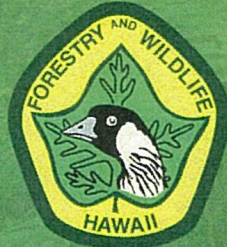




Watershed Management

MKWP Update Olowalu to Mā'alaea



Scott Fretz
Division of Forestry & Wildlife
Maui Branch
March 2025

Division of Forestry and Wildlife

Forestry

Wildlife

Native Ecosystems

Trails and Access

Watersheds
Native ecosystems
Endangered species
Habitat restoration
Invasive species
Public hunting
Public access
Forest products
Wildland firefighting



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Managed lands ~170,000 acres

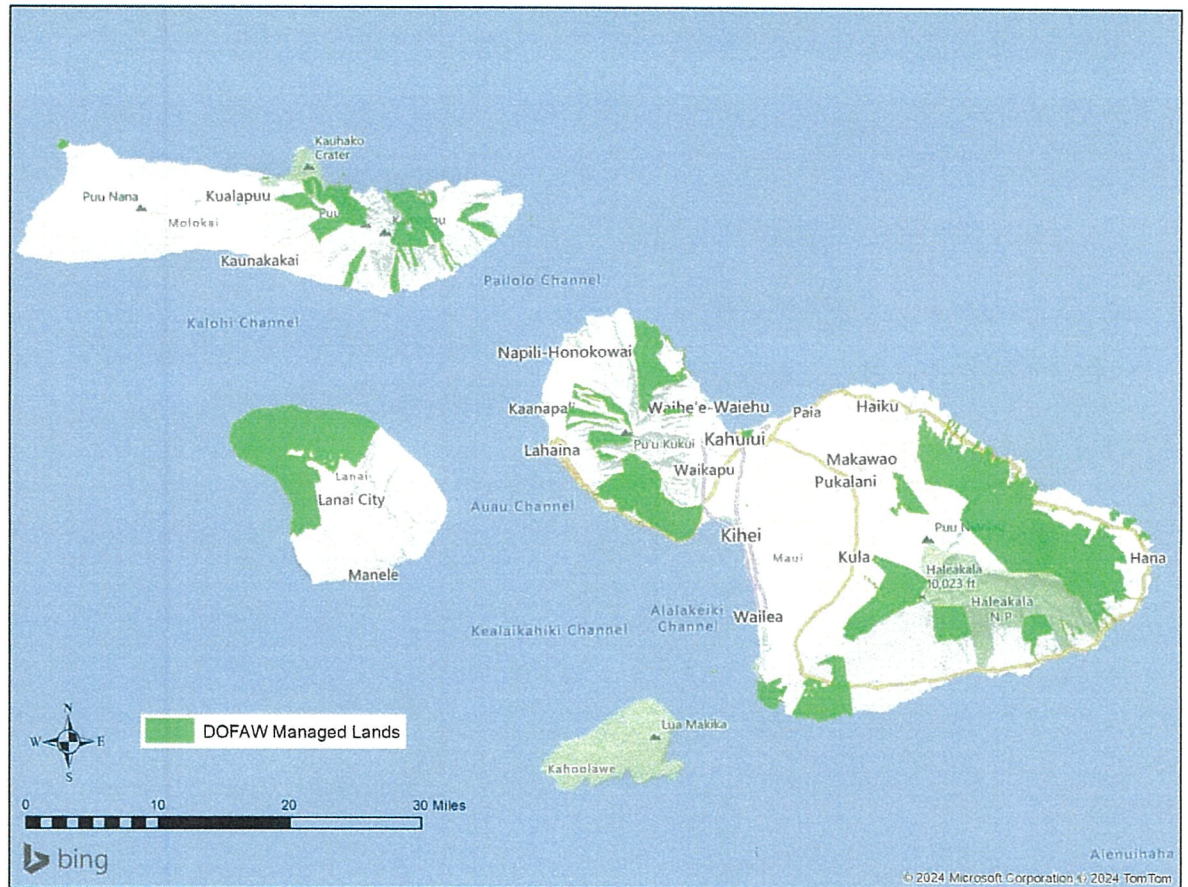
Forest Reserves

Natural Area Reserves

Wildlife Sanctuaries

Game Mgt Areas

Nā Ala Hele Trails

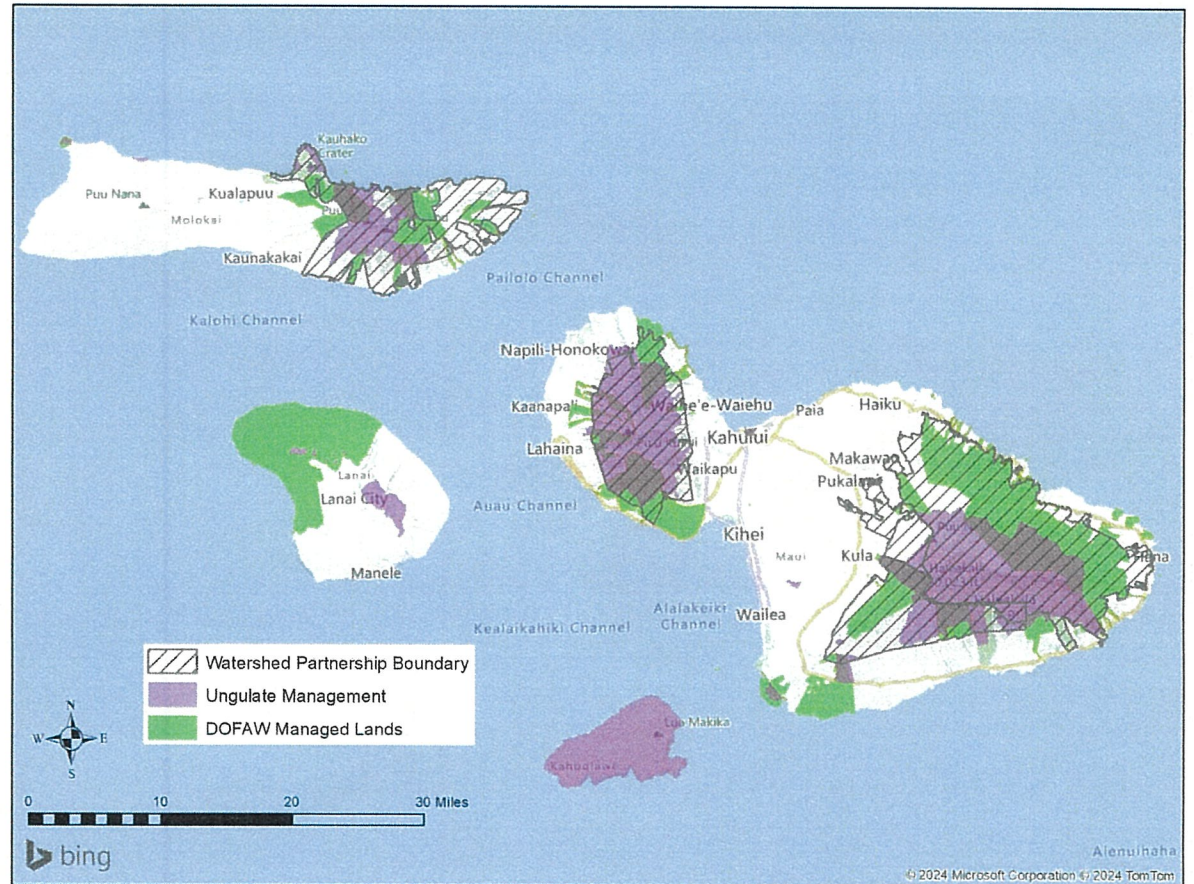


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30 x 30 Initiative

Effective management
Priority watersheds
Statewide on track
Maui ahead of targets
>50% x 2030



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Challenges

- Hooved mammals: pigs, goats, deer, cattle
- Invasive plants: grasses, weeds
- Fire and fuels
- Erosion and sedimentation
- Impacts to marine ecosystems
- Predators: rats, mongoose, J. chameleons
- Pests: slugs, snails

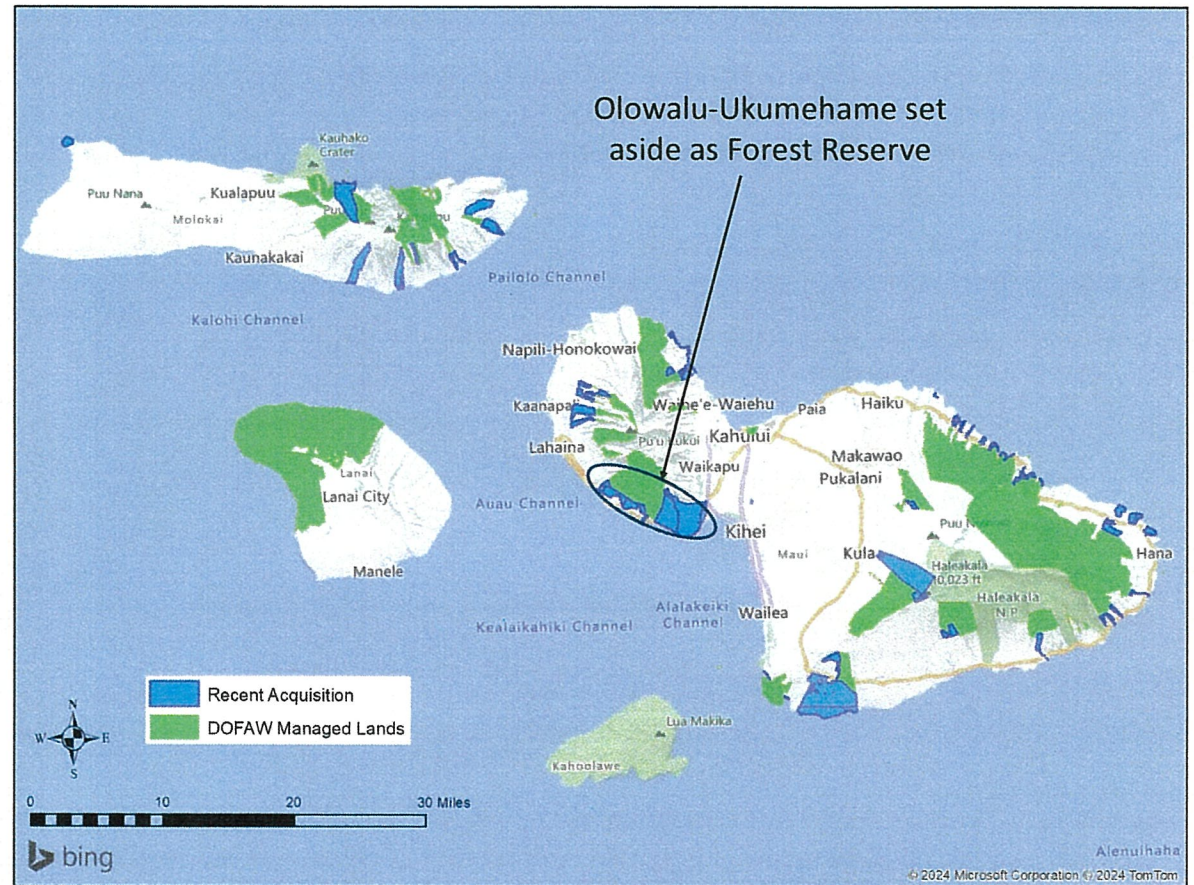


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Land acquisition

Set aside
Purchase
Donation
>80 parcels
~ 20,000 acres



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Olowalu- Ukumehame

- Upper watersheds managed
- Coastal and lowlands unencumbered
- Dry areas, highly modified
- Threats and degradation



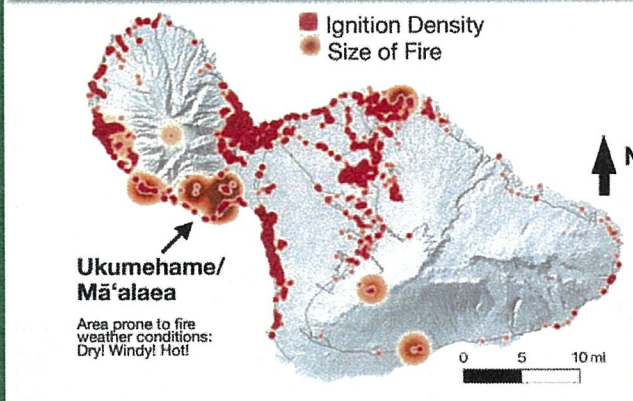
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Primary threats

- Feral ungulates
- Habitat destruction
- Invasive species
- Fire and fuel cycles
- Erosion and sedimentation

Maui Fire History 2002-2012

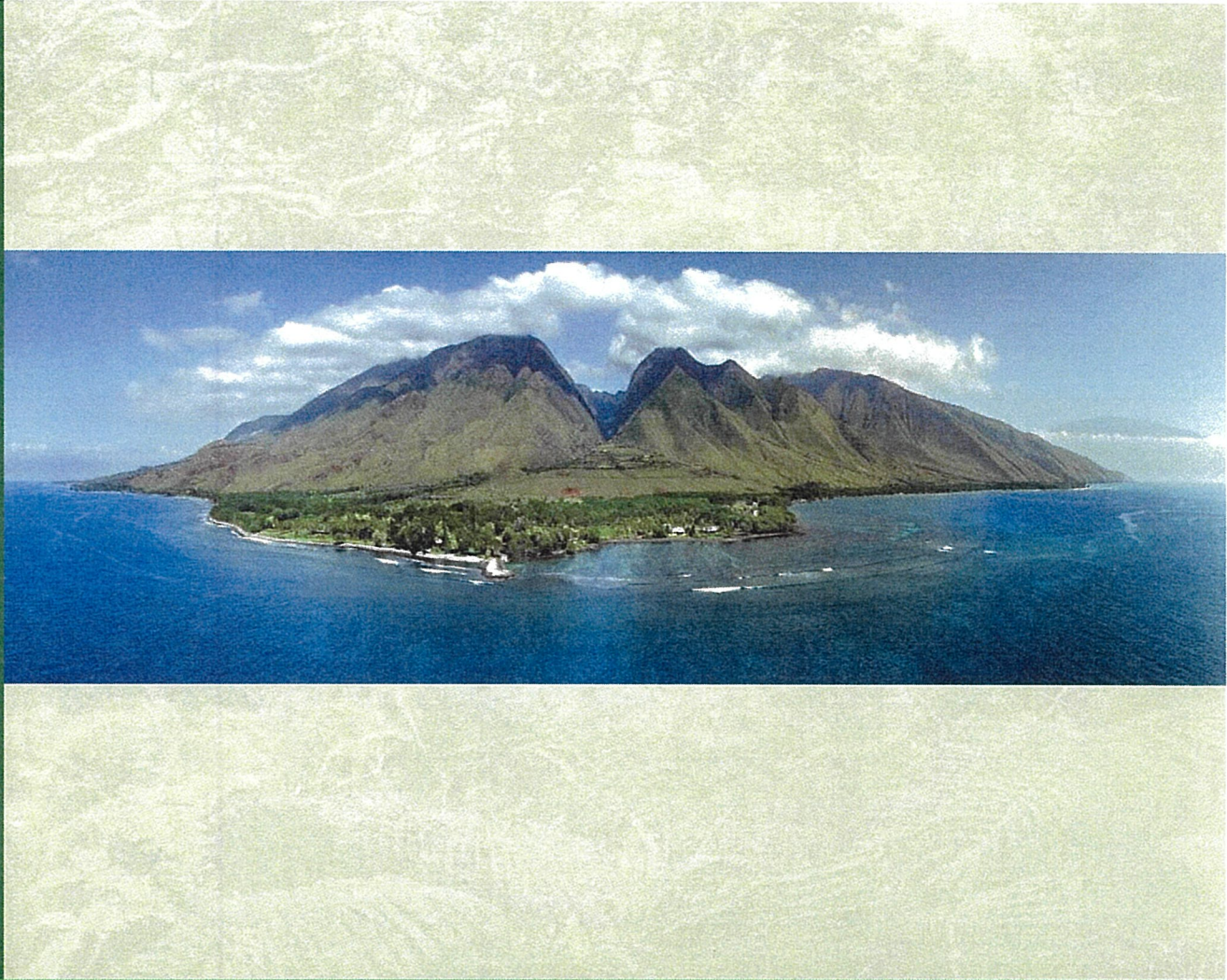


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Goals

- Restore native ecosystems
- Break fire-grass cycle
- Enhance watershed and wetland function
- Increase landscape and coral reef resilience

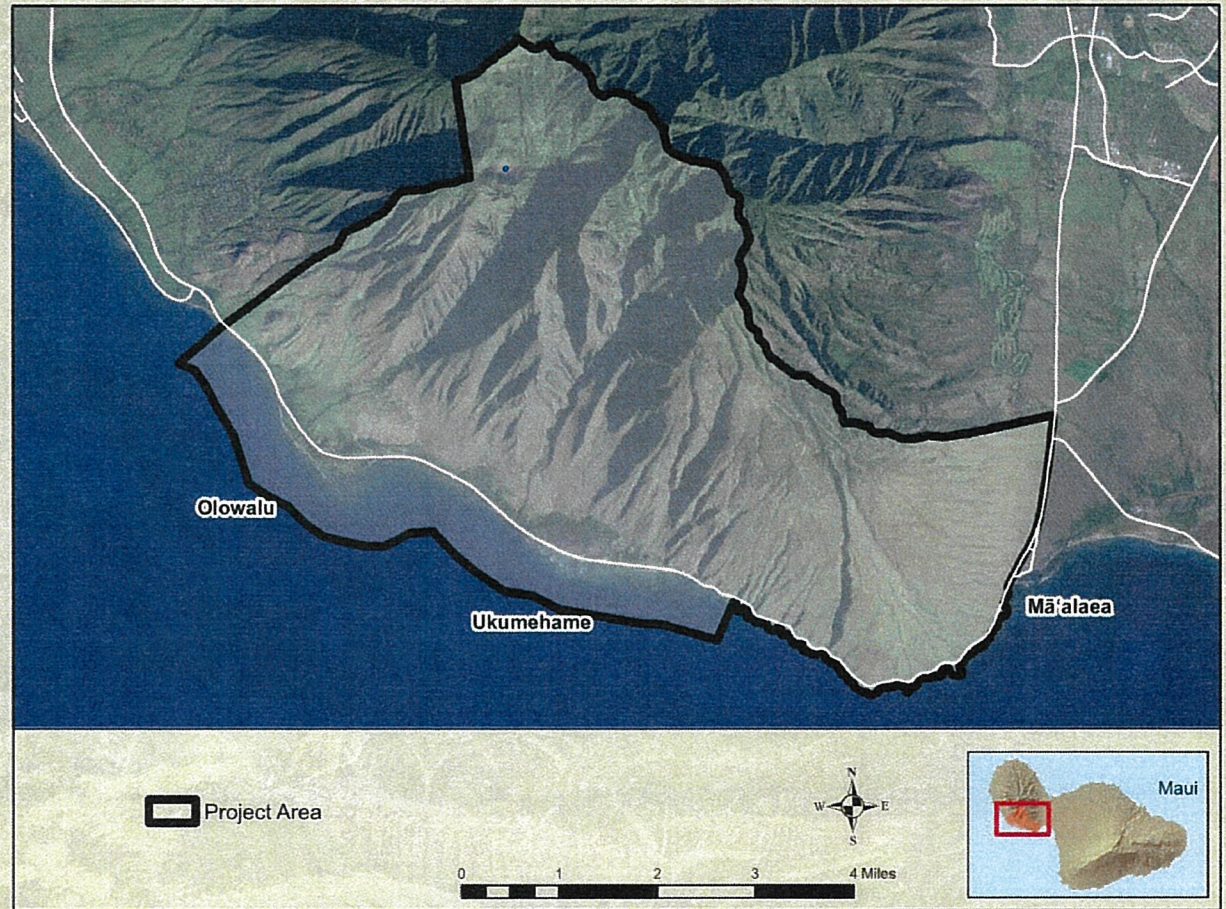


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Strategy

- Comprehensive
- Integrated
- Summit to reef
- Partnerships
 - Terrestrial
 - Marine
 - Community
 - Agency
 - Landowner

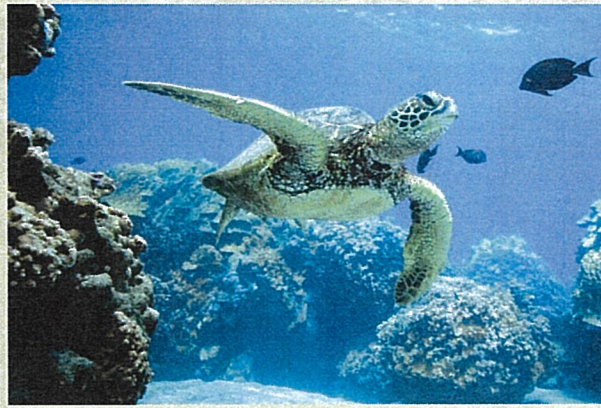


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Objectives

- Fencing ungulate control
- Upland habitat restoration
- Wetland and riparian restoration
- Fire breaks, green breaks
- Dip tanks
- Sediment detention

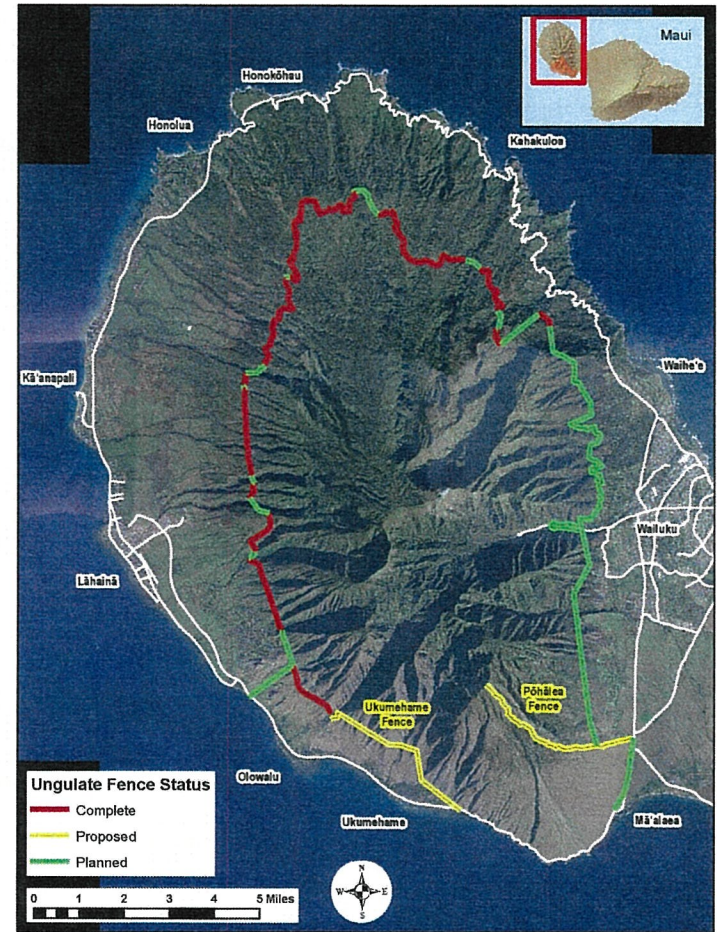


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Objectives

Fencing ungulate control

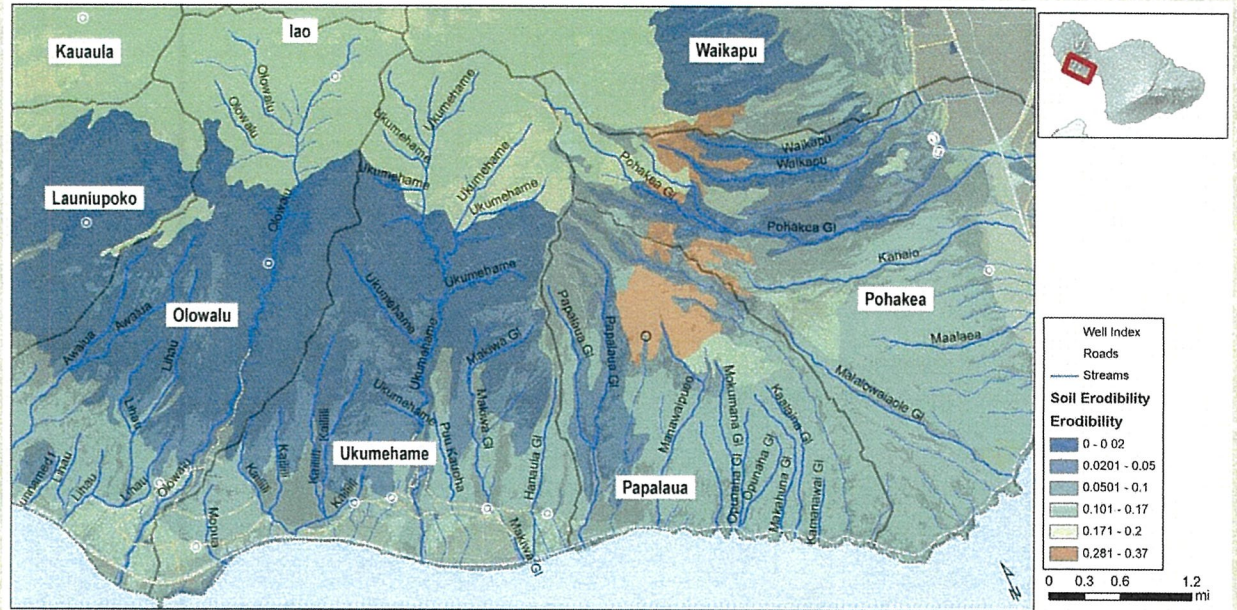
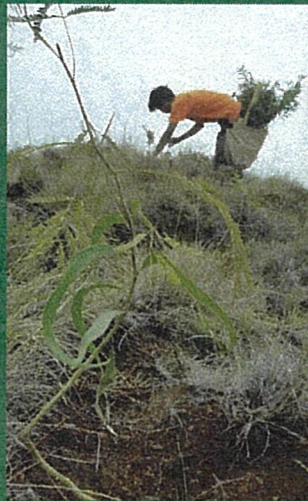
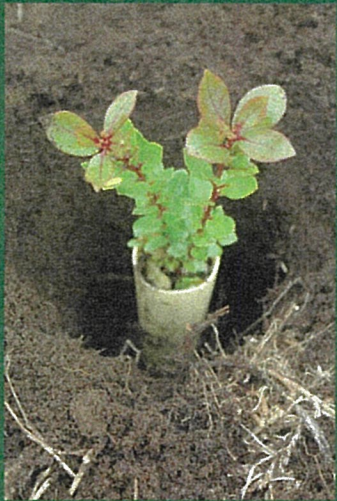


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Objectives

- Upland forest habitat restoration
- Soil stabilization

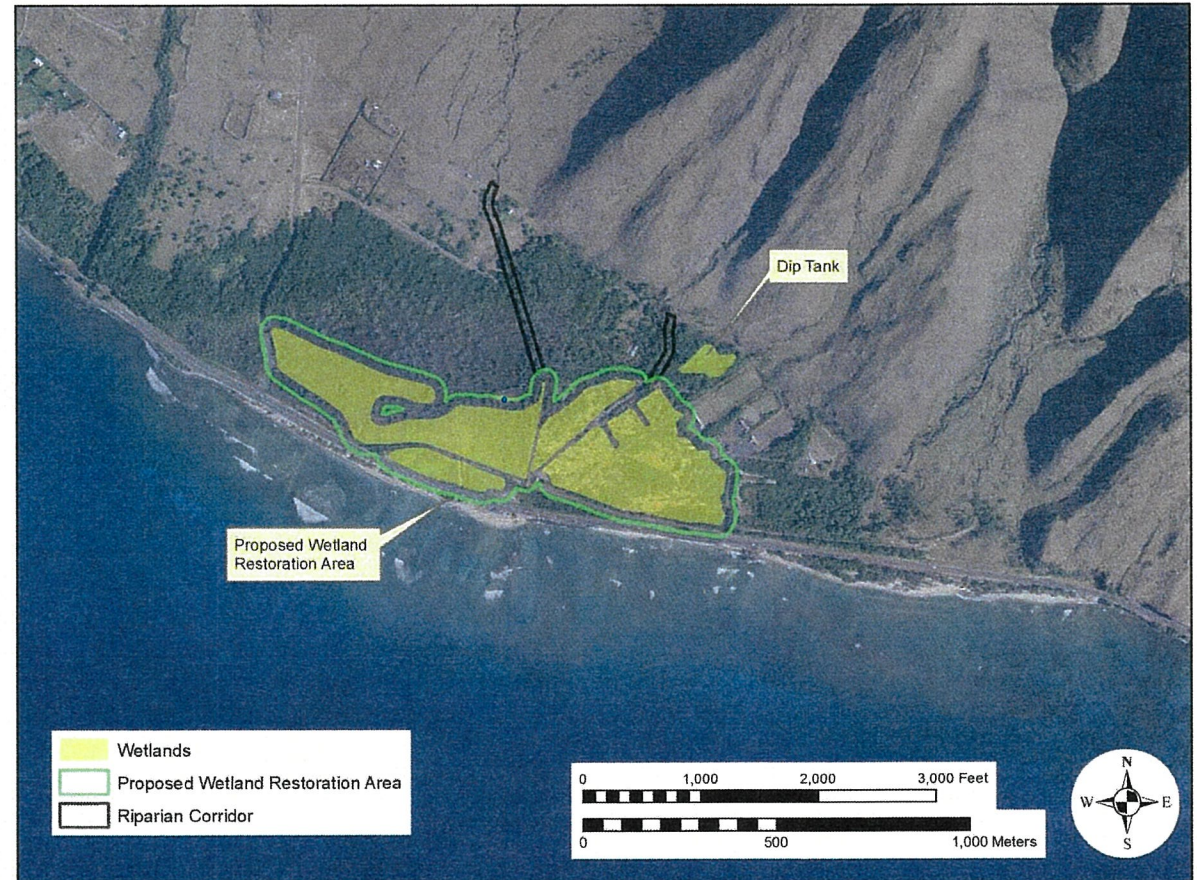


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Objectives

- Wetland habitat restoration
- Capture soils
- Filter and store water
- Recharge aquifers
- Green break for fire prevention

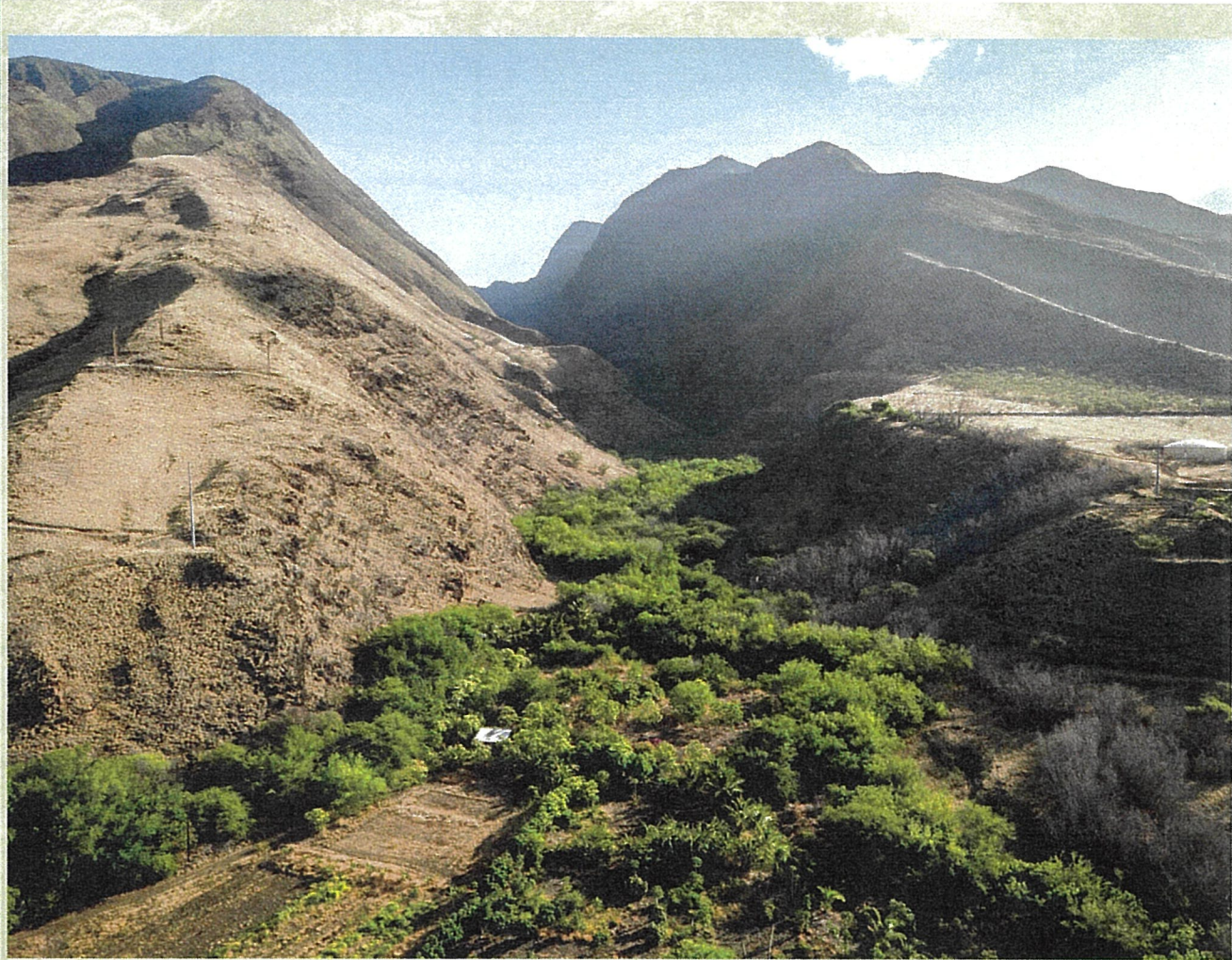


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Objectives

- Riparian habitat restoration
- Ukumehame and Kipuka Olowalu
- Stabilize soils
- Green breaks for fire prevention

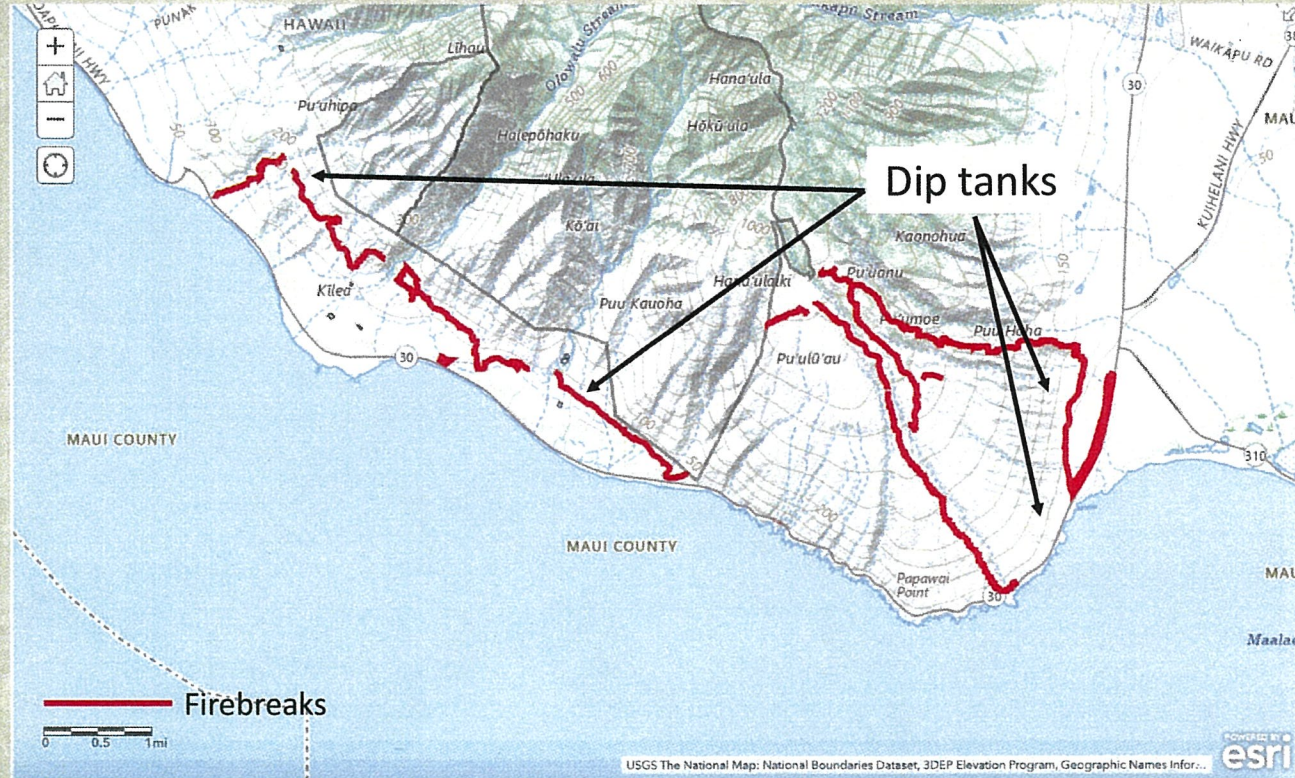


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Objectives

- Fire prevention and suppression
- Fire breaks
- Green breaks
- Dip tanks

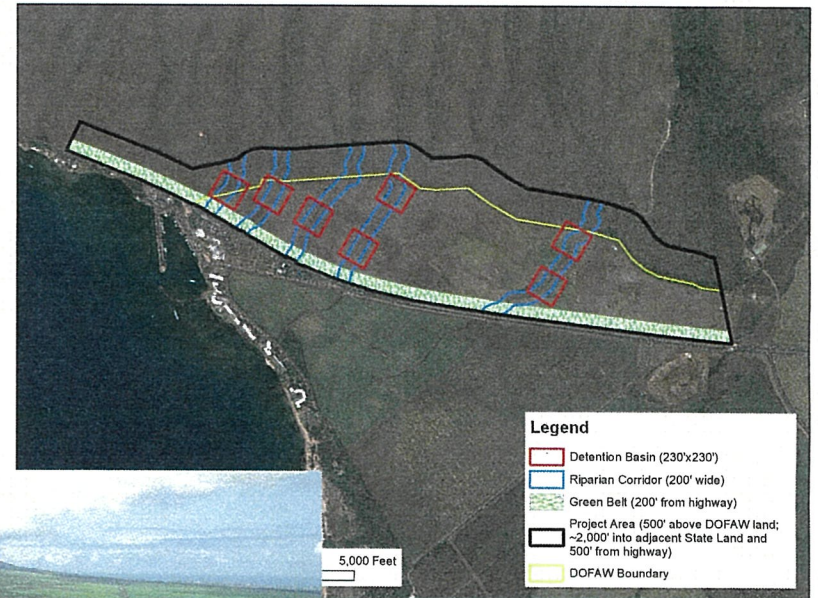
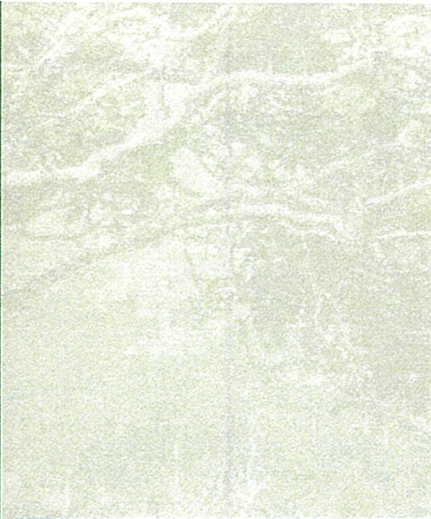


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Objectives

- Sediment detention
- Capture and removal
- Structural design
- Prevent sediments from entering the ocean



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Mahalo!

