

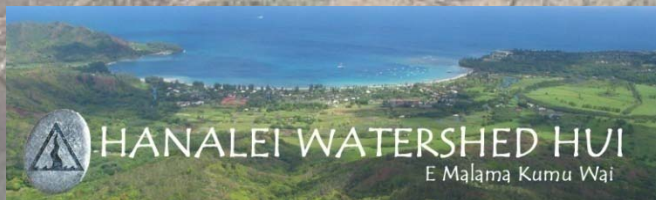
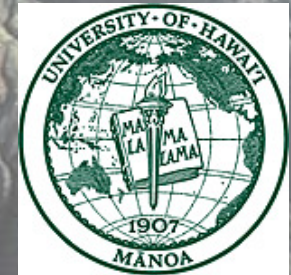
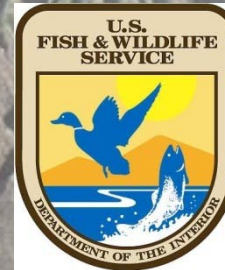
Managing land-based pollutants in Hanalei Bay thru inter-agency & community collaboration

Kathy Chaston

**NOAA National Ocean Service
Office of Ocean & Coastal Resource
Management**



Hawaii's local action strategy to address land-based pollution threats to coral reefs



LAS builds on other federal initiatives

- **1998 American Heritage River**

Created by Clinton Exec. Order in 1998 to protect environment, economy, and culture(14 in US)

- **2003 EPA Watershed Initiative Grant (\$800K)**

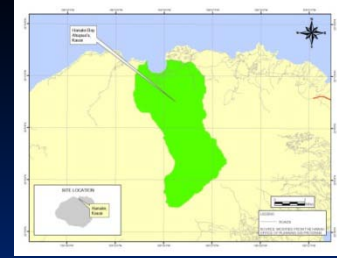
Cesspool upgrades, fencing cattle, Taro BMPs, coral monitoring (12 in US)

- **2004 LAS priority watershed**

Hanalei River: American Heritage River

- Federal Agency MOU: cut red tape to assist river community (EPA federal team chair)
- “River Navigator” (1 FTE) converted to 3 part time local coordinators
- USFS funding for 5+ years
- Resulted in community buy-in, built capacity, 1st watershed plan, good multi-federal agency participation, baseline data

Hanalei, Kaua'i





HWH



USGS

LAS has 3 key objectives:

- Reduce anthropogenic pollutant loads
- Improve understanding of links between pollution and coral reef health
- Increase awareness of pollution prevention



Hanalei Projects

Coral disease surveys

LAS/NOAA

Water quality monitoring

HWH/EPA

TMDL (EPA)

AnAGNPS model

NRCS/USGS/
UH/HWH

USGS circulation and sediment studies

Sediment load study
(USGS/HWH)

Upgrade beach restrooms
(HWH/EPA)

BMP's for taro
HWH/EPA

Coral reef monitoring

EPA/USGS/NFWF

Analysis of 10 yr coral cover data

LAS/NOAA

Hanalei

Fish pond restoration

HWH/NOAA

Centralized wastewater treatment design

HWH/EPA

Cesspool replacement
HWH/EPA/
USFWS

Okolehao Trail Restoration
HWH/NOAA

Livestock fencing

(HWH/ NFWF)

Hydrologic & sediment modeling (USGS)

BMP's for taro

UH/NFWF

LAS coordination

NOAA/NRCS

Synthesis workshop

HWH/LAS

Impacts of biological resources on water quality (USGS)



Workshops on stormwater and wastewater management and erosion control

Innovative Technologies for Stormwater and Wastewater Workshop



Protecting island resources by enhancing local stormwater and erosion control practices

- 3 workshops
- Guidelines drafted for “Stormwater Treatment Practices To Protect Water Quality in Maui County, Hawaii”
- Partners LAS, NOAA, MLP, SLIM, Maui County, MLSWCD

EPA Roles in Hanalei

- **AHR Federal Team chair**
 - develop Federal MOU, AHR Plan
- **Watershed Initiative Grant (~\$800K)**
 - Cesspool upgrades, fencing cattle, Taro BMPs, coral monitoring
- **Water quality monitoring**
 - sediments, turbidity, bacteria loads
- **TMDL: budget for sediments & nutrients**
- **CWA wetlands permit review & enforcement**
- **Grant \$ to develop 2nd watershed plan (CWA 319)**
- **Technical assistance**

Lessons Learned

- Community groups are dynamic
- Watershed initiatives take time
- Community support is critical
- Implement simple large scale management actions

Questions?

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