



Nature + Culture Connection: Indigenous Solutions to Climate Change June 30, 2021

Alakoko Fishpond Photo: Trust for Public Land

Mahalo for joining us. Our program will begin shortly.



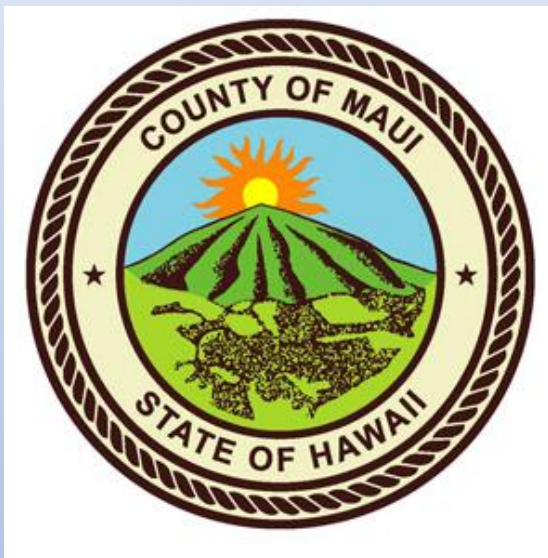
The logo for the Historic Hawai'i Foundation is displayed in a white rectangular box. It features the words "HISTORIC", "HAWAI'I", and "FOUNDATION" stacked vertically in a bold, black, serif font. The text is centered within the box.

HISTORIC HAWAI'I FOUNDATION

A statewide non-profit advocacy organization, **Historic Hawai'i Foundation** encourages the preservation of historic buildings, sites, structures, objects and districts relating to the history of Hawai'i.

We help people save Hawai'i's historic places.

www.HistoricHawaii.org



Office of Climate Action, Sustainability and Resilience

The Maui County Environmental Coordinator's Office provides access to information and resources, and serves as an advocate to see that important environmental concerns are brought before decision makers.

www.mauicounty.gov/142/Office-of-Climate-ActionSustainabilityRe



A global environmental non-profit working to create a world where people and nature can thrive.

From mauka to makai, **The Nature Conservancy, Hawai'i and Palmyra** works with individuals and communities to protect Hawai'i's spectacular diversity of life.

www.Nature.org



University of Hawai'i Office of Indigenous Innovation for UH System seeks inspiration from indigenous ancestral knowledge systems to develop solutions for contemporary contexts.

The focus: developing enterprises optimized for the repair, restoration and regeneration of peoples and places.



Mahalo to our Partners & Presenters:

- Makale'a Ane
- Alana Yurkanin
- Kamuela Enos
- Pomaika'i Kaniaupio-Crozier
- Peleke Flores
- Uncle Mac Poepoe
- Scott Crawford
- Hannah Kihalani Springer

Pu'u Kukui Watershed Preserve



- Pu'u Kukui Watershed Preserve
- Mālama Hulē'ia
- Hui Malama o Mo'omomi on Moloka'i
- Kīpahulu 'Ōhana
- Ka'ūpūlehu Marine Life Advisory Committee (KMLAC)

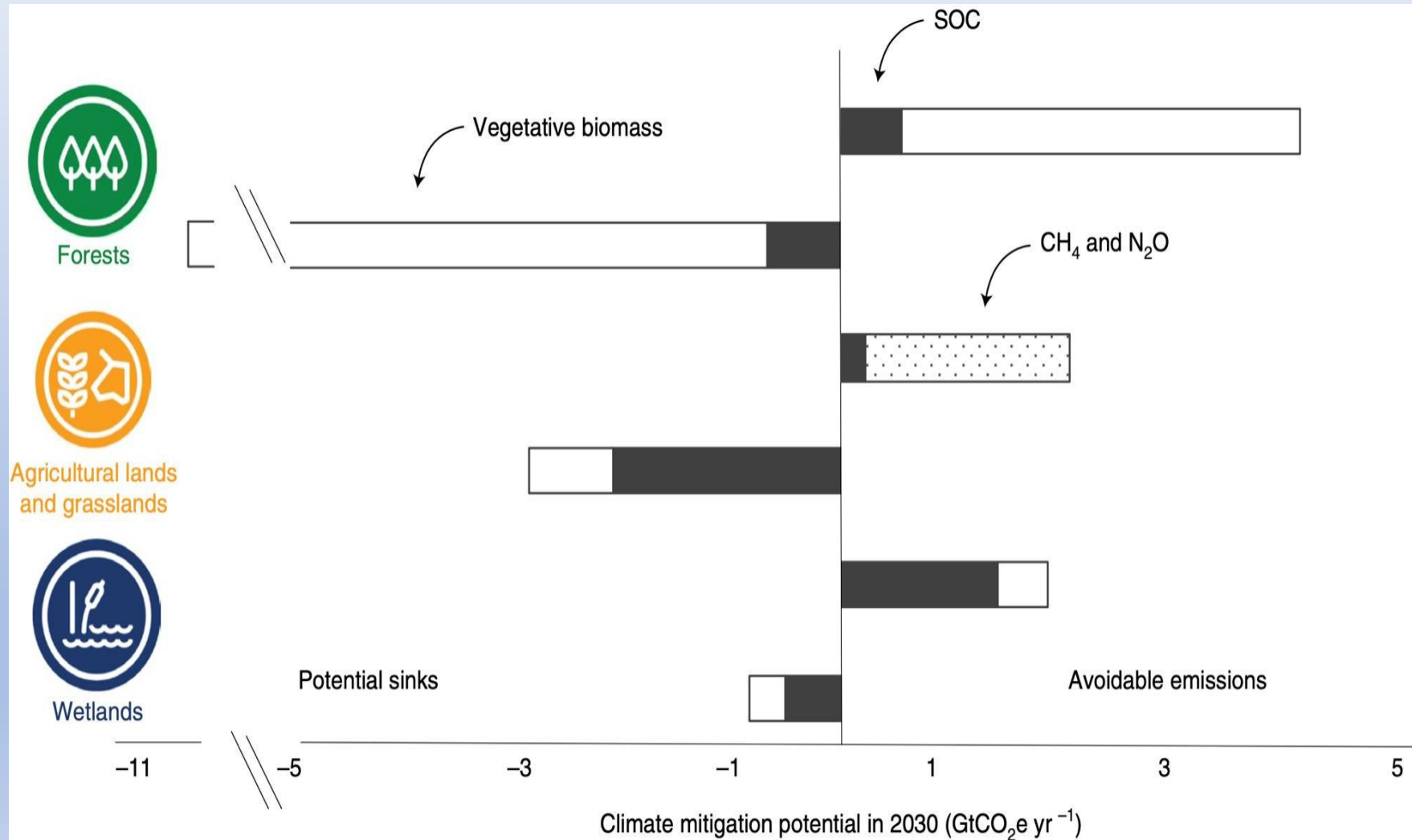


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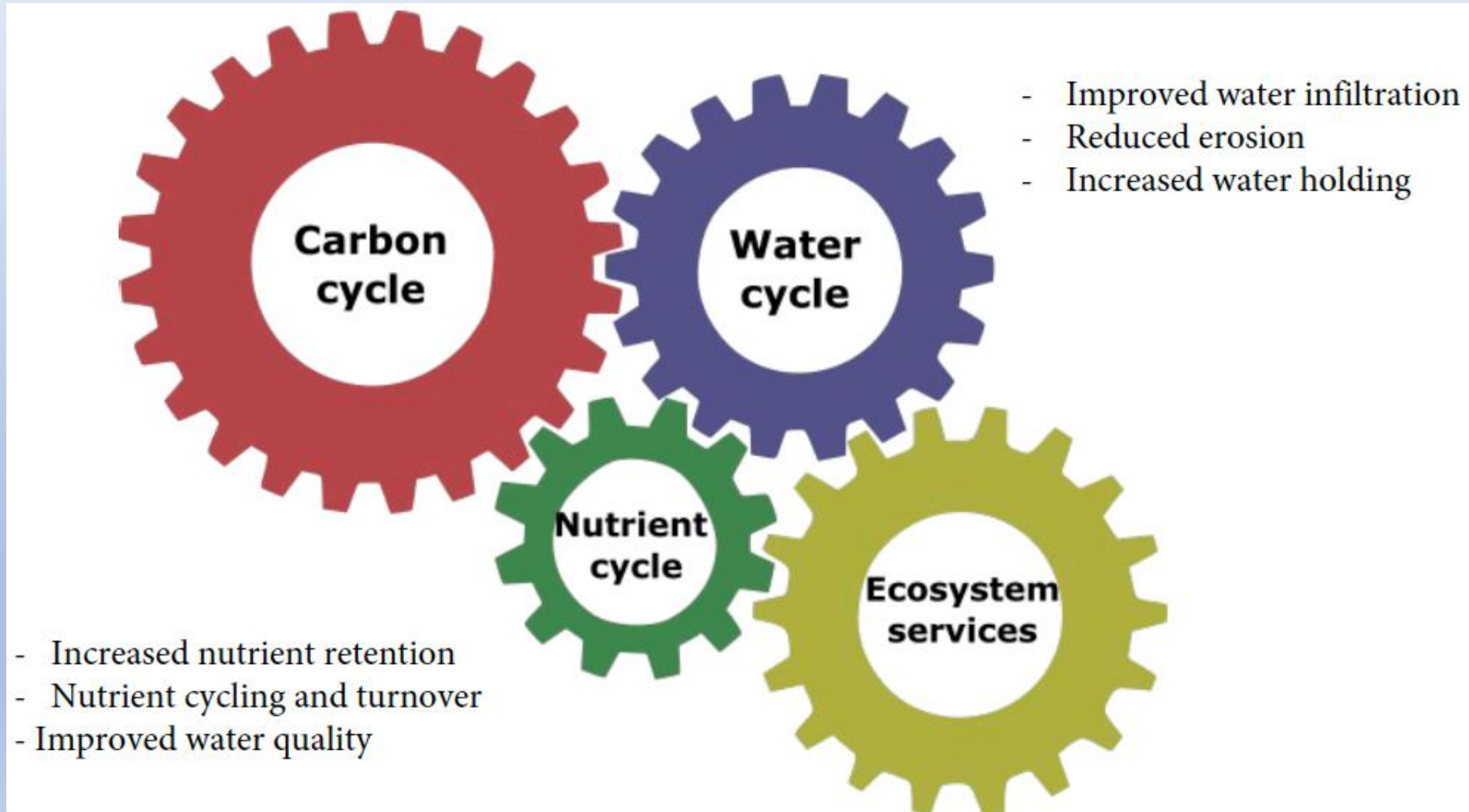
**Climate Action, Sustainability,
and Resiliency**

KE'ENA O HOHOLU

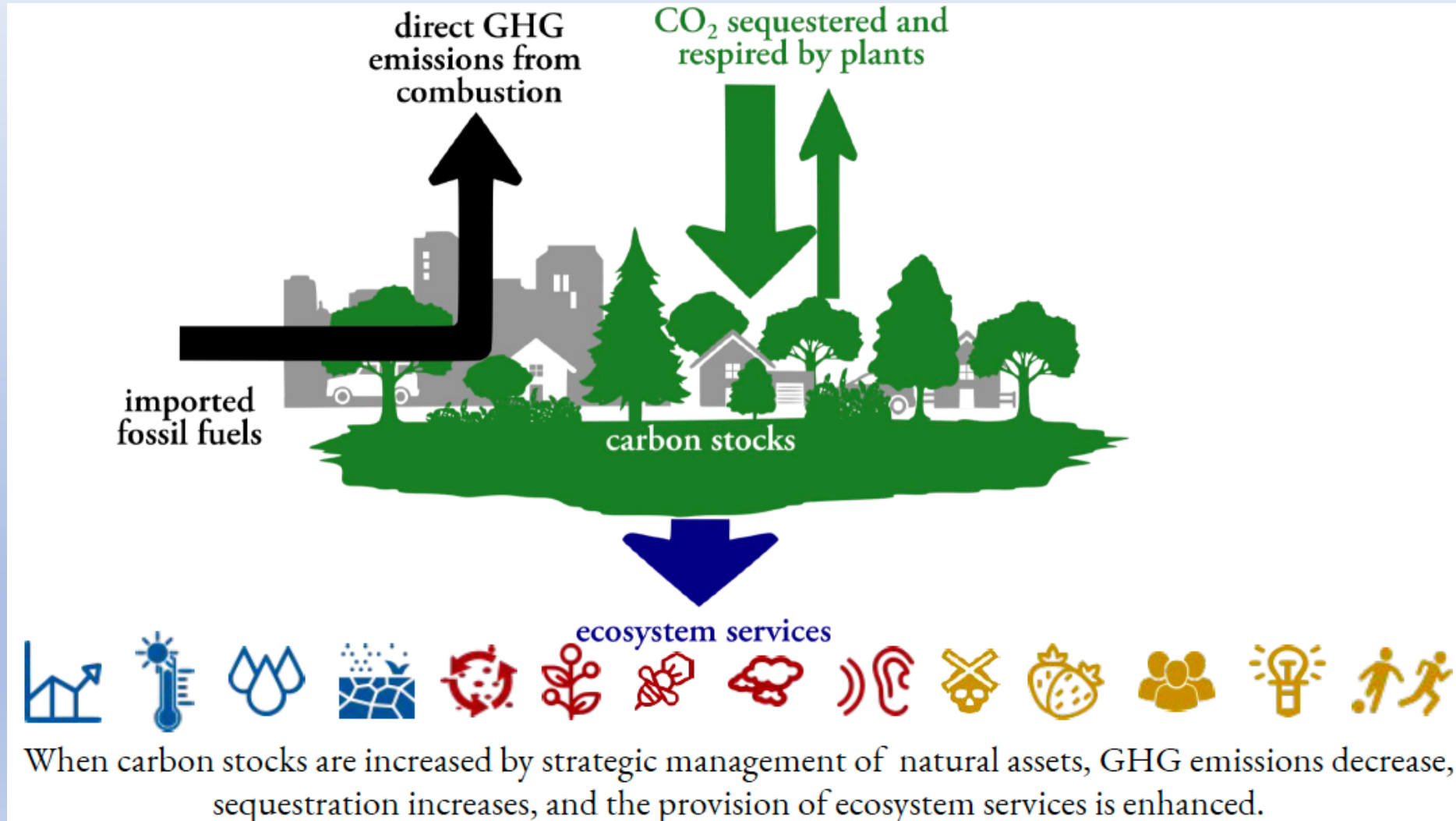
INVESTING IN RESILIENCE TEK NATURE BASED SOLUTIONS



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INVESTING IN RESILIENCE TEK NATURE BASED SOLUTIONS

Climate Regulation & Resilience



Climate regulation



Temperature moderation



Water flow and retention



Soil health & erosion prevention

Environmental Services



Nutrient cycling & management



Biodiversity & habitat



Pollination & biological pest management



Air purification



Noise reduction

Social Benefits



Reduced toxins



Food supply



Cultural & aesthetic values



Education & cognitive development



Recreation, mental & physical health

The Framework

ECOLOGY
AS
ECONOMY



FAMILY UNIT
AS
EMPLOYER,
TEACHER,
SPIRITUAL CENTER

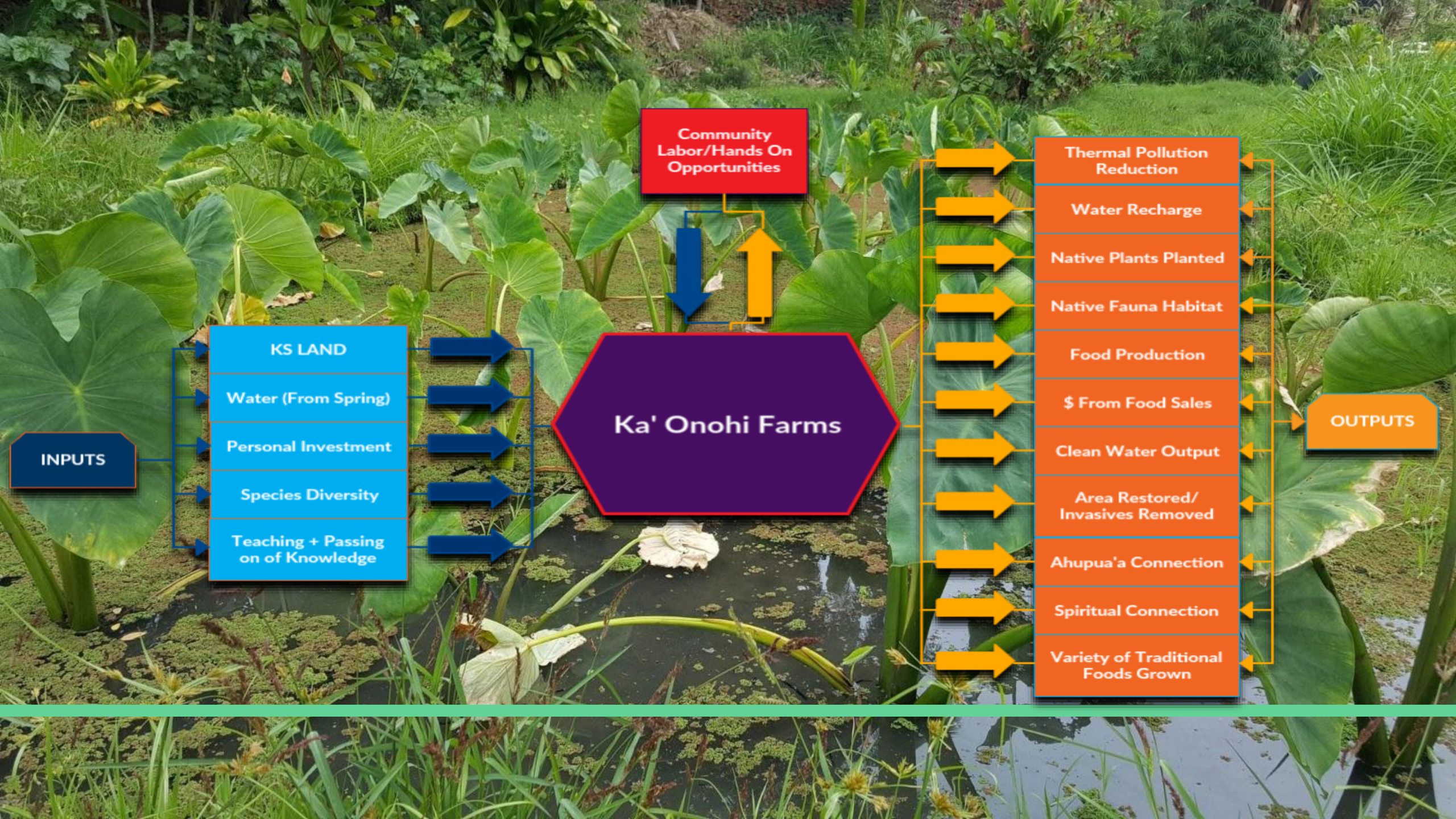


POVERTY
AS
LEARNED BEHAVIOR

SO

RESTORATION
OF ANCESTRAL FOOD
SYSTEM
AS
INTERVENTION





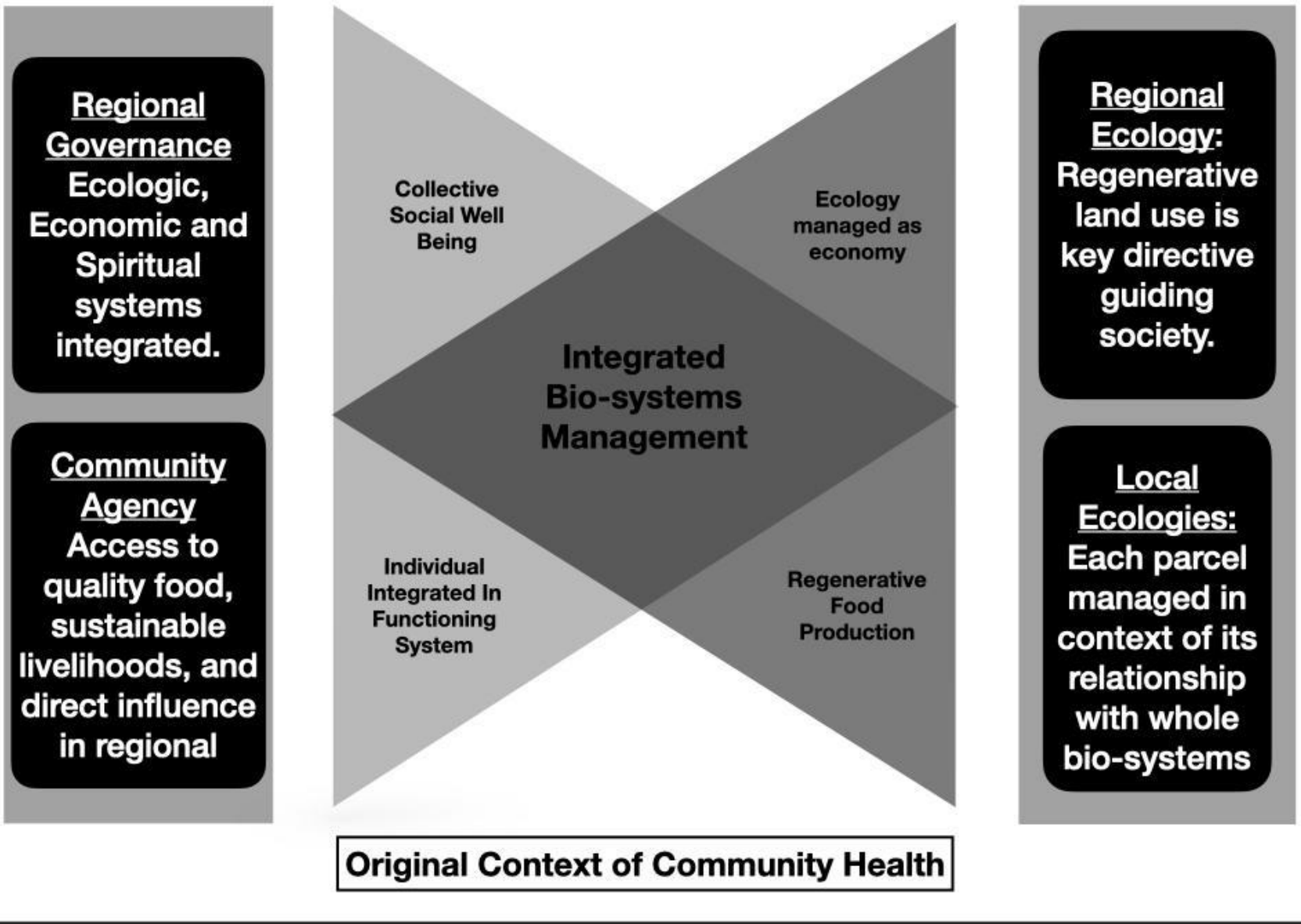
Community Labor/Hands On Opportunities

- KS LAND
- Water (From Spring)
- Personal Investment
- Species Diversity
- Teaching + Passing on of Knowledge

Ka' Onohi Farms

- Thermal Pollution Reduction
- Water Recharge
- Native Plants Planted
- Native Fauna Habitat
- Food Production
- \$ From Food Sales
- Clean Water Output
- Area Restored/ Invasives Removed
- Ahupua'a Connection
- Spiritual Connection
- Variety of Traditional Foods Grown

OUTPUTS



Regional Governance
Ecologic,
Economic and
Spiritual
systems
integrated.

Community Agency
Access to
quality food,
sustainable
livelihoods, and
direct influence
in regional

Original Context of Community Health

Regional Ecology:
Regenerative
land use is
key directive
guiding
society.

Local Ecologies:
Each parcel
managed in
context of its
relationship
with whole
bio-systems

Governance:
External forces
have removed
local agency
and decision
making.

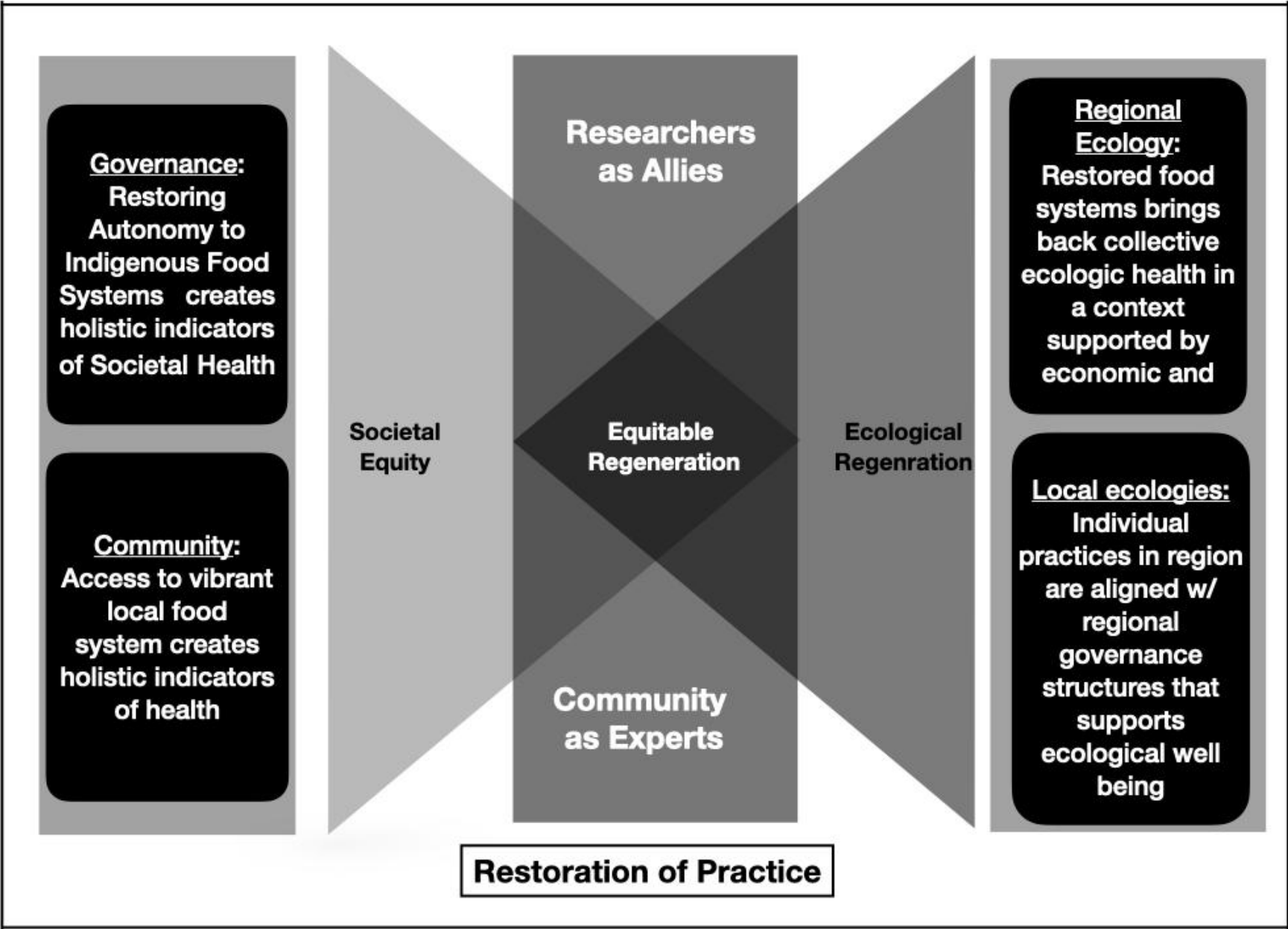
Community:
Relegation of
individual to
conditions of
poverty

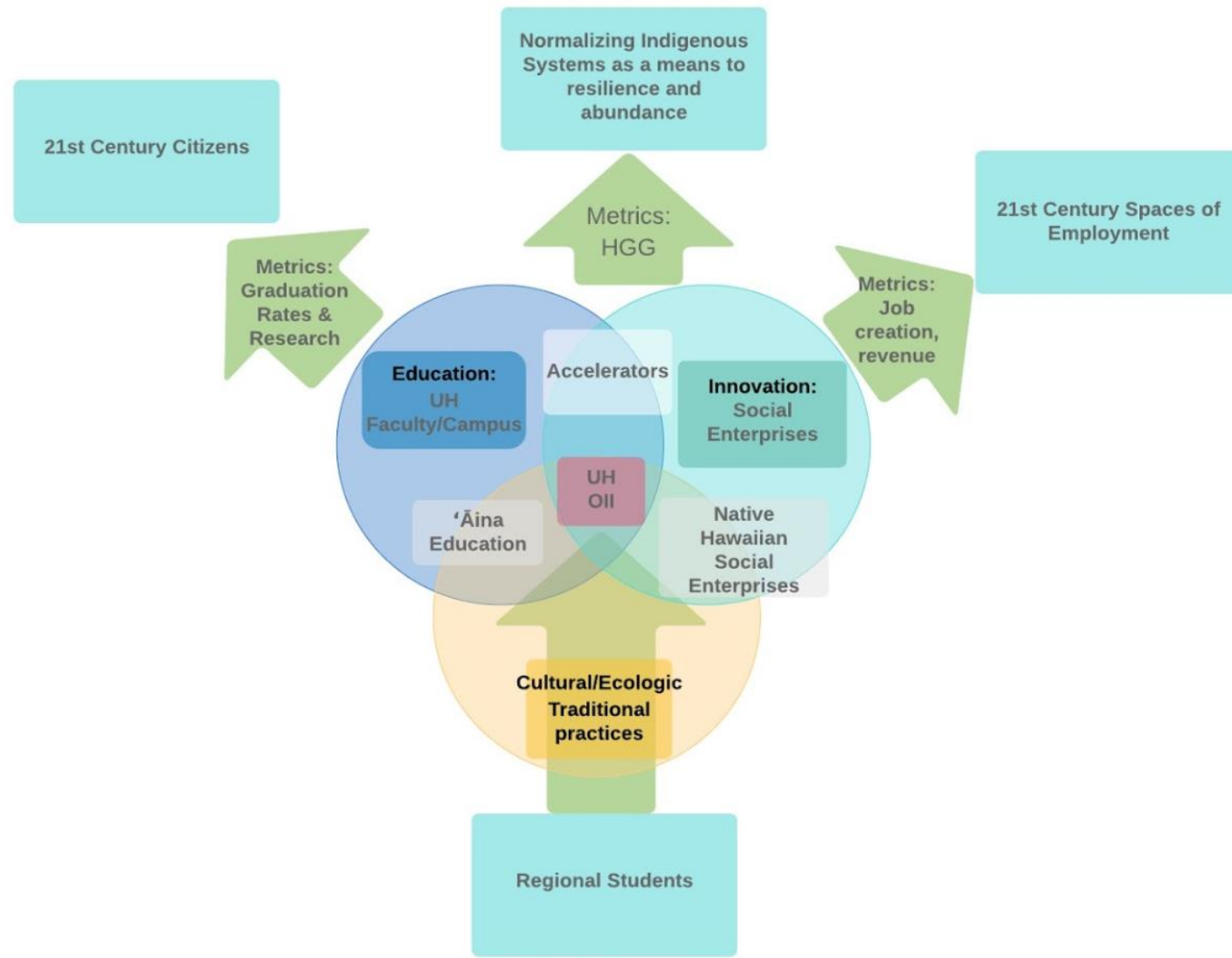


**Regional
Ecology:**
Regional land
use focuses
on extraction,
use in global
supply chain

**Local
Ecologies:**
Local food
producers
traditions
supplanted

Severance from Traditions







Equity: *A willingness to understanding the nature of the fracture: A willingness to acknowledge the history of dispossession, and a willingness to affirm the value of what was lost*

Reciprocity: *A willingness build interventions that address the reason for the fracture, and are built to hold each side equally strong: to ID interventions that recognize historical injustice **and** ancestral efficacy and then create approaches that work on investments into restorative interventions.*

Transparency: *the willingness to be clear and honest in intent, and to operate in a transparent way: Pewa are emphasized on the 'umeke, not hidden. They show that the carrier is now strong. We do not hide the fact that there was a fracture, but honor our work to mend it. And now we can have abundance*

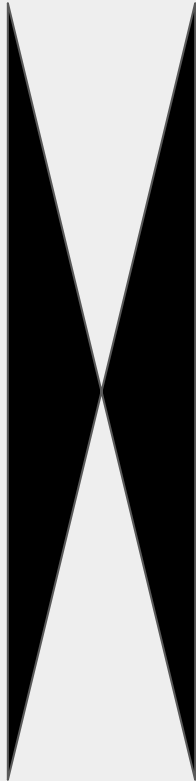
Pewa – n. a rectangular patch or wedge used for mending bowls, perhaps so called because of a resemblance to a fishtail.

Step 1 - Problem:
How might we solve [what problem] for [users]?

Step 1 - Name of Project:

**Step 2 - Core Users/
Beneficiaries:**
Who are you designing for?

Step 3 - Unmet Needs:
What are existing solutions not addressing for this particular user/beneficiary?



Step 4 - Value Propositions:
A value proposition is a feature or characteristic of your product that is desirable to the core user/beneficiary

Step 5 - Product Big Picture:
Describe the product, draw it out, storyboard it, show how the workflow works...whatever it takes for you to articulate the product you're making.

Step 6 - Identify Assumptions/Barriers
What assumptions are you making when you ideate this product? Are there things you don't know yet that you need to prove?

STORIES FROM THE Pae 'āina

Alakoko Fishpond (Hulē'ia Region, Kaua'i)

Pu'u Kukui Watershed Preserve (Lahaina, Maui)

Pu'u Kukui Watershed Preserve



Pu'u Kukui Watershed Preserve Protecting the Future

Video link: <https://youtu.be/9mX7XMuqUCw>

Hawaiian Science, Molokaʻi



Kelson "Mac" Poepoe, "Kanaka Science to Support Aloha 'Aina in our Changing Climate

Video Link: <https://youtu.be/ssTZnP441PM>

Kīpahulu Moku, a Community-based
Subsistence Fishing Area (CBSFA)
(Hāna, Maui)



Welina mai!



Kipahulu Moku CBSFA Presentation

June 30, 2021

Hosted by the Historic Hawai'i Foundation

Kīpahulu 'Ohana



OUR MOKU. OUR KULEANA.

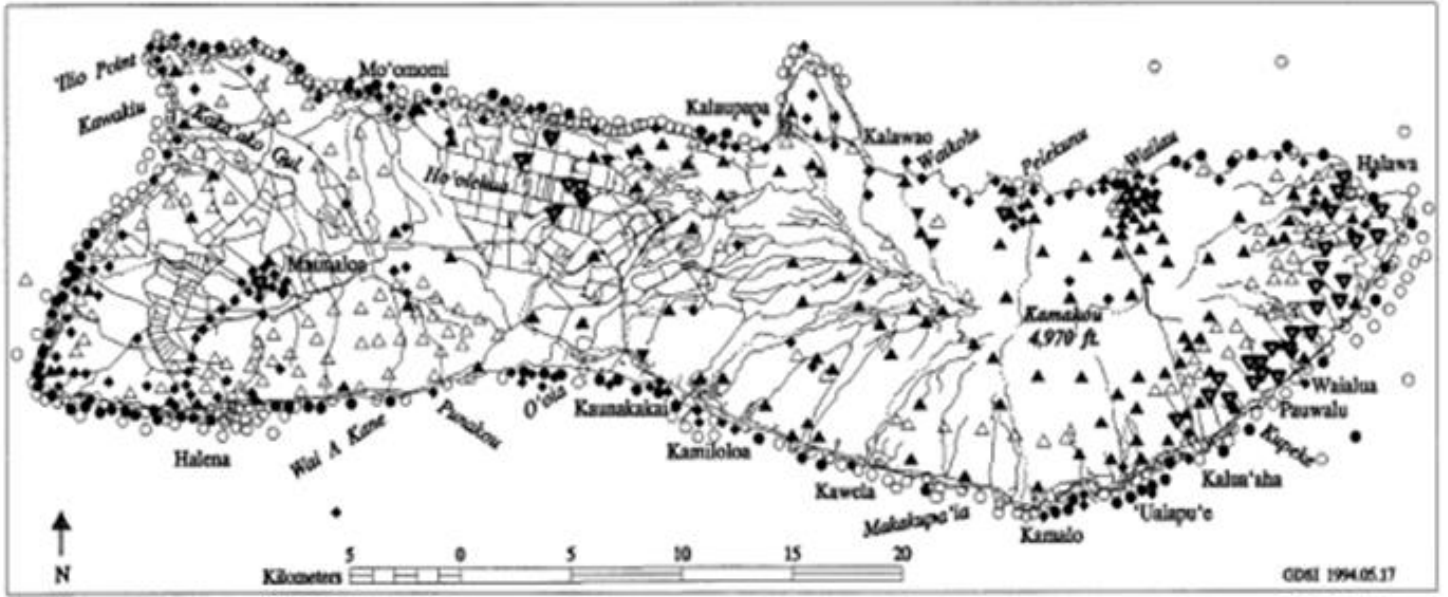


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Kīpahulu 'Ohana: Kīpahulu Moku

Video link: https://youtu.be/ioY-_98TCLw



SUBSISTENCE SITES

- Fishing
- Ocean Gathering
- Streams
- Gardening
- Raising Animals
- Roads & Trails
- Hunting
- Forest & Stream Gathering
- Future Sites to Access and/or Protect

Source: Moloka'i Subsistence Task Force Report (1994)

1993, Moloka'i
 Governor John Waihe'e appointed the Moloka'i Subsistence Task Force to document how important subsistence was to Moloka'i families.

The report found that **51%** of survey respondents rated subsistence as **"Very Important"** to their family. The map shows subsistence sites around the island of Moloka'i.



1994

The reliance of Moloka'i residents' on subsistence practices for their livelihood became one of the driving factors that pushed the Hawai'i State Legislature to create a process for designating Community-Based Subsistence Fishing Areas (CBSFA) (Act 271) to reaffirm and protect traditional fishing practices for Native Hawaiians.

It also established a two-year subsistence fishing CBSFA pilot project on the northwest coastline of Moloka'i.

2015
Hā'ena on Kaua'i was designated as a CBSFA.

Now
Several communities are pursuing rule-making across the State - including Mo'omomi, Kipahulu, and Miloli'i.



What is a CBSFA?

CBSFAs represent a State-recognized avenue for community groups to mālama ‘āina by proposing regulatory recommendations and management activities to sustain the health and abundance of marine resources for current and future generations.



Place-Based



Community-Driven



Rooted in indigenous science and observation based on generational knowledge and practice



Protects traditional and customary practices for subsistence and Hawaiian cultural lifestyle

RECOMMENDED KĪPAHULU MOKU COMMUNITY-BASED SUBSISTENCE FISHING AREA (CBSFA) REGULATIONS

Per person per day within the Kīpahulu Moku CBSFA

Examples of proposed rules that are modern implementations of traditional resource management practices: “kapu system”

- time-based - seasonal closures for spawning
- place-based - sanctuaries or fish replenishment zones

BAG/POSSESSION LIMITS:

- All finfish: 10 combined (except roi, ta‘ape, to‘au, and akule)

This rule cannot be less restrictive than existing statewide and/or Maui island rules; additionally:

- Kala, ‘ōmilu: 2 each

*No State bag limit for kala;
State bag limit of 20 ‘ōmilu*

- Ula: 2 each

No State bag limit for ula

- ‘Opihi: ½ gallon (shell on); approximately 40-50 ‘opihi

No State bag limit for ‘opihi

SIZE/SLOT LIMITS:

- Kole: 5” minimum

No State minimum for kole

- Moi: 11” minimum – 18” maximum

State minimum is 11”, no max

- ‘Ōmilu: 10” minimum – 24” maximum

State minimum is 10”, no max

- ‘Opihi: 1 ¼” minimum – 2” maximum

State minimum is 1 ¼”, no max

SEASONS:

- Moi, ula: Closed season May-September

State closed season for moi is June-August, ula is closed from May-August

GEAR RESTRICTIONS:

- Surround Gill net: Minimum mesh size 2 ¾”; no surround gill net except for akule and ta‘ape (bag net prohibited)

Current State standard is 2”

- Throw net: Minimum mesh size 3”

Current State standard is 2”

- Hook-and-line: Max 2 lines deployed with max 2 hook per line

No State standard for hook-and-line

- SCUBA/underwater breathing apparatus: No take/possession of marine life while using gear (except for ta‘ape and akule using net)

- Freediving: No take ‘opihi while freediving

- Night diving: No take or possession of marine life while night diving from 6pm to 6am

OTHER:

- Akule: Non-commercial take only

- ‘Opihi: No take within a rest area (from ‘Ohe‘o to Puhilele Point)

- Limu: No taking native limu (līpoa, kala, kohu) with holdfast/roots attached

KUKUI BAY SANCTUARY:

- From Maka‘aikūloa Point to Puhilele Point

- No take within Sanctuary



Climate change and resiliency

- Our CBSFA was not specifically proposed to address climate change directly, but we know that **proactively protecting resources** so the ecosystem is healthy is the best way to enable it to adapt to pressures and changes
- Part of a statewide effort to gather spawning data that may reflect **climate-based changes in seasonal patterns** to inform both community and State management strategies
- **Indigenous science, observation and traditional knowledge and practice** of the people who have generational connection with place is the foundation that guides all of our efforts, integrated with western science to complement and support



For more information, please visit
Kipahulu.org/CBSFA

Send comments to
cbsfa@kipahulu.org

Mahalo!

Ka'ūpūlehu Marine Life Advisory
Committee, Conservation Action
Planning (Kailua-Kona, Hawai'i Island)



Mo'olelo

A traditional history
A current sensibility

Hawai'i Historic Foundation

June 30th, 2021

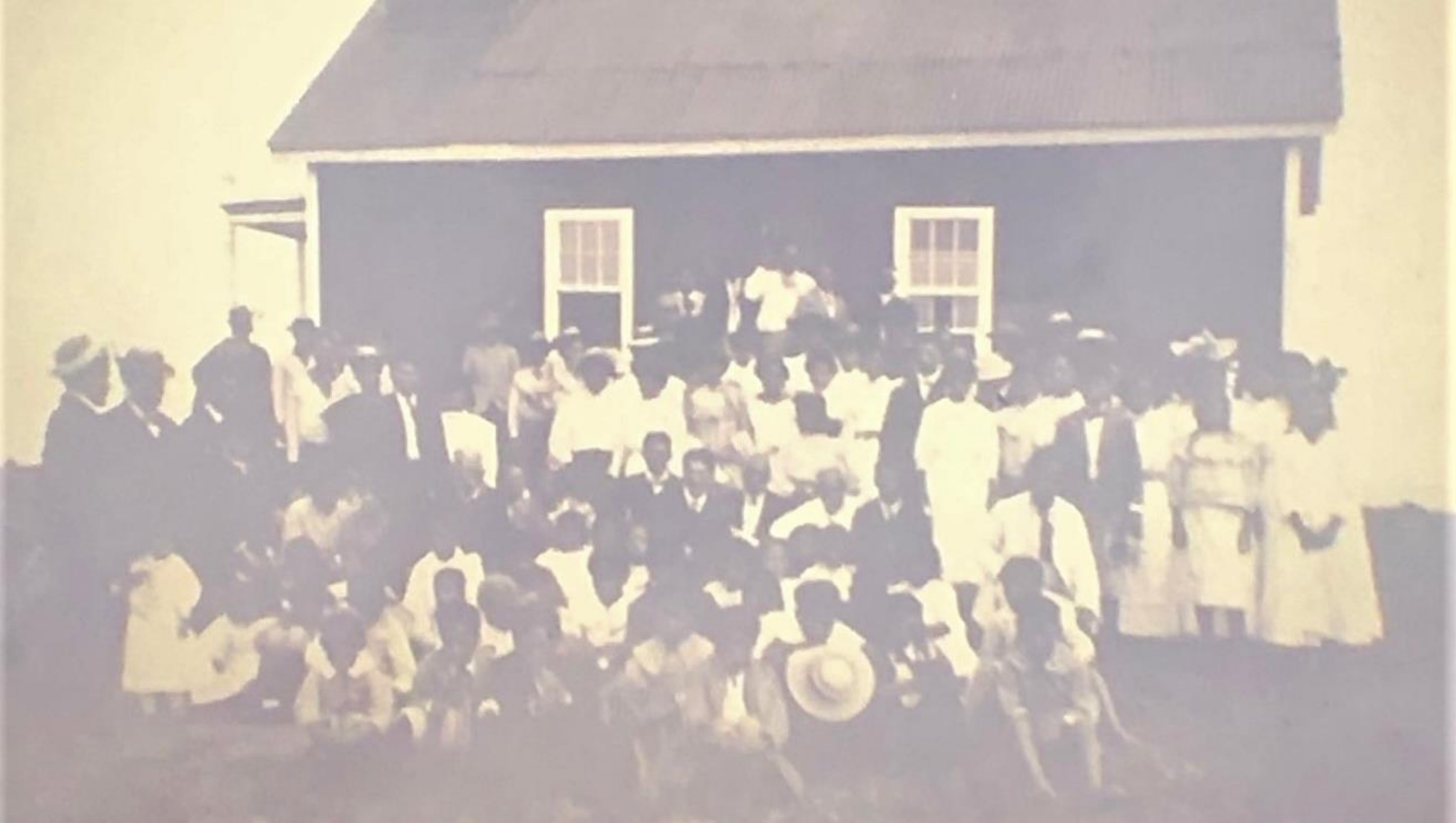
Hannah Kihalani Springer



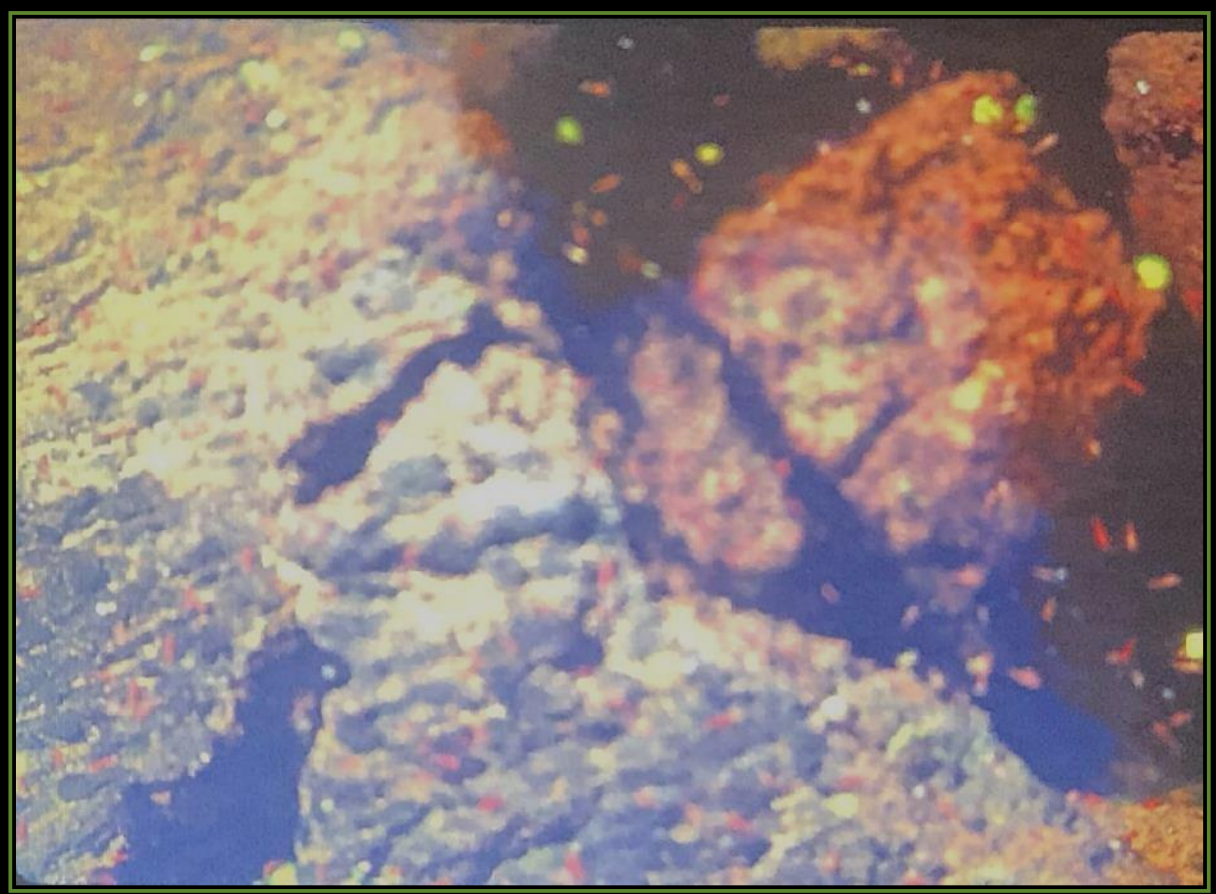


H. K. K. K.



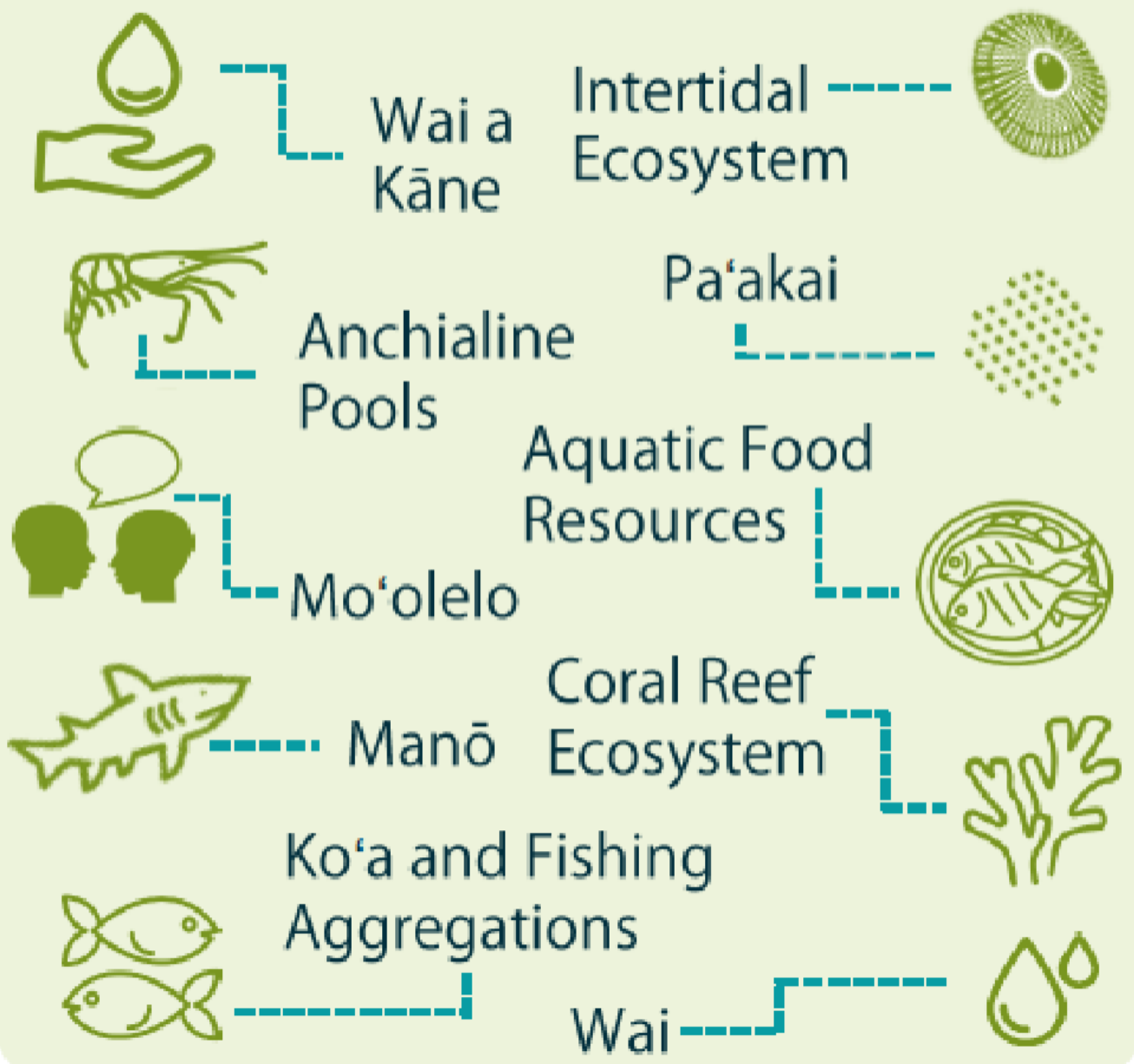




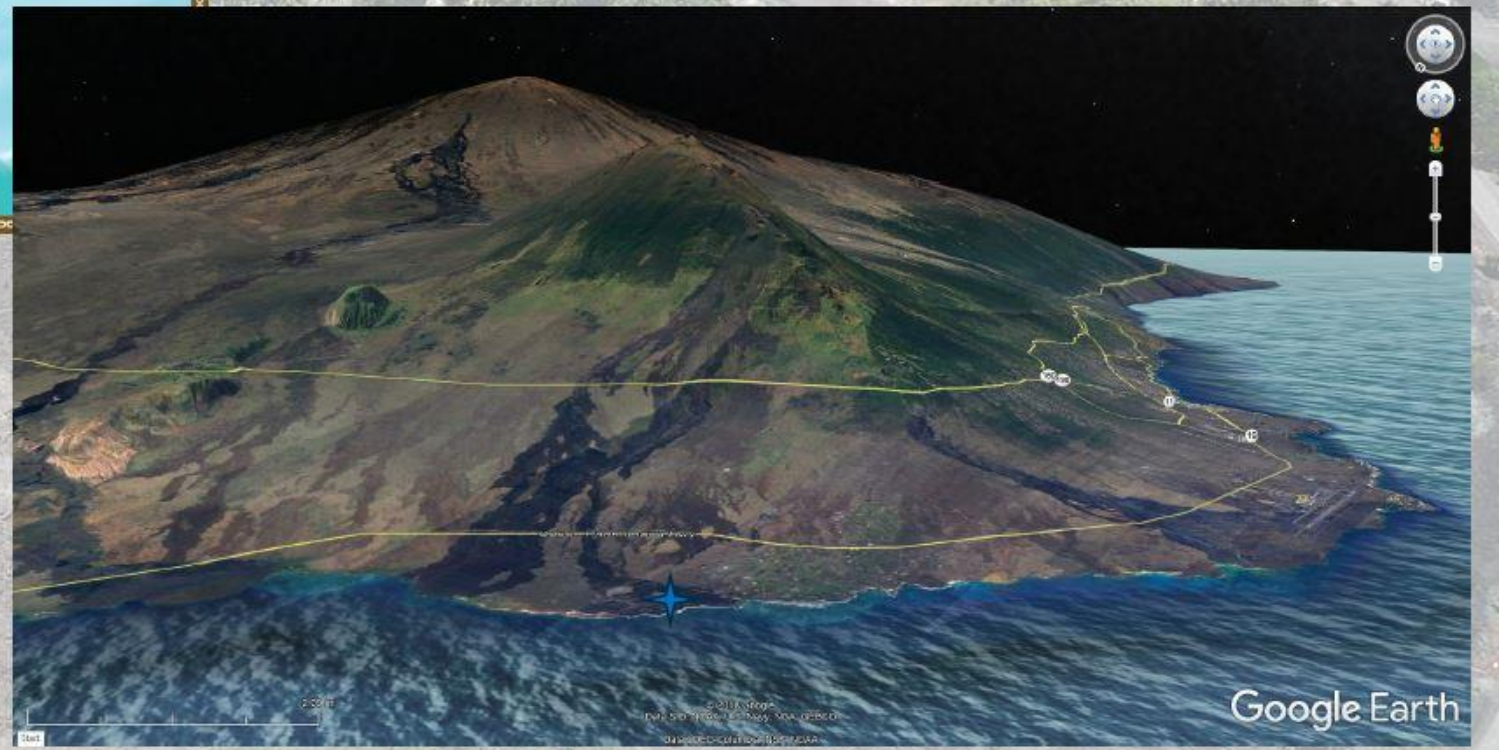
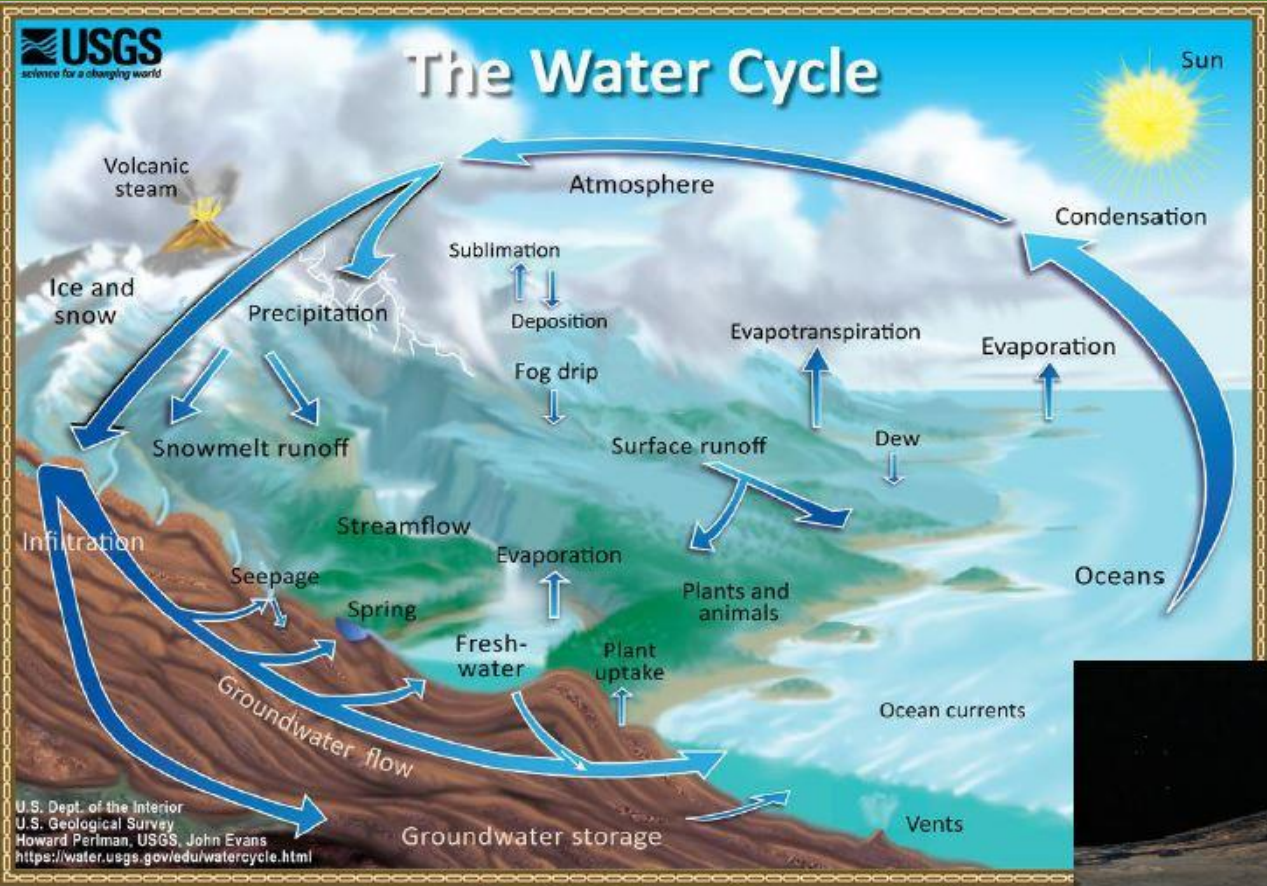


2015 Conservation Action Plan

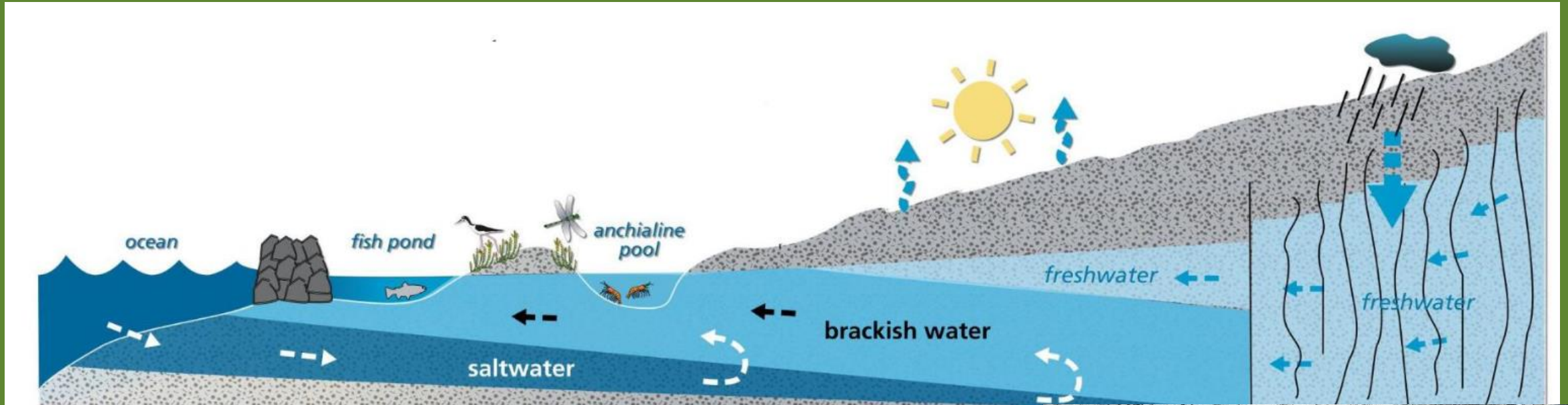
WHAT WE WANT TO MĀLAMA

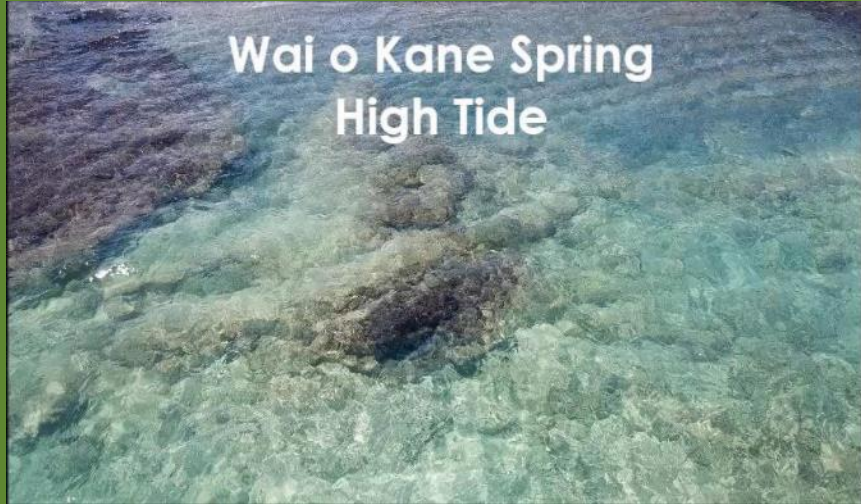


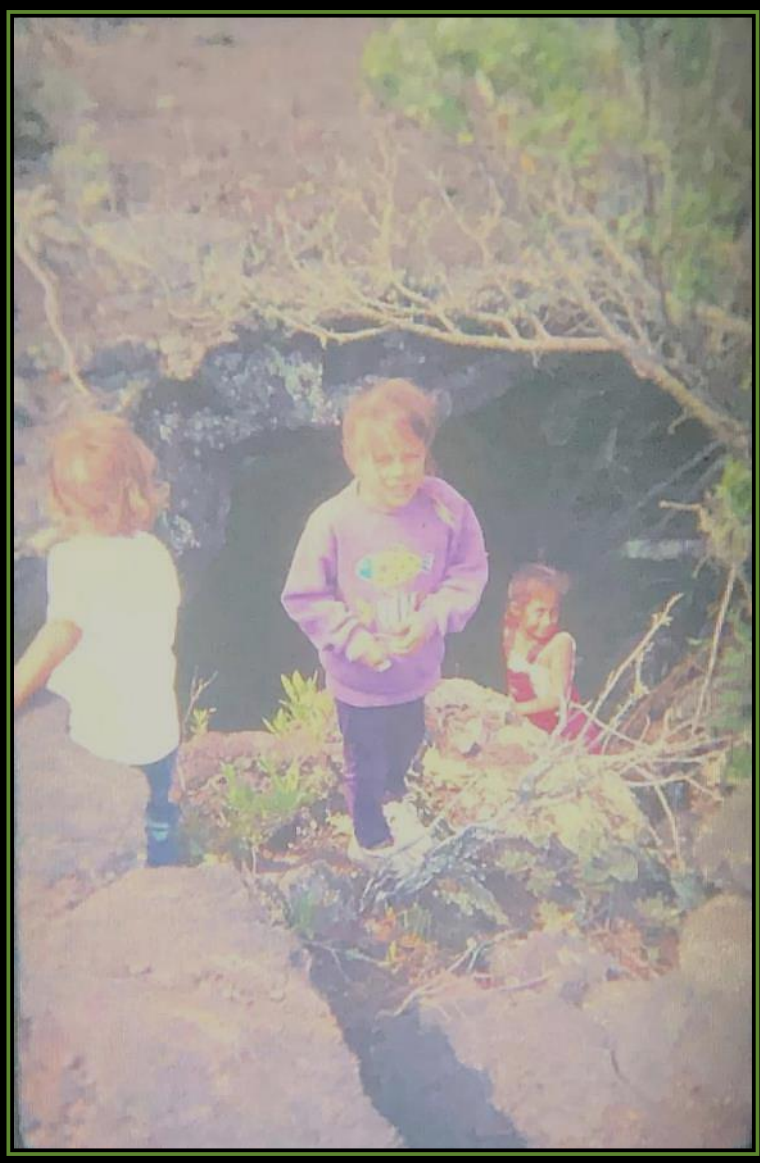
The Water Cycle



Shoreline Brackish system









Intertidal Monitoring



Fish and Benthic Monitoring



July
2
0
1
6





Invasive Fish Capture "Roi Round-ups"



FishPath
Fisheries Management Planning
began in 2018 and continuing









Mahalo

John Richards

Herb Kāne

Rebecca Most

Chad Wiggins

Reverend Baker Collection

Lei Lightner

Kaikea Nakachi

RESOURCES

- Office of Climate Action, Sustainability and Resilience, Maui County
Resilience Officer: Makale'a Ane Email: ChanaMakalea.DudoitAne@co.maui.hi.us
- The Nature Conservancy, Hawai'i <https://www.nature.org/en-us/about-us/where-we-work/united-states/hawaii/>
- Pu'u Kukui Watershed Preserve: <https://www.puukukui.org/>
- Mālama Hulē'ia: <https://malamahuleia.org/>
- Hui Malama o Mo'omomi on Moloka'i <https://www.mauinui.net/hui-malama-o-moomomi.html>
- Kīpahulu 'Ohana: <https://kipahulu.org/>
- Ka'ūpūlehu Marine Life Advisory Committee (KMLAC): <https://www.facebook.com/KMLAC/>

Hawaiian Ahupua'a Planning Approach (H.A.P.A.) for Rural Communities in Hawai'i: Modern Culturally-Based Sustainable Living Through Planning for Architecture by John Ching

[https://www.semanticscholar.org/paper/Hawaiian-Ahupua'a-Planning-Approach-\(H.A.P.A.\)-for-Ching/ea62222c1af48c097557965f1baf663542c9886](https://www.semanticscholar.org/paper/Hawaiian-Ahupua'a-Planning-Approach-(H.A.P.A.)-for-Ching/ea62222c1af48c097557965f1baf663542c9886)

GROUP DISCUSSION & QUESTIONS

POLICY AND PLANNING

ZONING

PERMITTING

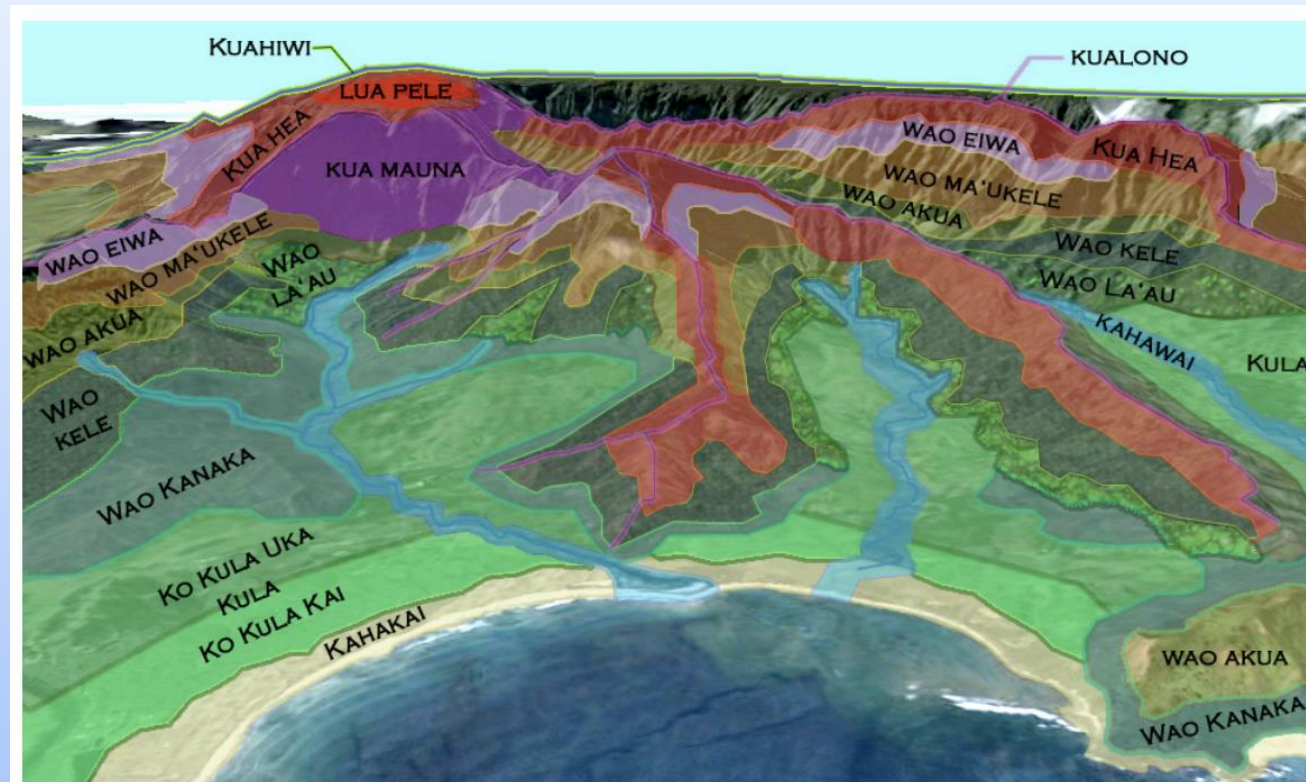


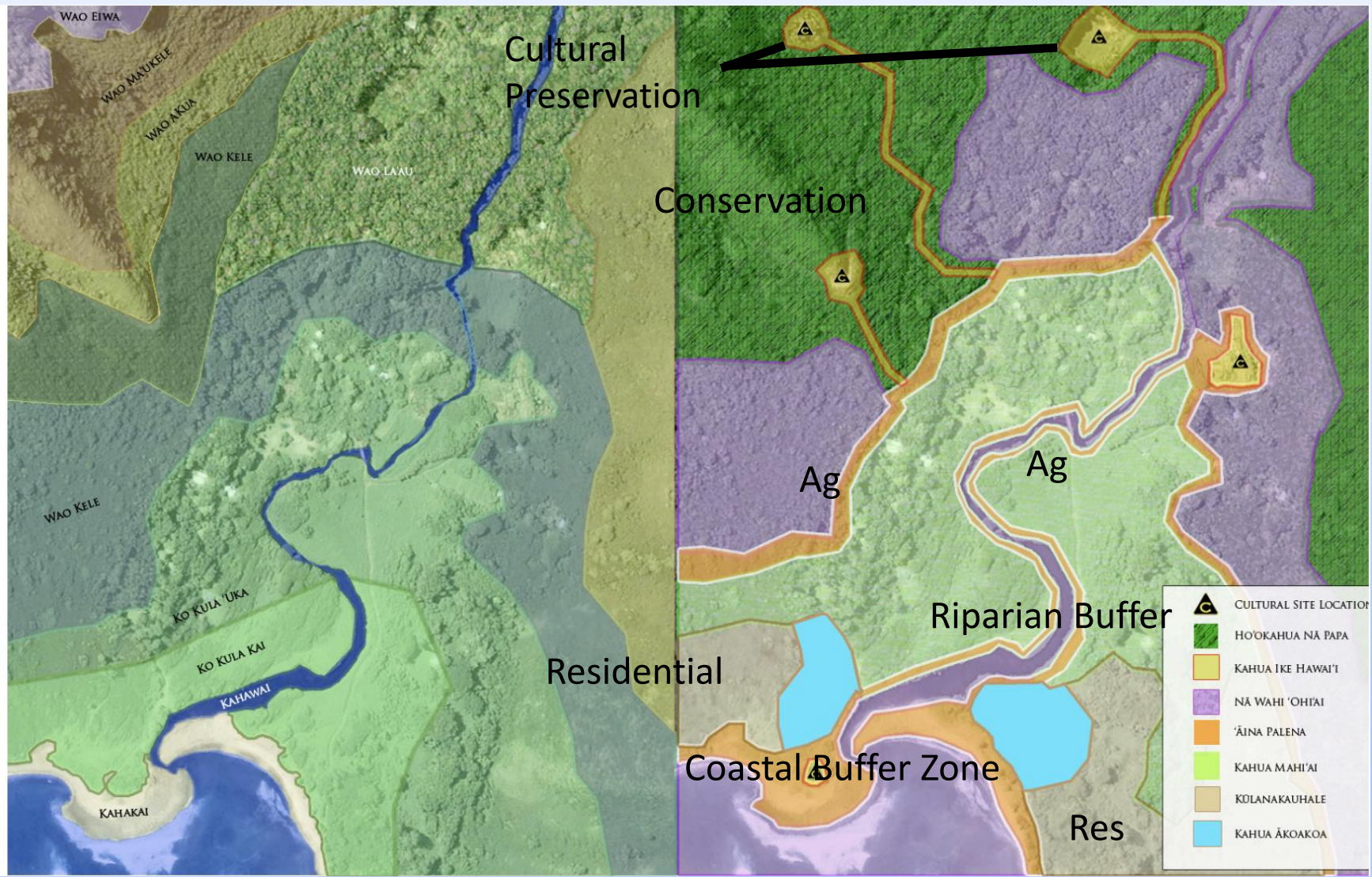
Figure 11: Traditional Land Zones were determined by its naturally occurring features, the life forms that were present, and the natural function of the zone.



Figure 14: Transect of the ahupua'a showing human uses relative to the various traditional land zones.

POLICY AND PLANNING ZONING PERMITTING

Figure 16: An example of how the proposed land uses (top) might be placed according to the "traditional" land zones (bottom).



Ching, J.. "Hawaiian Ahupua'a Planning Approach (H.A.P.A.) for Rural Communities in Hawai'i: Modern Culturally-Based Sustainable Living Through Planning for Architecture." (2010).