



HAWAIIAN HOME LANDS

HAWAIIAN HOMES COMMISSION • DEPARTMENT OF HAWAIIAN HOME LANDS

Community Meeting #3

‘Ualapu‘e Kuleana Homestead Project

Kilohana Recreation Center

October 20, 2022, 6:00 PM – 7:30 PM

DEPARTMENT OF HAWAIIAN HOME LANDS – PLANNING OFFICE



Agenda

- **Opening Pule**
- **Introductions**
- **Meeting Kuleana and Purpose**
- **Project Update**
- **Land and Resource Evaluation Analysis**
- **Feedback**
- **Next Steps**
- **Closing**



Mahalo for Attending

- Please feel free to eat throughout the presentation
- Please feel free to move around meeting area to look at posters / materials
- Please hold questions until the end of the presentation (we have paper / pens available if you need to write down your questions)
- Please place phones on vibrate and take any calls outside so others can continue to hear the presentation



The Hawaiian Homes Commission Act



Prince Jonah Kūhiō Kalanianaʻole



Kuleana Homestead Settlement Plan



Hawai'i Administrative Rules §10-3-30

- DHHL, together with interested applicants, will develop a plan for settlement and development of the designated tract, for approval by the HHC
- **The Settlement Plan will include:**
 - Location and description of the tract;
 - Approximate size and number of lots to be awarded;
 - Approximate location of community center and common areas;
 - Preliminary conceptual proposals for community management and economic development of adjacent department lands, if applicable;
 - Plan for the identification, protection and preservation of all significant historical, archaeological, and biological sites; and
 - Settlement timetable to commence after the award of the lots



Purpose

The purpose of tonight's meeting is to present the consultant findings to date.

We will then review the process that we are going through currently to identify a **potential** proposed area for subsistence agricultural homestead settlement, as well as **identify and protect significant historical, archaeological, and biological sites.**



Project Update

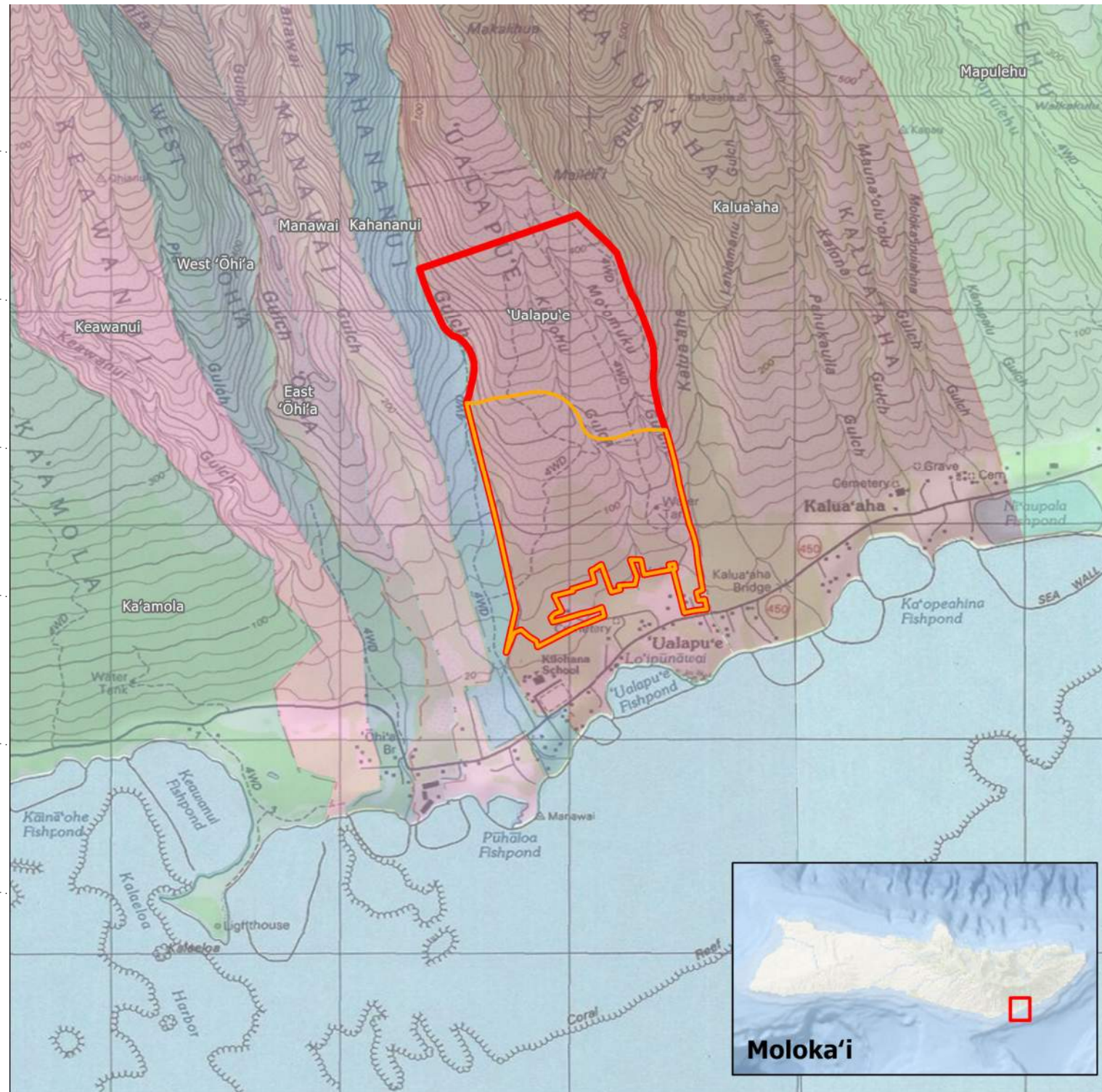


Areas of Concern We Have Heard So Far

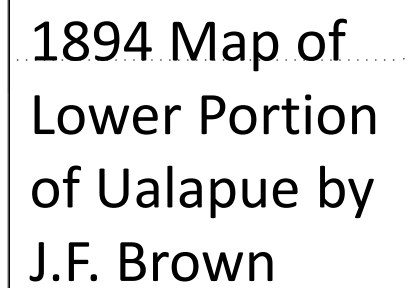
- Cultural and Historical sites
- Impact to natural resources
- Slope and erosion
- Fire
- Agriculture
- Hunting
- Cultural access
- Water and Waste Disposal
- Roads and Traffic
- Site safety
- Size and number of lots
- Resilience hub / emergency shelter

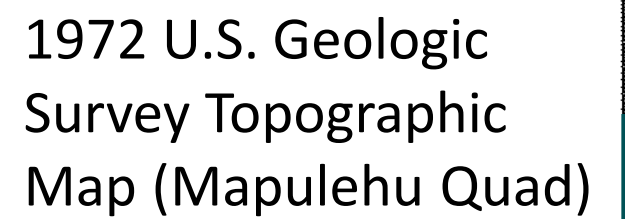


Ahupua'a



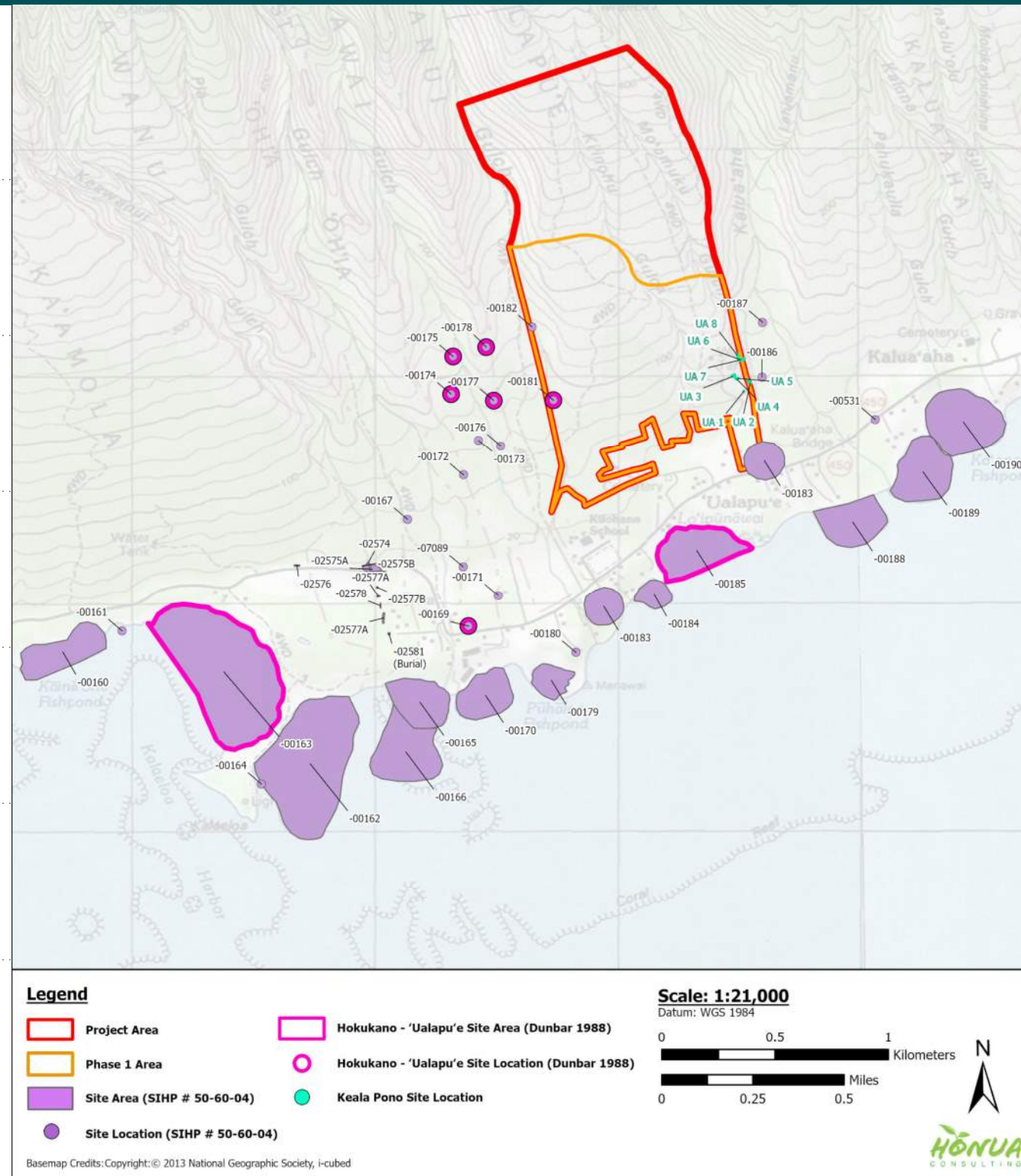
2013 National
Geographic Society,
i-cubed







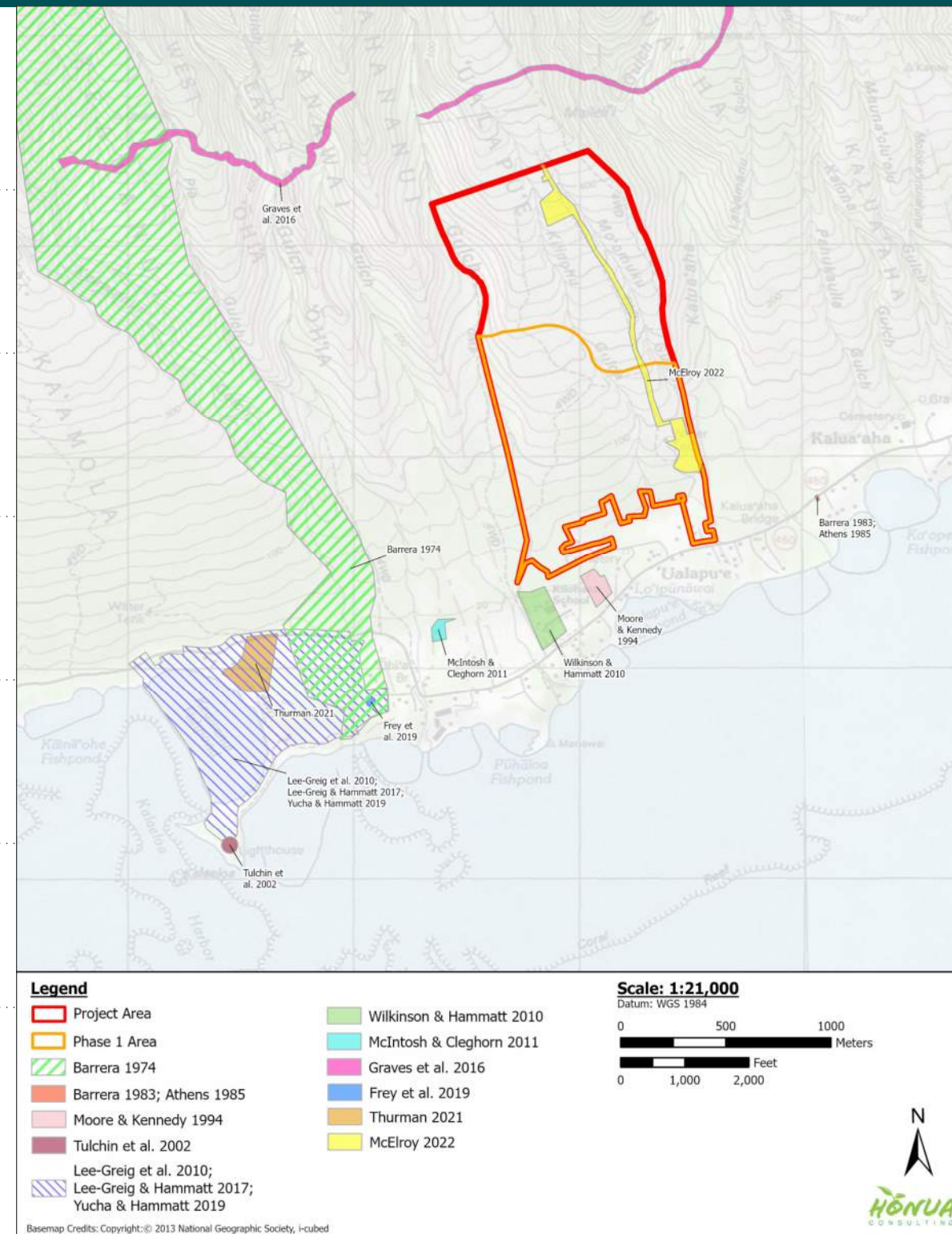
Historic Properties



2013 National
Geographic Society,
i-cubed



Previous Archaeology





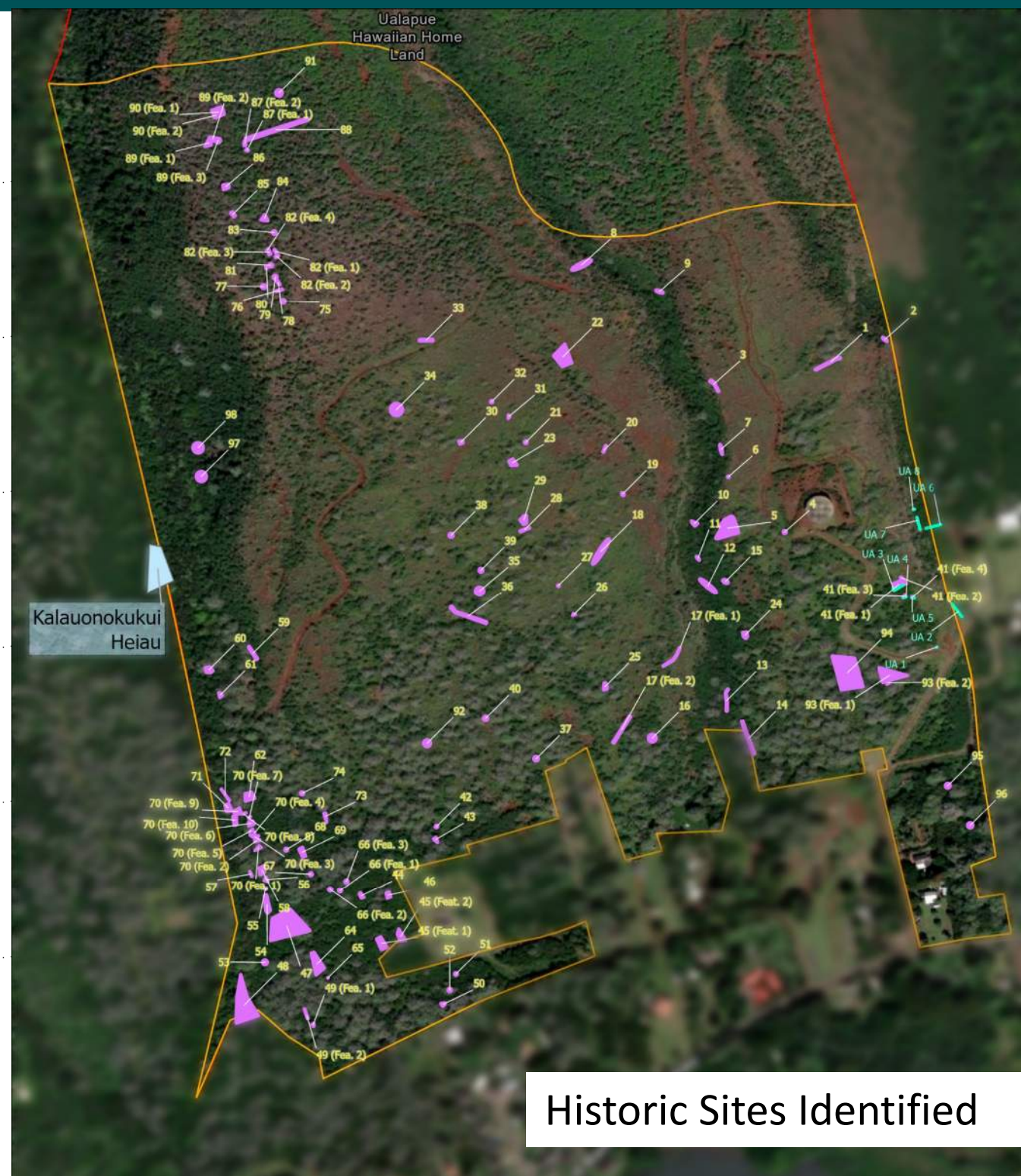
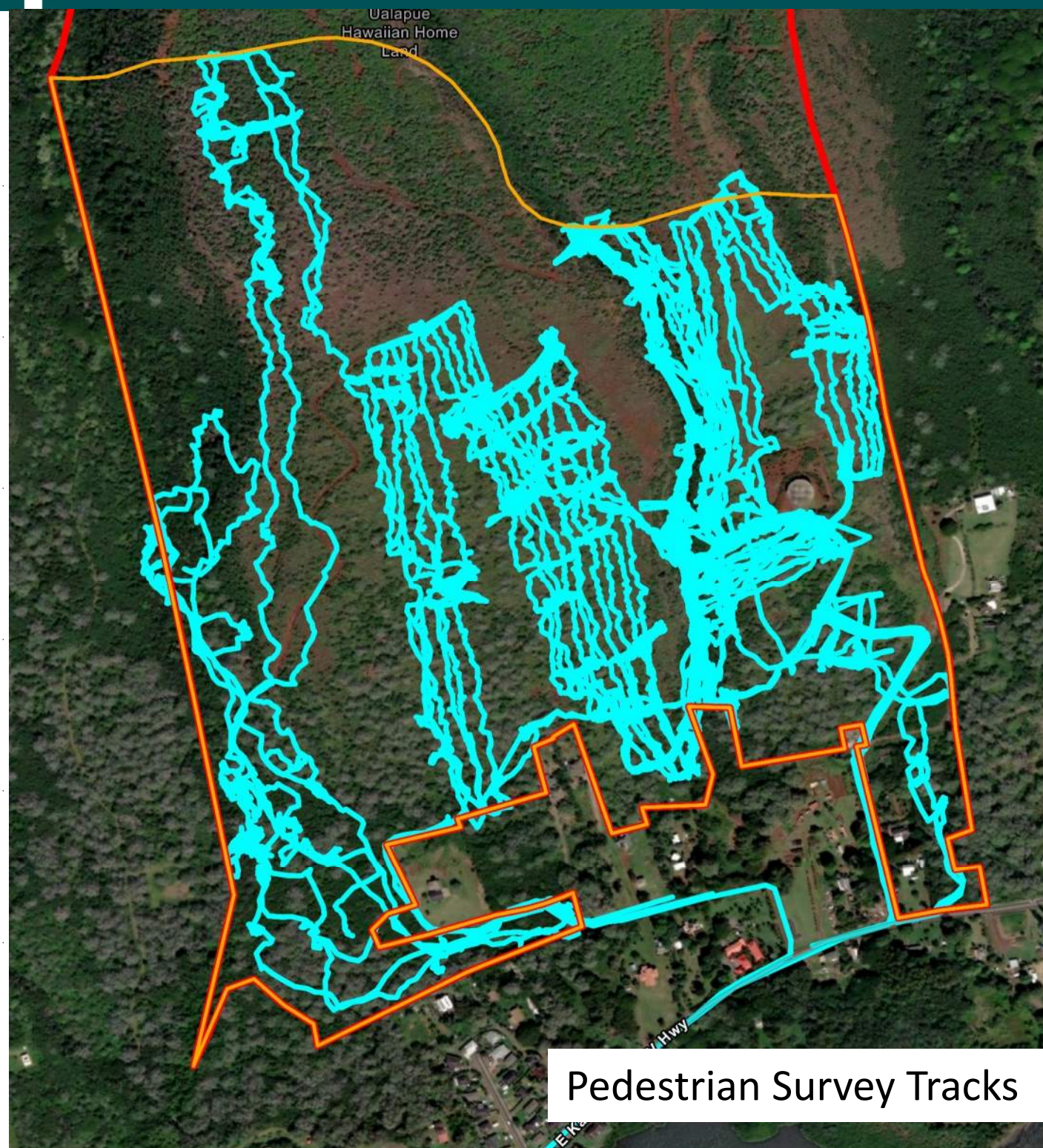
Recent Archaeology

Archaeological Field Investigation

- October 2021 (Previous consultant)
- March 20-25, 2022
- May 15-20, 2022
- June 28-30, 2022



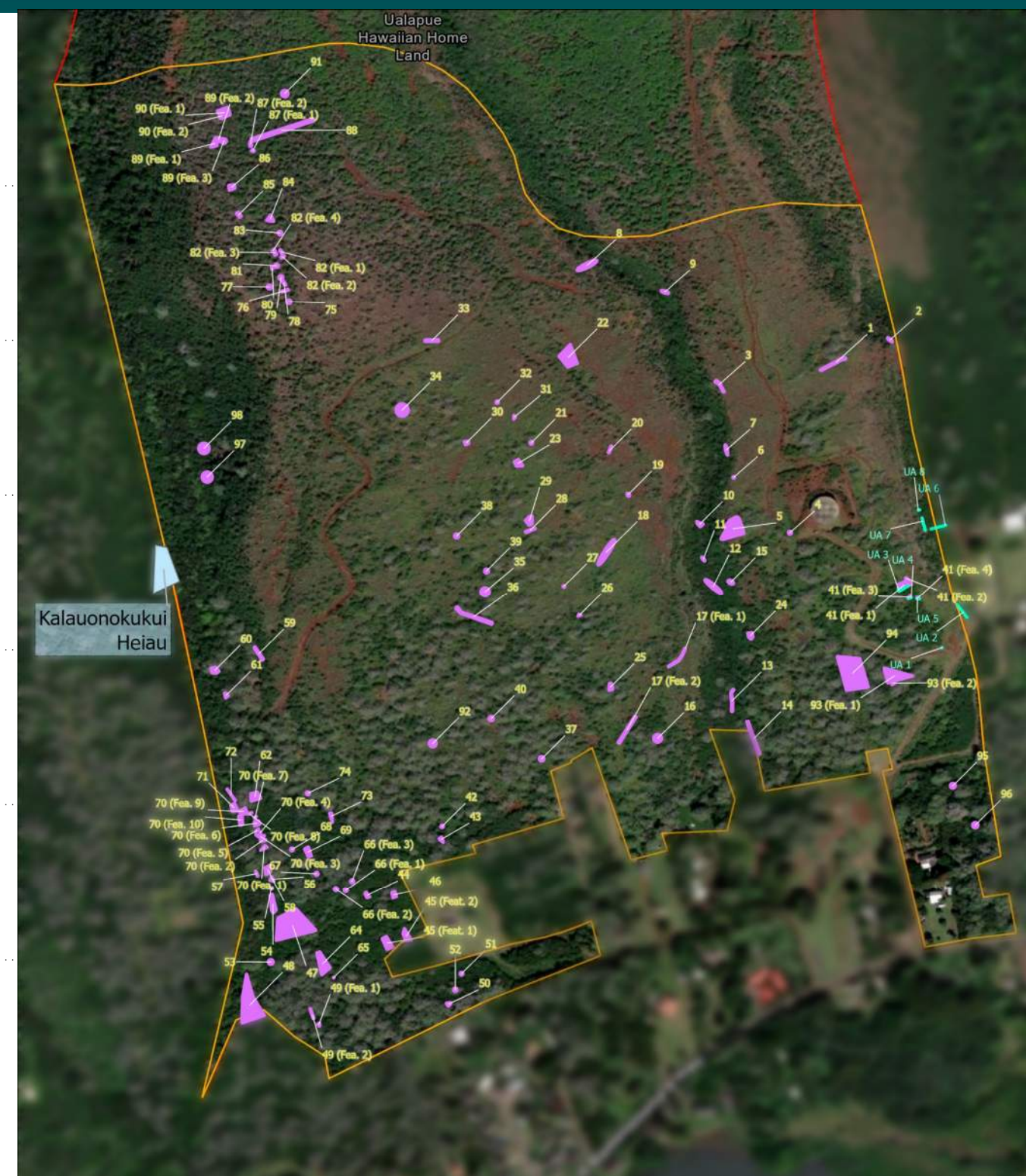
Preliminary Archaeological Findings





Preliminary Archaeological Findings

- 96 individual sites
- Many sites had multiple features associated with them
- One diagnostic artifact, 1942 bottle
- Portions lacking archaeological sites have been impacted by:
 - Road construction
 - Erosion
 - Clearing and Fencing for cattle







Select Photos



Honua Site 73



Honua Site 47



Honua Site 62

Honua Site 69





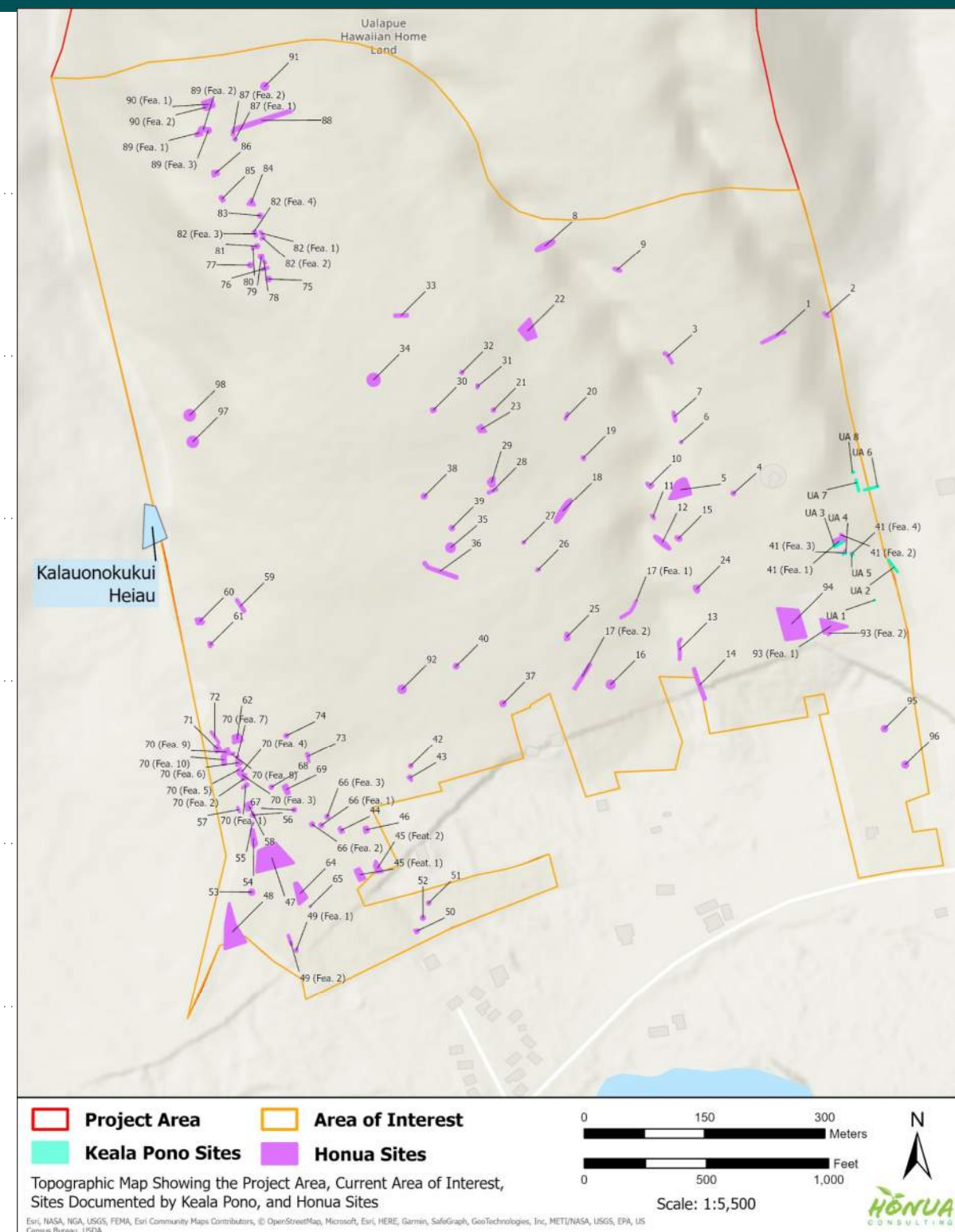
Preliminary Summary of Identified Sites

Site #	# of Fea.	Formal Type	Functional Interpretation	Temporal Interpretation	Comments
1	1	Terrace/alignment	Cultivation/gardening	Pre-contact / early historic	Long, low, cross-slope terrace/alignment
2	1	Modified outcrop	Soil / landscape retention	Indeterminate	Located at upper edge of gulch – functioned to reinforce / retain upper plateau above Mo’omuku Gulch
3	2	Terraces	Cultivation/gardening	Pre-contact / early historic	Located at upper edge of Ki’inohu Gulch
4	1	Mound	Clearing mound	Probably historic	Mostly subrounded boulders w. cobbles – no formal structure
5	5	Site complex	Habitation	Pre-contact / early historic	Fea. 1 = soil-filled platform (house site); site is on edge of plateau area above Ki’inohu Gulch
6	1	Modified outcrop	Soil / landscape retention	Indeterminate	Located at upper edge of gulch – functioned to reinforce / retain upper plateau above Ki’inohu Gulch
7	1	Rockshelter	Temporary shelter	Pre-contact / early historic	Single marine shell (Turbo sp.) on ground surface within rockshelter
8	1	Rockshelter	Temporary shelter	Pre-contact / early historic	Several rocks on ground surface inside rockshelter
9	2	Rockshelter w. small wall at one end	Temporary shelter	Pre-contact / early historic	Short, subangular boulder wall (Fea. 2) defines the north end of the site
10	3	Terrace/alignment	Cultivation/gardening	Pre-contact / early historic	Located in bottom / floodplain of Ki’inohu Gulch
11	2	Rockshelter w. small terrace in front	Temporary shelter	Pre-contact / early historic	Terrace (Fea. B), 3-4 courses high, retains living floor in front of rockshelter
12	1	Terrace	Indeterminate	Indeterminate	Atypical / unique feature located under a small, dry waterfall in gulch



Next Steps: Archaeology

- Finalize Archaeological Site Analysis and Recommendations
- Complete Archaeological Literature Review and Field Investigation (LRFI)
- Initiate consultation with State Historic Preservation Division
 - Once the project is delineated, an Archaeological Inventory Survey (AIS) will be required to fully document and evaluate sites
 - Any action will require Preservation; and may require Data Recovery and/or Archaeological Monitoring





Cultural Resource Evaluation

Ethnographic Interviews

- March 19-23, 2022 (9 interviews) - ongoing
- Previous Studies

Key Practices Identified

- **Hunting** (deer, goats, pigs)
- **Spiritual Practices and Activities** (i.e., pule and protocol)
- **Gathering Practices** (lei, lā'au)
- **Kilo** (observational practices, especially relating to loko i'a)
- **Agricultural / Aquacultural Practices** (farming, fishing, loko i'a)
- **Habitation and Access** (habitation sites, trails, huaka'i pō)
- **Mo'olelo** (histories and stories of the area)

‘UALAPU‘E, MOLOKA‘I

*Oral Histories
from the East End*

Traditional & Customary Practices Report for Mana'e, Moloka'i

Traditional Subsistence Uses, Mālama Practices and Recommendations,
and Native Hawaiian Rights Protections of Kama'āina Families of
Mana'e Moku, East Moloka'i, Hawai'i





Land and Resource **Evaluation Analysis**



Aerial Survey

- Resource Mapping Hawaii (RMH)
- High-resolution imaging:
 - Terrain
 - Erosion
 - Vegetative cover





Aerial Survey





Aerial Survey





Land & Resource Evaluation Analysis

- 16 Categories being examined
- Each category is assigned a 1-10 rating (10 being lower sensitivity)
- Each category is assigned an influence percentage
- Five (5) scenarios produced by adjusting influence and category ratings

SUITABILITY CRITERIA			
Slope	Archaeology	Soil Type	CWRM Wells
Wellhead Protection Zone	Streams/ Gulches	Rainfall	Roads/Trails/ 4WD
Biological Resources	Flood Zones	Tsunami Zone	Extreme Tsunami Zone
Wildfire Risk	ALISH	LSB	DHHL Land Use Designation



- 30 ft: Minimum for all
- 50 ft: Larger typically for heiau, etc.
- 100 ft: Largest typically for burials, etc.

Ualapue Hawaiian Home Land

Kalauonokukui Heiau

Legend:

- Project Area**
- Area of Interest**
- Keala Pono Sites**
- Honua Sites**

Topographic Map Showing the Project Area, Current Area of Interest, Sites Documented by Keala Pono, and Honua Sites

Scale: 1:5,500

Scale Bar: 0, 150, 300 Meters; 0, 500, 1,000 Feet

North Arrow: N

Source: Esri, NASA, INGA, USGS, FEMA, Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, US Census Bureau, USDA

HONUA CONSULTING

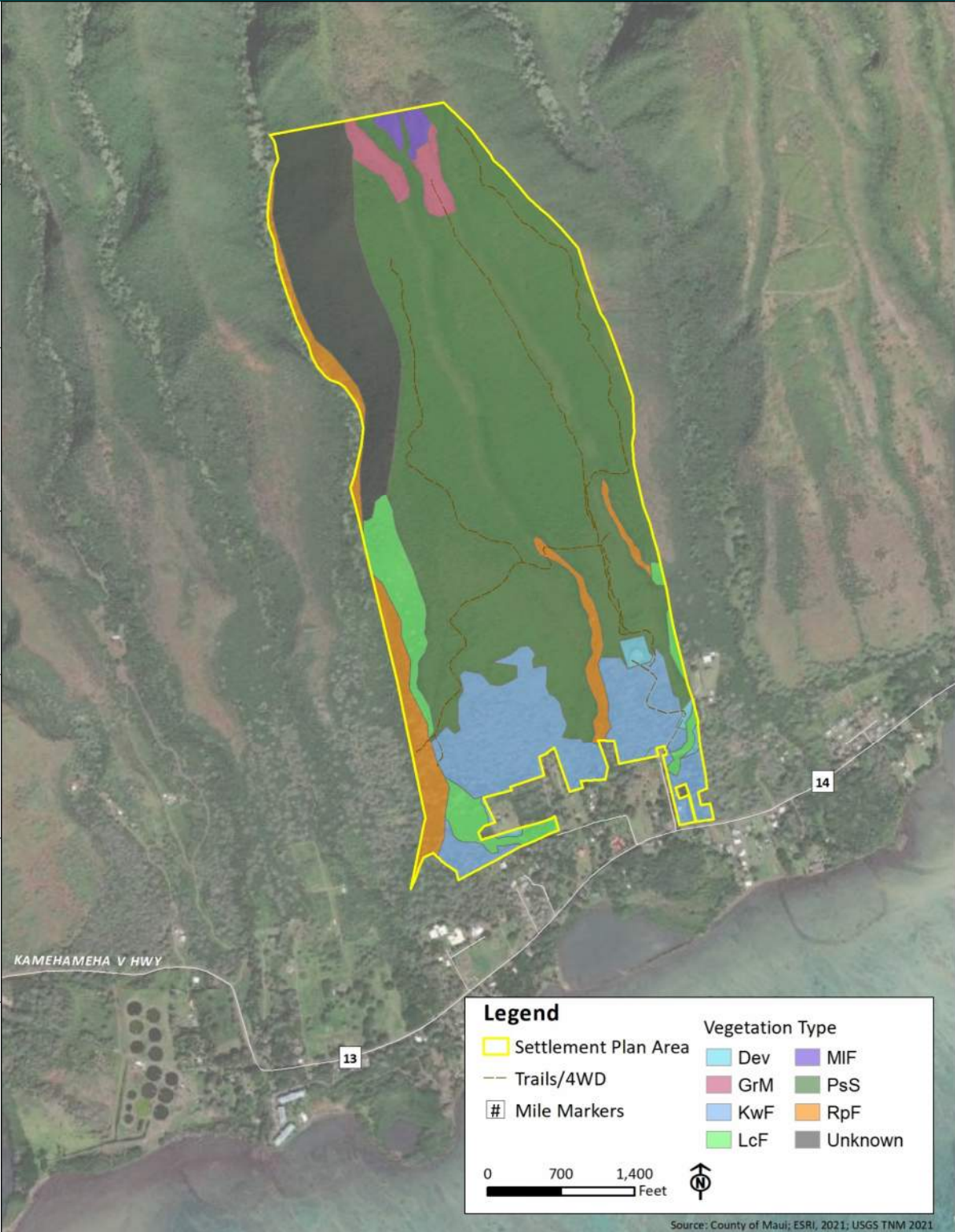


Biological Resources

Plant Survey

- 56 plant species total
- 75% introduced, 25% native
- Majority of Area: Waiwī scrub
- Lower portion: Kiawe forest and koa haole scrub
- Upper Portion: Grass meadow and paperbark forest
- Gulches: Riparian Forests

BIOLOGICAL RESOURCES	RATING
Dev (Developed Land)	10
KwF (Kiawe Forest)	10
LcF (Koa Haole Scrub)	10
PsS (Waiwī Scrub)	8
RpF (Riparian Forest)	3
MIF (Paperbark Forest)	1
GrM (Grass Meadow)	1
Unknown	1

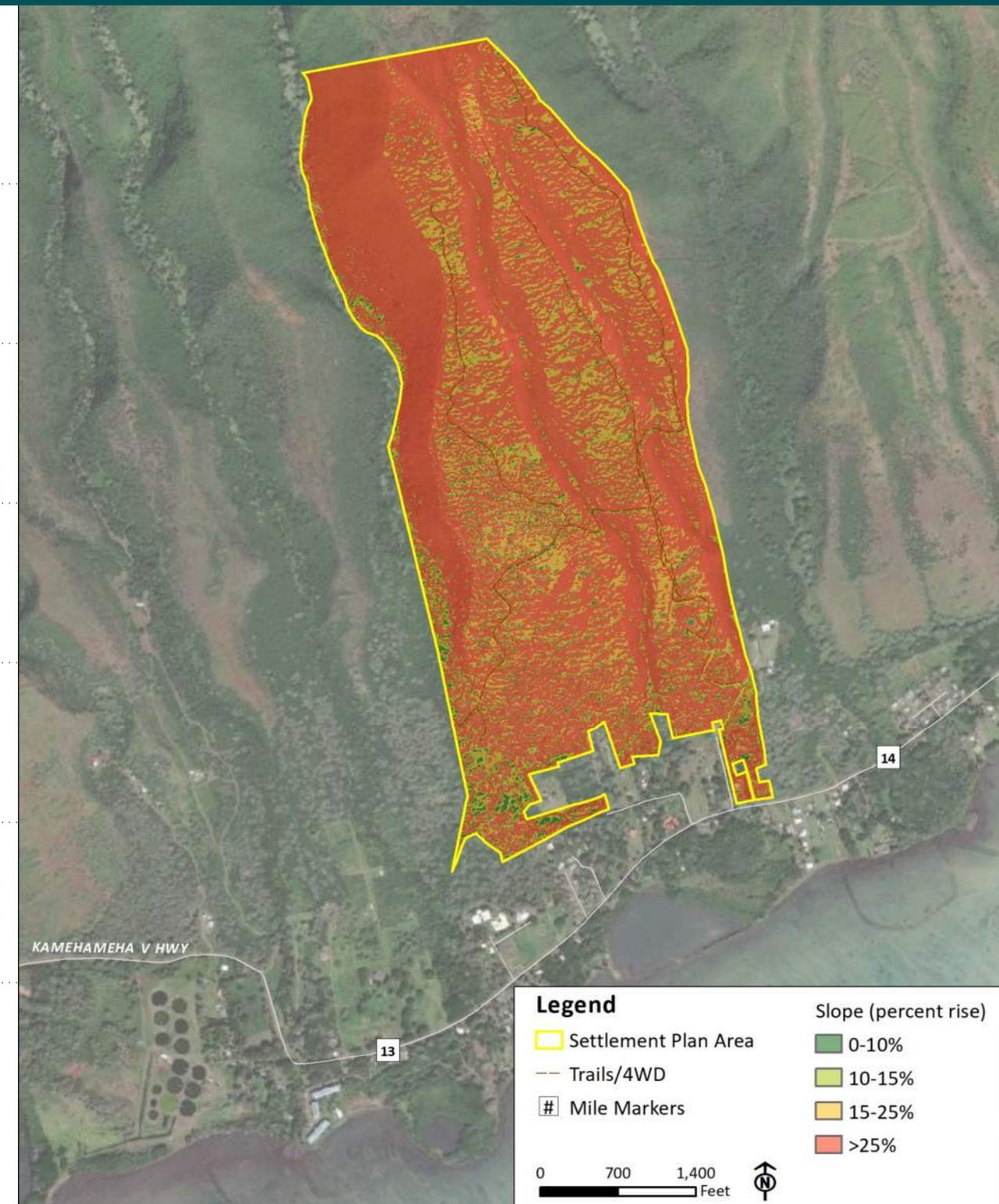




Slope and Erosion

- Elevation ranges from 20 ft to 1,800 ft
- A majority of the site is 11-20% slope
- Three large gulches: Mo'omuku, Ki'inohu, and Kahananui
- Landscape altered by ungulates, invasive plants
- High runoff and erosion affecting fishpond and reef
- Minor grading, installation of road culverts, and runoff cutoff ditches will be required to mitigate erosion

SLOPE	RATING
0-10%	10
10-15%	8
15-25%	5
>25%	1



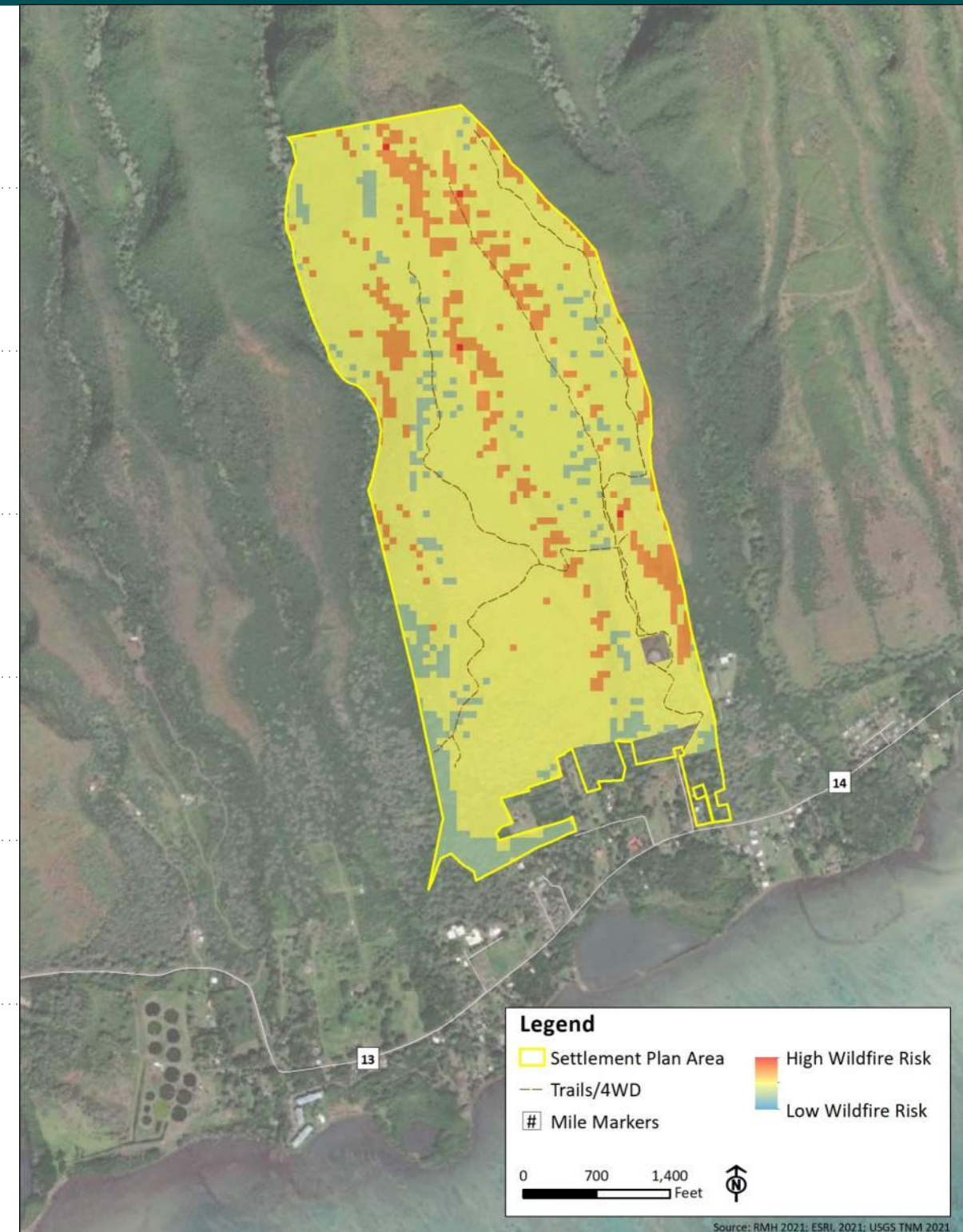


Wildfire Risk

Factors

- Ignition: primarily human ignition is of concern (near homes/roads), depends on season
- Wind: determines direction and spread of fire
- Fire travels rapidly in gulches/slopes
- Lack of water, long fire response time in area
- Post-fire erosion and resulting landslides can affect downslope environments

WILDFIRE RISK	RATING
Wildfire Risk (Medium)	5
Wildfire Risk (High)	1

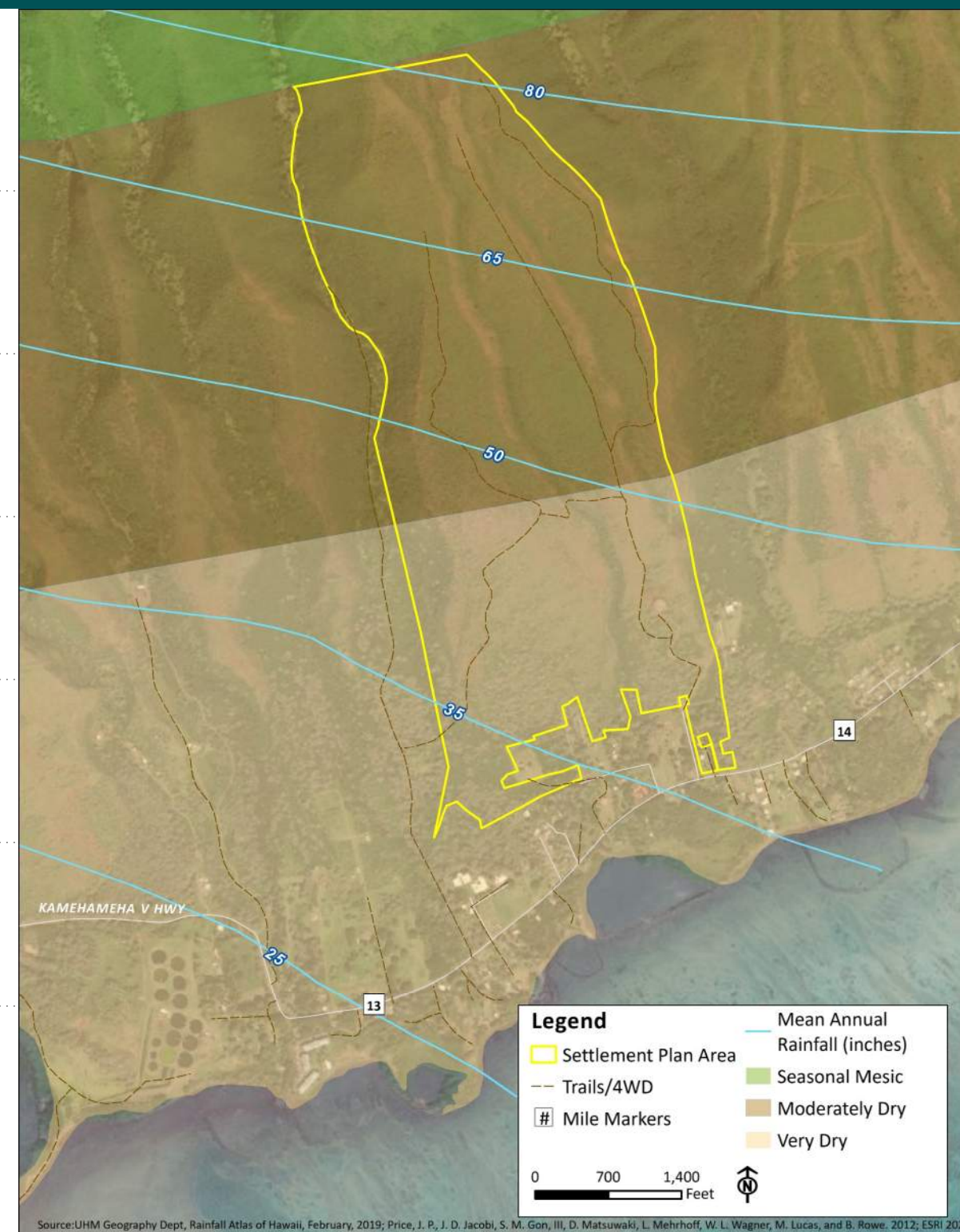




Rainfall

- The island of Molokaʻi is characterized by low rainfall
- 35-80” of rainfall per year in project area
- Most rainfall occurs between November and February
- Coastal, very dry to moderately dry, mesic

RAINFALL BAND	RATING
80-100”	10
65-80”	10
50-65”	10
35-50”	5
25-35”	5

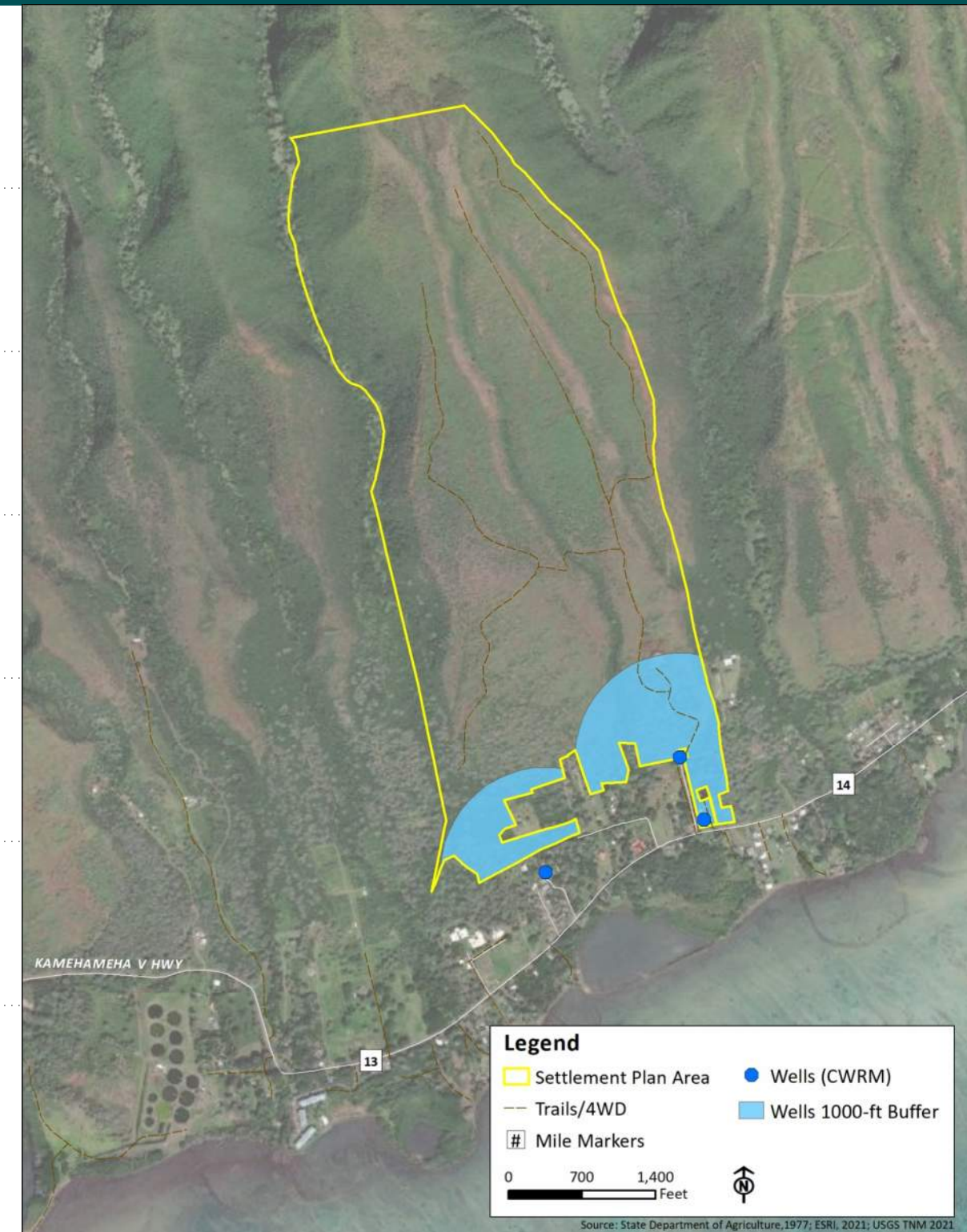




CWRM Well Protection

- 'Ualapu'e Well
- Private Wells

CWRM WELLS	RATING
1000 ft buffer	1

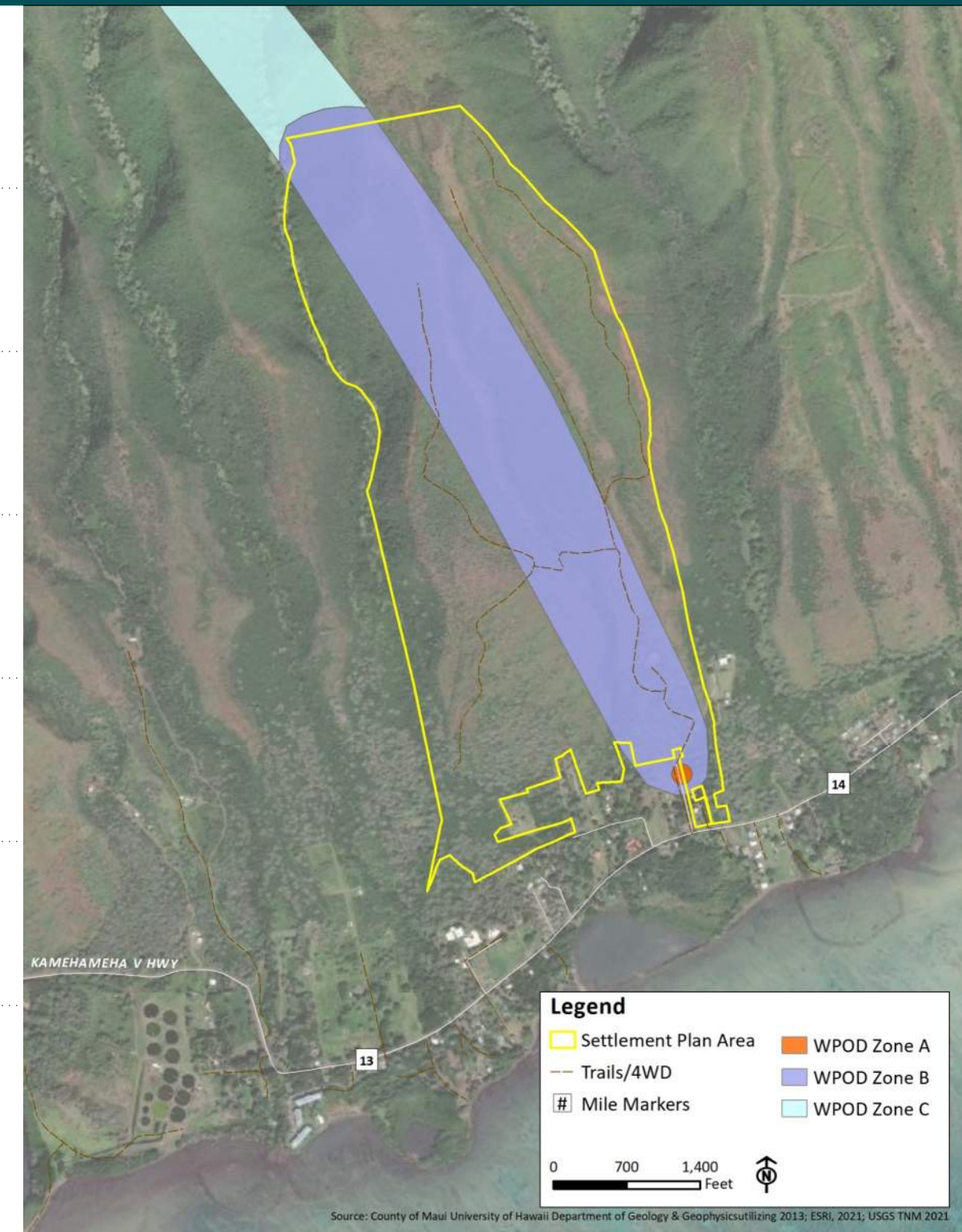




Wellhead Protection Zone

- Very High - (Zone A): 50 ft fixed radius around each well to provide protection from direct contamination
- High - (Zone B): 1,000 ft radius based on survival times of bacteria and viruses to travel to well
- Medium - (Zone C): protective measures from travel time of contaminant spill

WELLHEAD PROTECTION ZONE (1000 ft buffer)	RATING
WPDZ A	1
WPDZ B	5
WPDZ C	8





Streams/Gulches

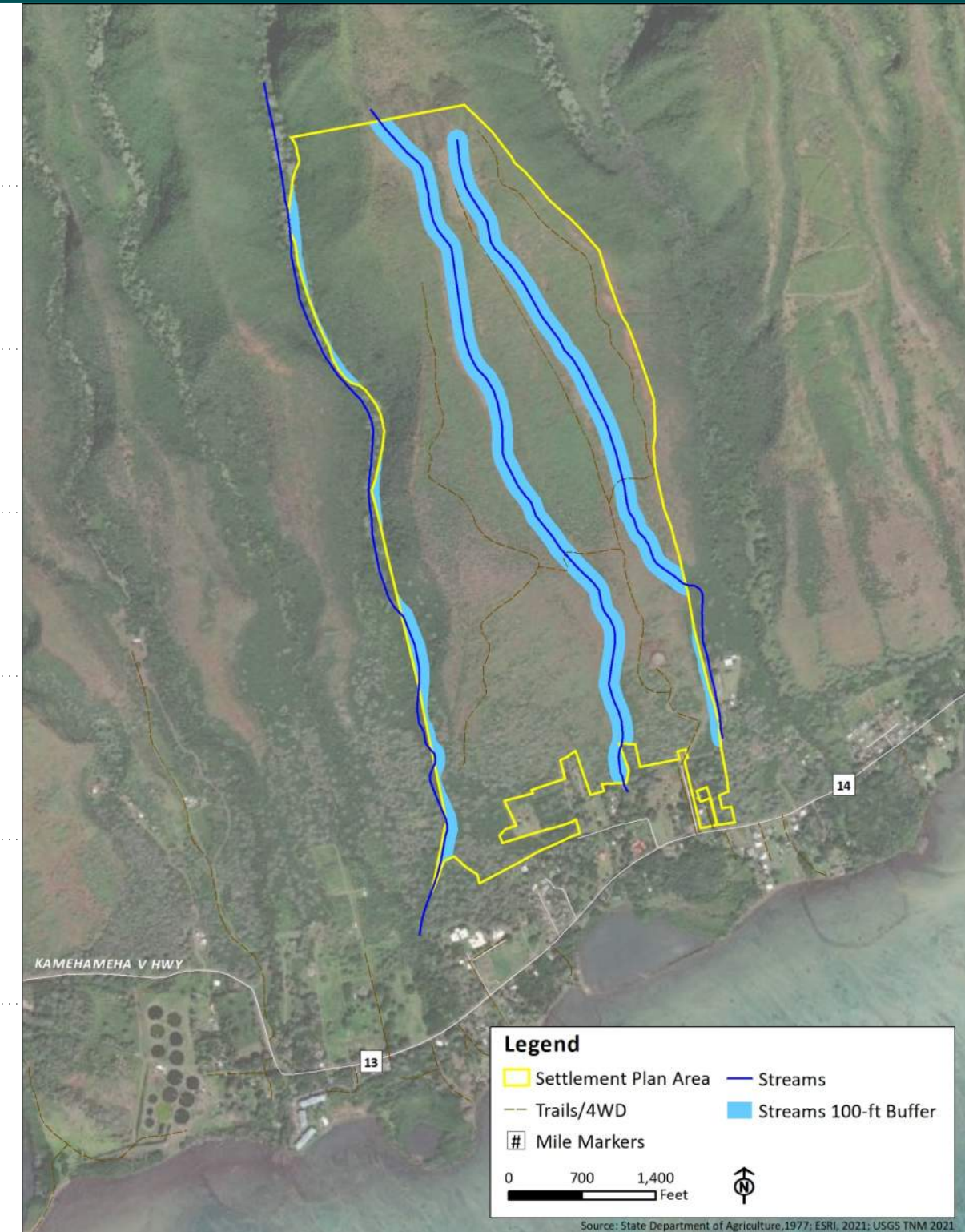
Mo'omuku and Ki'inohu Gulch:

- Ephemeral
- Flows after a 2 to 4-day rain event

Kahananui Gulch:

- Interrupted perennial stream
- Flows after every rain event
- May be categorized by USACE as jurisdictional waters

STREAMS/GULCHES	RATING
100 ft buffer	1

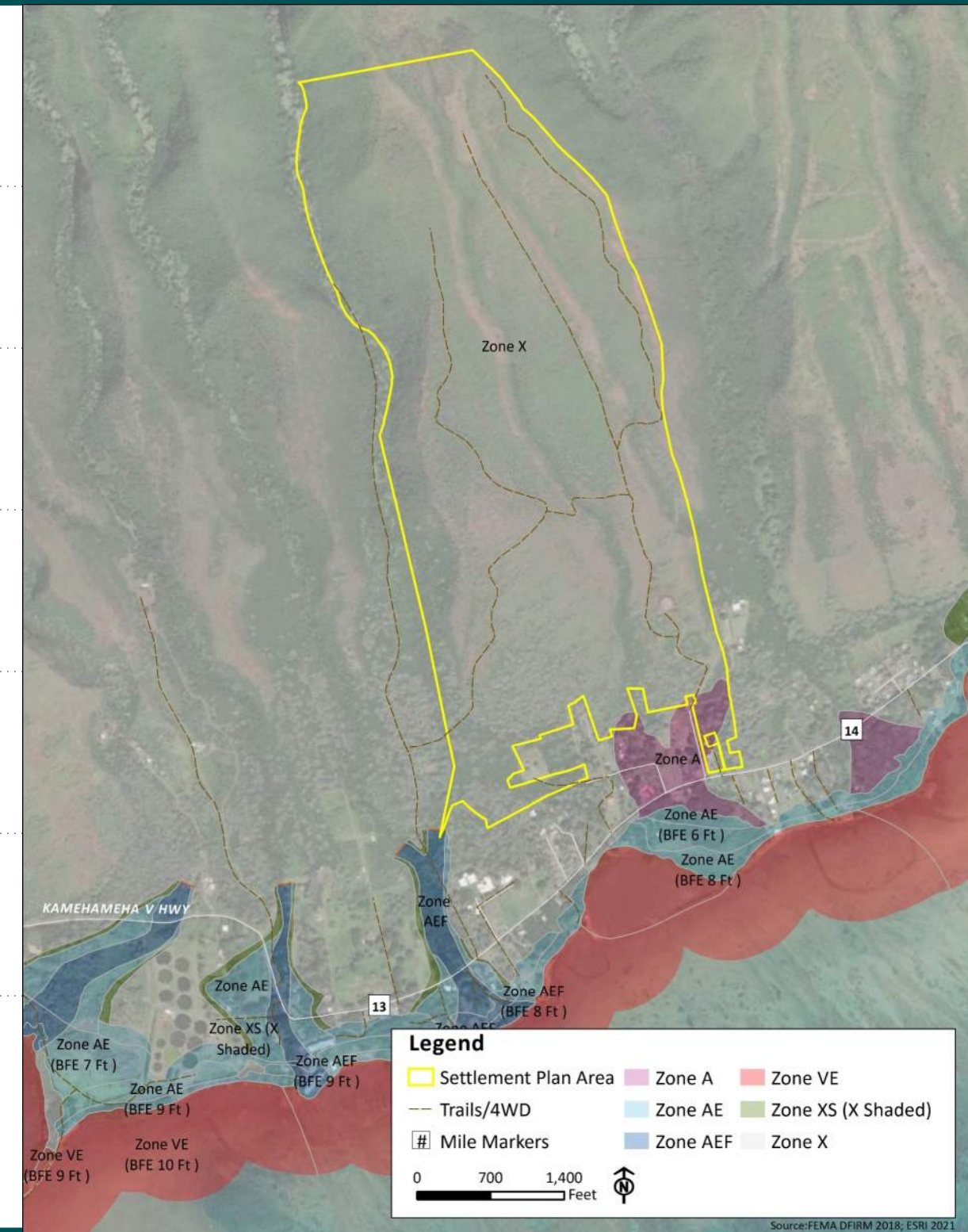




Flood Zones

- Zone A – Area has potential to flood, not ideal for homesites
- Zone AE – (lower left point)

FLOOD ZONES	RATING
Zone X	10
Zone AE	7
Zone A	5

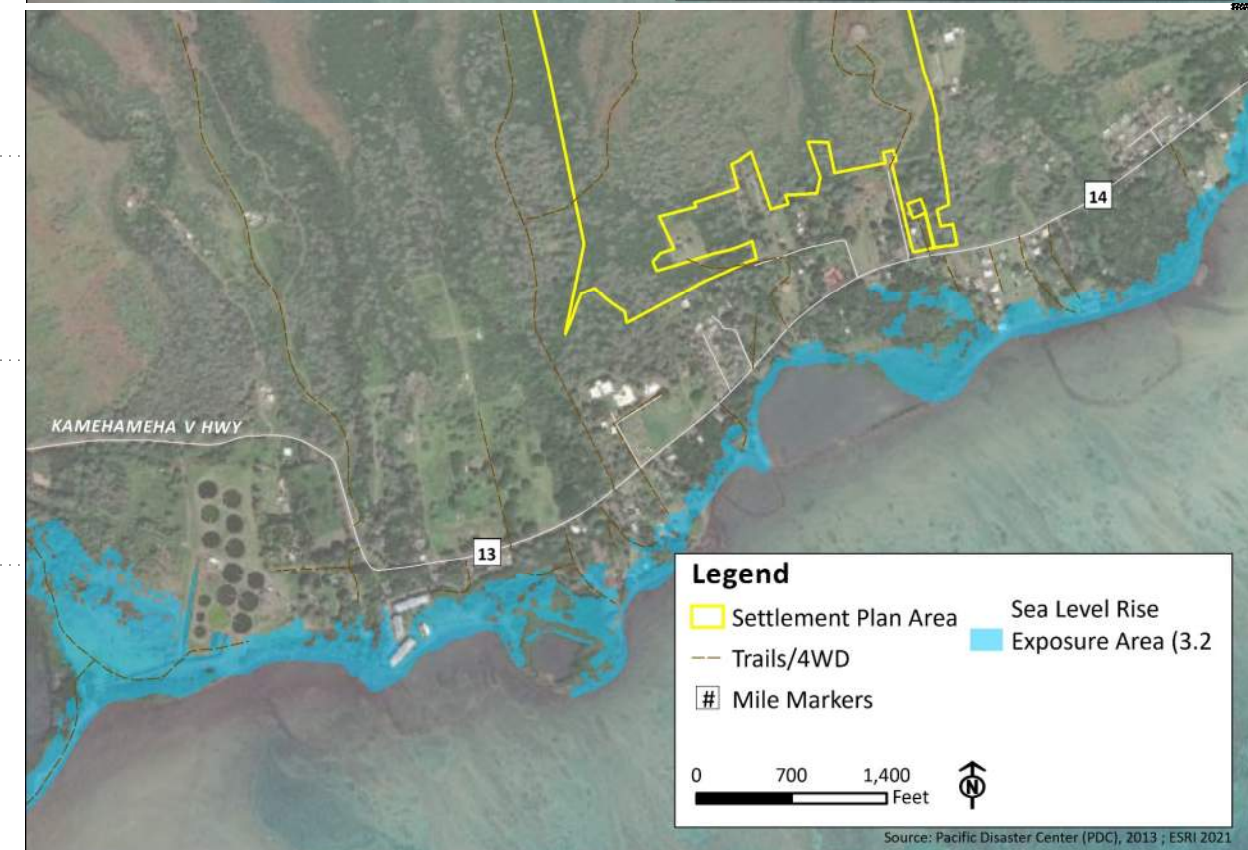
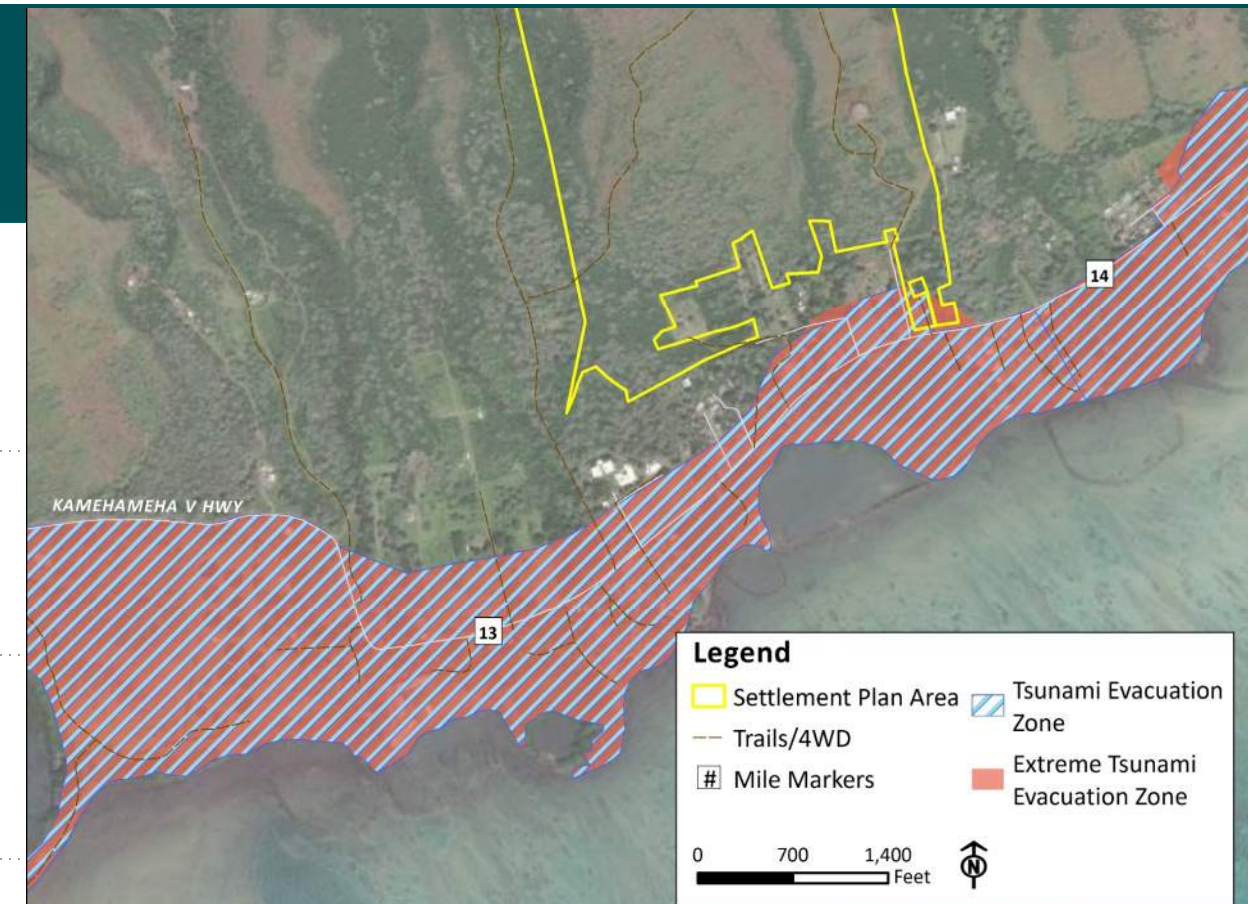




Tsunami and Sea Level Rise

- Lower portion of Project area within the Extreme Tsunami Evacuation Zone
- Note: Project area is located outside of the 3.2+ Sea Level Rise Exposure Area (SLR-XA)

TSUNAMI ZONE	RATING
Tsunami Zone	1
Extreme Tsunami Zone	1



Source: Pacific Disaster Center (PDC), 2013 ; ESRI 2021



Roads/Trails/4WD/Access

- Understand that cultural access is important and this discussion needs to occur with beneficiaries
- Would like to use existing roads as much as possible

ROADS/TRAILS/4WD	RATING
50 ft buffer	1



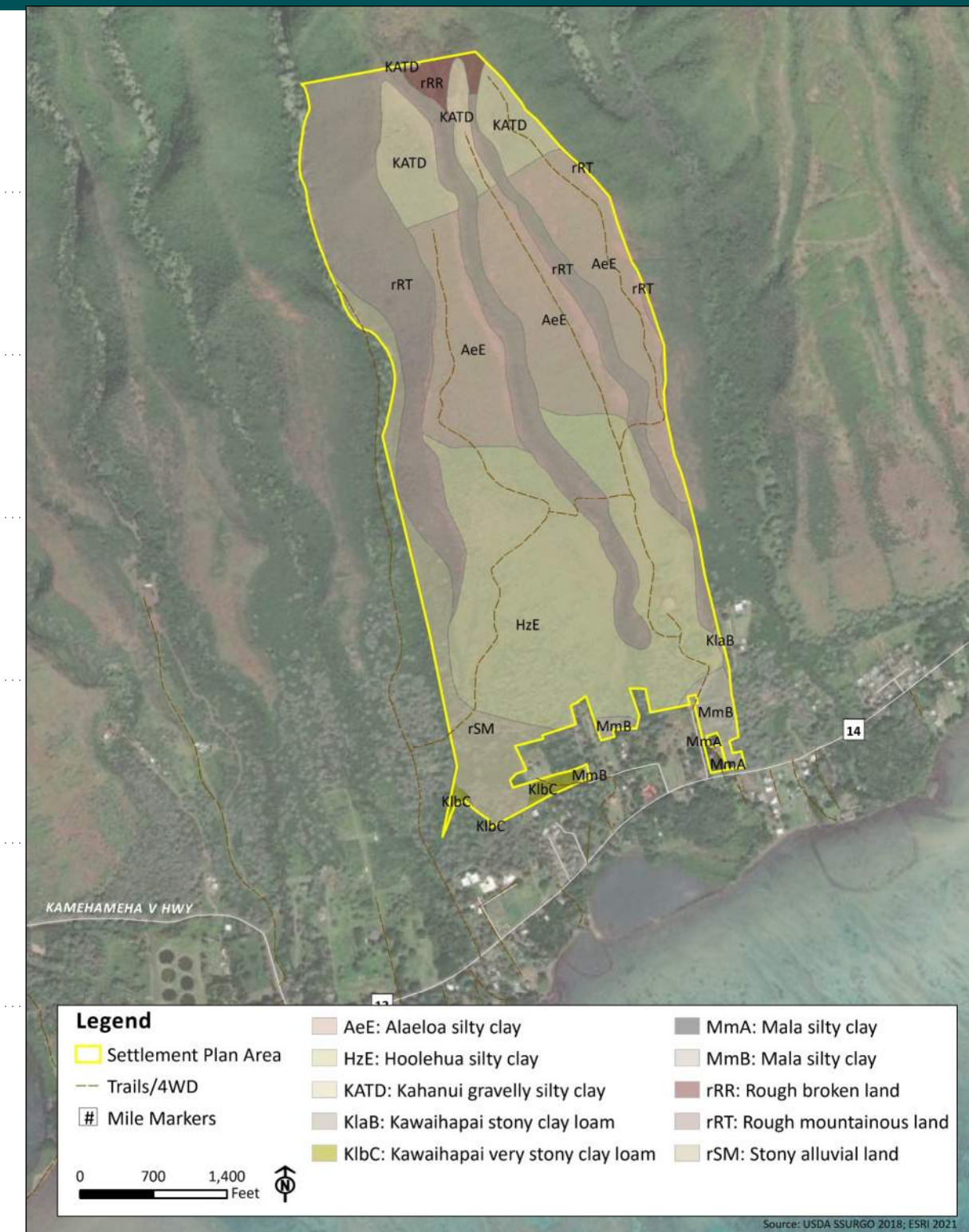


Soils

Soil Characteristics:

- Medium to severe runoff
- Medium to severe erosion
- Best uses include pasture, truck crops, orchards, wildlife habitat, homesites

SOIL TYPE	RATING
Alaeloa silty clay (AaE)	10
Hoolehua silty clay (HzE)	10
Kawaihapai stony clay loam (KlaB)	10
Kawaihapai very stony clay loam (KlbC)	5
Kahanui gravelly silty clay (KATD)	5
Mala silty clay (MmA)	5
Mala silty clay (MmB)	5
Rough broken land (rRR)	1
Rough mountainous land (rRt)	1
Stony Alluvial land (rSM)	1

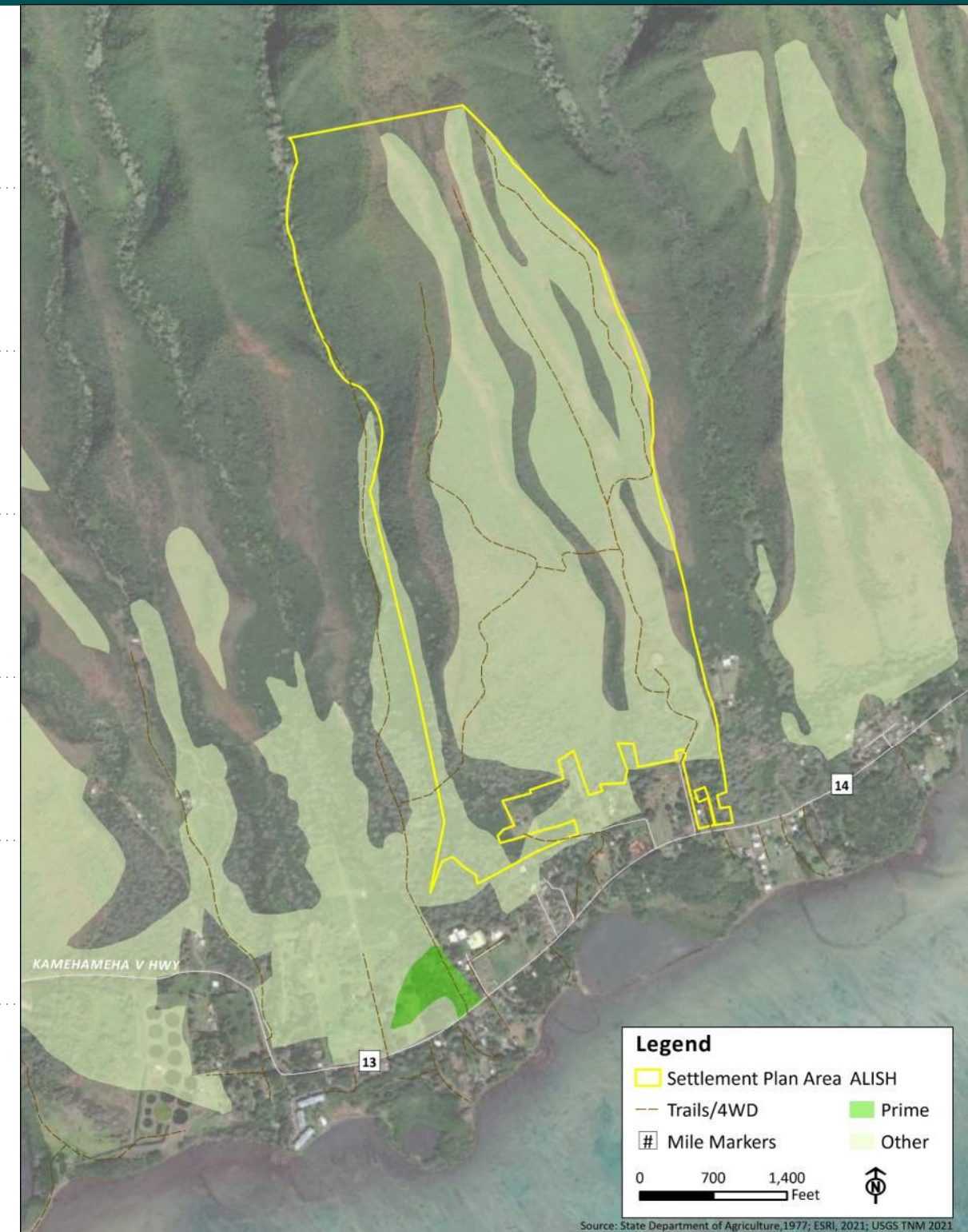




Agricultural Lands of Importance to the State of Hawai'i (ALISH)

- No Prime Ag Land in area
- Other would have lower sensitivity, followed by unclassified lands (primarily gulches / streams)

ALISH	RATING
Other	10
Unclassified	5

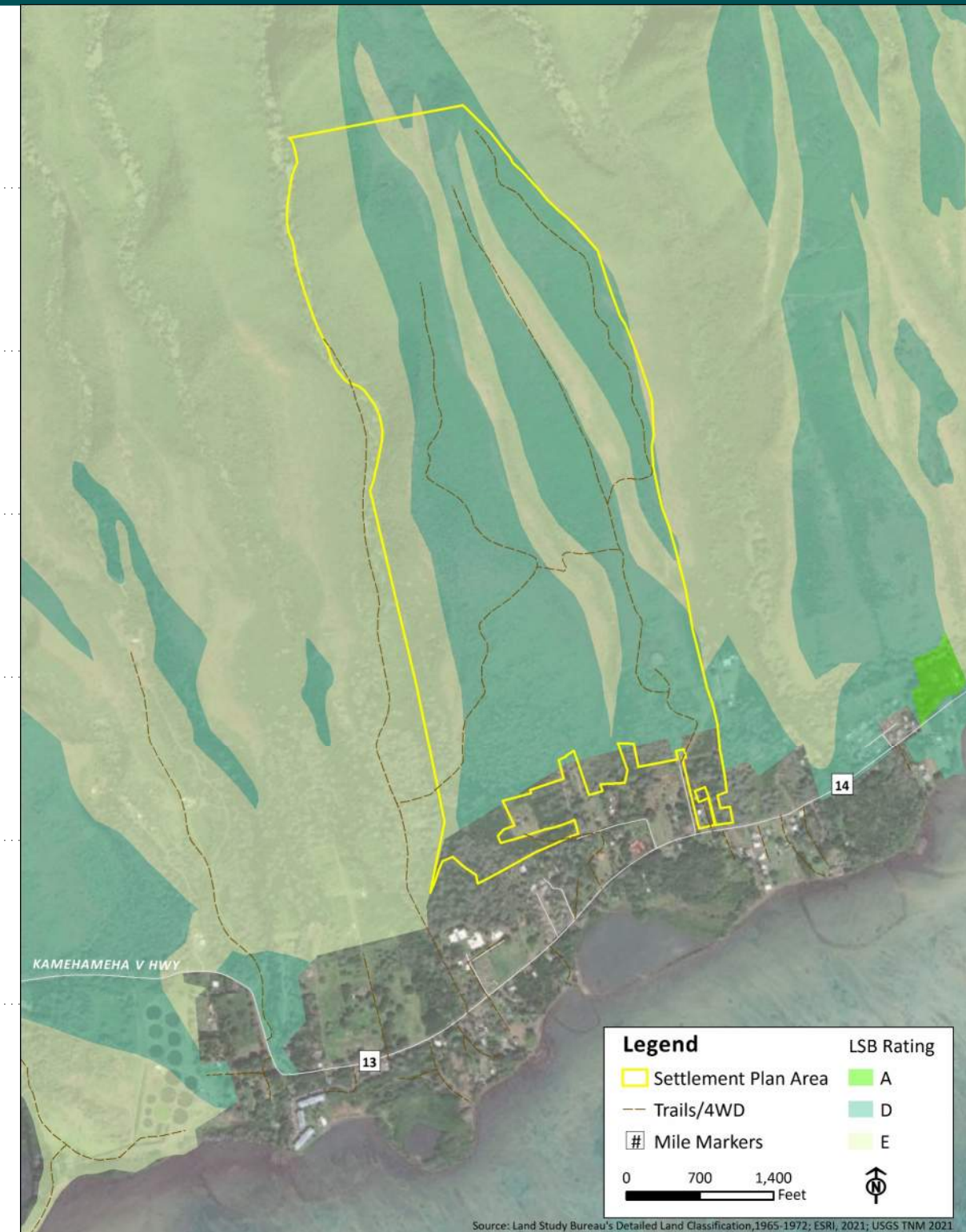




Land Study Bureau (LSB)

- LSB is ranked A-E (A being the highest / most productive)
- Therefore, D has lower sensitivity than E

LSB	RATING
D	10
E	5

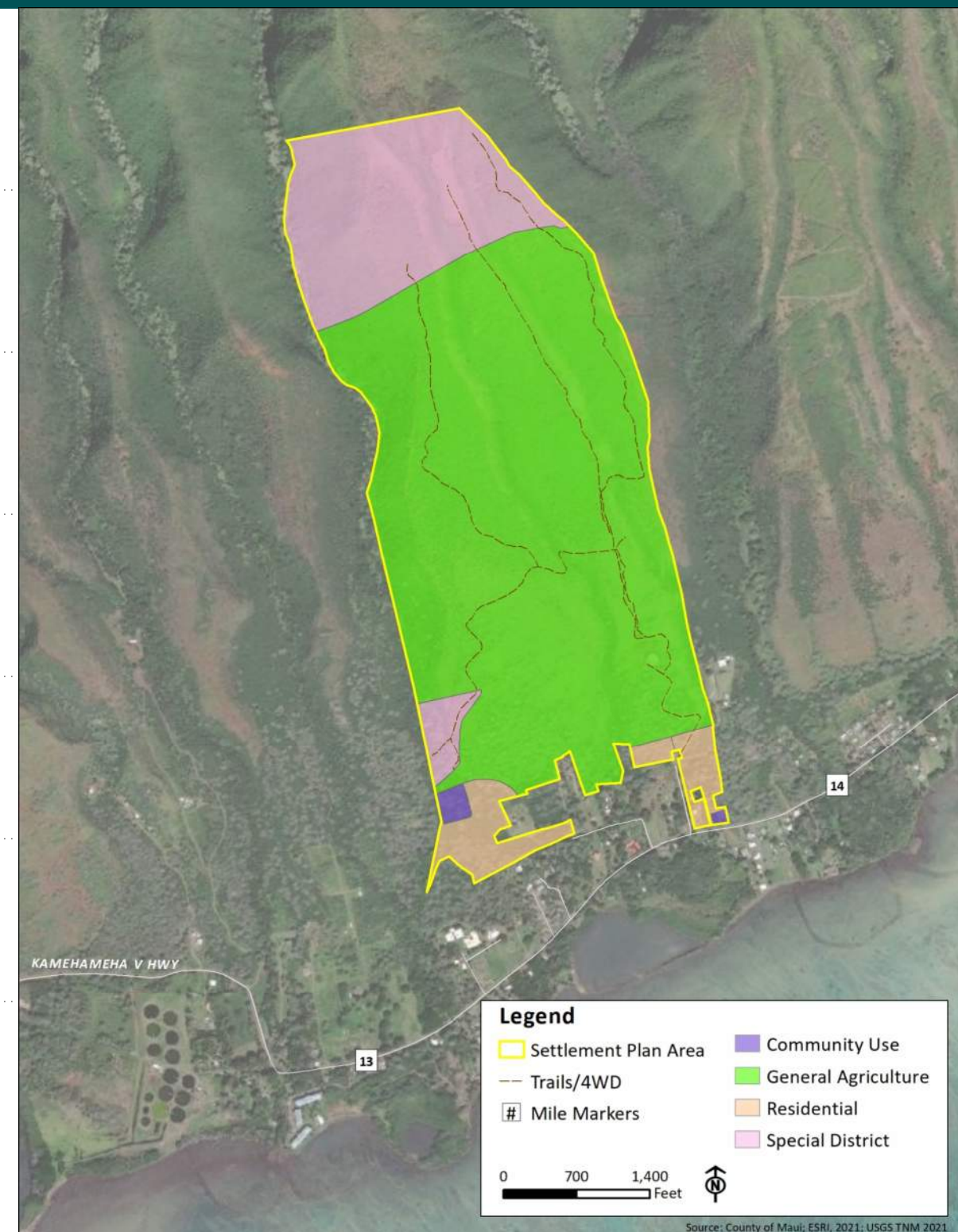




DHHL Land Use Designation

- Land Use Designation from the 2019 Molokaʻi Regional Plan
- Residential best suited for homesites/kuleana lots
- General Agriculture best suited for agriculture/ kuleana lots
- Community use reserved for homestead association management
- Special District best suited for conservation/ reforestation

DHHL LAND USE DESIGNATION	RATING
Residential	10
General Agriculture	8
Community Use	3
Special District	1



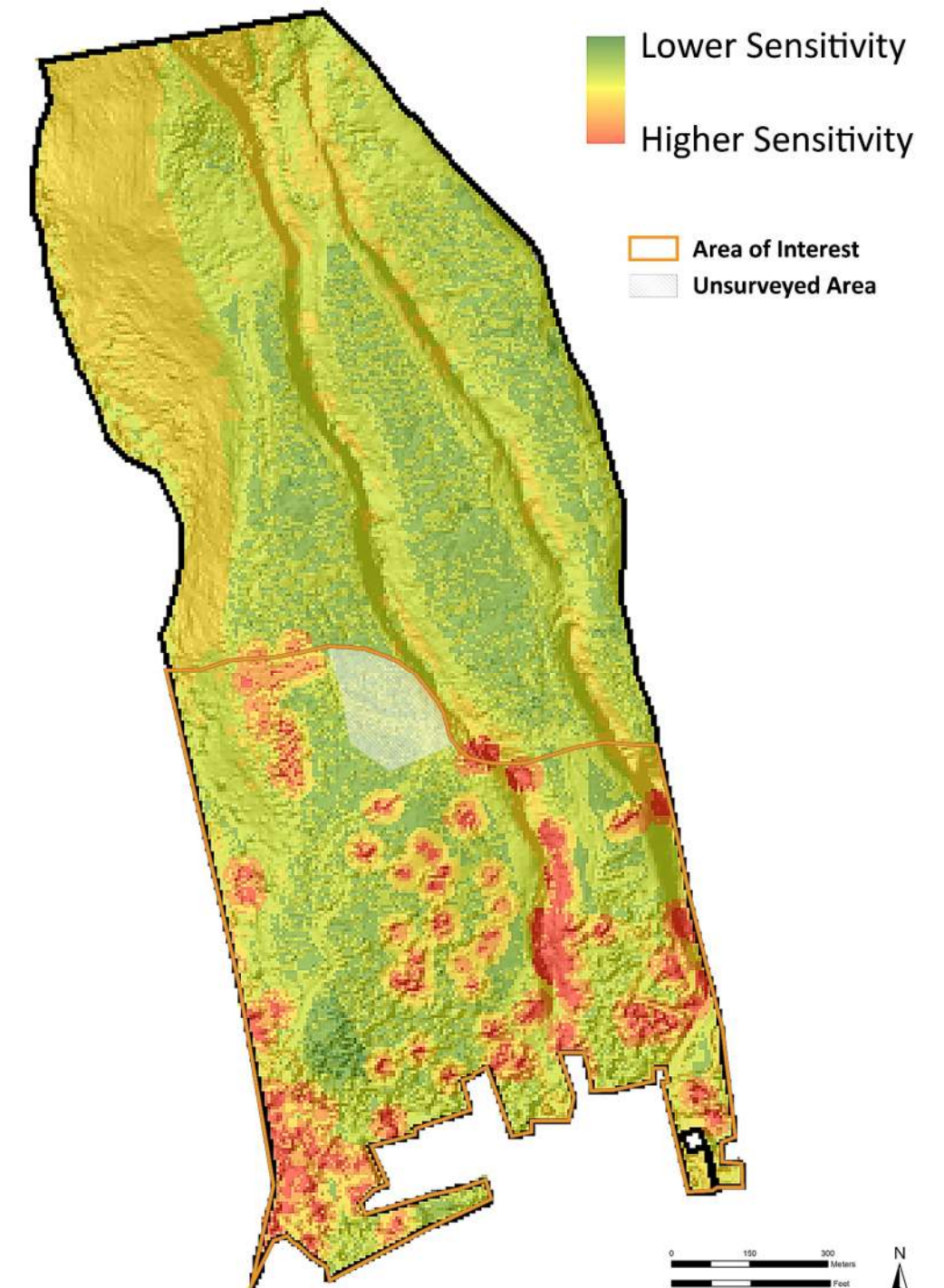


Land & Resource Evaluation Analysis Scenario

CATEGORY	INFLUENCE
Slope	11%
Archaeology	33%
All other categories	4% each

- Additional buffers around archaeological sites:

- 30 ft buffer Rating: 1
- 50 ft buffer Rating: 3
- 100 ft buffer Rating: 5



Aerial Photograph Showing the Project Area, Current Area of Interest, Sites Documented by Keala Pono, and Honua Sites



Land & Resource Evaluation Analysis



CATEGORY	INFLUENCE
Slope	11%
Archaeology	33%
All other categories	4% each

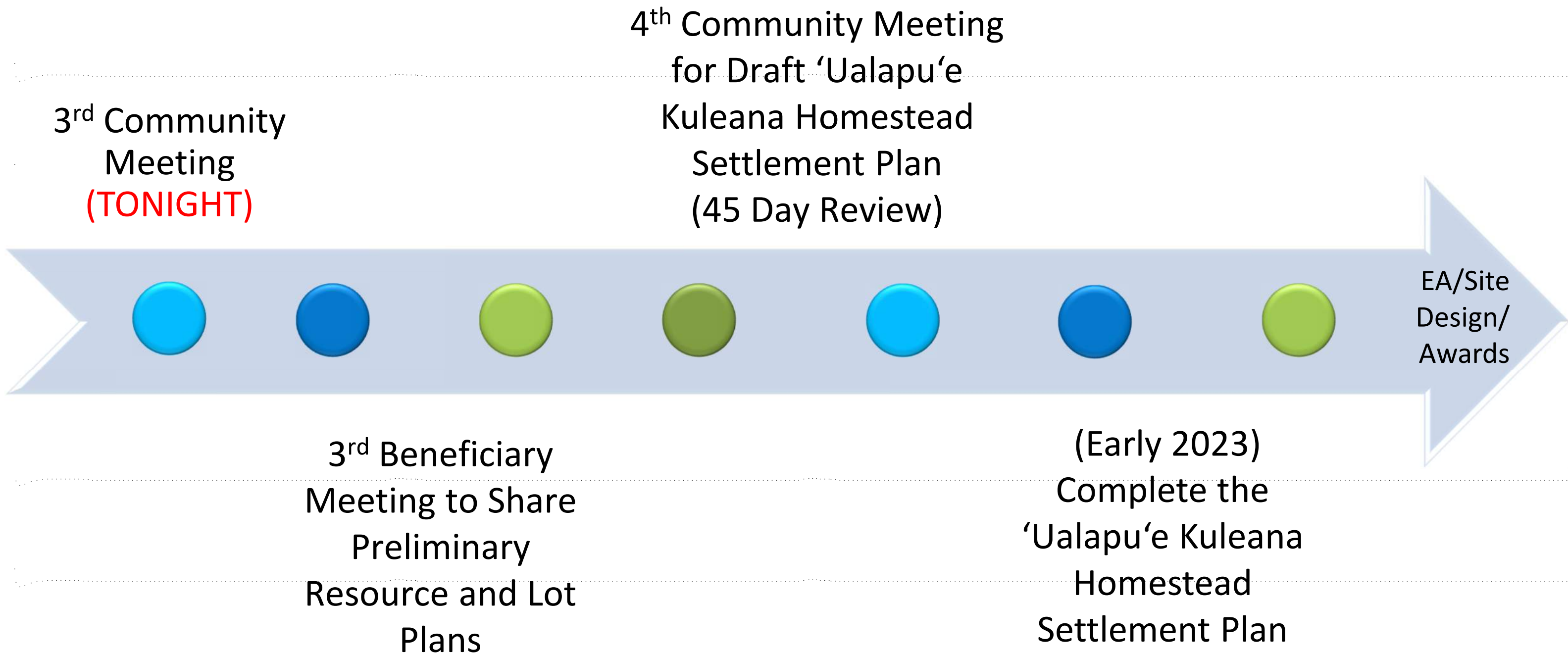




Next Steps



'Ualapu'e Planning Timeline



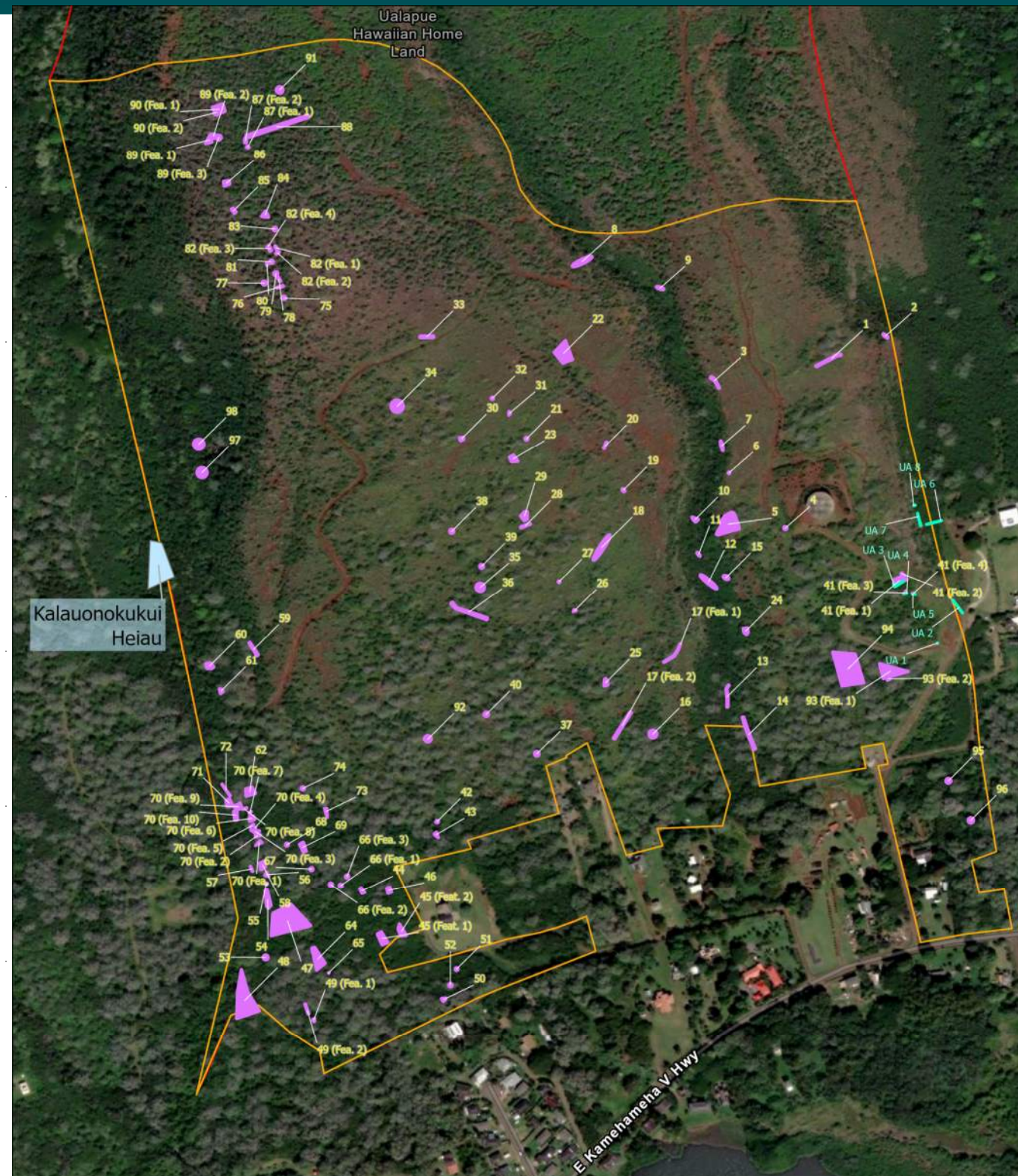
SUBJECT TO CHANGE



Feedback and **Community Comments**



Archaeology



DEPARTMENT OF HAWAIIAN HOME LANDS – PLANNING OFFICE



Providing Community Comments

- **Please practice Kapu Aloha**
- Commenters will be called to the microphone in the order they signed up at the registration desk, if you have a time restriction or other limitation, please let us know
- Comments (first round) will be limited to 2 minutes to allow for as many people to comment as possible
- Please try not to have side conversations when people are commenting, so we can have a clean recording of the meeting for our meeting notes
- If everyone who wants to comment has had at least one turn, people will be able to comment for another 2 minutes if there is time
- Please direct comments to the facilitator (and not each other)



Questions?



DEPARTMENT OF HAWAIIAN HOME LANDS

Contact:

dhhl.planning@hawaii.gov
ualapuekuleana@g70.design

Project Information Website:

dhhl.hawaii.gov/po/molokai