Building a network of partnerships to support NOAA's Integrated Ecosystem Assessment

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NOAA’s Integrated Ecosystem Assessment (IEA)

- Overarching goal:

  Provide sound and relevant scientific information that addresses existing and future resource management concerns in the region
- Adaptive “loop” process
- Inclusive process with diverse stakeholders who are affected by and invested in the region

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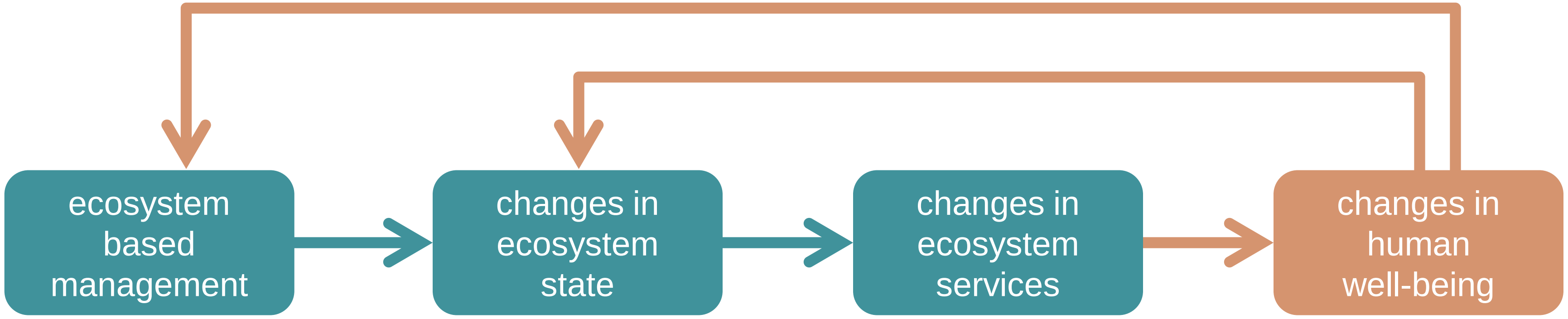
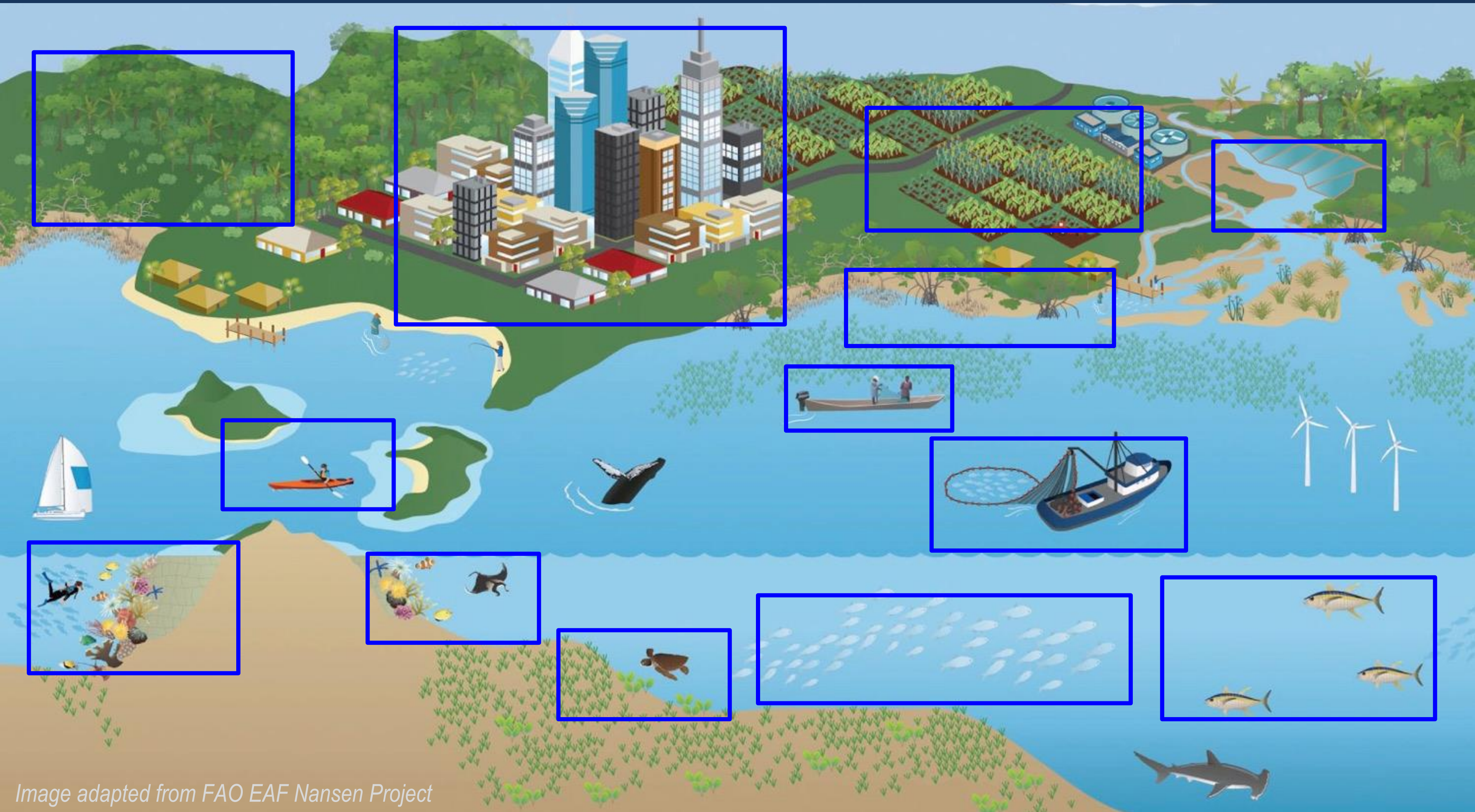
- Inclusive process with diverse stakeholders who are affected by and invested in the region
- Focus has been on ecosystem management, status, and services



Ecosystem-Based Management

Image adapted from FAO EAF Nansen Project

Ecosystem-Based Management



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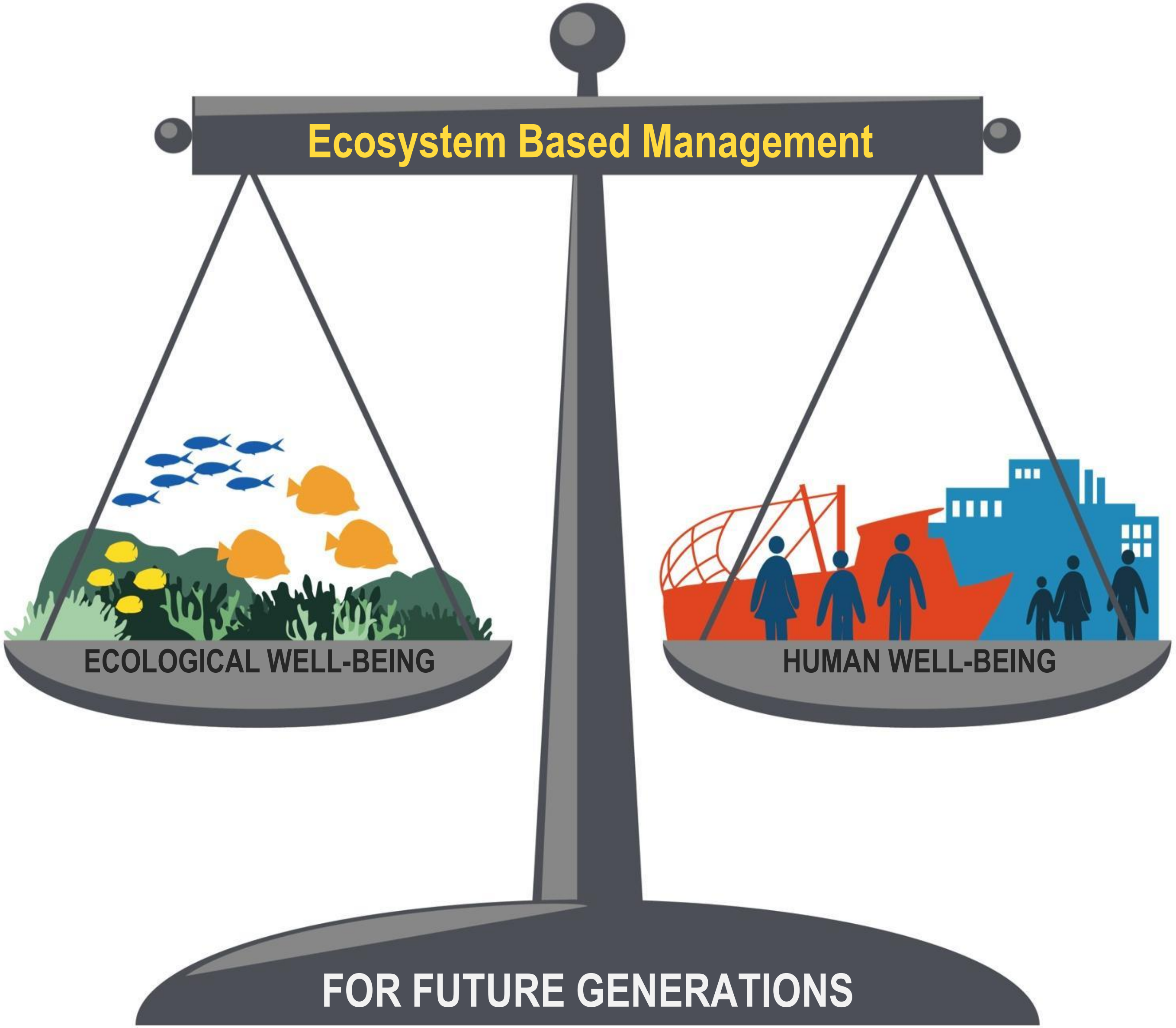

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Integrated Ecosystem Assessment

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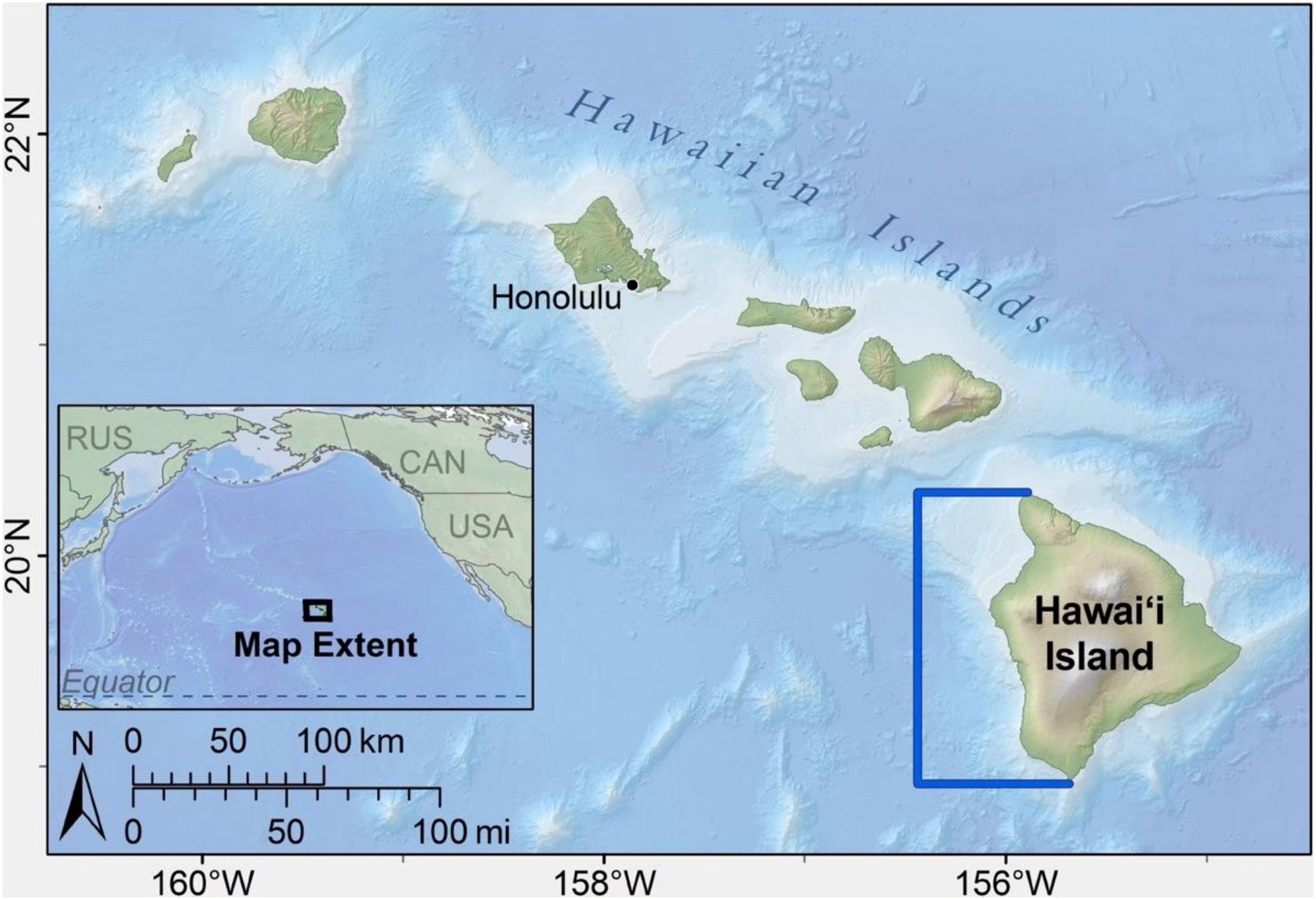
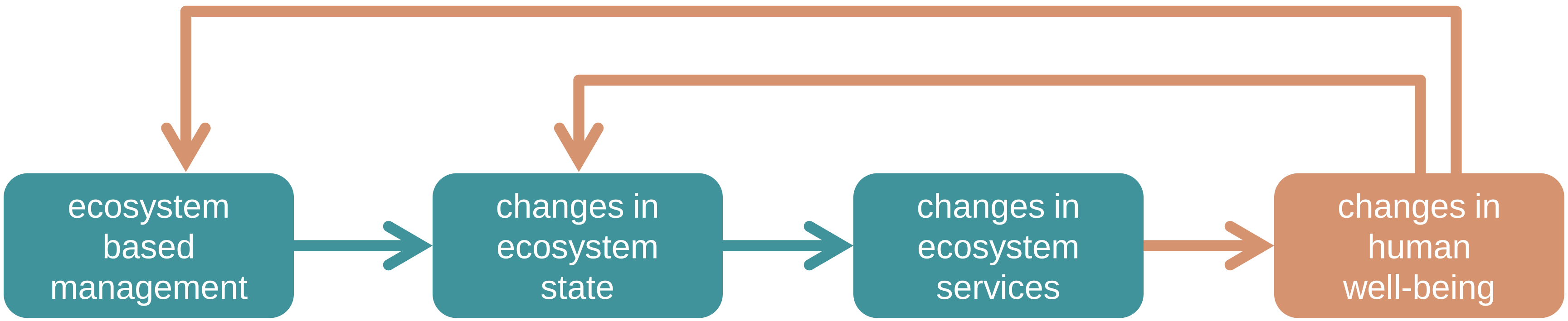


Collaboration within the West Hawai‘i IEA

- National and local level program lead
- Natural and social scientists
- Local marine resource managers
- Private conservation research and efforts
- Community members

The IEA uses indicators to monitor different parts of the system...



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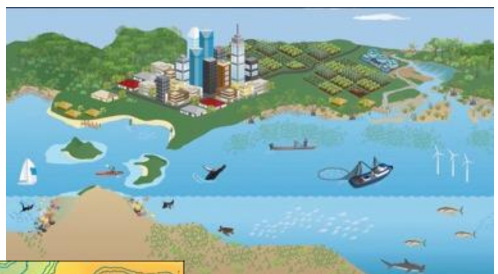
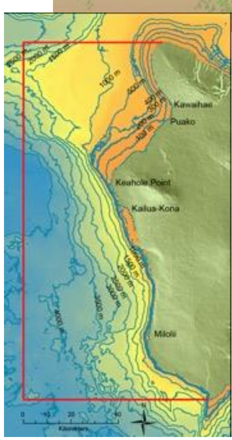
ecosystem based management → changes in ecosystem state → changes in ecosystem services → changes in human well-being





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changes in human well-being → ecosystem based management

changes in human well-being → changes in ecosystem state

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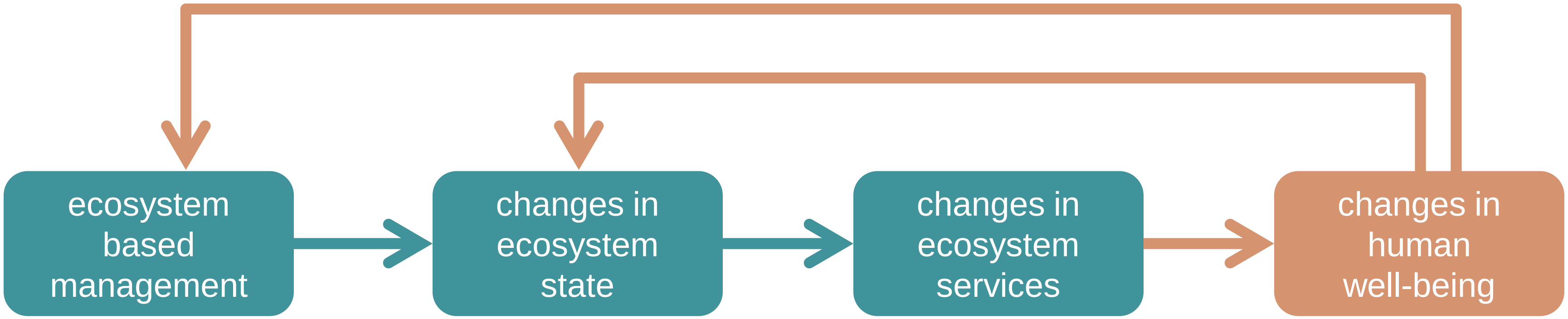

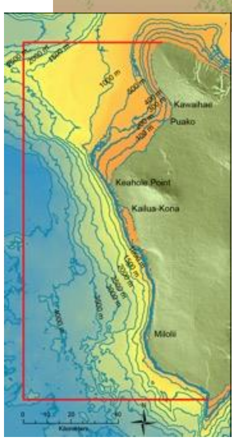

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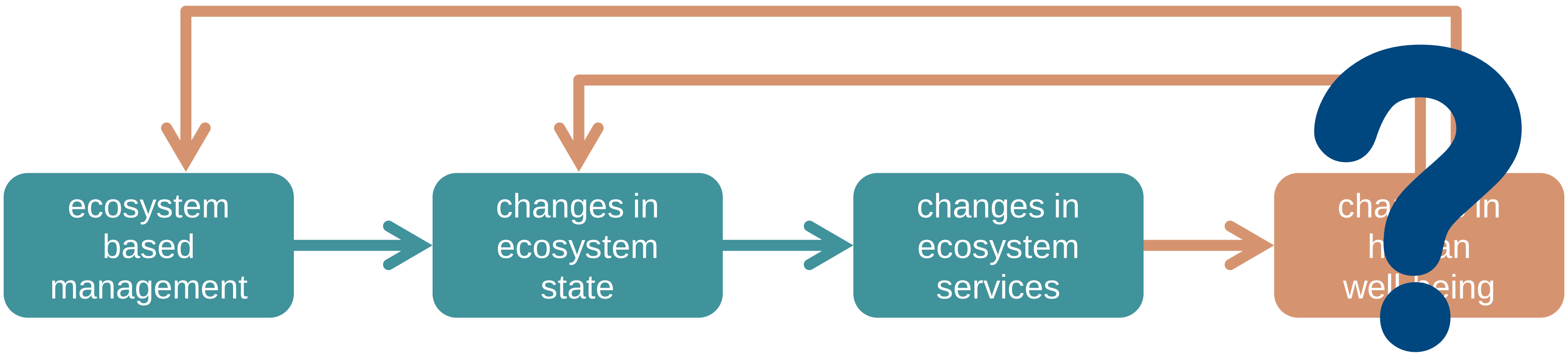



How do management objectives affect community well-being?
What conservation goals do communities have?
How can the IEA conduct science to support management and community **well-being**?

Defining Community

- Community of place, interest, identity
- Who's in the fishing community?

  Commercial fishers, subsistence fishers, recreation fishers, marine resource managers, terrestrial resource managers, coastal land owners, and more…

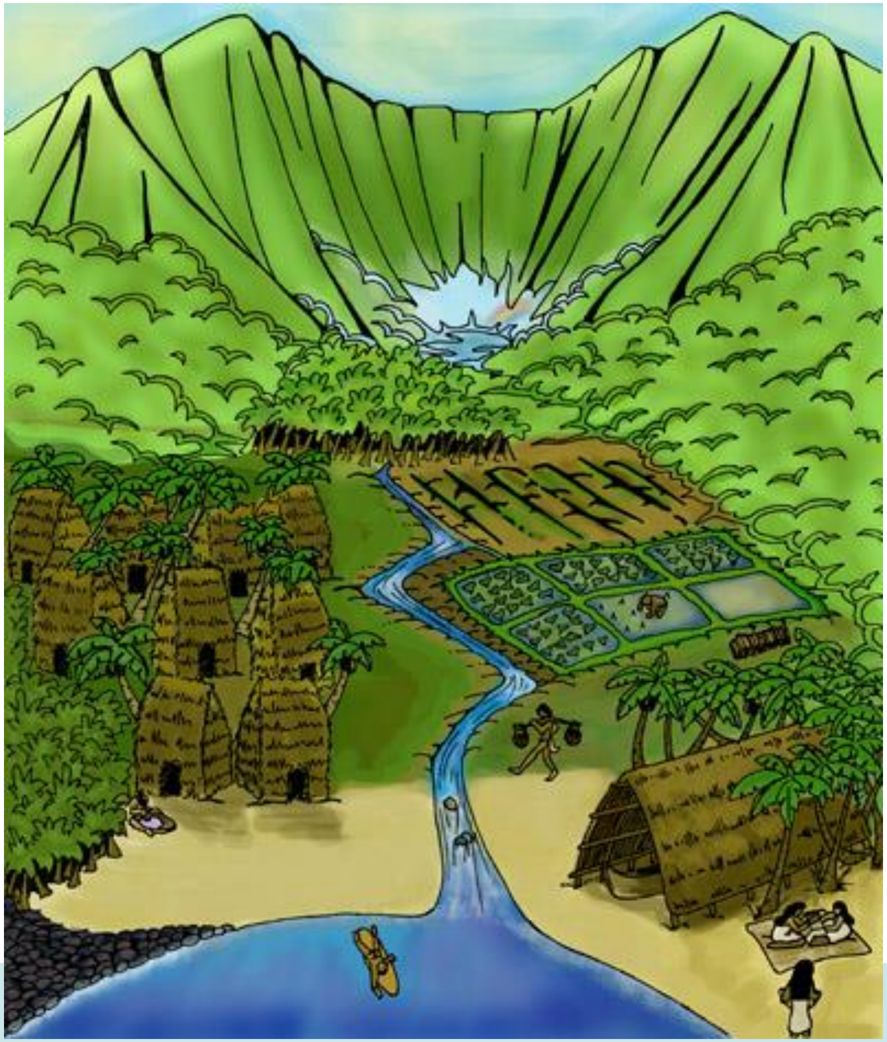
- Informal discussion session with community

  informed how we created next steps, language, underlying research frameworks, and more…

Defining Community: the importance of place

- Hawai‘i has strong connection to place
- Reciprocal relationship
- Ahupua‘a: traditional land division and management practices

“the fisherman is an **integral part** of the ecosystem” – community member



Clear need for a network

"Alone we can do so little,
together we can do so much."

– Helen Keller

- Partnerships
  - Mentor group: support developing research methods
  - Manager group: understand resource management needs and objectives
  - Community group: understand how the environment supports well-being

→ The groups have both unique and overlapping members

Mentor Group

- **Purpose:** provide guidance, expertise, feedback, literature, moral support
- **How:** Invitation to join group
- **Via:** emails, phone calls
- **Role:** brainstorming, reviewing data collection materials to create possible *indicators*
- **Benefits to partner:** ???

HAWAI'I WILDLIFE FUND

UNIVERSITY OF HAWAI'I

PUGETSOUND PARTNERSHIP

The Nature Conservancy

The UNIVERSITY of VERMONT

Hawaii Division of Aquatic Resources

Manager Group

- **Purpose:** identify management goals and needs for West Hawai‘i; align developing *indicators* with their needs
- **How:** Contact existing management entities
- **Via:** phone, in person meetings
- **Role:** communicate (early and often!)
- **Benefits to partner:** The IEA will do research that feeds directly into their needs, to the best ability

Community Group

- **Purpose:** guidance on project objectives and methods
- **How:** pre-existing network that I formally reached out to
- **Via:** emails, phone calls, and in-person interviews
- **Role:** providing primary data which informs development of human well-being domains and *indicators* for the IEA
- **Benefits to partner:** Formally captures cultural importance of their place; supports grant/management plan writing

Lessons Learned: fostering internal support

- Communication
- Become a bilingual scientist
  - Different disciplines use different words for the same thing, and the same words for different things
- Learn and teach
  - Reflect back to when you were just learning about your field
- Take a deep breath

Lessons Learned: engaging the community

- Do your homework
  - Are there customs that you are expected to participate in?
  - Is there any background you should know walking in?
  - Does your perfect audience or potential partner exist?
- Show your face
- Bring something to share
- Keep listening

Weaving it all together

- Biological and oceanographic indicators
- Social threats brought in (coastal development, sedimentation, erosion, population growth)
- Human well-being indicators being created/investigated so that we can start to understand:
  - How society positively influences the environment
  - How society is impacted by environmental changes