

Kuahiwi a Kai: Lāna‘i Watershed Conservation Program Update

Community Meeting Summary: February 28, 2022

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Video Documentary

KUAHIWI A KAI BACKGROUND

What is the program?

- Long-term commitment to conservation on Lāna‘i’s windward side (20,000+ acres) – from the mountains to the sea
- Partnership and fund matching with National Fish & Wildlife Foundation (NFWF) and grantees
- Launched in 2019, first grantees awarded in 2020

Why is this needed?

- Generations of nearsighted agricultural practices and overgrazing by deer, sheep, and goats has done great damage
- Millions of tons of top soil has eroded onto the near-shore reef
- Only 3% of Lāna‘i’s original native mesic forest remains today
- This damage threatens Lāna‘i’s watershed, native plants and habitat, and continued existence of nearshore reef and fishery

PROGRAM AREA



FROM MAUKA TO MAKAI



Photo: Joe West

ASSESSMENT & BASELINE: 2020 - 2021

United States Geological Survey

Current vegetation map and change over last 18 years

- High resolution island-wide vegetation modeling & mapping, prioritizing ecosystem restoration & habitat protection
- Baseline vegetation maps, 95% accuracy
- Highlights invasive species spread over time
- Prioritize protection/restoration of higher elevation native habitat

UH Department of Oceanography

Water quality monitoring w/ school engagement

- Building, deploying, & monitoring real-time environmental sensors: water level, water temperature, dissolved oxygen, chlorophyll/turbidity, pH, rainfall, wind
- Data collection: 10x cheaper, solar-powered, no required infrastructure, Lasts years w/out maintenance
- Data Analysis: tidal predictions, flood mapping, Seal level rise benchmarks
- Data distribution: online portal, API access

ON THE GROUND RESTORATION: 2021+

LCHC Stewardship Hunting Program

Deer population management

- Protect and restore landscape through ungulate removal
- 120 registered hunters, 971 hunts, 450 Axis deer removed including 269 doe, 219 Mouflon removed
- Hunter responsibilities: remove ungulates, document archaeological sites and native plants, participate in community stewardship work day

Pono Pacific

Landscape Scale Ungulate Fencing

- Install four fence lines to enclose overall program area & create mauka to makai management units within program area
- Excludes feral ungulates, protects native habitat, allowing natural vegetation regeneration, effective conservation & management activities

Ridge to Reefs

Erosion Stabilization and pilot outplanting

- Youth and teacher engagement: seed and plant native species, community based low cost sediment trapping efforts
- Soil erosion impacting coral reefs: evaluate treatments plots within enclosures
- Next steps: work w/Pono Pacific on electric fence plot, and students assist w/test plots and growing native plants

TELLING THE STORY: 2021+

Video Documentary

- Videos and stories of the land, history, science, and change
- Status: preplanning, document grantee work & community sentiment

For more information, please reach out to communitymeetings@pulamalanai.com

Info as of February 28, 2022, subject to change without notice