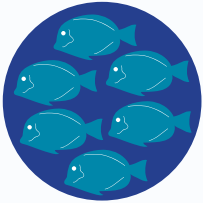


# Maunaloa Watershed Snapshot 2016



## TARGET FOOD FISH

"The great fishpond of Keahupua o Maunaloa was noted for being the largest fishpond of its kind in Polynesia. Today, the renewal of ancient mullet ponds at Kalauha'iha'i and Kānewai gives us new hope as we uphold this rich legacy of Hawaiian ocean farming."

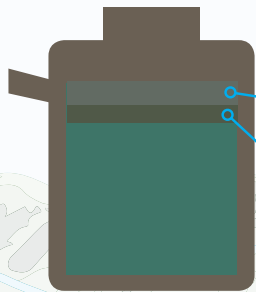
- CHRIS CRAMER, CO-FOUNDER, MAUNALOA FISHPOND HERITAGE CENTER

## AVERAGE ANNUAL RAINFALL



"Over the past 90-100 years, rainfall in Hawai'i has slowly declined overall. While the effects of global warming on Hawaiian rainfall are still uncertain, evidence suggests decreases in some areas will continue."

- DR. TOM GIAMBELLUCA  
PROFESSOR, UNIVERSITY  
OF HAWAII



## WATER QUALITY

**248** of 1,655 Cesspools are within 200 feet of a stream.

**165** of 1,655 Cesspools are within 200 ft of the coastline.

## MARINE INVERTEBRATES AND ALGAE



One of the few places where **Halophia, native seagrass,** grows in Hawai'i.



Invasive algae removed from **28 Acres**



**207,400**

## RESIDENT POPULATION (2010)

## COMMUNITY INVOLVEMENT (2010-15)



**53** Natural Resource Management Projects

**12,973** Volunteers



## LAND COVER

**26%**

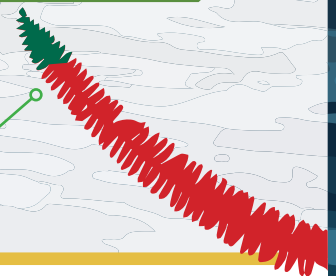
Impervious surface that does not allow surface water to penetrate



## NATIVE VEGETATION

Native Forest Cover

**7%**



Hawai'i Conservation Alliance  
FOUNDATION



WWW.CONSERVATIONCONNECTIONS.ORG



HAWAII  
CONSERVATION  
ALLIANCE



WWW.HAWAIIKAIHUI.ORG



**MM**  
malama maunaloa

WWW.MALAMAMAUNALUA.ORG

# LOCAL MEASURES OF AHUPUA'A HEALTH

The Watershed Snapshot is a status report on the health of our *ahupua'a*, or watershed. In consultation with the Hawai'i Conservation Alliance, communities across the state identified metrics that would best define the health of their watersheds *ahupua'a*. Available data from resource management organizations was compiled to inform the selected metrics, and communities also collected socio-economic, and local *kūpuna* (elder) knowledge. An online library of all available watershed related data has been created as a public resource and can be found by visiting [hca.maps.arcgis.com](http://hca.maps.arcgis.com). The information is compiled as a suite of communication tools to help inform, guide, and garner support for more effective *mauka-to-makai* management efforts. Visit [www.hawaiiconservation.org/communitysnapshot](http://www.hawaiiconservation.org/communitysnapshot) for more information.

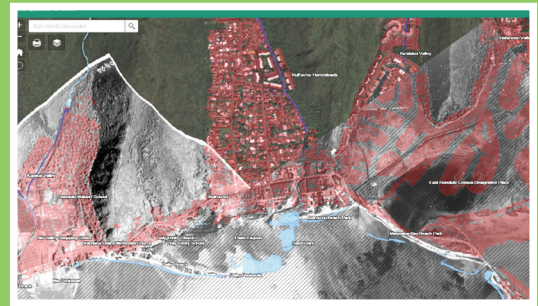
## MAUNALUA

Located on the southeast coast of O'ahu, the Maunalua area profiled for the Watershed Snapshot stretches from Kūpikipikiō (Black Point) to Kawaihoa (Portlock Point), encompassing the eastern portion of Kona *moku* (district) and the entire Maunalua *moku*. The region has long been treasured for its beauty, abundant resources and cultural significance. In recent decades, the region's flatlands and hillsides have seen significant development, changing the area from rural to suburban. This development has increased the area's impervious surfaces in the form of paved roads, shopping centers, cementing of streams and the altering of other natural areas to support its 60,000 residents. As a result, an increase in sediment run-off into Maunalua Bay has caused degradation of near-shore ecosystems, poor water quality and invasive algae to take over near-shore reefs. Intense community action has led to efforts to protect Maunalua Bay, Paiko Lagoon State Wildlife Sanctuary, Kalauha'īha'i Fishpond, Kānewai Spring, and Keawaawa Wetland.



In March 2016, a water quality training with community members resulted in data collection from two sites. Communities received water quality kits and are in the process of developing monitoring plans for on-going data collection.

## STATEWIDE WATERSHED HEALTH DATA



To access statewide, publicly available watershed-related data compiled from various agencies, visit the online Watershed Health Web Map at [hca.maps.arcgis.com](http://hca.maps.arcgis.com). Also available is the Maunalua Web Map, which features data from the community snapshot metrics used for this project and additional requested data.

# WATERSHED SNAPSHOT PROGRESS 2012-16



« Honolulu to Napili, Maui

- 8 Community Consultations Statewide
- Watershed Boundary Maps, Scope of Communication Tools and Metrics Confirmed

2013



« Waimea, Hawai'i Island

- Convening of Communities Statewide to Solicit Interest in Snapshot Participation
- Intellectual Property, Data Sharing Agreement, HCA ARC GIS Tool Demo Data Discussion, Communications 101

2014



« Hā'ena, Kaua'i

- Site Planning Meeting on O'ahu and Moloka'i for 6 Volunteer Communities
- Maps with Available Data, Metrics Checklist, Site Plan Development, Additional 2-3 Metric Selection, Project Timeline, Metric Data Compilation

2015



« Maunalua Bay, O'ahu

- 3 Community Engagements
- Watershed Health Web Map and Snapshot Web Maps for each of the 3 sites
- Water Quality: Training, Consult, Collection, Supply Kits and Monitoring Plans
- Community Data Gathering: Community Involvement in Resource Management, Place Names, Local Knowledge
- Lessons Learned Workshop
- IUCN WCC Pavilion Event

2016