

DWS Watershed Grants Program, March 20, 2018



The Nature Conservancy's Molokai Program
East Molokai Watershed Partnership Coordinator

Project Goals: To sustain healthy native forest in fenced units, while enhance or improve native vegetation levels in unfenced units.

Project Objectives:

1. Remove all ungulates from fenced units and sustain ungulate free status.
2. Control populations of feral ungulates in unfenced units to reduce erosion and increase vegetation cover.
3. Continue to reduce priority weed populations from all forest systems through coordinated weed removal sweeps.
4. Assist with the detection and response to the introduction of new invasive species.
5. Foster partner and community engagement through outreach programs like: Molokai Fire Task Force; Molokai Earth Day planning and event; Mana'e Mauka Working Group; MoMISC, MoPEP, EMoWP etc.
6. Document management activities through monitoring and GIS summary mapping.
7. Complete annual contract with USGS for the Kawela Stream Gauging Station to measure stream flow and water quality.
8. Support research projects like USGS Ridge to Reef Kawela Reseach project that documents vegetation changes, hydrological recharge, and erosion/sedimentation levels in response to EMoWP management strategies.

Benefits:

- a. Sustaining or improving "intact" native montane forest systems with the potential recovery of listed endangered plant and animal species.
- b. Sustaining or improving watershed capacity by increasing infiltration of rain water into aquifers by sustaining and or increasing vegetation recovery or enhancement.
- c. Reducing erosion (non-point source pollution) and sedimentation onto the adjacent fringing reef.
- d. Reducing sedimentation of the coastal highway which reduces cost of maintaining the highway and also reducing dangerous highway conditions.
- e. Preventing or reducing wildland fires that impact vegetation levels and erosion rates.
- f. Conservation awareness, engagement and collaboration of the local community.
- g. Documentation of conservation successes which may lead to "Best Practices."
- h. Leveraging funds and conservation actions.

DWS/OED Funds

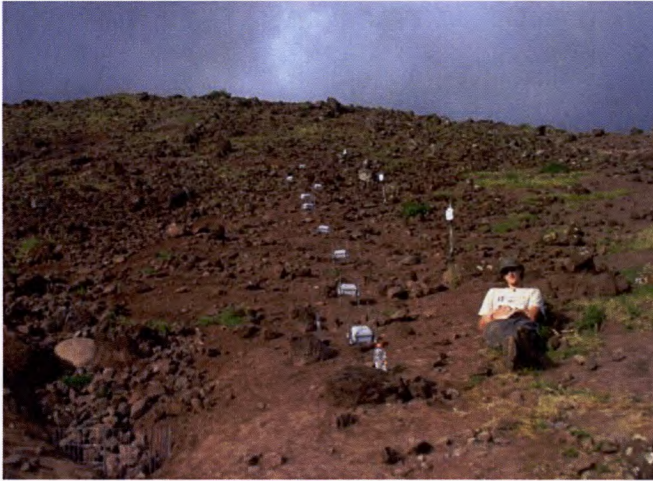
- DWS/OED funds from 2002-12
- DWS funds only 2013-Present, current funding level sine 2016 - \$250,000
- FY19 request - \$250,000
 - \$75,000 - Personnel/Benefits
 - \$142,391 - Management, Helicopter and USGS Kawela Stream Gauge Contracts
 - \$32,609 - Overhead (15% allowed by County of Maui)

DWS annually leverages over \$400,000 in State and Private funds.

Attachments: USGS Veg Recovery Pics; State DOT Overtime Graph; EMoWP Land and Sea Scape View

RECEIVED AT WR MEETING ON 3/20/18
Ed Misaki

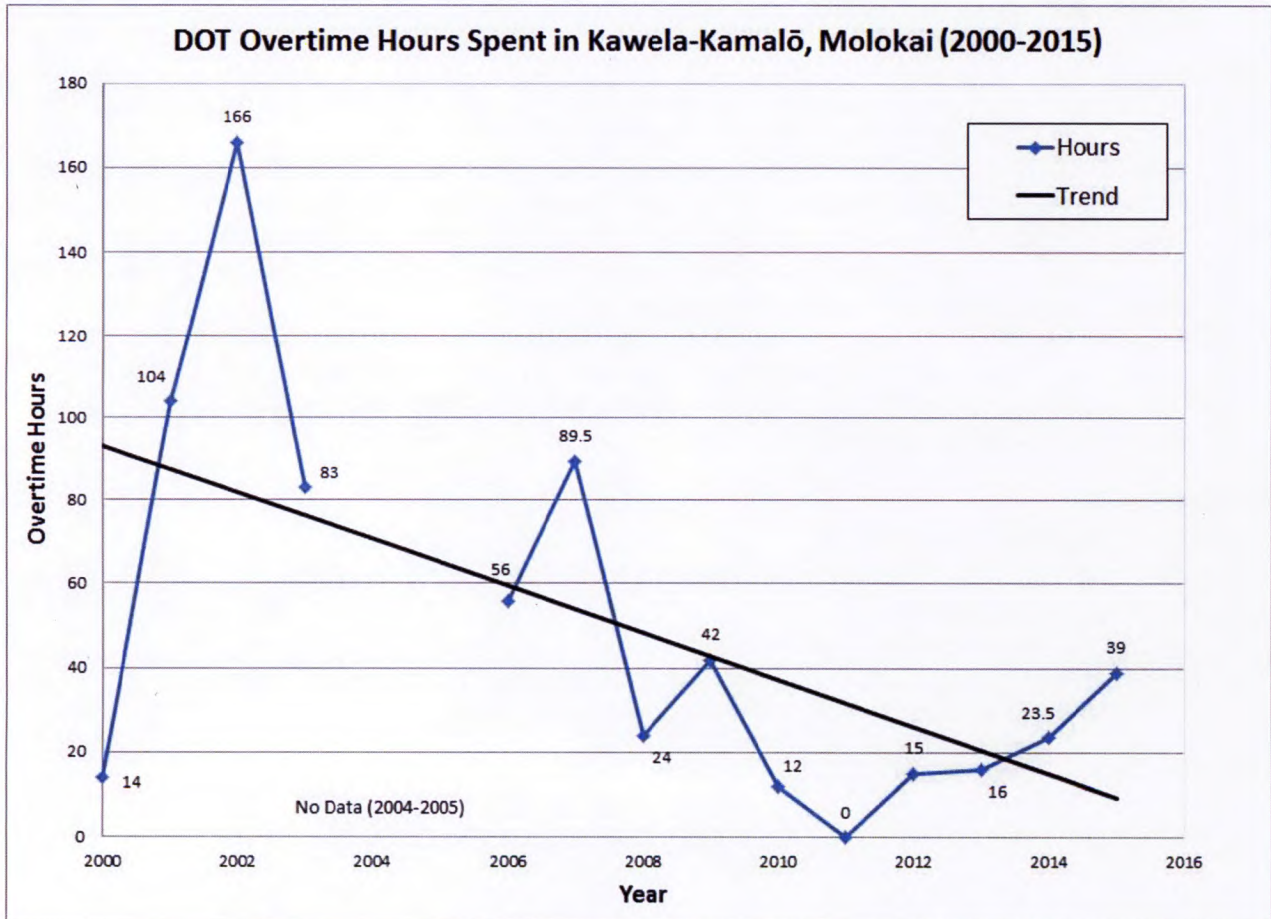
USGS Ridge to Reef Site 1 -- 2007, 1% Ground Cover

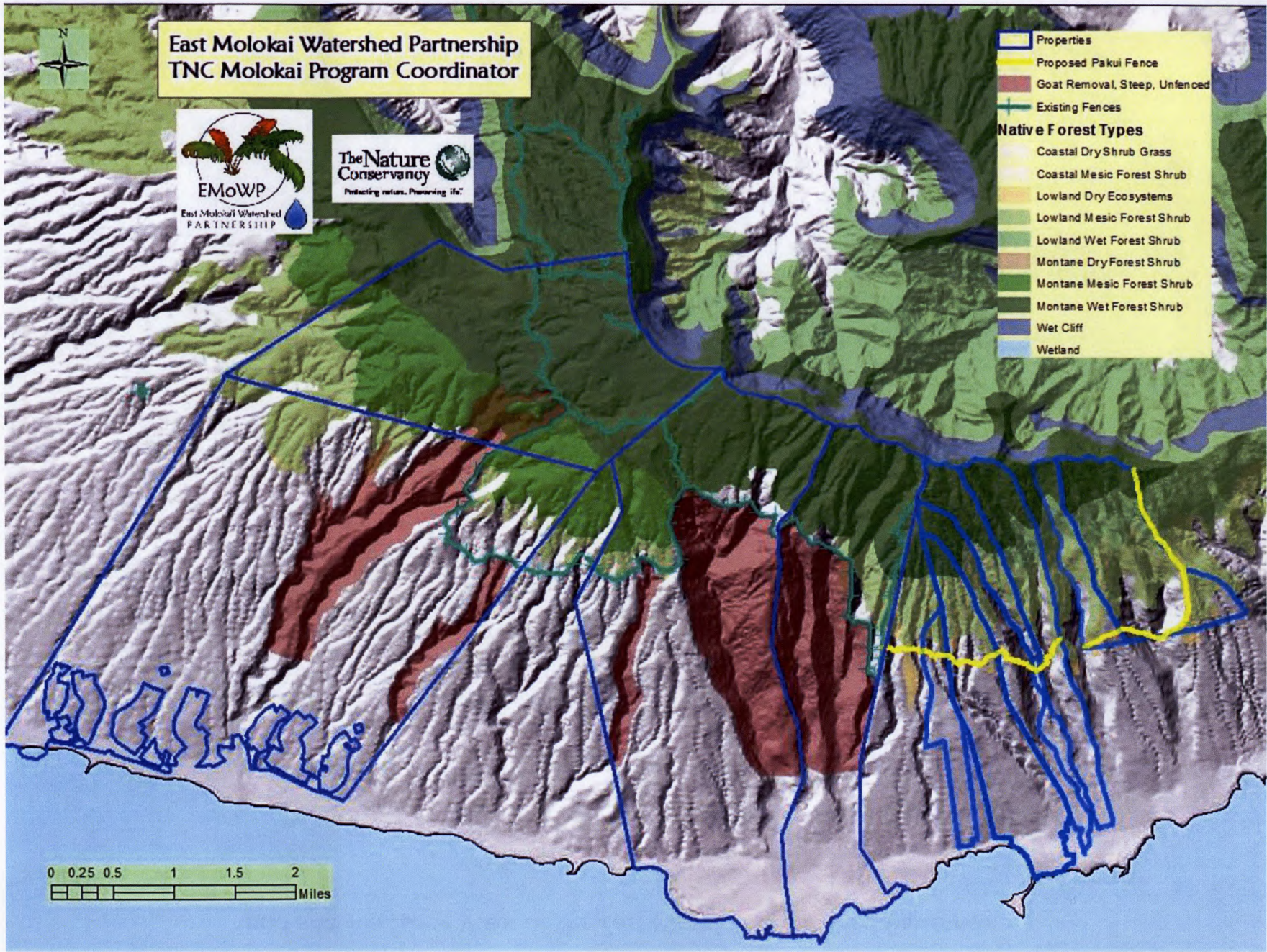


After EMoWP/TNC Animal Control Efforts
USGS Ridge to Reef Site 1 - 2014
Vegetation Recover over 70 % Ground Cover



Public Safety and Economic Benefits – DOT Overtime keeping roads safe after winter storm event.





Land and Sea Scape View of the East Molokai Watershed Partnership



Fringing Reef System – Longest, Continuous in Hawaii and the US

Recovering Denuded middle zone

Intact Upper Native Forests Systems