

# ‘Ewa ‘Āina Education Initiative

**Unit Plan: Aloha Kuhialoko**

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**‘Āina Site: Kuhialoko**

## **Curriculum Themes:**

- Past-Present-Future: Kuhialoko’s historical importance, there have been significant negative impacts in the last 150 years, what can be done to create a brighter future?
- Problem-Solution Framework: Curriculum can focus on one problem, Classroom/School/Community Improvement Projects

Hawaiian Culture-Based Lens	Cross Cutting Content	Instructional Design
<ul style="list-style-type: none"><li>● Pilina Kaiāulu: Community Integration informed by a Hawaiian sense of place</li><li>● Mālama ‘Āina: Land stewardship focusing on sustainability and a familiar connection</li><li>● Pilina ‘Ohana: Family integration where parents/‘ohana are seen as a child’s first teachers</li></ul>	<ul style="list-style-type: none"><li>● ‘Ōlelo Hawai‘i</li><li>● Watersheds<ul style="list-style-type: none"><li>○ Human Interaction/Impacts</li><li>○ Food production - Food Webs</li><li>○ Health-Total well-being</li></ul></li><li>● Mathematics (Comm. Core Thread)</li></ul>	<ul style="list-style-type: none"><li>● Historical Inquiry</li><li>● Stewardship - Sustainability</li><li>● Student Choices in Final Project Peer/‘Ohana/Community Education-Action</li></ul>

**Unit Plan: Aloha Kuhialoko**

**Target Grades: 9-12**

**Target Subjects: Hawaiian Studies, ‘Ōlelo Hawai‘i**

**Essential Question/s** (3 max) that unit will address

1. What does it mean that Kuhialoko and the ‘Ewa moku were ‘āina momona?
2. What caused the changes we see throughout ‘Ewa and Pu‘uloa today?
3. Do you have kuleana for ‘Ewa/s future? For Pu‘uloa’s Future?
4. How can I express myself when I don't know all the words (of a target language)?

## **Background Information -**

- ‘Āina site background for Kuhialoko available via the following link:  
[https://drive.google.com/file/d/1VCg-GCD3zYd9P1S8\\_NBvU0a\\_cEL9PcX3/view?usp=sharing](https://drive.google.com/file/d/1VCg-GCD3zYd9P1S8_NBvU0a_cEL9PcX3/view?usp=sharing)
- ‘Āina Site Steward: Ali‘i Miner and ‘ohana
- Summarized from the Halau o Pu‘uloa: Ewa ‘Āina Inventory. A direct link to this resources available via the following URL:  
[https://www.ksbe.edu/assets/site/special\\_section/regions/ewa/Halau\\_o\\_Puuloa\\_Waiawa.pdf](https://www.ksbe.edu/assets/site/special_section/regions/ewa/Halau_o_Puuloa_Waiawa.pdf)

**Background Information Cont.**

Kuhialoko provides a wonderful location for students to view traditional food systems and food systems management, especially loko iʻa, in practice. The site includes multiple opportunities for stewardship and observation activities under the guidance of a steward who “carries” generational knowledge of the ahupuaʻa.

In general, prior to the introduction of western values, concepts of land use and ownership, and commercial activities in the 19th century, traditional Hawaiian life in Waiawa (literally “milkfish water”) was very much centered around the natural resource and wahi pana of Puʻuloa (Pearl Harbor), with its extensive shoreline and estuaries that were home to numerous fishponds and loʻi kalo (pondfield complexes). As shown by Māhele documents, the coastal flats around Puʻuloa (i.e., the area below, or south of, the H-1 freeway), including the lower reaches of Waiawa Stream on the Mānana (Pearl City) Peninsula, were the favored places for permanent settlement and irrigated agriculture in this area. McAllister (1933) recorded three fishponds in Waiawa Ahupuaʻa: Loko Apala (ʻĀpala), Loko Kuhialoko and Loko Moʻo. By this time (early 1930s), Loko ʻĀpala was reduced from a very large (75-acre) fishpond to just a few acres. Likewise, the other fishponds had also nearly disappeared by the 1930s (see Sterling and Summers 1978:48), but they were once major sources of food and tribute in traditional times. In typical Hawaiian style, these fishponds were integrated with the loʻi kalo area, the Waiawa Stream and pūnāwai (fresh water springs) in Waiawa kai.

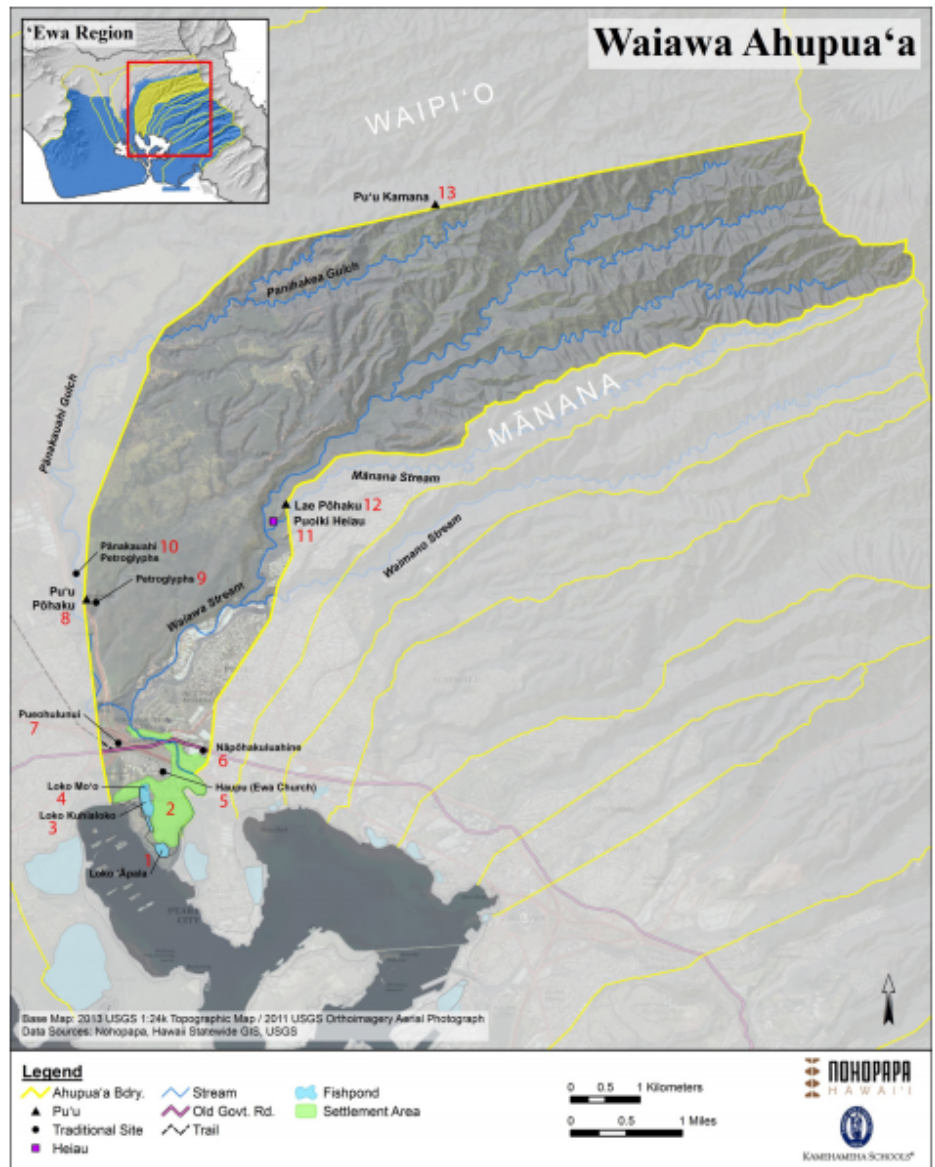
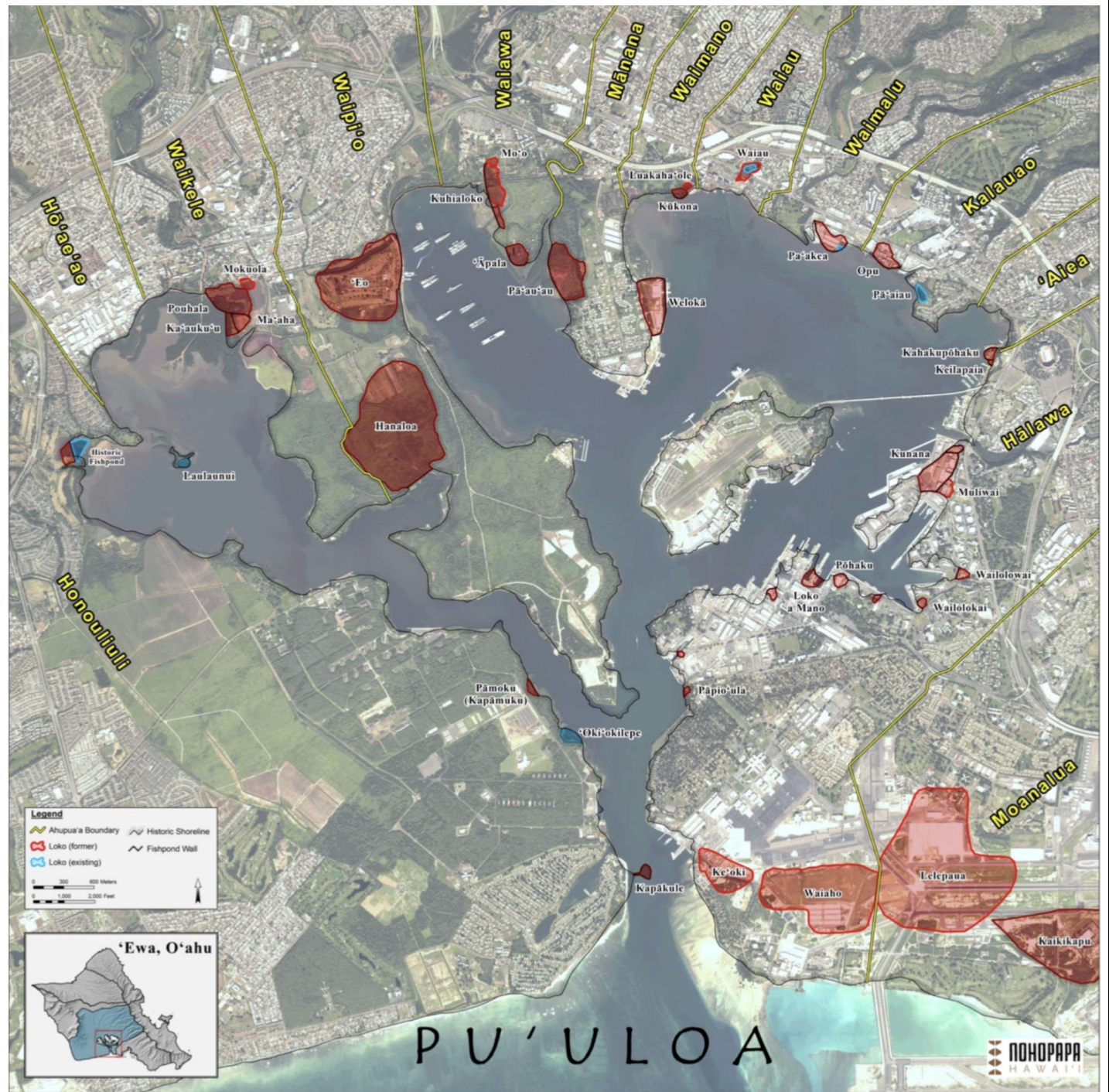


Figure 81. GIS map depiction of significant Hawaiian cultural and natural resources in Waiawa Ahupuaʻa

Students will be taught to use key Hawaiian place names and be shown the loko iʻa map of Puʻuloa as shown on the next page as further evidence of ʻāina momona (abundance) within this ahupuaʻa.

Also recommended for teachers is viewing the graduate presentation of Keliʻi Keliʻipaʻakaua who studied and mapped the historical land uses of the area in collaboration with Hawaiian ʻāina stewards in the area including those at Kuhialoko. The presentation is available for viewing via the Huliuaapaʻa Facebook page via the following URL: [https://www.facebook.com/watch/live/?ref=watch\\_permalink&v=210633793976686](https://www.facebook.com/watch/live/?ref=watch_permalink&v=210633793976686)





**Sequential Unit Plan Lesson Outline****(please bold face the titles indicate lessons for which details have been provided)**

<b>Lesson Title</b> (3-5 sentence description for each)	<b>Time Estimate in Hours</b>
Unit Intro (Big Picture Connection): <ul style="list-style-type: none"><li>• Bell work: Where is your “place”</li><li>• Discussion on naming conventions, land, rain, winds</li><li>• Lei Momi o `Ewa book reading</li><li>• Punahinano Story translation project from Ka Nupepa Kuokoa, Volume XXXI, Number 41, 8 October 1892 — He mau Anoai Kahiko o Hawaii nei.</li><li>• Summary highlights and essential questions in slideshow</li><li>• Assignment: “How do you connect?” presentation</li></ul>	<b>4</b>
<b>Learning Hawaiian Numbers- E Helu Kākou!</b> <ul style="list-style-type: none"><li>• Discussion on Western vs. Hawaiian counting -Kauna</li><li>• How high can you count activity</li><li>• Watch 2 learning to count in Hawaiian Videos</li><li>• Numerical system- kana rule, kūmā rule, exceptions</li><li>• Play Keola (Bingo) in Hawaiian Using the online Bingo card generator</li></ul>	<b>2</b>
Counting Practice <ul style="list-style-type: none"><li>• Counting in Hawaiian Video</li><li>• Play Keola - Stop showing numbers, Have Students Read the Numbers</li><li>• Assignment - Object count &amp; Share Out/Analysis</li></ul>	<b>2</b>
<b>Preparation for Huaka`i (field trip) to Kuhialoko</b> <ul style="list-style-type: none"><li>• Huaka`i Preparation Slideshow</li><li>• Goals for huaka`i, introduction to `āina momona, preparation of makana</li><li>• Review of behavior guidelines, entrance protocols</li></ul>	<b>2</b>
<b>Huaka`i to Kuhialoko #1</b> <ul style="list-style-type: none"><li>• Focus on identifying and counting invasive and native/food plants</li><li>• Learning the connection of the plants to other aspects of Kuhialoko (birds, insects, fish, water, soil)</li><li>• Hana to remove invasive plants and care for native/food plants</li><li>• Learning about aspects of `āina momona from the site steward</li></ul>	<b>4</b>
<b>Huaka`i to Kuhialoko #2</b> <ul style="list-style-type: none"><li>• Introduction/History of Kuhialoko - Ali`i Miner</li><li>• Separate Students into 3 groups for waterfowl count and aquatic life kilo</li><li>• Waterfowl Identification / parcel counts</li><li>• Plant Identification / Pull Weeds (Wā Hana)</li><li>• Count Share out / analysis debrief</li><li>• Lunch</li><li>• Story Time</li><li>• Final Walkaround</li><li>• A hui hou- return to campus</li></ul>	<b>4</b>

## Unit Assessment Plan

### Formative Assessment Methods Used On a Regular Basis Throughout Unit

- HĀ student self-assessment completed weekly via google forms
- Pre-assessment Puke Mo'omana'o journaling
- Quizlet flash cards/game scores
- PearDeck quizzes/grade analysis
- Kahoot
- Discussion/Check Ins
- Daily Check outs

### Summative Assessment

- Punahinanalō Children's Book Creation/Presentation: students will create an illustrated children's book with content they learned about throughout this unit. Possible topics include:
  - Bird species of Kuhialoko
  - Plant species of Kuhialoko
  - What is `āina momona and how it's connected to Kuhialoko
  - Counting in `Ōlelo Hawai`i (using native species found at Kuhialoko)
  - Lessons learned from Uncle Ali`i
- Students present and read their books to partnering elementary school students (an annual event)