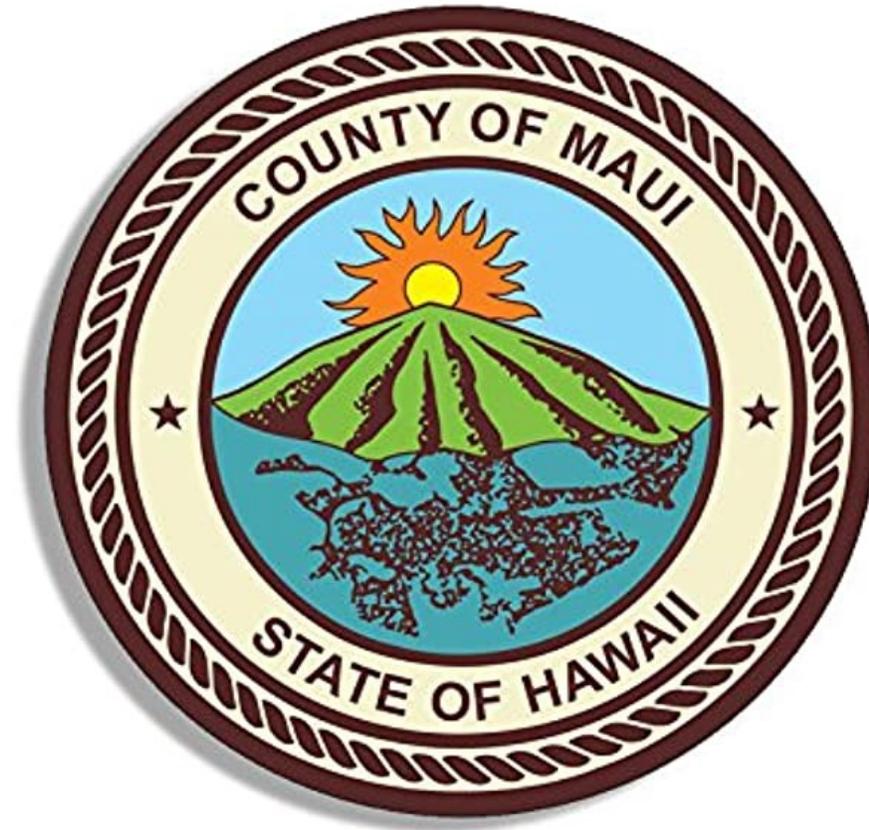


BUILDING THE MAUI COUNTY CULTURAL OVERLAY AGRICULTURE AND PUBLIC TRUST

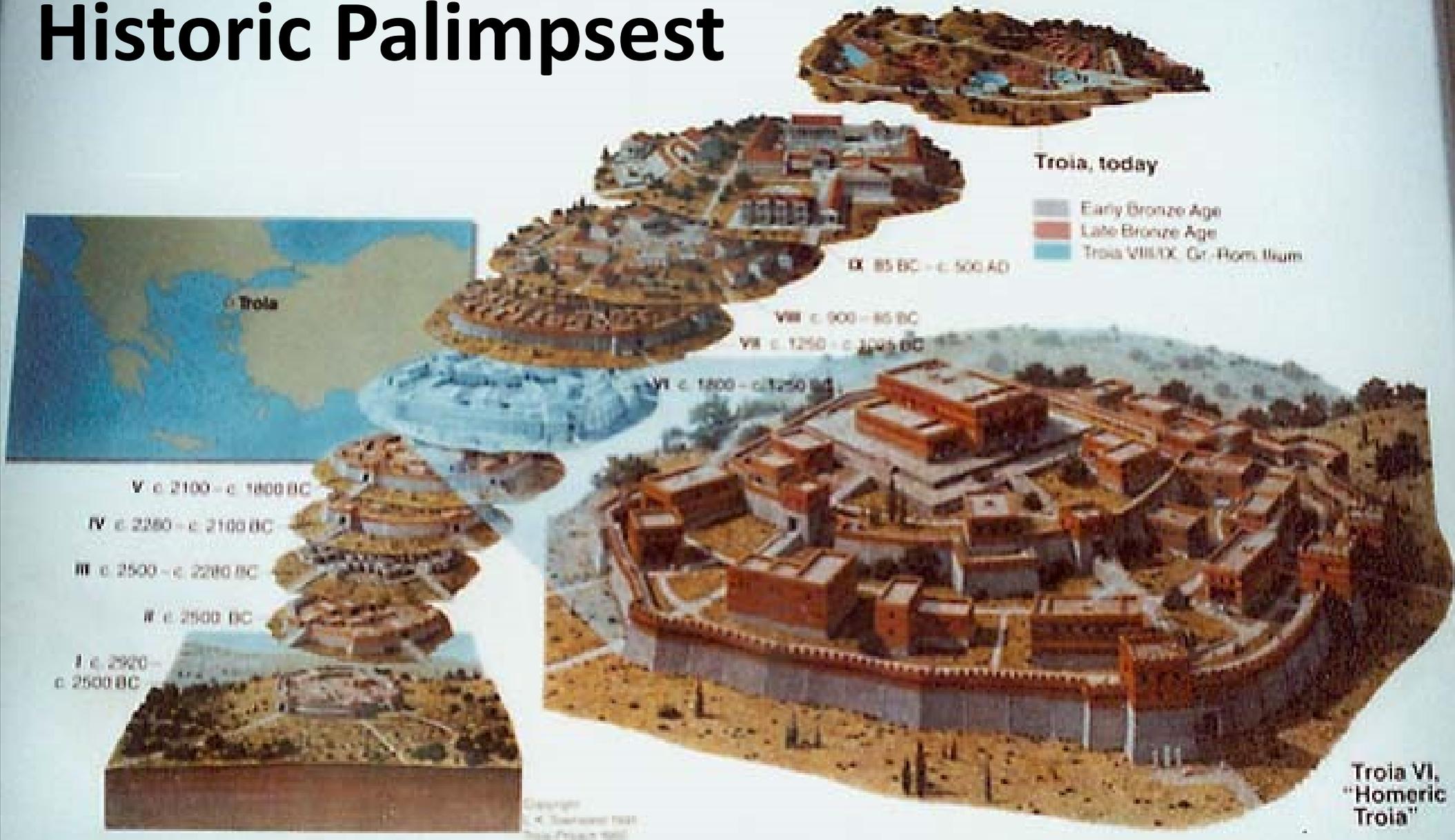


March 15, 2022

Displaying Data in Meaningful Ways

Geographic Information System (GIS)

Historic Palimpsest



Troia, today

- Early Bronze Age
- Late Bronze Age
- Troia VIII/IX, Gr.-Rom. Itum

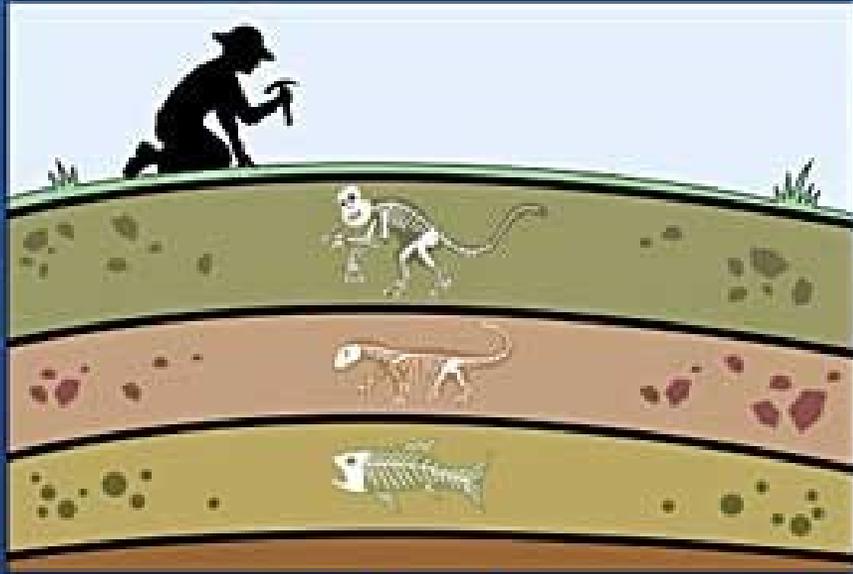
- I c. 2920 - c. 2500 BC
- II c. 2500 BC
- III c. 2500 - c. 2280 BC
- IV c. 2280 - c. 2100 BC
- V c. 2100 - c. 1800 BC

- VI c. 1800 - c. 1250 BC
- VII c. 1250 - c. 1045 BC
- VIII c. 900 - 85 BC
- IX 85 BC - c. 500 AD

Troia VI, "Homeric Troia"

Copyright
© H. Sauerland 1997
Troia Project 1995

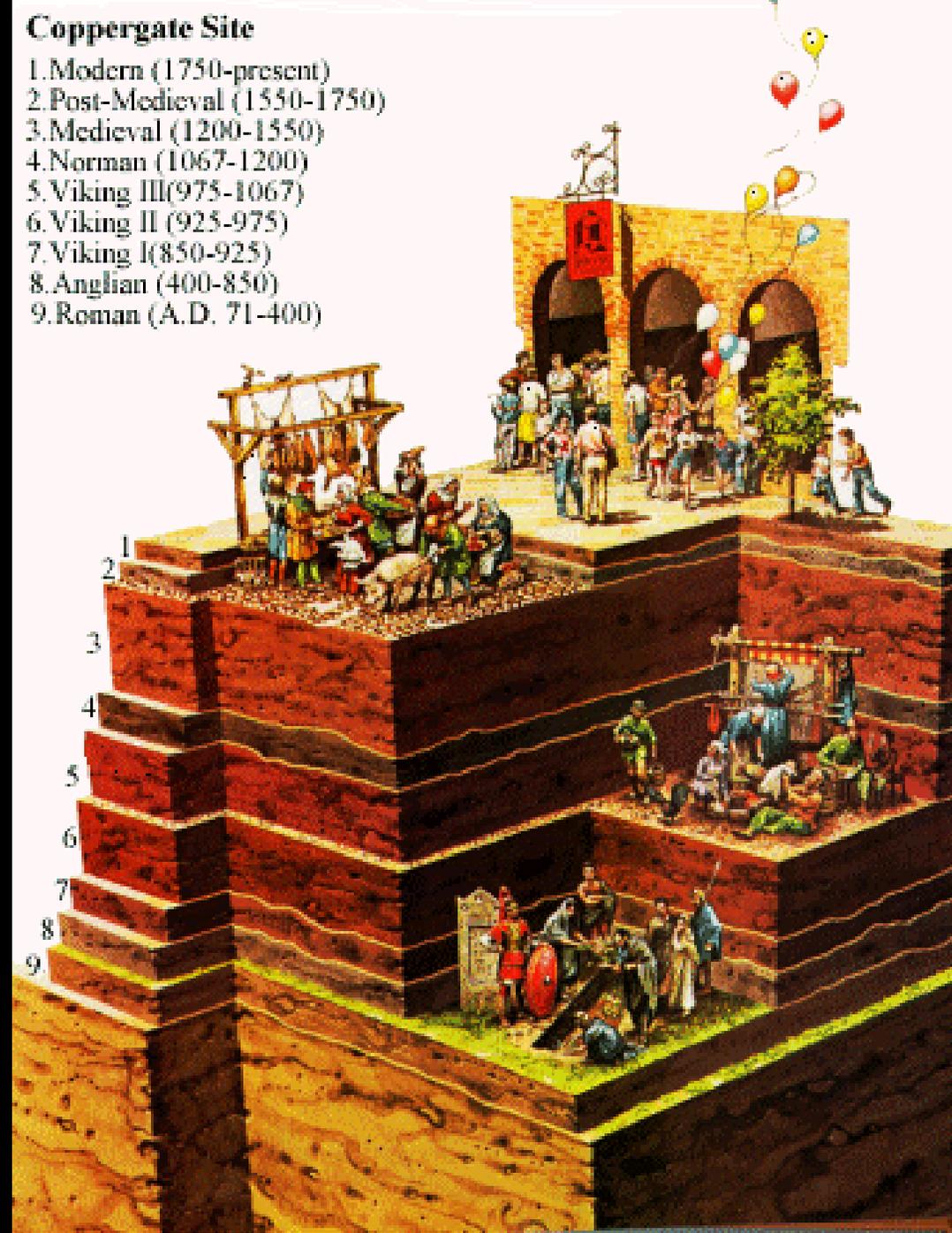
Over Time



...so the deeper we dig,
the farther back in time we see

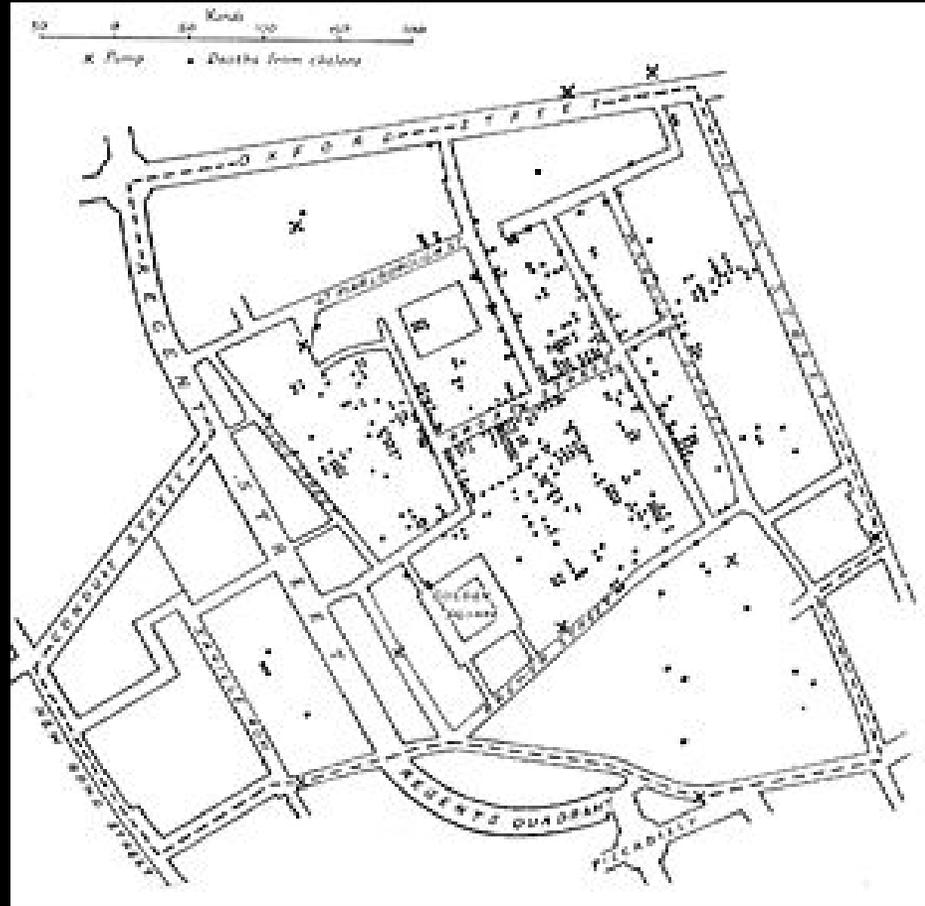
Coppergate Site

1. Modern (1750-present)
2. Post-Medieval (1550-1750)
3. Medieval (1200-1550)
4. Norman (1067-1200)
5. Viking III (975-1067)
6. Viking II (925-975)
7. Viking I (850-925)
8. Anglian (400-850)
9. Roman (A.D. 71-400)

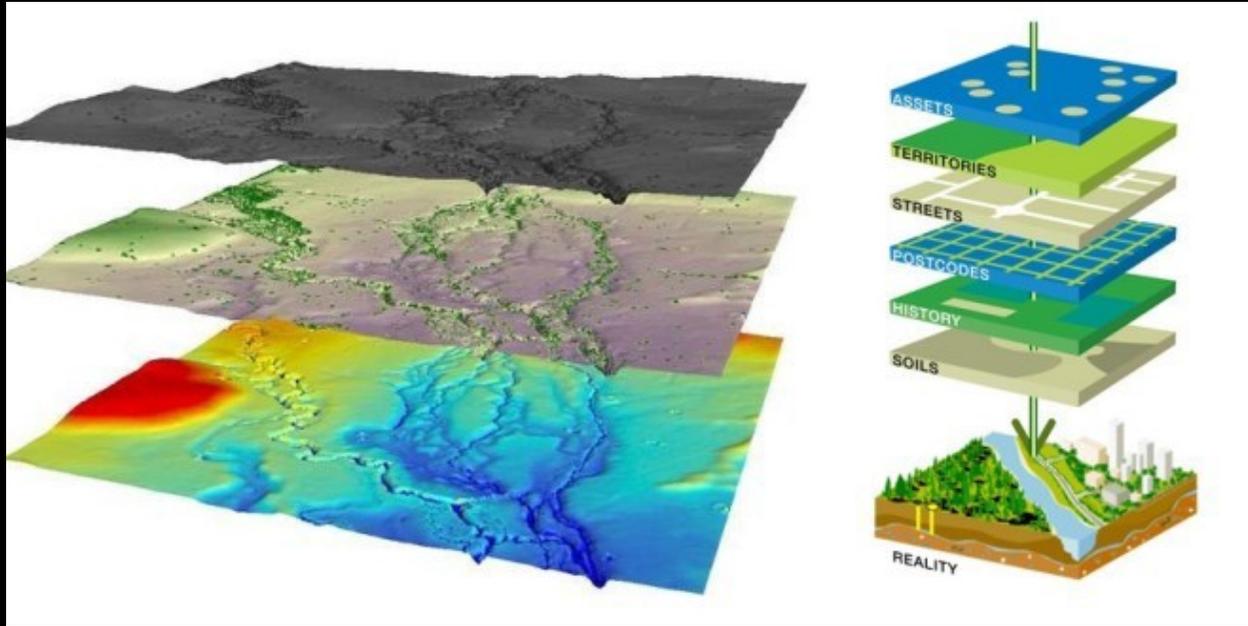


Across Space

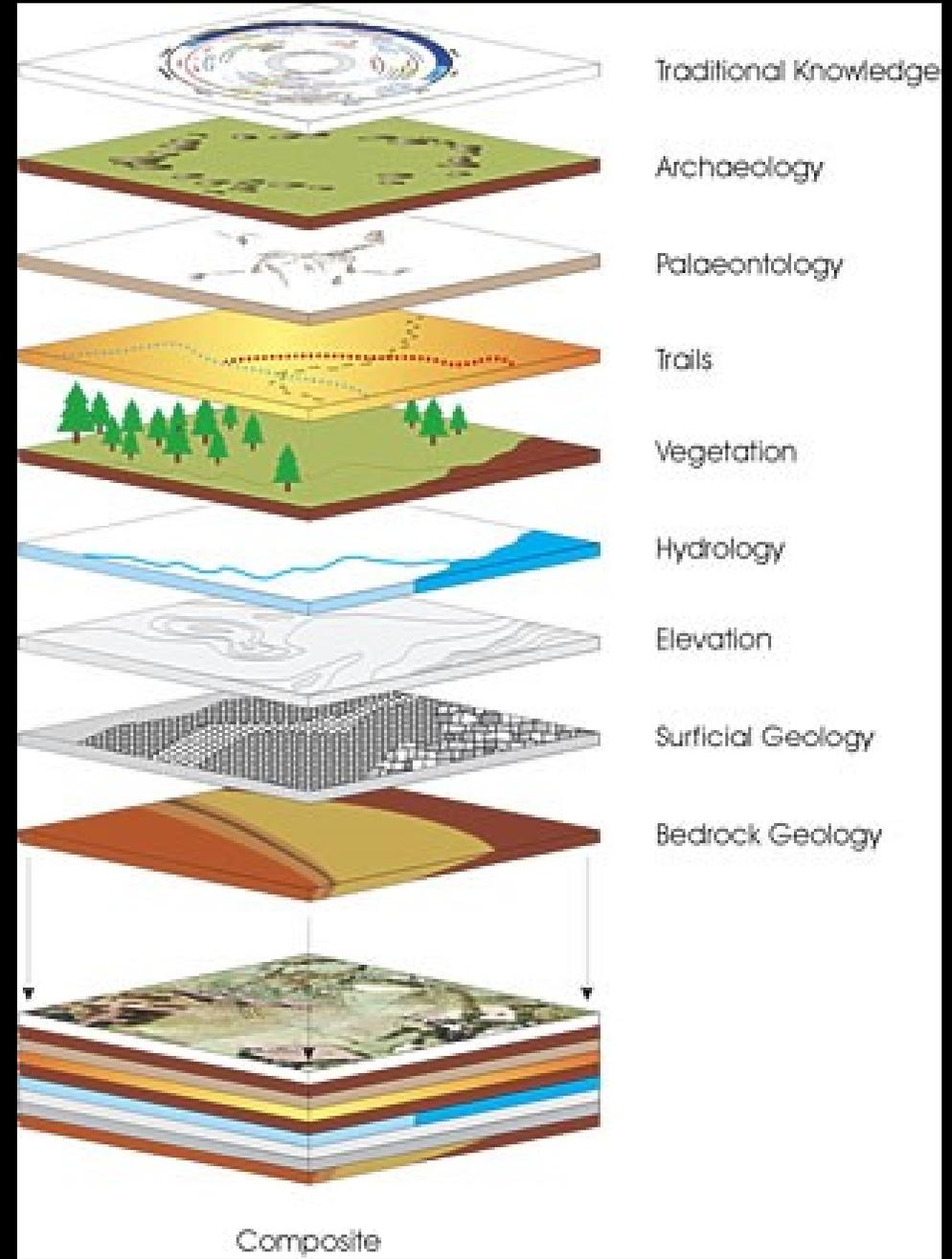
The analysis of spatial relationships **both within sites and between sites**



Map by Dr. John Snow of London, showing clusters of cholera cases in the 1854 Broad Street cholera outbreak. This was one of the first uses of map-based spatial analysis.

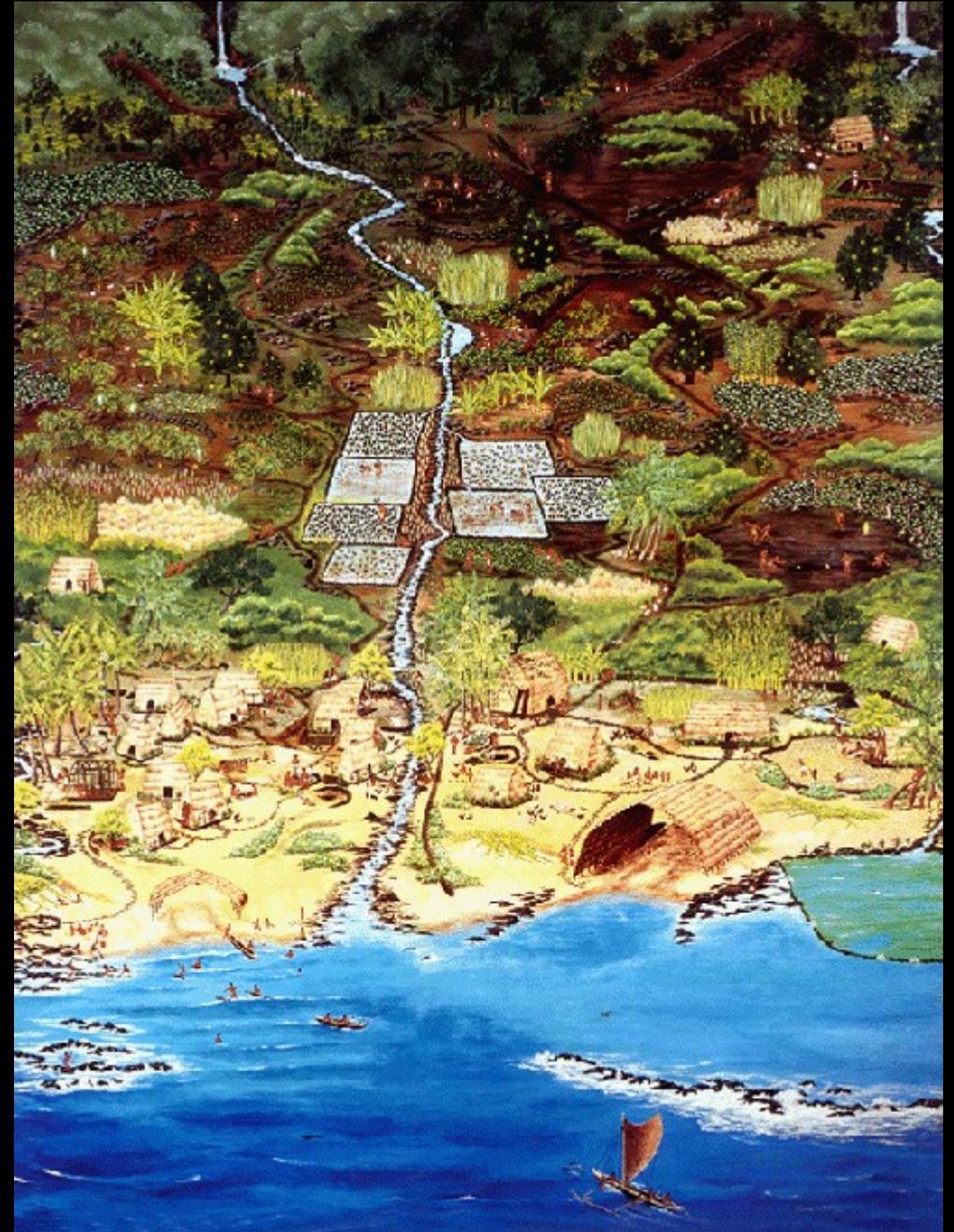


Geographic Information System (GIS) analysis is a useful tool for scientific research and data management. It provides a wider perspective to analyze cultural landscapes.



Composite

A Cultural Landscape consists of *material culture* including artifacts, biofacts (ecofacts), architecture (features), sites and the relationship between sites.



Continuous use over time



Surface Survey



**Pedestrian
(on foot)**



Satellite Imagery



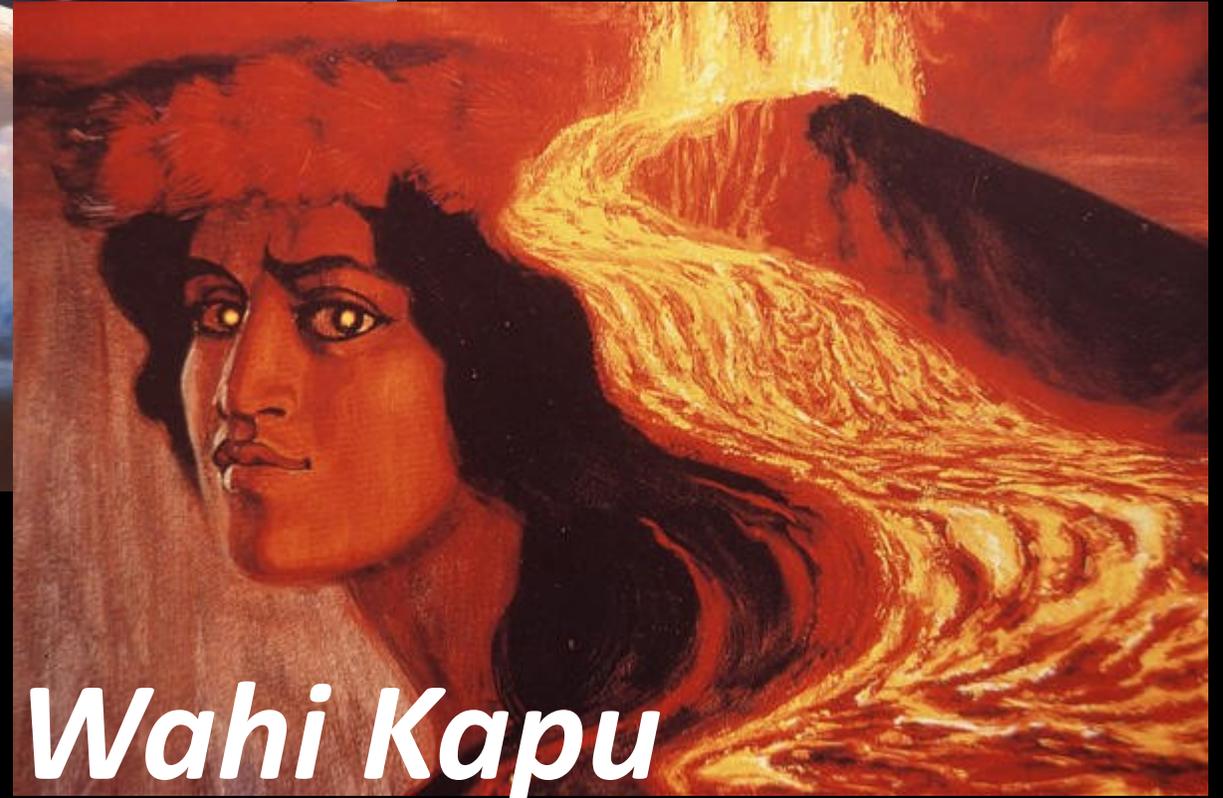
Aerial Photography

Mapping Drones



The image features a composite background. The outer ring is a satellite-style view of the Earth, showing continents and oceans. The inner part of the image is a close-up of a human eye, with the iris and pupil visible. The Earth's colors are blended into the eye's structure, making the globe appear as if it is being viewed through a lens. A bright white light source is positioned at the center of the pupil, creating a reflection on the iris.

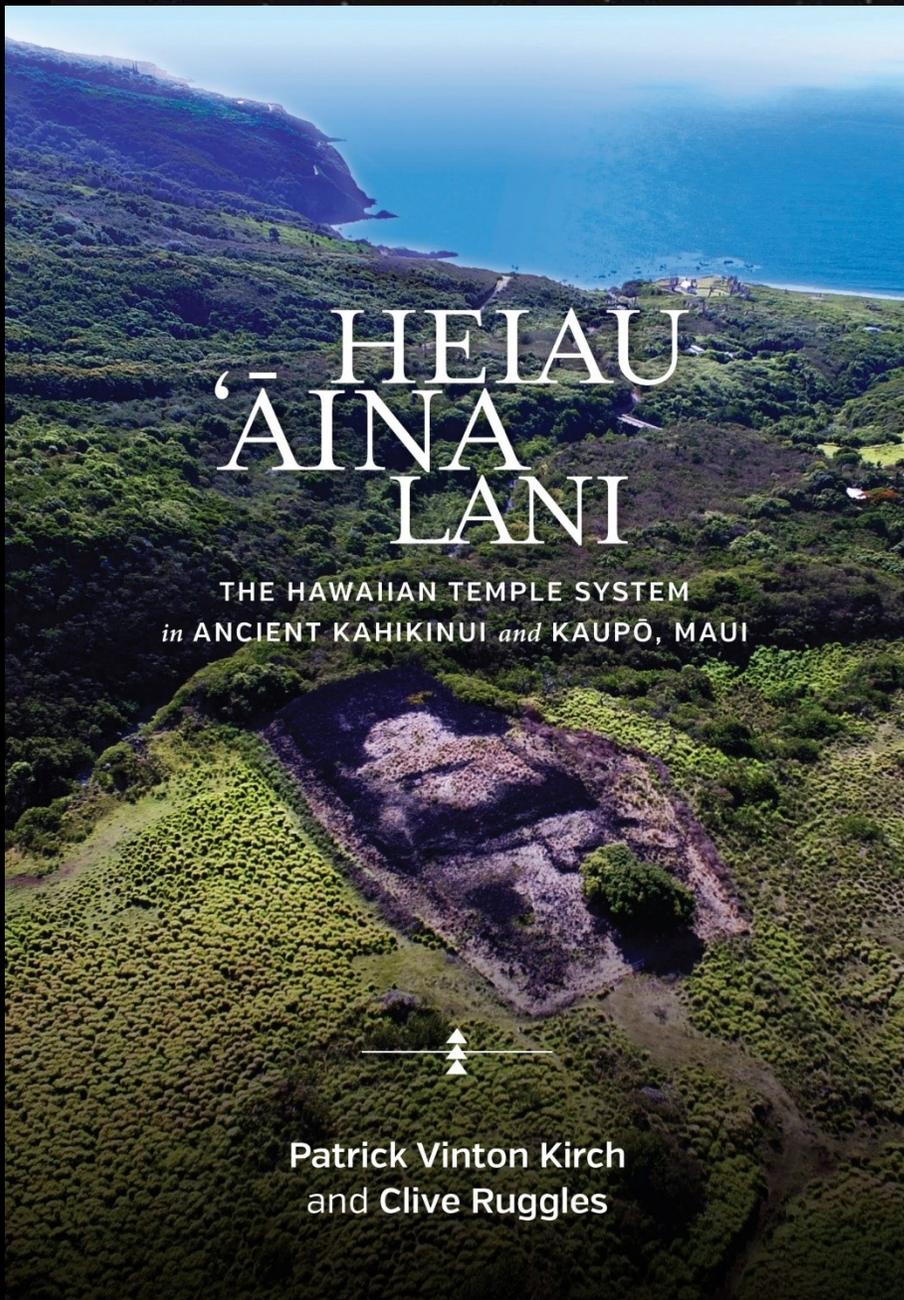
Applying a Cultural Lens



Wahi Pana & Wahi Kapu
Sacred & Tabu Cultural Landscapes

Archaeoastronomy:





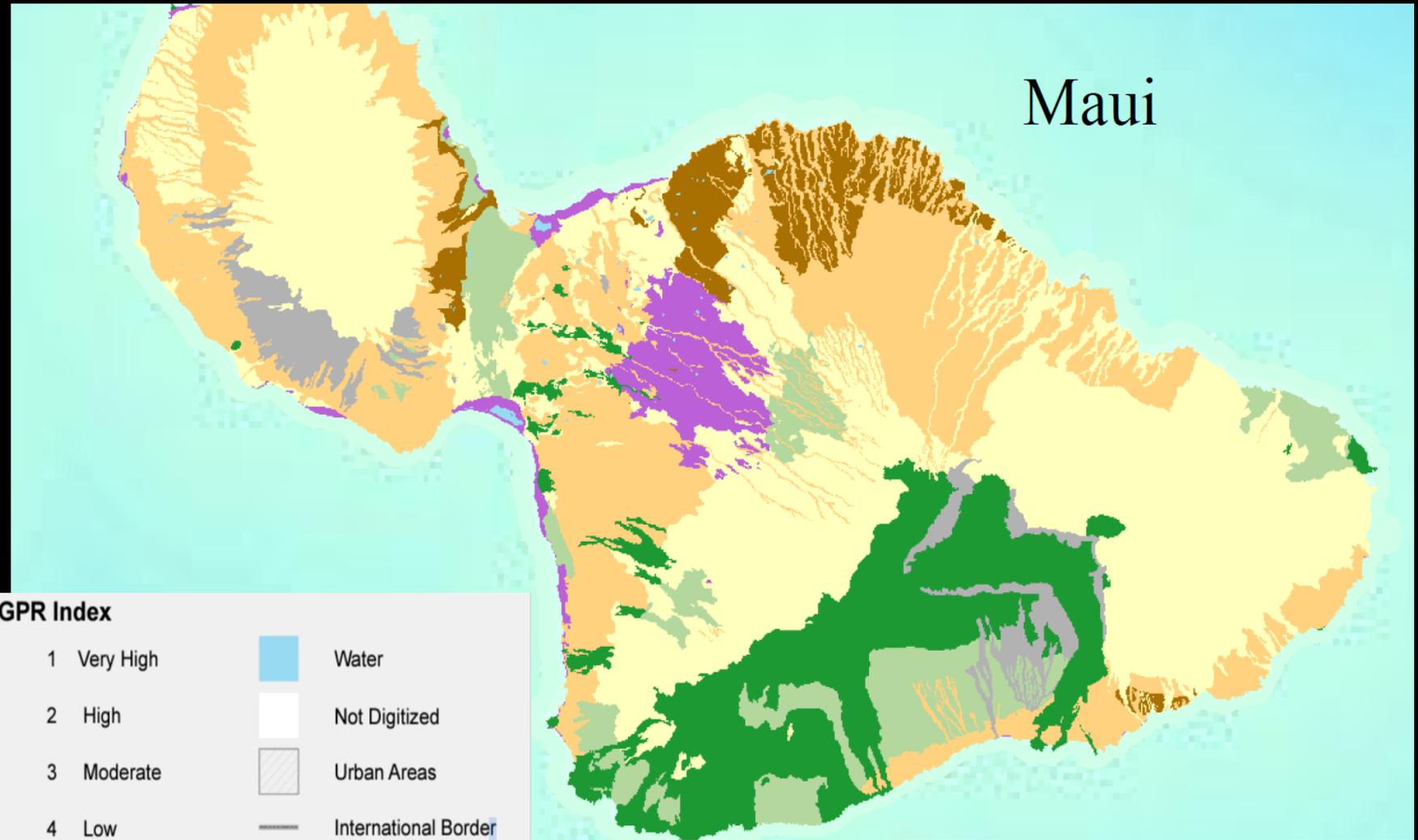
Heiau, 'Āina, Lani is a collaborative study of 78 temple sites in the ancient *moku* of Kahikinui and Kaupō in southeastern Maui, undertaken using a novel approach that combines archaeology and archaeoastronomy.

Its title, meaning “Temples, Land, and Sky,” reflects the integrated approach taken by Patrick Vinton Kirch and Clive Ruggles, based upon detailed mapping of the structures, precise determination of their orientations, and accurate dating.

Types of Data that can be Displayed

- **Maps and Surveys**
- **Images**
- **Documents & Reports**
- **Sound Clips**
- **Video Clips**
- **Important Events**
- **Cultural knowledge**
- **Architecture**
- **Archaeological Sites**

Soils Maps



USDA-NRCS. 2009. *Ground Penetrating Radar Suitability – Hawaii* (map). Using ArcGIS, Version 9.2 (Environmental Systems Research Institute, Inc., Redlands, Ca.), National Soil Survey Center, Lincoln, Nebraska. Scale 1:900,000. Map projection using Hawaii_Albers_Equal_Area, North American Datum 1983.

USDA-NRCS. 2008. Soil Survey Geographic Database (SSURGO) version 2.1. Hawaii Collection. Honolulu, Hawaii. Soil Data Mart Source (<http://soidatamart.nrcs.usda.gov>). April 2009 edition.

Soil Survey Staff. 2009. NSSC DATA – Ground Penetrating Radar Suitability Index (GPRS) [data file] - National Soil Information System (Evaluation Draft - 02/2009). USDA Natural Resource Conservation Service, National Soil Survey Center, Lincoln, Nebraska. (<http://soils.usda.gov>)

Current County and Equivalent, TIGER/Line 2008 (cartographic boundary file, tl_2008_us_county.zip). 2008. U.S. Census Bureau. Available FTP: <ftp://ftp2.census.gov/geo/tiger/TIGER2008/>. [Accessed on February 20, 2009]

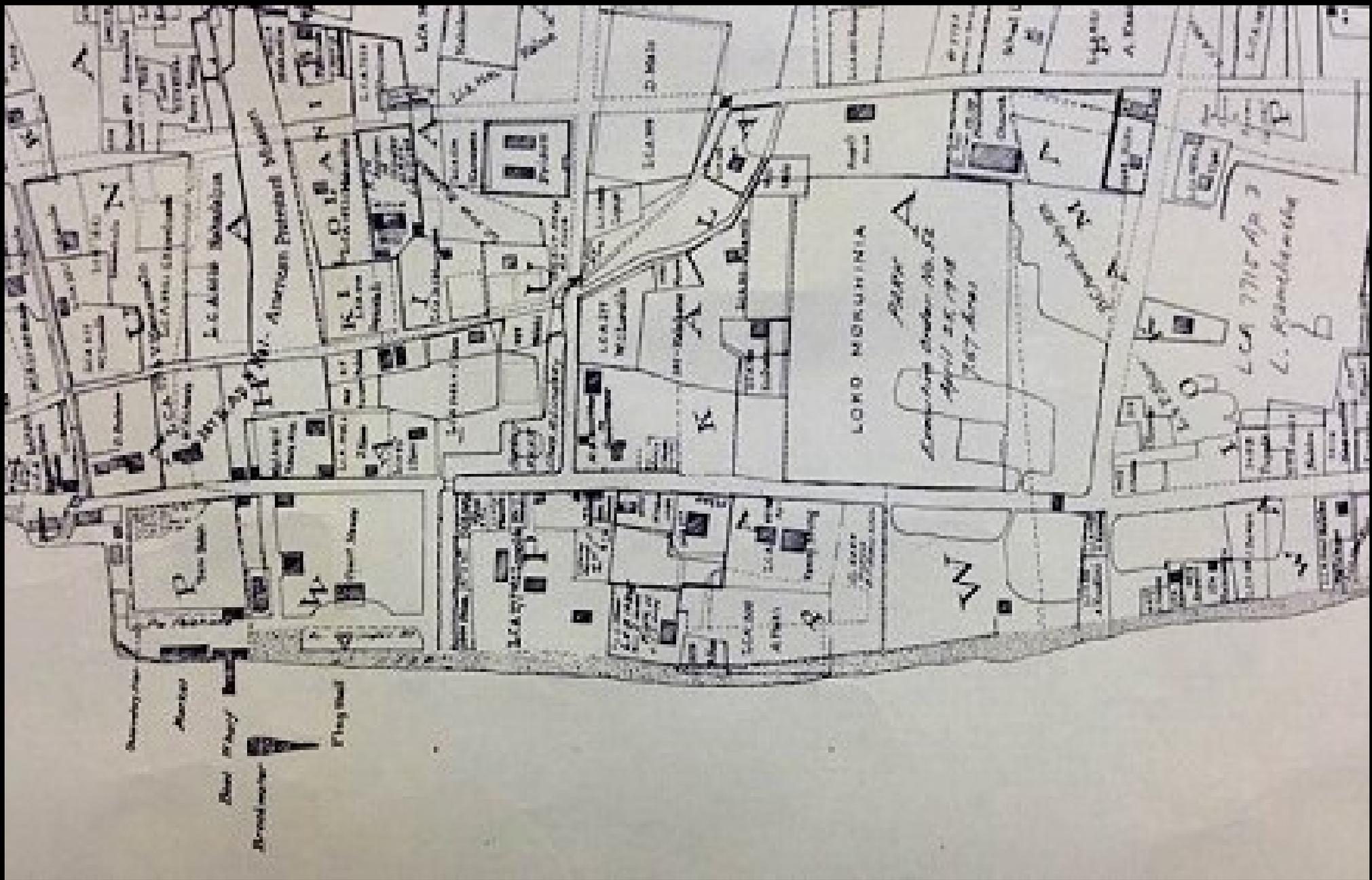
Current State and Equivalent, TIGER/Line 2008 (cartographic boundary file, tl_2008_us_state.zip). 2008. U.S. Census Bureau. Available FTP: <ftp://ftp2.census.gov/geo/tiger/TIGER2008/>. [Accessed on February 20, 2009]

Urban Areas (generalized cartographic boundary file, ua99_d00_shp.zip). 2000. U.S. Census Bureau. Available FTP: <http://www.census.gov/geo/cob/body/ua/ua00shp/>. [Accessed on February 20, 2009]

USGS. Analytical Hillshade computed from 1 kilometer National Elevation Dataset (NEDS) using the following parameters: 315 degrees altitude, 45 degrees azimuth, and z factor 1x. Prepared by USDA-NRCS-NSSC, Lincoln, NE.

GPR Index

	1 Very High		Water
	2 High		Not Digitized
	3 Moderate		Urban Areas
	4 Low		International Border
	5 Very Low		State Line
	6 Unsuited		County Line
	Not Rated		Interstate Highway



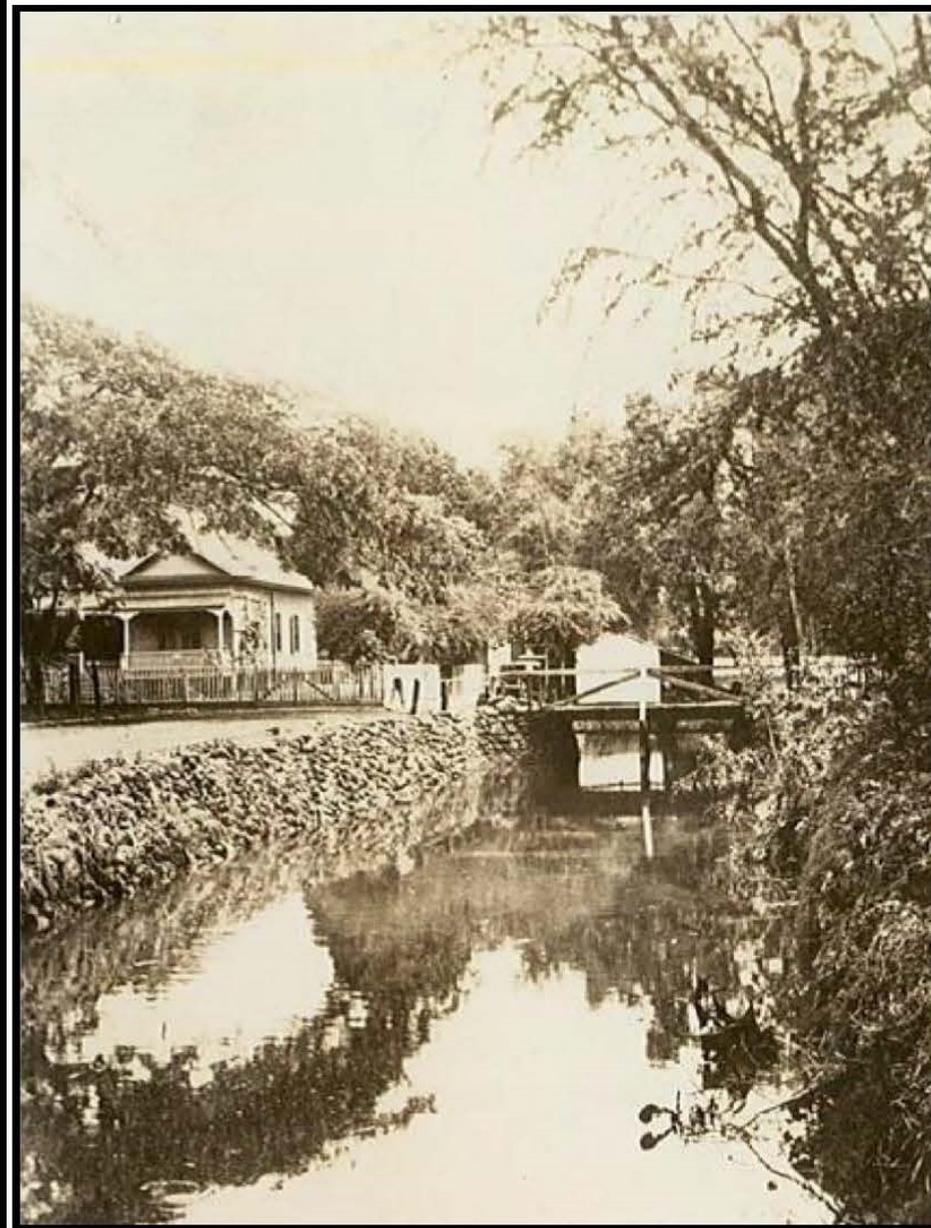
1884 Map of Lahaina by Alexander



Lahaina Harbor



Banyan Tree with fresh water well



Canal Street



Hoapili's House on the edge of Loko o Mokuhina



Kamehameha III & Royal Family

Buke Kakaui Paa

no ka mahale aina

i Koocholoia

iwaena o

Kamehameha III

a me

Na Lii

a me

Na Honohiki ana

Hoale Hii Honolulu

Januari

1848.

Papa Huhikahi
no Keia Puke.

Victoria Kamamohi 2	Kahanaumakūhau 38	Poko	69
Lotia Kapuniwohi 5	Kahalo	50	Kaluahikana 69
Hesho Kalole 10	Kalamoku	50	Lanauhi 70
Kosa Huhikahi 14	E. H. Kamamauna 3	Huanu I. I.	70
L. Konia 16	Kalaimakūlii	52	Kalohokoulii 70
Ruta Huhikahi 16	John Hall	52	Pakohoo 70
William Lunalilo 18	Kali	52	Kahanu 70
W. L. Lelaikoku 20	Kikuatou	54	Hoikopaa 70
M. Kekauonohi 26	William Laron	54	Leioha 70
H. Kekuanoo 30	L. Kaahala	54	Kaahinahina 70
Joane Si 30	Kaahawa	54	Kaaweanohi 70
Charles Kanani 32	H. H. Hoalalo	56	Kahalo 70
P. Kamatika 32	Kaawe	56	Kaawehine 70
Isua Kaco 34	Kapuniwohi 36	Mokohai	70
Esita Kipa 34	Kaulimae	56	Kaepala 70
Paula Kapaeha 34	Mokohoo	58	Kahoe 70
Kalokoko 36	Kalama	58	P. I. Manini 70
Kahi 36	Kekuaikaha	58	Kaole 70
Lona Pitka 12	Paalea	58	Kaawana 70
John Stevenson 38	Kanui	60	Kahalo 70
John 38	Paukewahie	60	E. Huhia 70
Kuluhi 38	Kaole	60	Kekuaikaha 70
Paulo Kanoa 40	Kakai	62	Luki Puka 70
Uluhohu 40	Paniani	62	Kahoe 70
Kanole 40	Hueu	62	Kaialakani 70
Ma Kaco 42	Kaumea	64	Kahakou 70
Kamakee Pitka 12	Kuhio	64	Alapai 70
Davida Kaulikomo 28	Pala	64	Kuunui 70
Kalua 44	Kalua	64	Hoomanawanui 70
Luisi Kealoha 44	Kaaliwai	66	Kahalaau 70
Kamaha 46	Kalaau	66	Kapala 70
Kupa 46	Kahonu	66	P. A. Huhine 70
Kaaha 46	Kapa	66	Kahaha 70
Samuelo Kuluwai 48	Luluhiwalani	68	Kuhio 70
Linona Kaulikomo 48	Luki kai	68	Kahama 70

Māhele

**DRAFT -- Archaeological Inventory Survey Report for the
Proposed Mokuhinia Ecosystem Restoration Project
Waiokama and Lower Waine‘e Ahupua‘a, Lāhainā District,
Maui Island**

TMK: [2] 4-6-007: 001, 002, and 036-038

Prepared for
County of Maui

Prepared by
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Cultural Surveys Hawai‘i, Inc.
Wailuku, Hawai‘i
(Job Code: WAINEE 6)

December 2017

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Fax: (808) 244-1994



Moku`ula and Mokuhinia c. 1900



Hawai`i Cultural Resources Information System

<https://shpd.hawaii.gov/hicris/search>

Canal St, Lahaina, HI, 96761

Archaeological Resource

Resource Number	2019RE00500
Entity Type	Resource
Resource Name	King Kamehameha III's Royal Residential Complex
Resource Type	Archaeological
Resource Classification	Site
SIHP Number	50-50-03-02967
View Details	View

Zoom to 3 of 9

Resource Mapping Hawaii | County of Hawaii; City and County of Honolulu; County of Kauai; County of Maui; Hawaii Statewide GIS Program. Powered by Esri

<https://shpd.hawaii.gov/hicris>

Office of Hawaiian Affairs

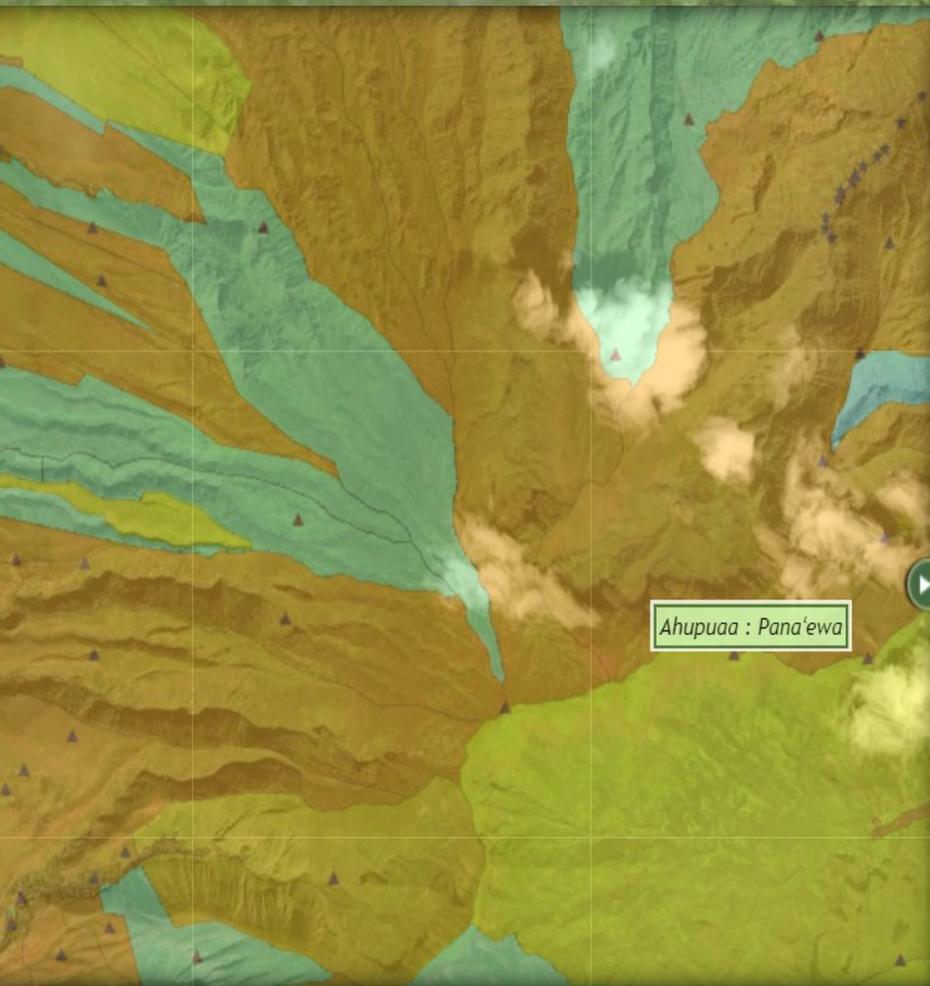
<http://kipukadatabase.com/kipuka/>

246007002

Go



- Lahaina Historic District**
Site Number:03001
State Site:50-50-03-03001
- Land Award**
Type: Land Commission Award
Claimant: Makaulia
Helu: 10221 & 10218:3
- Land Award**
Type: Land Commission Award
Claimant: Makaulia
Helu: 10221:1
- Tax Map Key Parcel**
TMK#: 246011006
Owner: Lokahi - Condo Master
Trust Land Status: Null
- Tax Map Key Parcel**
TMK#: 246011008
Owner: Aina Nalu - Condo Master
Trust Land Status: Null
- Tax Map Key Parcel**
TMK#: 246011999
Owner: Road
Trust Land Status: Null
- Ahupua'a: Paunau**
Moku: Lāhainā
Mokupuni: Maui



Search Results

TMK (1)			Historic Sites (0)		
'Ili (0)		Ahupua'a (0)		Moku (0)	
Land Awards			Crown Lands (0)		
Tmk			Owner		
246007002			State DLNR		



**First we make the layer cake
and then we can embellish it.**



The background features a series of concentric circles that create a tunnel-like perspective. A bright lens flare is positioned on the right side, overlapping the circles. The text "Coming soon" is written in a white, cursive font across the middle of the image.

Coming soon

The Maui County Cultural Layer

APT Committee

From: Janet Six <Janet.Six@co.maui.hi.us>
Sent: Friday, March 11, 2022 3:13 PM
To: APT Committee
Subject: Cultural Overlay Pres.
Attachments: Cultural Overlay pres.pptx

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from janet.six@co.maui.hi.us. [Learn why this is important](#)

Aloha kakou,

See attached PowerPoint I will be presenting on the 15th.
Happy Aloha Friday!
J6

Janet Six, PhD
Principal Archaeologist for the County of Maui