# **Maui Surface Water**

Dean Uyeno



1<sup>st</sup> Annual Joint State Water Conference Wailuku, Maui January 15, 2013

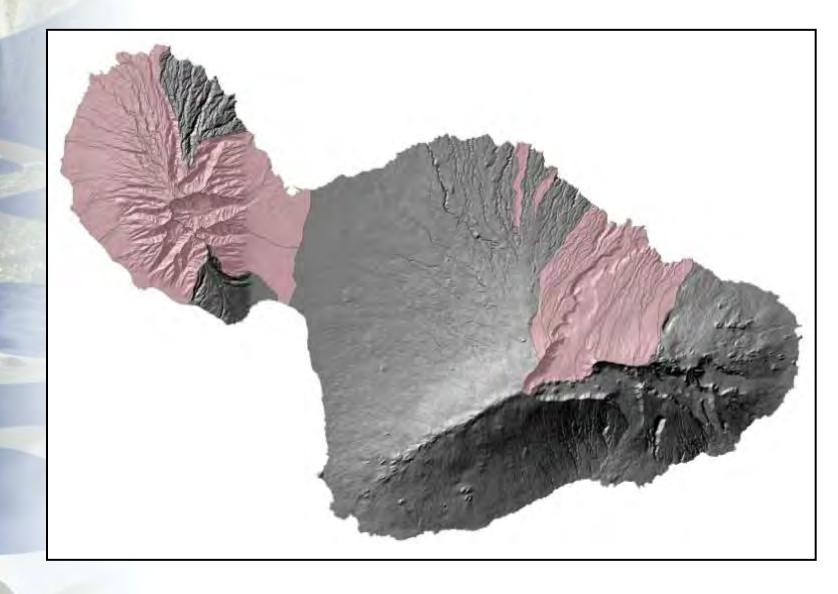
### **Stream Protection & Management Program**

#### Introduction

- Regulate stream channel alterations and stream diversion works statewide via permits
- Set measurable interim instream flow standards watersheds statewide
- Respond to requests for determination
- Respond to surface water-related complaints
- Administration of surface water use permits in surface water management areas and claims of appurtenant rights



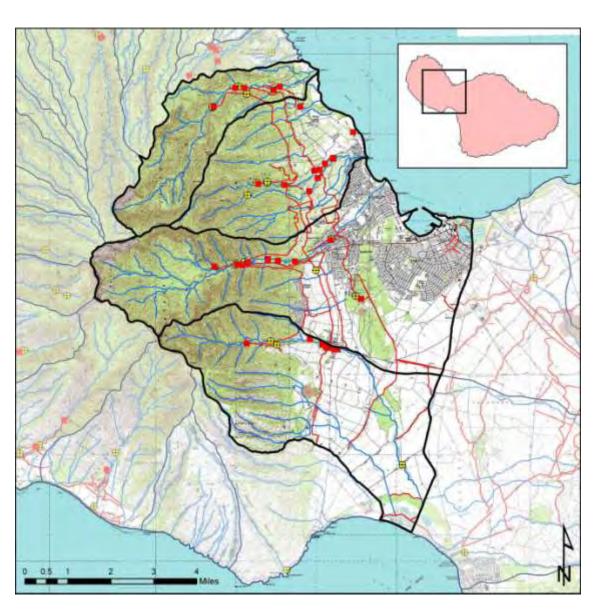
## **Current Priority Areas**





### Na Wai Eha (Central Maui)

<u>Hydrologic Units</u> Waihee Waiehu Iao Waikapu





### Background

- July 2001 Petition filed to designate lao and Waihee aquifer systems as ground water management areas.
- June 2004 Petition to Amend the Interim Instream Flow Standards (Interim IFS) for Waihee, Waiehu, Iao and Waikapu filed by Earthjustice.
- October 2004 Earthjustice filed a Waste Complaint against Wailuku Water Company.
- February 2006 Commission initiated a contested case hearing combining lao high-level water use permit applications and the Petition to Amend the Interim IFS.
- June 2010 Commission issued its Decision and Order, with water being restored to Waihee and North and South Waiehu Streams.



#### **Decision and Order**

- Waihee River 10 mgd below Spreckels Ditch
- Waihee River 6 mgd at the mouth of the river





#### **Decision and Order**

 North Waiehu – 1.6 mgd immediately below the North Waiehu Ditch diversion





### **Decision and Order**

- South Waiehu 0.9 mgd immediately below the Spreckels Ditch diversion
- Waiehu Stream 0.6 mgd at the mouth of the stream





#### **Implementation – Streamflow Measurement**



Waihee River below Spreckels Ditch



Waihee River at Kahekili Hlghway



Spreckels Ditch Intake at South Waiehu Stream



Waiehu Stream below Confluence



#### **Implementation – Biological Connectivity**







lao-Maniania Intake at lao Stream





#### **Implementation – System Losses**











## Na Wai Eha (Water Management Area)

### Background

- March 2008 Commission designated Waihee, Waiehu, Iao, and Waikapu as Surface Water Management Areas with an effective date of April 2008.
  - April 2009 Commission received 125 applications for existing use.
    - 115 applications were accepted (10 deemed incomplete)
    - 95 existing use applications claimed appurtenant rights
    - Note: 77 new use applications currently
- March 2010 Commission initiated the public hearing process on Surface Water Use Permit Applications for existing uses.
- July 2010 Commission staff conducted field investigations for existing uses.

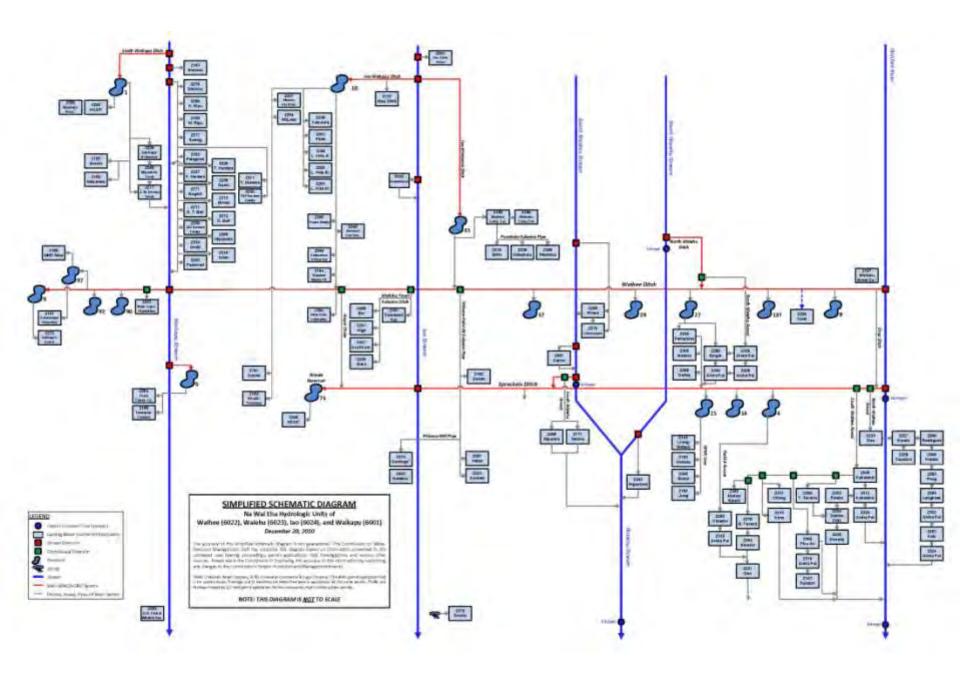


## Na Wai Eha (Water Management Area)

### Background

- September 2011 Commission initiated a process for determining Appurtenant rights.
- October 2011 Public Notice issued to announce Appurtenant rights determination.
- August 2012 Public Notice issued listing all Appurtenant rights claimants, for new and existing uses, with deadline for written objections.
- August 2012 Commission approved appointment of a hearing's officer to handle Appurtenant rights claims.





## Na Wai Eha

### Where are we today?

- August 2012 Hawaii Supreme Court issued its opinion:
  - Failed to adequately address effect of IFS on traditional and customary Hawaiian practices.
  - Analysis of instream uses was incomplete.
  - Failed to adequately consider alternative water sources.

Court vacated the Commission's Decision and Order and remanded the case for further proceedings.

- Another public notice will be issued for additional appurtenant rights claimants.
- Dr. Lawrence Miike appointed as hearings officer for appurtenant rights determination.
- Public hearing on surface water use permits continued to October 2013.



### East Maui

### Background

• June 2001 – Commission received 27 Petitions to Amend the Interim Instream Flow Standard for streams in East Maui from Native Hawaiian Legal Corporation (NHLC).

NHLC agreed that initial effort would focus on seven (7) streams.

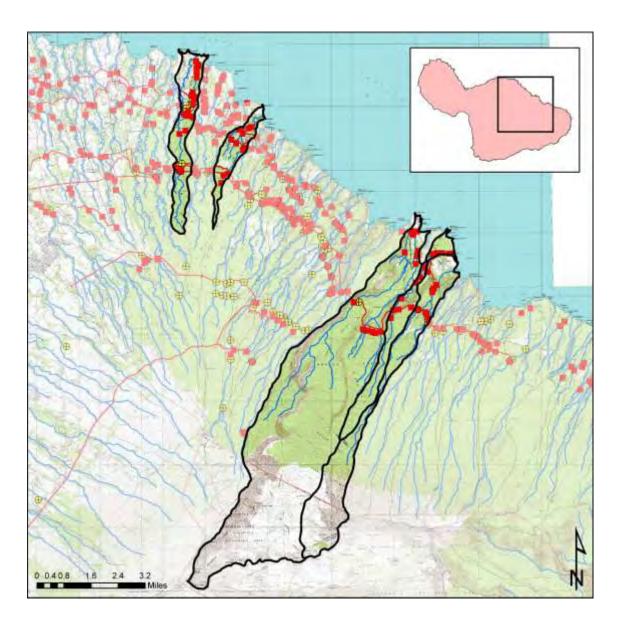
- 2005/2006 U.S. Geological Survey released findings of two cooperative studies on the hydrology and biology of East Maui streams.
- December 2006 Staff authorized to initiate and conduct public fact gathering meetings.
- September 2008 Commission approved staff recommendation to restore streamflow at measurable amounts.



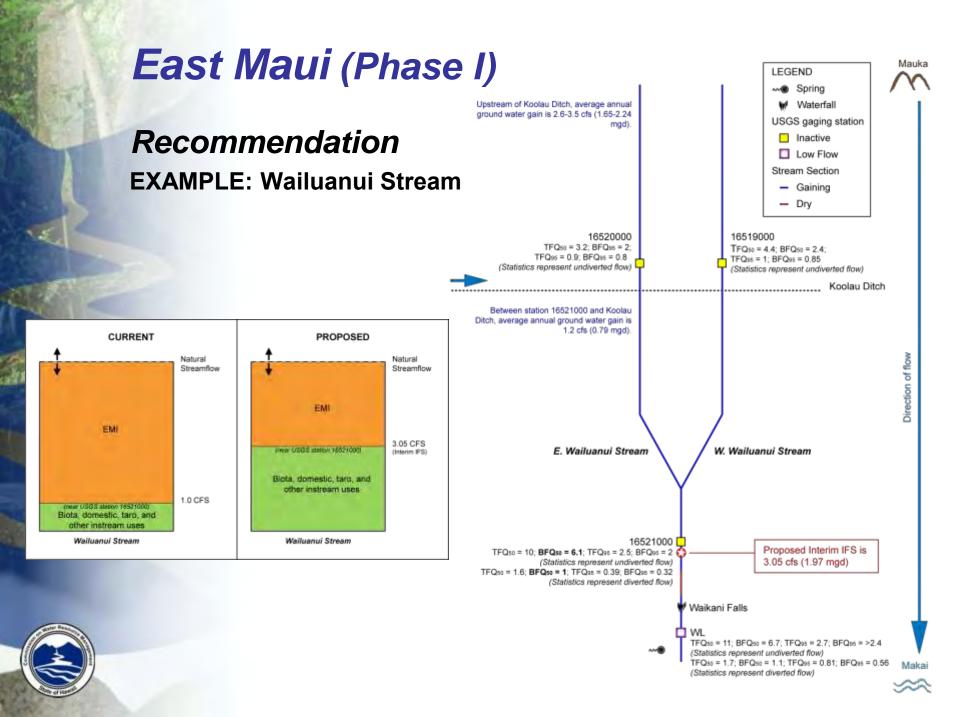
## East Maui

#### Phase I Hydrologic Units

- Honopou
- Hanehoi
- Piinaau
- Waiokamilo
- Wailuanui





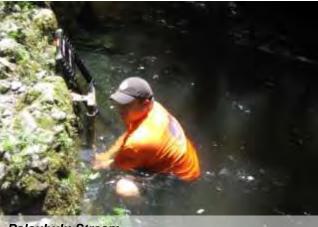


### East Maui (Phase I)

#### **Implementation – Monitoring**







Palauhulu Stream





### East Maui (Phase I)

#### **Implementation – Investigations**







Minor Diversions at Waiokamilo

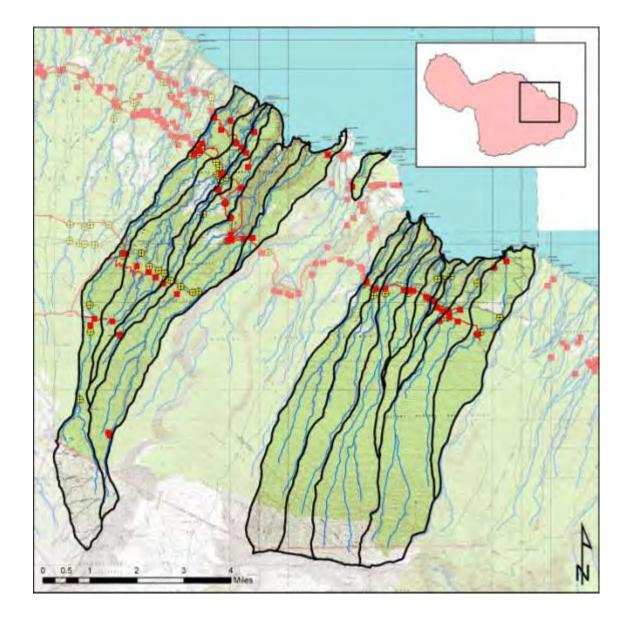




## East Maui

#### Phase II Hydrologic Units

- Waikamoi
- Puohokamoa
- Haipuaena
- Punalau
- Honomanu
- Nuaailua
- Ohia
- West Wailuaiki
- East Wailuaiki
- Kopilula
- Waiohue
- Paakea
- Waiaaka
- Kapaula
- Hanawi
- Makapipi



### East Maui

### Background

- December 2009 Staff made recommendations on remaining 16 hydrologic units, but Commission voted to defer action.
- May 2010 Commission approved staff recommendation with amendments.
  - Measurable amounts, comparable to status quo.
  - Conditional amount of 0.93 cfs (0.6 mgd) on Makapipi Stream.
  - Seasonal restoration flows on Waikamoi, West Wailuaiki, East Wailuaiki, and Waiohue Streams.
  - NHLC requested a contested case hearing.



### East Maui (Phase II)

#### **Implementation – Monitoring**











### East Maui (Phase II)

#### **Implementation – Streamflow Restoration**







Seasonal Release at East Wailuaiki Stream





### East Maui (Phase II)

#### **Implementation – Biological Connectivity**







Low-Flow Channel at Honopou Stream





## East Maui (Contested Case Hearing)

### Background

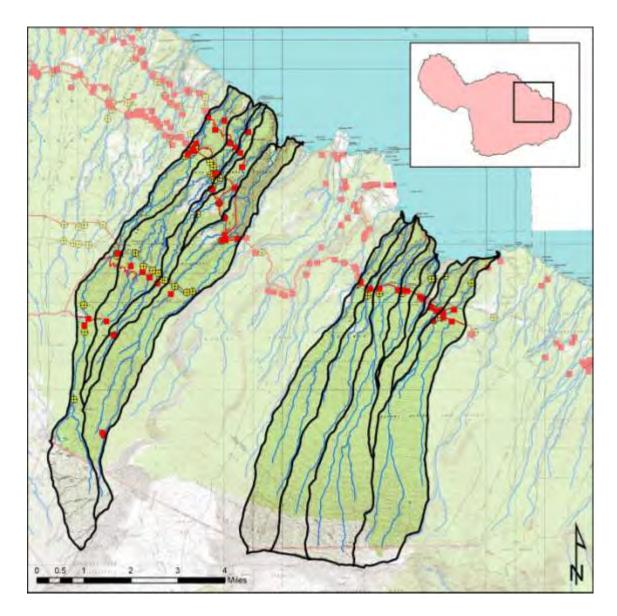
- October 2010 Commission voted to deny request for a contested case hearing filed by NHLC and Maui Department of Water Supply.
  - November 2010 NHLC filed appeal, on behalf of Na Moku Aupuni o Koolau Hui (Na Moku), with the Intermediate Court of Appeals.



## East Maui (Contested Case Hearing)

#### **Contest** Hydrologic Units

- Waikamoi
- Puohokamoa
- Haipuaena
- Punalau
- Honomanu
- West Wailuaiki
- East Wailuaiki
- Kopilula
- Waiohue
- Paakea
- Kapaula
- Hanawi





### East Maui

#### Where are we today?

 November 2012 – Intermediate Court of Appeals issued opinion vacating the Commission's decision denying Na Moku's petition for contested case hearing.



### Background

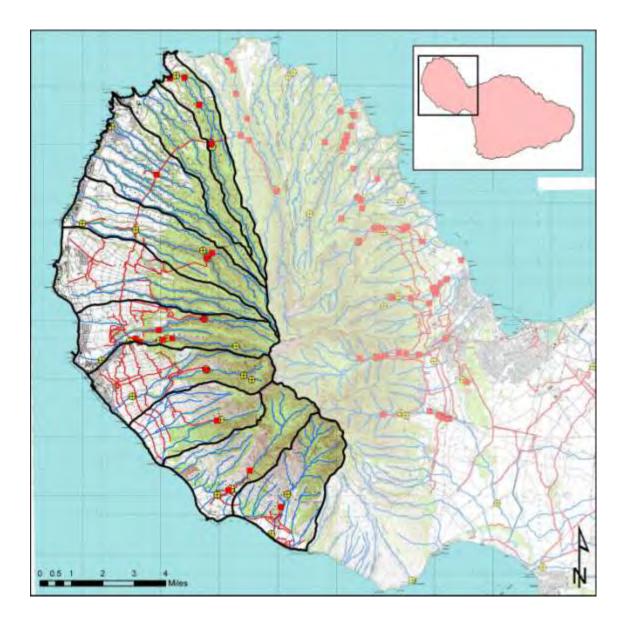
- August 2006 Maui Pineapple Company (MPC) petitioned the Commission to establish amended instream flow standards for Honokohau and Honolua Streams.
- November 2008 Commission notified MPC that the petitions would be delayed due to Na Wai Eha.
- June 2011 Commission entered into a \$648,000 cooperative agreement with the U.S. Geological Survey to conduct a low-flow stream study for 10 streams in West Maui.

Study completion expected in June 2014.



#### **Hydrologic Units**

- Honolua
- Honokahua
- Kahana
- Honokowai
- Wahikuli
- Kahoma
- Kauaula
- Launiupoko
- Olowalu
- Ukumehame





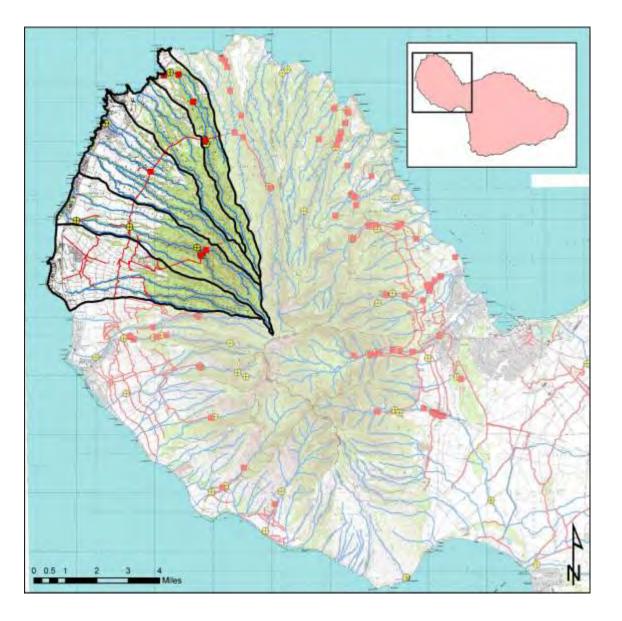
#### Background

- July 2008 The U.S. Army Corps of Engineers (USACE) expressed interest in developing a West Maui Watershed Plan with the assistance of the Department of Land and Natural Resources (DLNR), Department of Health, and various other federal agencies.
- September 2012 USACE and DLNR enter into a \$3 million costshare agreement to develop a watershed plan in support of the West Maui "Ridge to Reef" Initiative.



#### **Hydrologic Units**

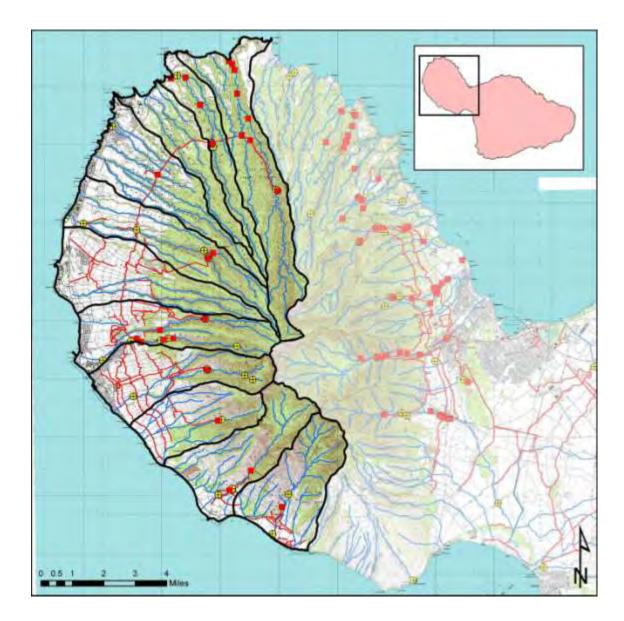
- Honolua
- Honokahua
- Kahana
- Honokowai
- Wahikuli





#### **Hydrologic Units**

- Honokohau
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- Kauaula
- Launiupoko
- Olowalu
- Ukumehame





#### Where are we today?

 USGS is in the 2<sup>nd</sup> year of its low-flow stream characterization study.

More information available at: http://hi.water.usgs.gov/studies/lahaina\_lowflow/

 Components of the West Maui "Ridge to Reef" Initiative are moving forward.

More information available at: http://www.hawaiicoralreefstrategy.com/

• The Commission staff expects to begin preparing instream flow standard assessments in 2013.



#### COMMISSION ON WATER RESOURCE MANAGEMENT

#### Ke Kahuwai Pono

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#### Water News

#### NOMINATIONS FOR COMMISSION MEMBERS

The Nominating Committee for the State Commission on Water Resource Management is soliciting nominations for two positions on the Commission starting July 1, 2013. The Nominating Committee will send the names of three individuals for each position to the Governor who selects one person for each position and submits the names to the Senate for confirmation

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program to help well owners understand groundwater basics, well care best practices, and how to find assistance. It will also teach well owners how to sample their well, how to interpret sample results, and what they can do to protect their well and source water from

#### Website: http://hawaii.gov/dlnr/cwrm E-mail: dlnr.cwrm@hawaii.gov