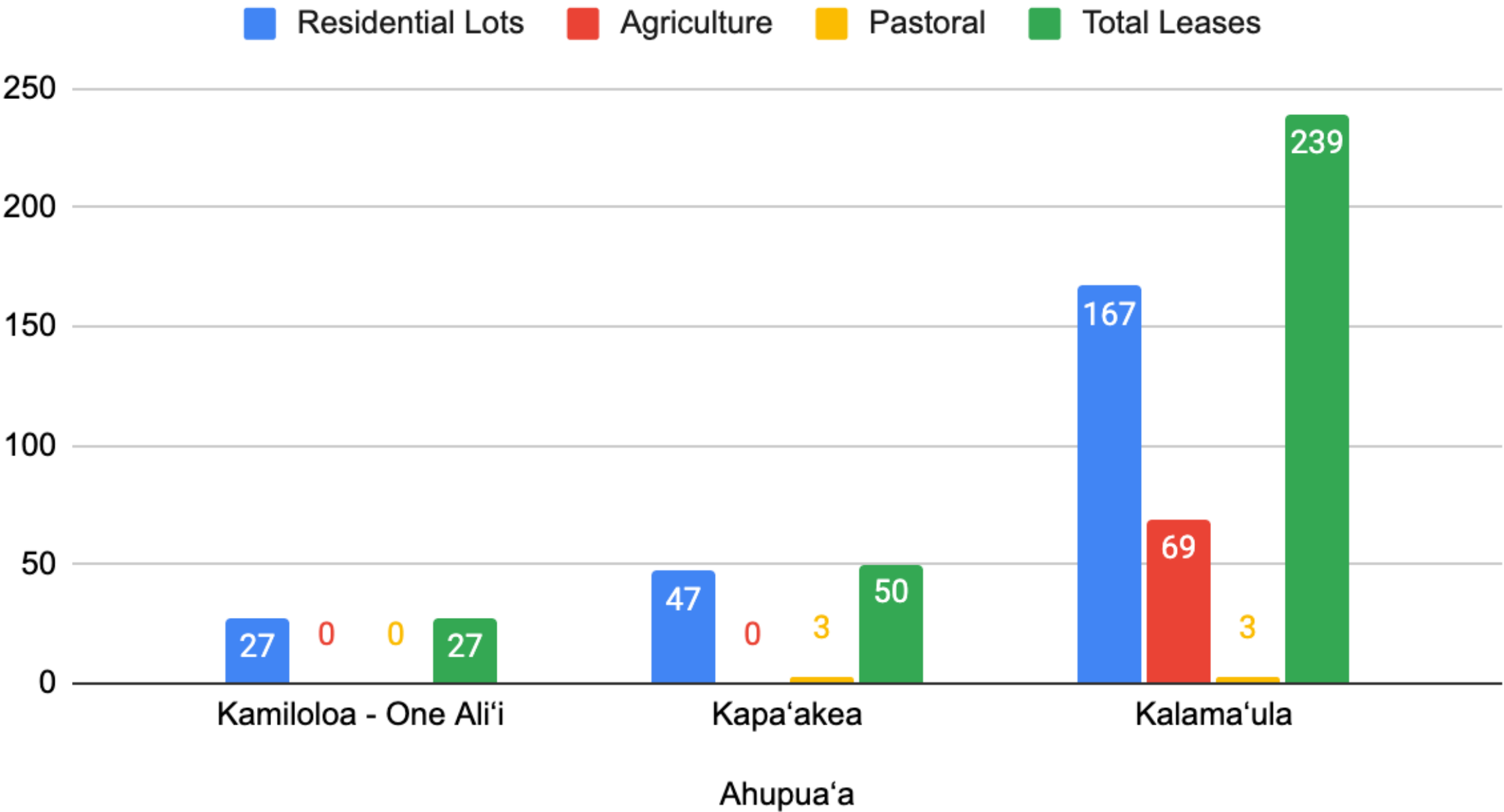


Sea Level Rise (3.2 ft. Scenario)	▲ Bridges
Exposure Area	DHHL Land Makai of Kamehameha V Highway
Potential Flooded Highways	Moloka'i Wetland Prioritization Project Sites
Special Flood Hazard Zones	Sediment Discharge
A: No BFE Determined	County of Maui Beach Parks
AE: No BFE Determined	Vulnerability and Adaption Study Sites
VE: Coastal Flood Zone with Velocity Hazard (wave action); BFE Determined	

Molokai Coastal Homestead Community Resilience Plan (MCH-CRP) 2024



Residential Lots, Agriculture, Pastoral and Total Leases



Kamiloloa - One Ali'i Homestead:

27 Residential Lots
75 Residents
=27 Total Leases

Kapa'akea Homestead:

47 Residential Lots
3 Pastoral Lots
166 Residents
=50 Total Leases

Kalama'ula Homestead:

160 Residential Lots
69 Agriculture Lots
3 Pastoral Lots
322 Residents
=232 Total Leases



WHAT IS THE PROCESS OF THIS PLAN?

Multiple meetings & workshops will be held with beneficiaries to go over different issues & concerns and identify up to:
5 priority projects per Ahupua'a.





WHAT IS THE PROCESS OF THIS PLAN?

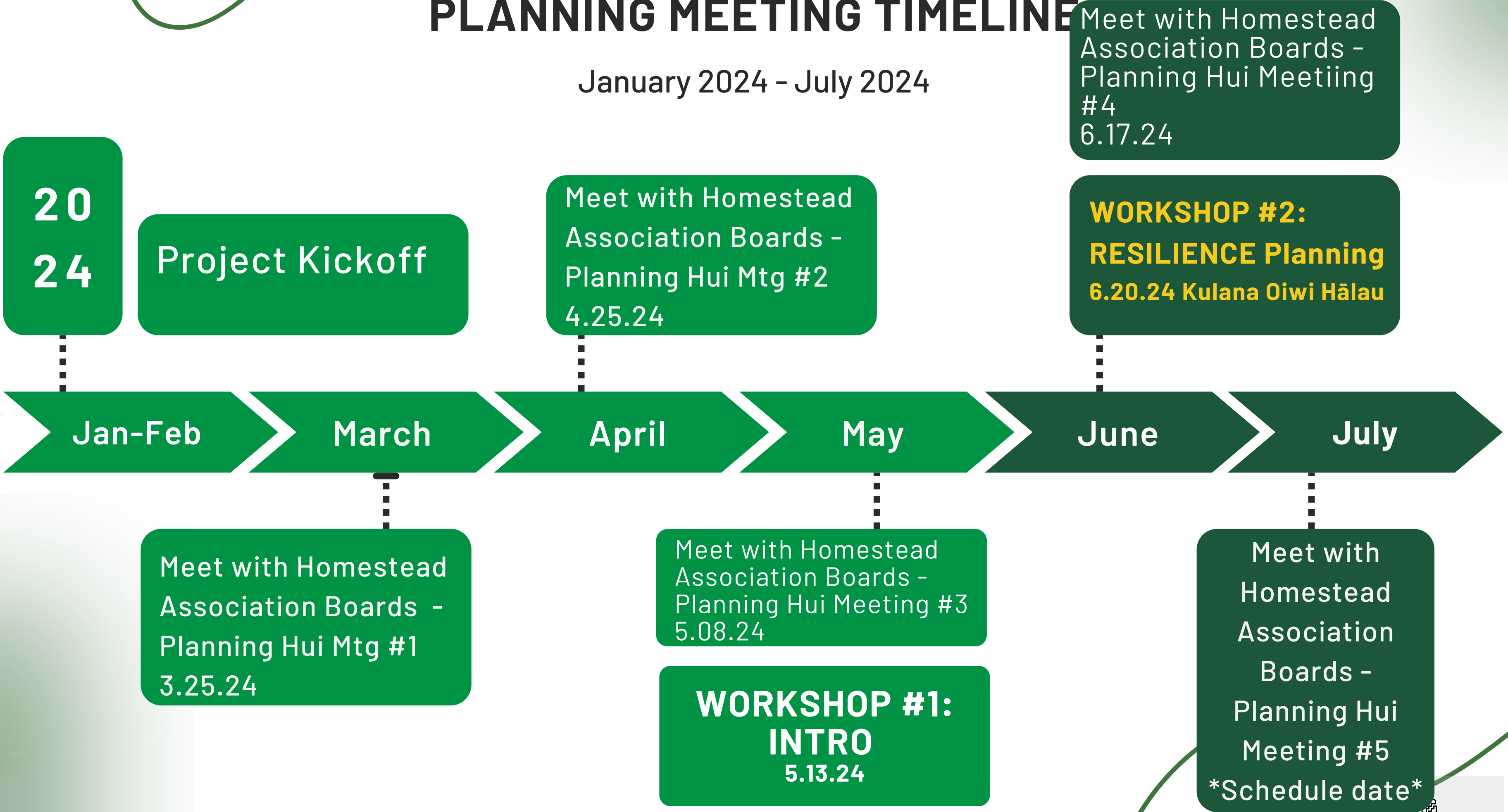
Beneficiary Consultation & Collaboration with:

Native Hawaiian key stakeholders on Hawaiian Homelands, in a process that includes:

- **Planning Hui Meetings:** with Ahupua'a Associations & Reps
- **Workshops:** 3 In-person Beneficiary Workshops
- **Small Group Interviews:** *Up to 6* with knowledgeable stakeholders, such as Kūpuna, 'ōpio, & cultural practitioners
- **Technical Meetings:** 4 with state, county, natural resources agencies, etc.
- **Huaka'i:** Each Ahupua'a: tbd for Mauka & Makai locations

PLANNING MEETING TIMELINE

January 2024 - July 2024



PLANNING TIMELINE

July 2024 - December 2024

WORKSHOP #3

What are the
OPTIONS?

G70 Work on
Preliminary Draft

DHHL Review
Preliminary Draft

FINAL MCH-CRP
PLAN

August

September

October

November

December

Jan-Feb

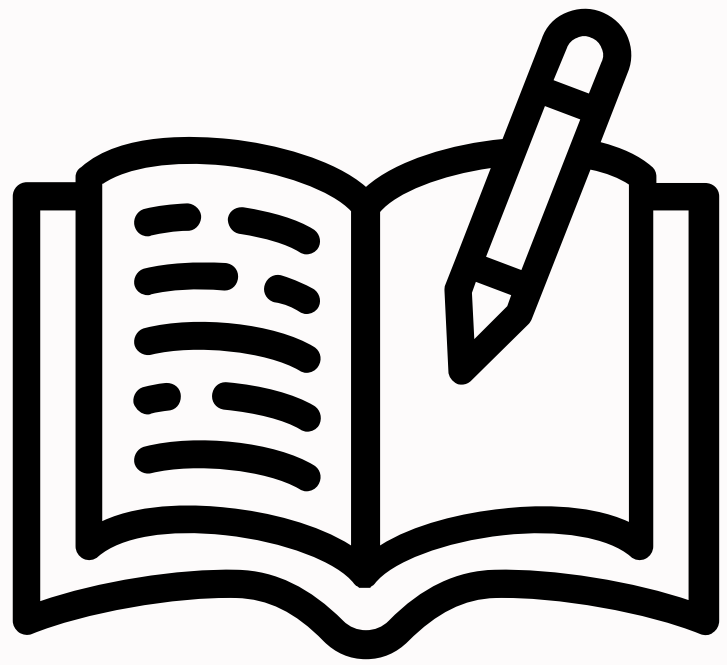
WORKSHOP #4

What can be
DONE?

WORKSHOP #5

Beneficiary Review
Preliminary Draft

20
25



Ahupua'a Ha'awina

In your Ahupua'a groups:

Write down your thoughts & draw/mark on your Ahupua'a maps with the stickers provided & large sheets:

Assign 1-2 people to write.

1. **Pilikia**/Hihia/Hazard/Problem/Danger/Risk/Threat/Issue
2. **Manawa**/Opportunities/Possibilities
3. **Waiwai**/Benefits/Strengths/Value/Advantage/Assets

Present= (45mins total) 15 mins each 'ahupua'a (Pilikia, Manawa, Waiwai). **Choose** (1-2) reps to present on behalf of your Ahupua'a



WHAT DOES
RESILIENCE
MEAN TO YOU?

RESILIENCE

the capacity to withstand or to recover quickly from difficulties; toughness.



RESILIENCE: *HA'AWINA*

WHAT DOES THIS MEAN TO YOU? WHAT COULD IT LOOK LIKE IN THE FUTURE?

WHAT IS THE PILIKIA OR HIHIA?

PROBLEM / HAZARD / RISKS / DANGER / THREAT / ISSUE

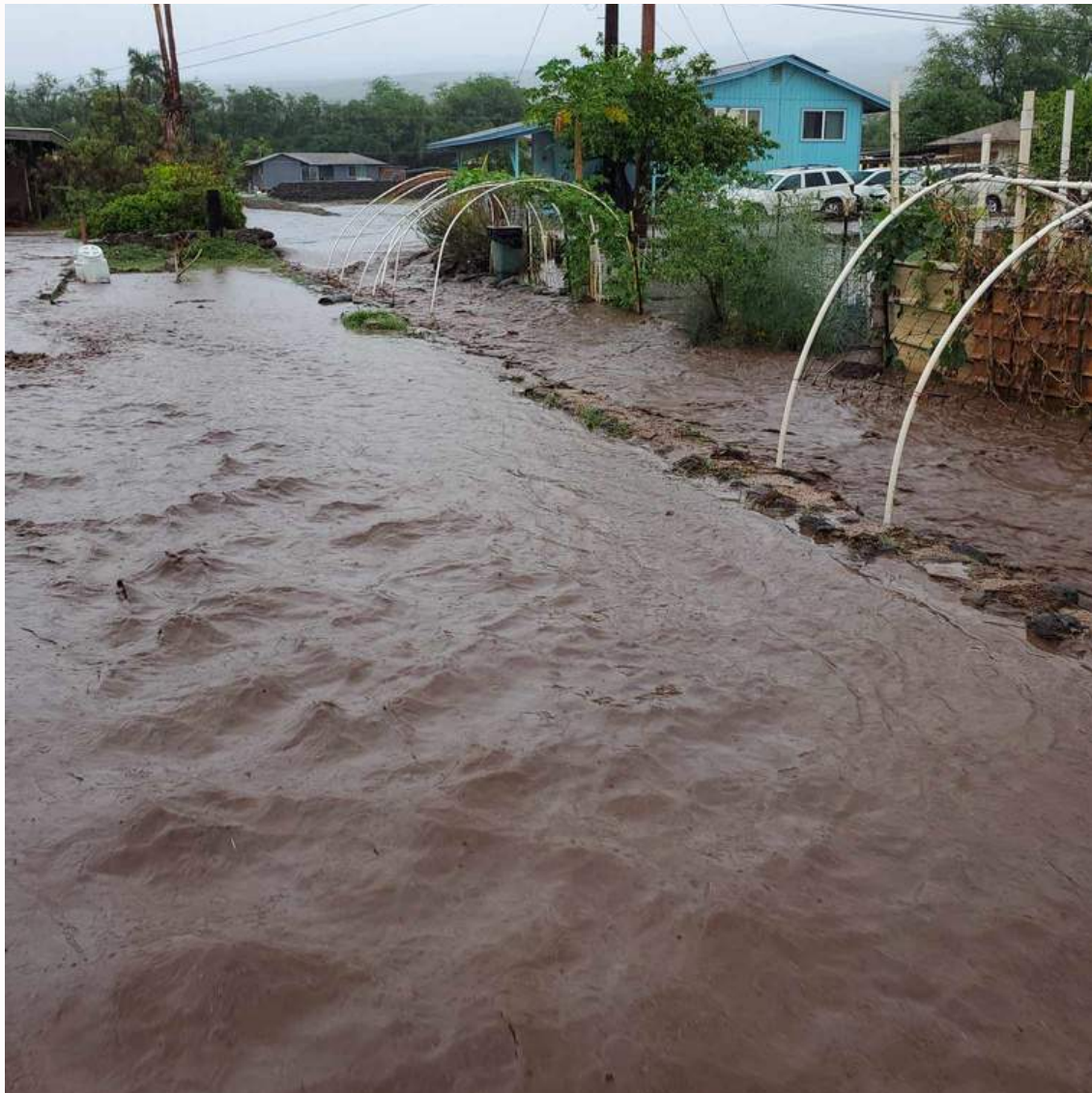
KALAMA'ULA



Wildfire

Policy... What is the policy for control burns and wildfire prevention?

KAPA'AKEA



Flooding

Policy... What is the policy for County/State Officials to clear culverts before a storms
Creating: Emergency Evacuation Plan
Non-Profit creation: for Implementation Funding

KAMILOLOA ONE ALI'I



Shoreline Erosion

WHAT IS THE PILIKIA OR HIHIA? KALAMA'ULA

Invasive Species



Kapuāiwa Grove
(Mites)



Gorilla Ogo



Deer Population



Wildfire



Flooding



Mangrove



Kūlana Oiwi Engineering

WHAT IS THE PILIKIA OR HIHIA?

KAPA'AKEA



Flooding

Policy... What is the policy for County/State Officials to clear culverts before/during/after storms



Shoreline Erosion



Erosion Affecting Marine Life



Non-Profit Organization
Creation



Mauka Restoration

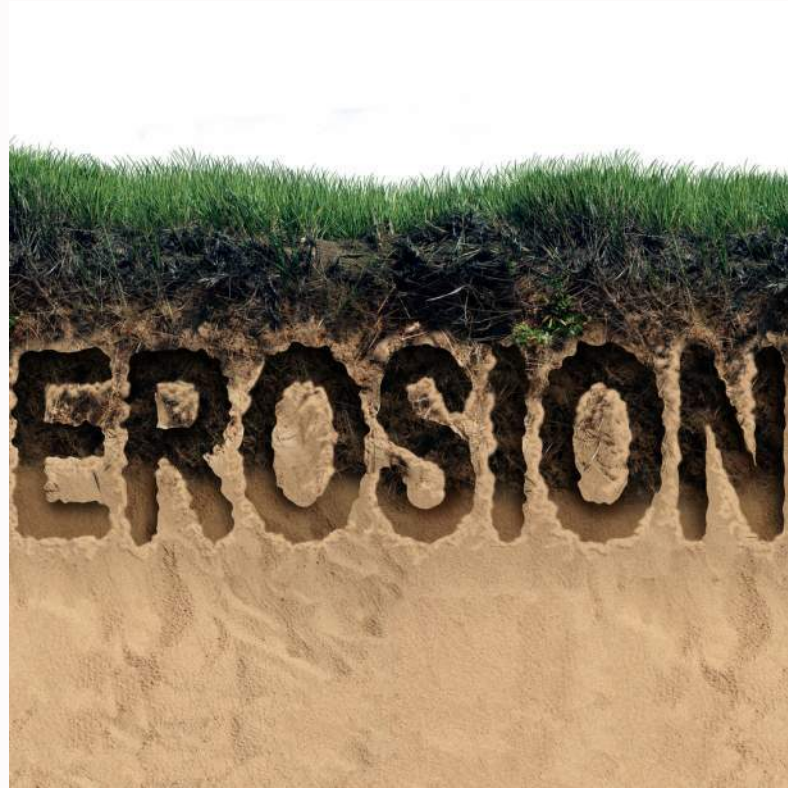
Planning/Policy



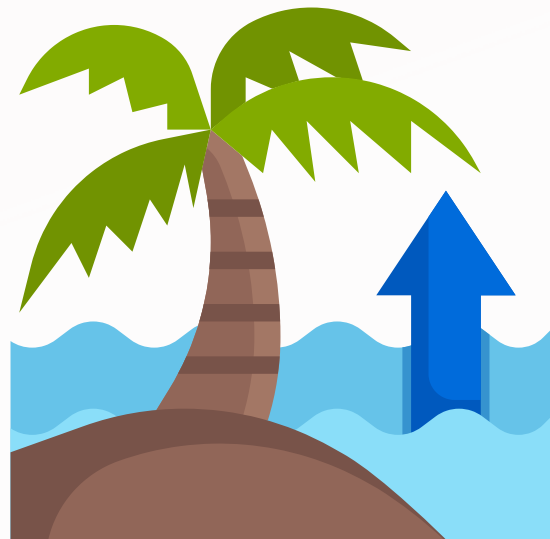
Emergency Planning,
Evacuation Areas, etc.

WHAT IS THE PILIKIA OR HIHIA?

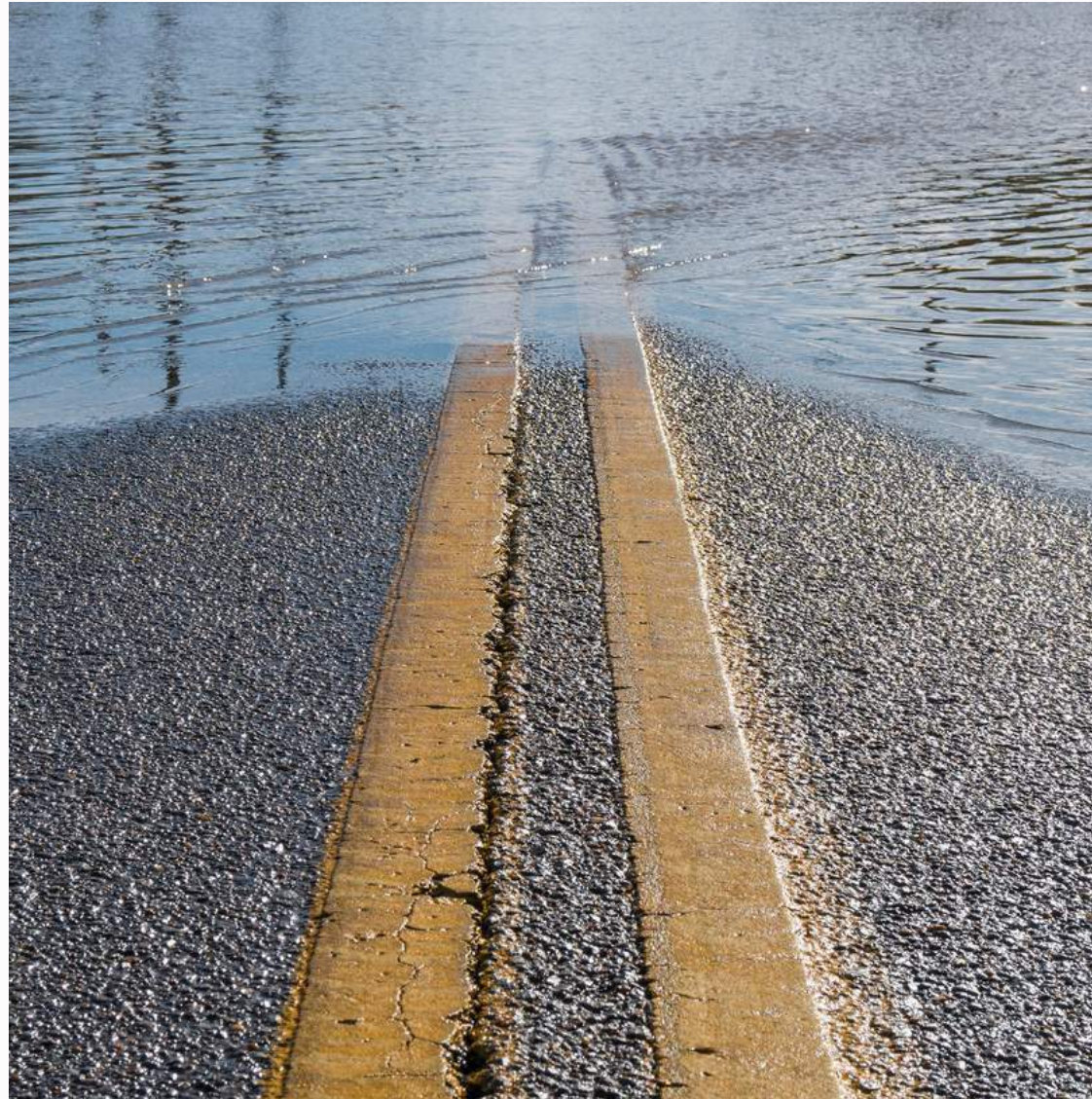
KAMILOLOA ONE ALI'I



Shoreline Erosion



Sea Level Rise



Flooding



Price of Water in area

WHAT IS A PILIKIA OR HIHIA IN YOUR AHUPUA'A?

Circle your Ahupua'a

KALAMA'ULA

KAPA'AKEA

KAMILOLOA ONE ALI'I

PROBLEM/ HAZARD/ RISKS / DANGER / THREAT /
ISSUE

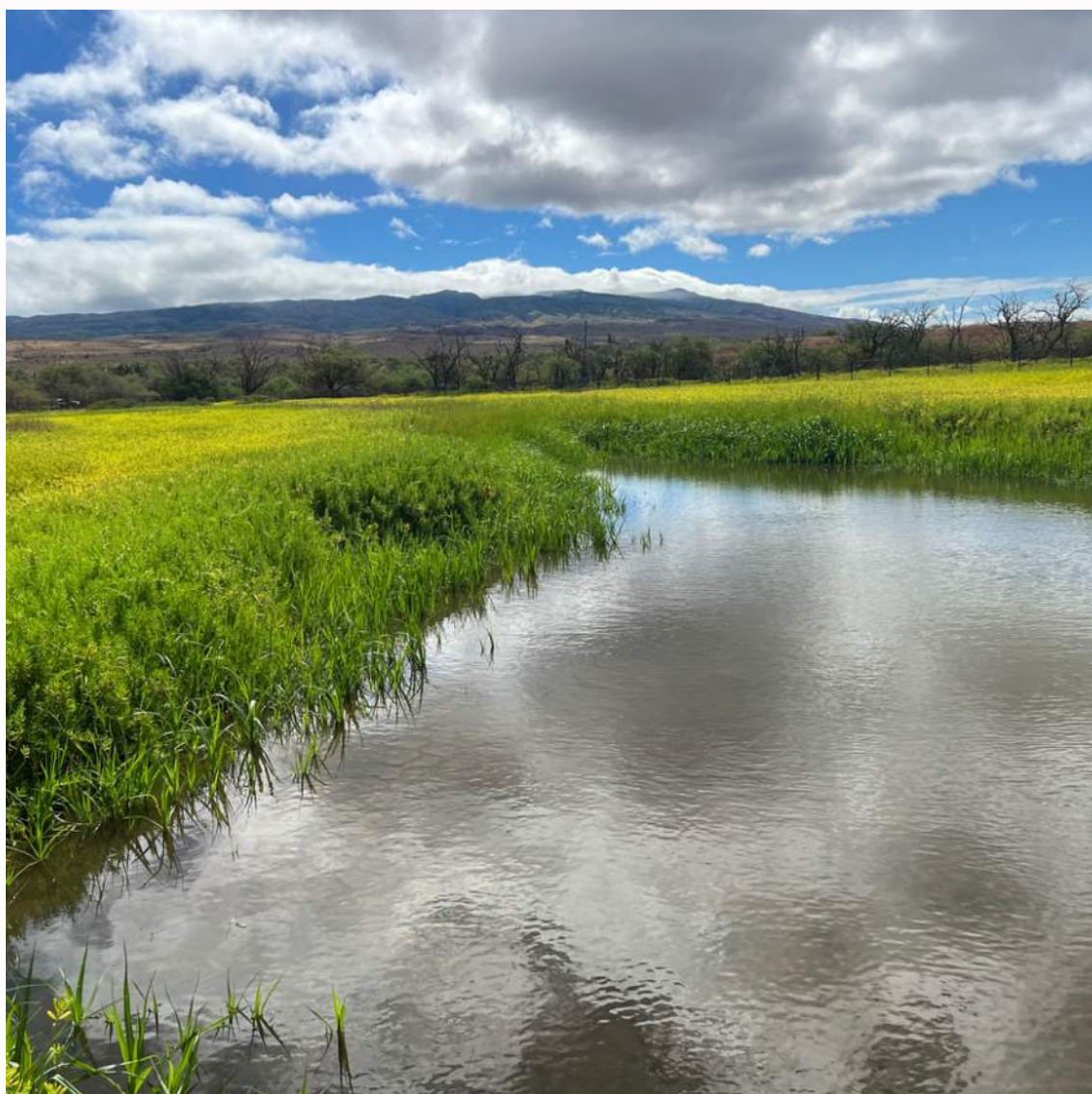
List out problems and hazards for your ahupua'a:



WHAT ARE SOME MANAWA?

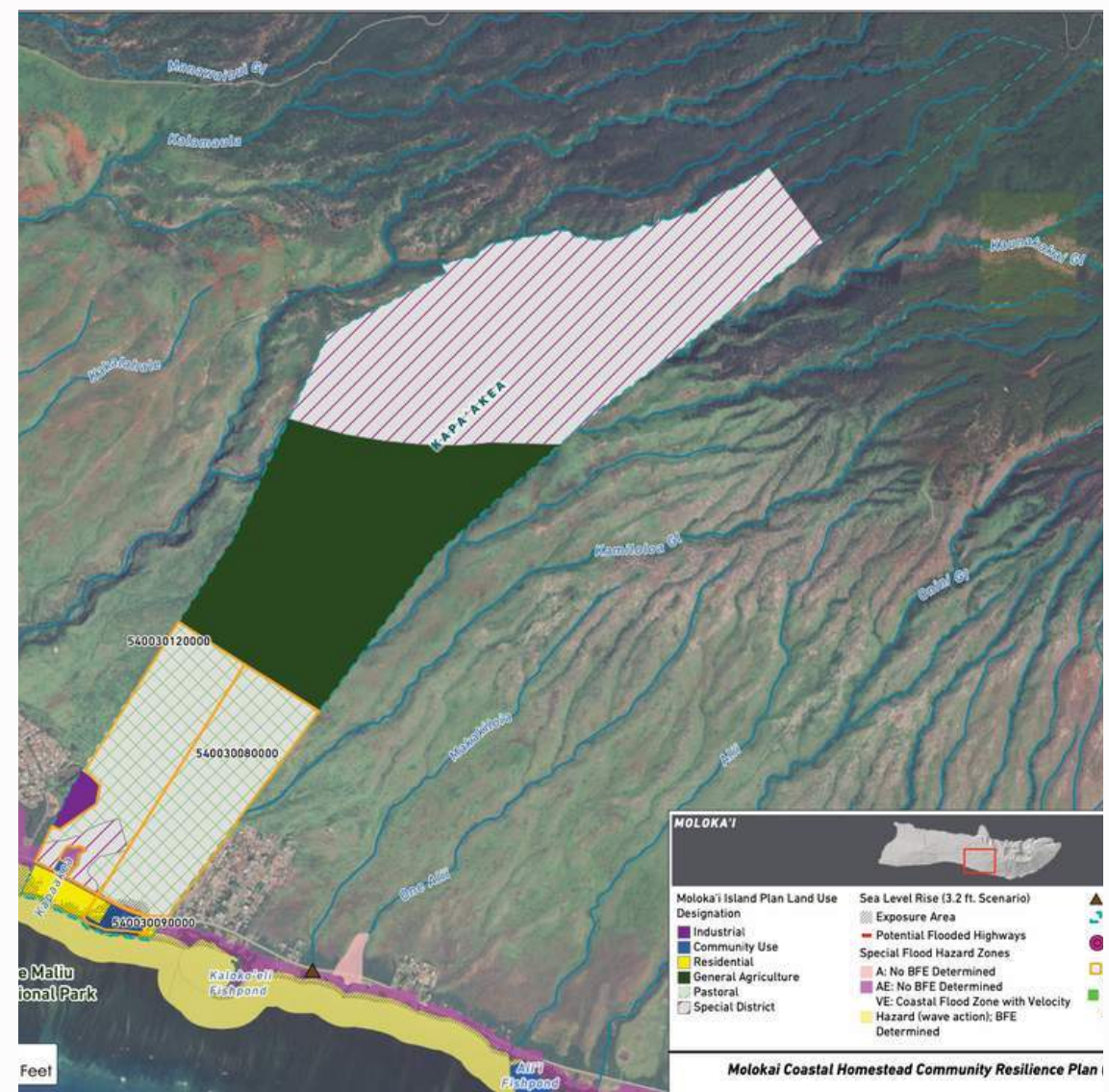
OPPORTUNITIES / POSSIBILITIES

KALAMA'ULA



Ohi'apilo Wetland Restoration

KAPA'AKEA



Mauka Restoration

KAMILOLOA ONE ALI'I



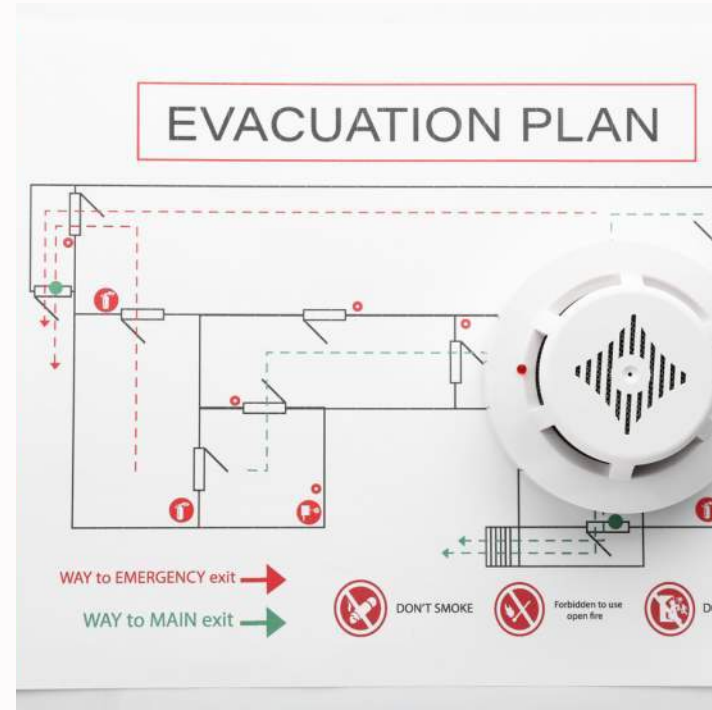
Limu Farming

WHAT ARE SOME MANAWA?

KALAMA'ULA



Plant Native Plants to mitigate flooding and erosion



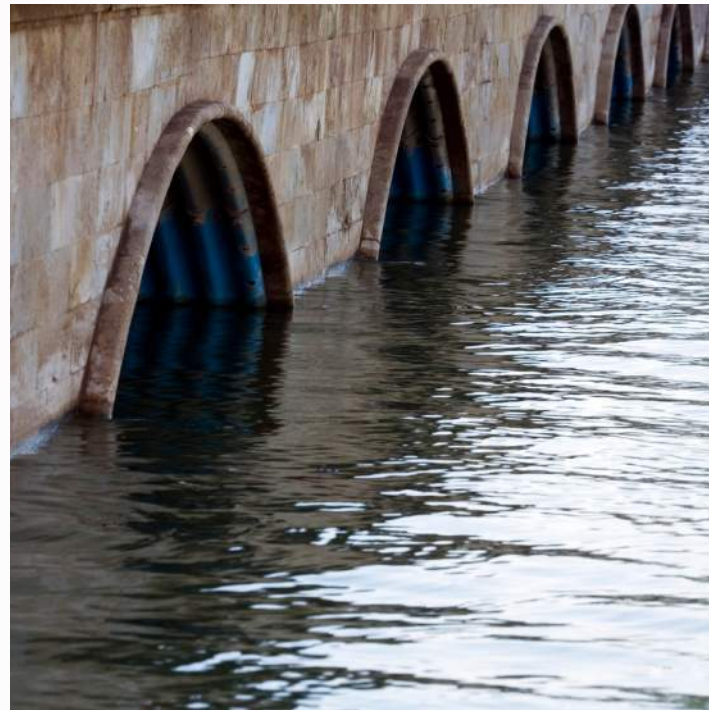
Develop Evacuation Plans & Resilience Hubs



Shoreline Coastal Management to restore wildlife



Maintenance of Kalanianaʻole Hall (education)



Culvert Maintenance



Control Burns at Kapuawai



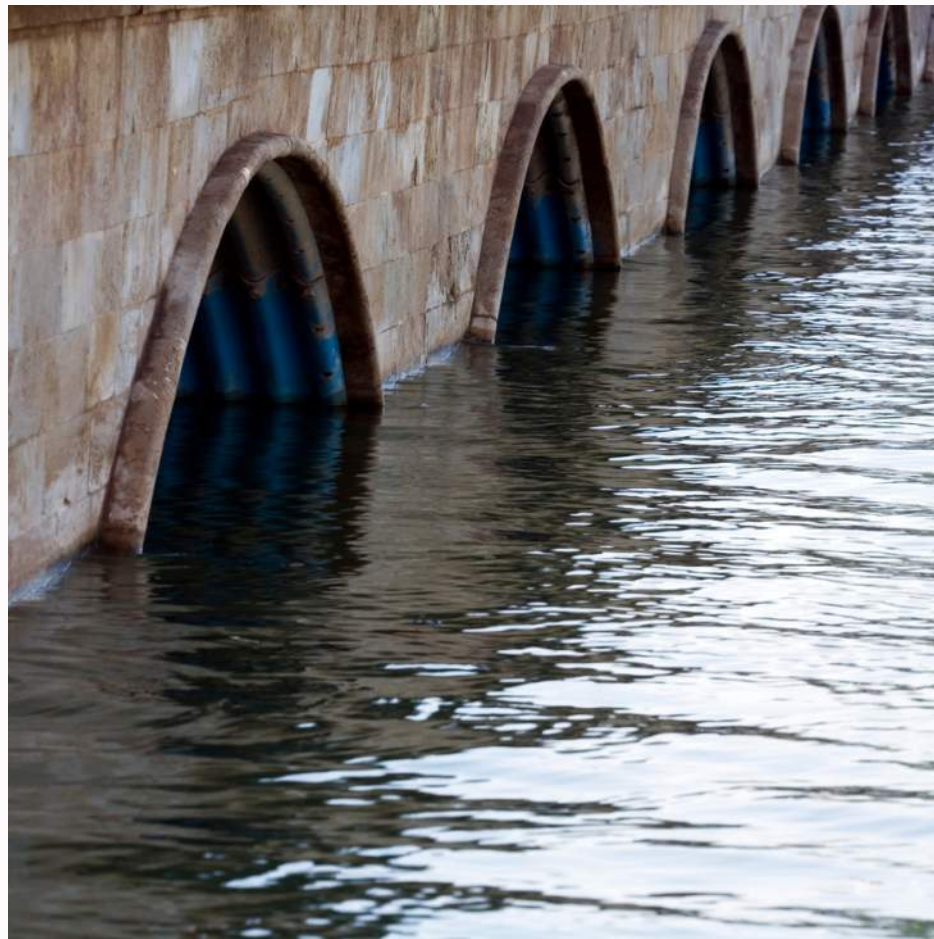
Coconut Planting projects



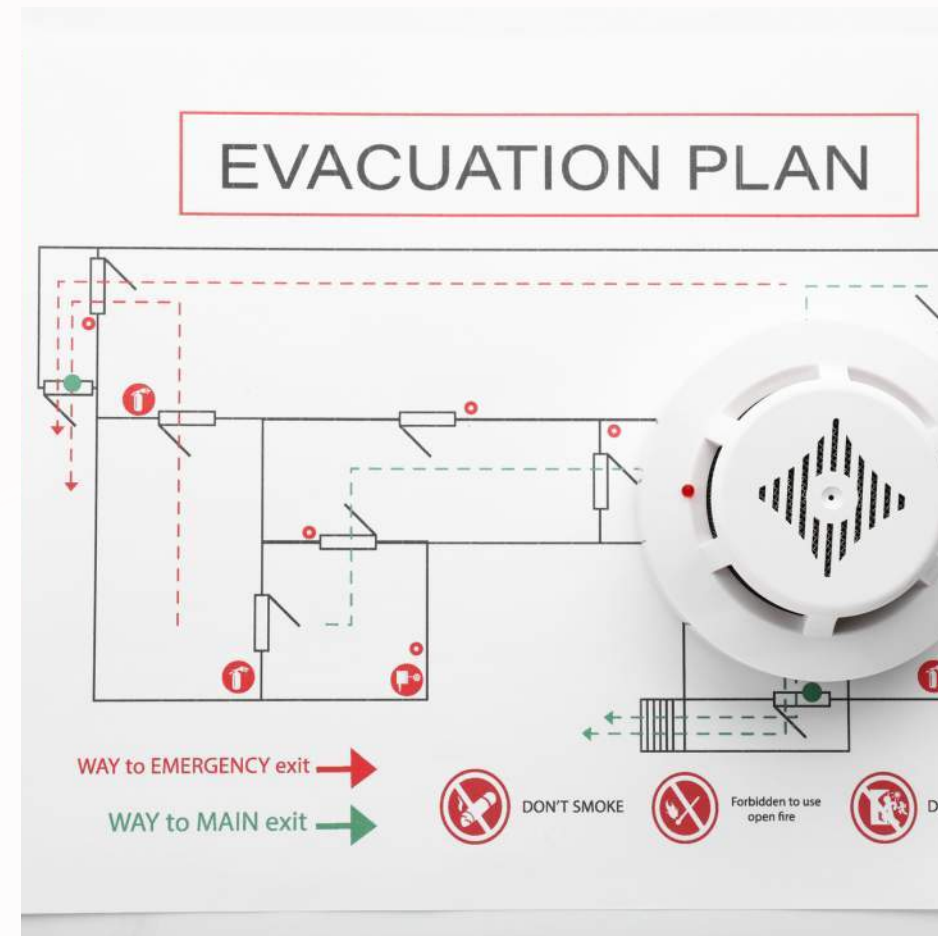
Limu Farming

WHAT ARE SOME MANAWA?

KAPA'AKEA



Keep streams open and maintained



Develop Evacuation Plans & Resilience Hubs



Protection of Kapa'akea Cemetery

WHAT ARE SOME MANAWA?

KAMILOLOA ONE ALI'I



Keep streams open and maintained



Develop Evacuation Plans & Resilience Hubs



Funding:

- Soft Medium Erosion Controls
- NAHASDA Funding for relocation
- Provide low to no interest loans for resiliency measures

- Installation of temp. inshore/nearshore groins/jetties to manage water flow
- Creation of potable and non-potable water tanks programs for residential farm uses

WHAT ARE SOME MANAWA IN YOUR AHUPUA'A?

Circle your Ahupua'a

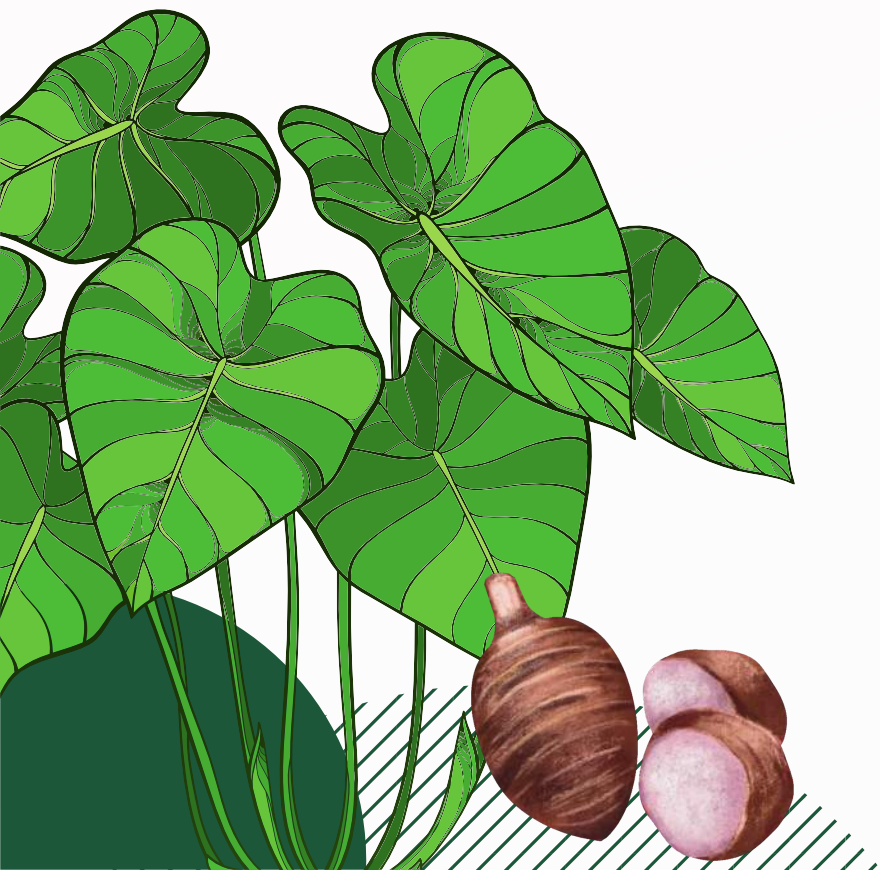
OPPORTUNITIES / OPTIONS / POSSIBILITIES

List out opportunities for your ahupua'a:

KALAMA'ULA

KAPA'AKEA

KAMILOLOA ONE ALI'I



WHAT ARE SOME WAIWAI?

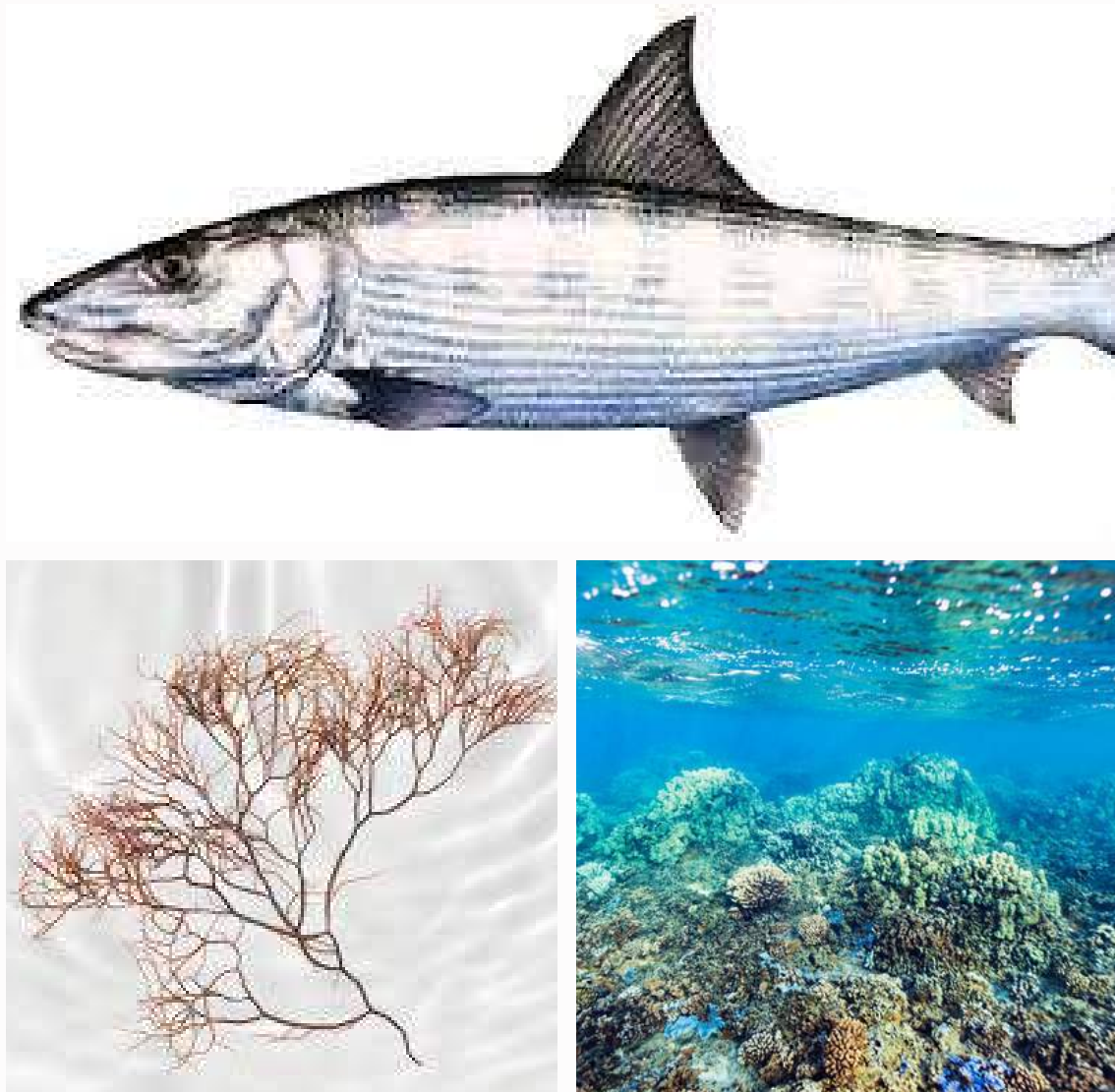
BENEFITS / STRENGTHS / ADVANTAGE / VALUE / ASSETS

KALAMA'ULA



Kapuāiwa Grove/Kiowea Park

KAPA'AKEA



Kahakai: Marine Structure/Life

KAMILOLOA ONE ALI'I



Ali'i Fishpond (Ka Honua Momona)

KALAMA'ULA

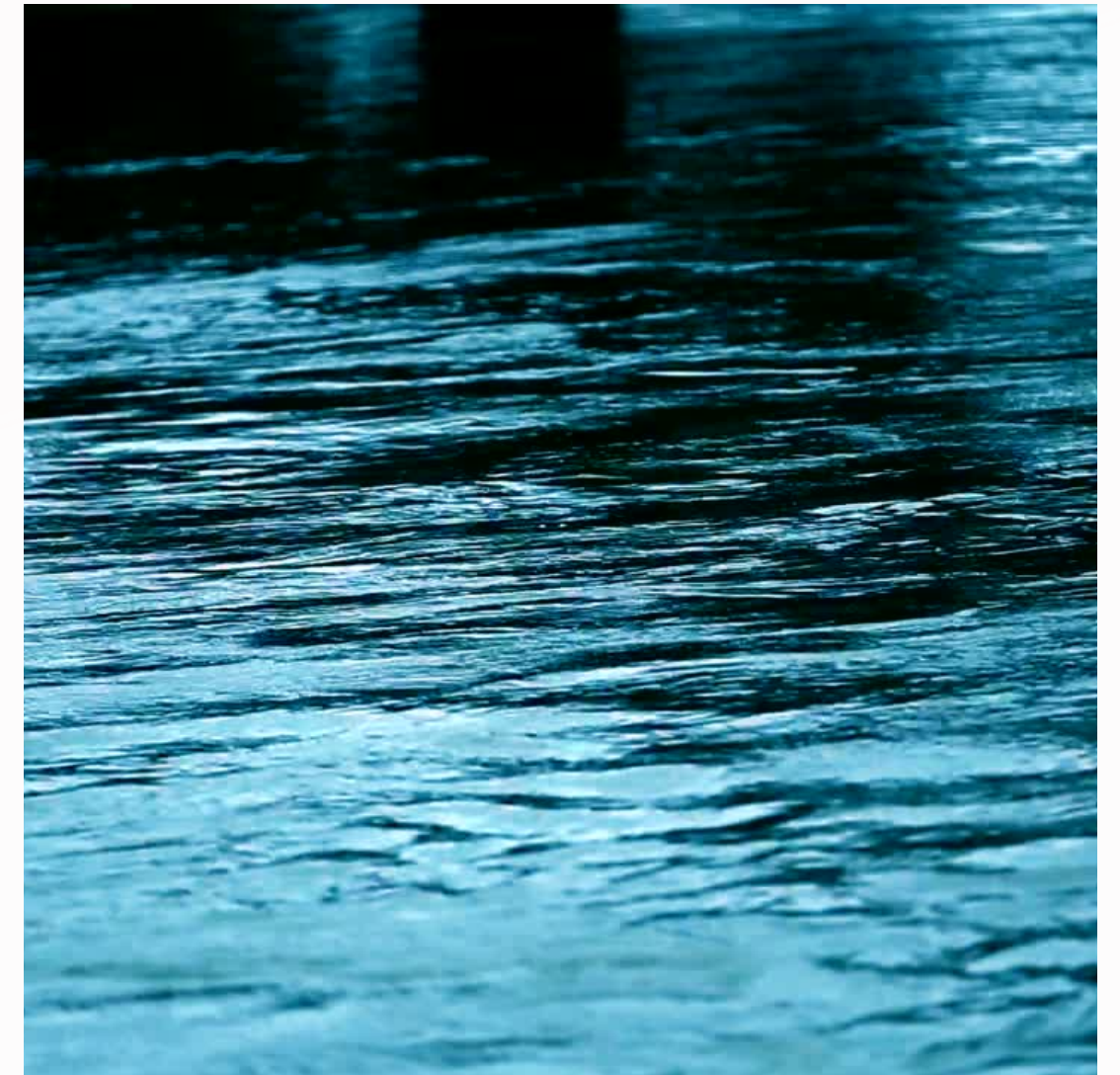
WHAT ARE SOME WAIWAI?



Kapuāiwa Grove IS SACRED



'Ōhi'apilo Wetland




Punawai

- Knowledge, History, Mo'olelo, & being raised in Kalama'ula
- Growing up with their kūpuna and being raised by their elders first hand. They hold the knowledge!
- "OUR PEOPLE MAKE US RESILIENT"

WHAT ARE SOME WAIWAI?



- 



Kahakai: Marine Structure/Life

WHAT ARE SOME WAIWAI?

KAMILOLOA ONE ALI'I



ALI'I Pond



Limu Farming



Older Community with Knowledge

- Many residents have lived on their lots for over 70 years.
- The older generation was raised to share everything, which made them more self-sufficient. Neighbors took care of one another - didn't matter who you were.
- Ali'i Pond has historical and cultural significance; mullet live here.
- Limu farming.

WHAT ARE SOME WAIWAI IN YOUR AHUPUA'A?

Circle your Ahupua'a

KALAMA'ULA

KAPA'AKEA

KAMILOLOA ONE ALI'I

ASSETS / BENEFIT / STRENGTHS /

ADVANTAGE / VALUE

List out assets for your ahupua'a:



NEXT WORKSHOP!

SAVE THE DATES FOR THE 2 NEXT
WORKSHOPS!

AUGUST:

Workshop #3: August 8th

Workshop #4: August 28 or 29



MAHALO !

ANY QUESTIONS OR CONCERNS?

SUST'ĀINABLE MOLOKAI

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NANCY MCPHERSON - DHHL

✉ nancy.m.mcpherson@hawaii.gov

