



# Hanalei Bay

## WHY IS THIS WATERSHED SPECIAL?

Honored in song and story, the watershed is an area of unique cultural significance to the Hawaiian people. The Hanalei River watershed extends from the top of Mt. Wai'ale'ale (5,148 ft) to the coral reefs off the north shore of the island of Kauai, Hawaii. The river is popular for kayaking, fishing, crabbing, and prawning. Commercial companies offer kayaking and snorkeling tours and embark from the river for trips to the famed Na Pali coast. Hanalei Valley farmers produce over sixty-seven percent of the state's taro, a staple in the traditional Hawaiian diet.

## ENVIRONMENTAL CHALLENGES

The Targeted Watersheds Grant will focus on the following environmental problems:

- The fragile coral reef ecosystem within the bay is threatened by both natural forces (landslides) and human activity. Sediment and nutrient pollution entering the bay result in cloudy water and increased algae, which deprive the coral and its inhabitants of essential sunlight and oxygen.
- There is a growing public health concern from inadequate septic systems in the densely populated area of Hanalei. High levels of bacteria, which result from the lack of a centralized wastewater collection and treatment system, contaminate the groundwater and flow directly into the bay.
- Local agricultural and ranching practices, invasive plant species, and feral pigs and goats are all potential causes of excess nutrients, streambank degradation, erosion, and sedimentation of streams.

Hanalei Bay – the nation's number two beach in 2002. This spot may best be known as the backdrop for the movie, *South Pacific*.

## RESTORATION ACTIVITIES

Everyone who wants to participate is considered part of the Watershed Hui. EPA Targeted Watersheds Grant funds will help the Hui to:

- Replace cesspools to reduce bacteria loadings. Innovative, on-site treatment systems using the best available technology and/or advanced wastewater standards will be constructed at high-risk sites.
- Establish a long-term community-based plan for a centralized wastewater treatment system. For example, the Hui will decide whether to construct wetlands or build a traditional treatment facility.
- Evaluate the effectiveness of agricultural best management practices to reduce nutrients and sediment, in a partnership with Hanalei taro farmers.
- Further analyze impacts to coral reefs, including benthic habitat and reef fish surveys.

“When we are finished with this watershed project, the water will be cleaner – there will be less nutrients, sediments and bacteria. We will see tangible environmental results. And, what's most exciting to me is that my daughter will be able to swim safely in the river.”

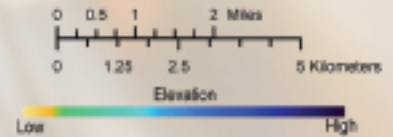
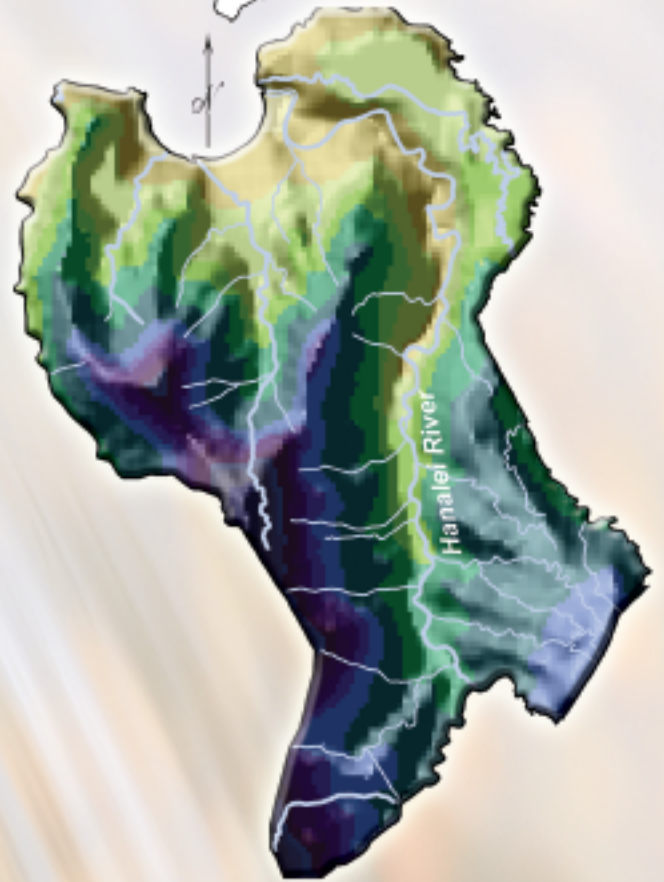
– Jan Surface  
Hanalei Watershed Hui



## A STRONG PARTNERSHIP FOR CHANGE

A broad and diverse coalition of stakeholders are working to protect the watershed. Partners include:

- Local Partners: Civic clubs, local and county governments, business councils, farmers, schools, etc.
- State Partners: State of Hawaii Office of Hawaiian Affairs, Tourism Authority, Department Of Land and Natural Resources, Department of Health
- Federal Partners: U.S. Forest Service, National Oceanic and Atmospheric Administration/National Marine Sanctuary, U.S. Geological Survey, Natural Resource Conservation Service
- University of Hawaii
- Waipa Foundation



Changes in taro cultivation will reduce sediments and other pollutants. (Photo by Carl Berg)



Kayakers enjoy a day on the Hanalei River. (Photo by Larry Debord)



Scientist Dr. Carl Berg teaches young people about the Hanalei River.



A sophisticated computer model being tested in mountainous terrain will help prioritize measures to reduce turbidity. (Photo by Pat Chavez)

## EPA'S TARGETED WATERSHEDS GRANT PROGRAM

EPA's Targeted Watersheds Grant Program is a new, competitive grant program designed to encourage collaborative, community-driven approaches to meet clean water goals.

For more information about the selected watersheds, please visit:  
<http://www.epa.gov/owow/watershed/initiative/>



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