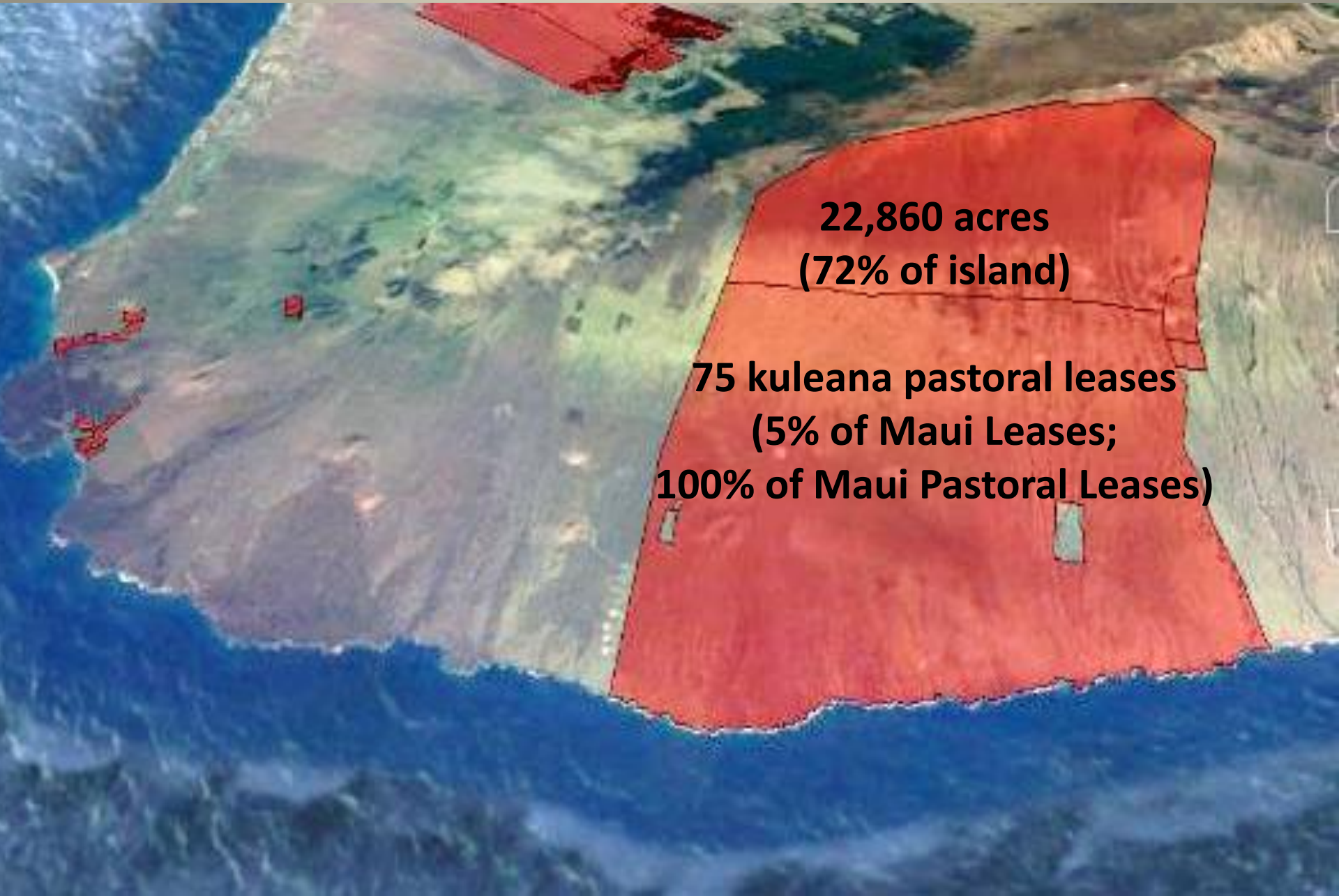


E ho'omaui i nā moku koa o Maui

Update to the Hawaiian Homes Commission on the
Kahikinui Forest Restoration Project



Kahikinui Region



**22,860 acres
(72% of island)**

**75 kuleana pastoral leases
(5% of Maui Leases;
100% of Maui Pastoral Leases)**

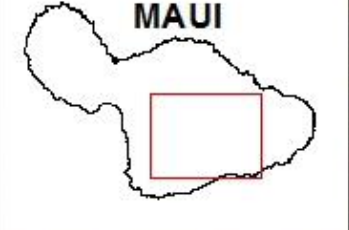
Kahikinui Regional Plan

Priority Projects

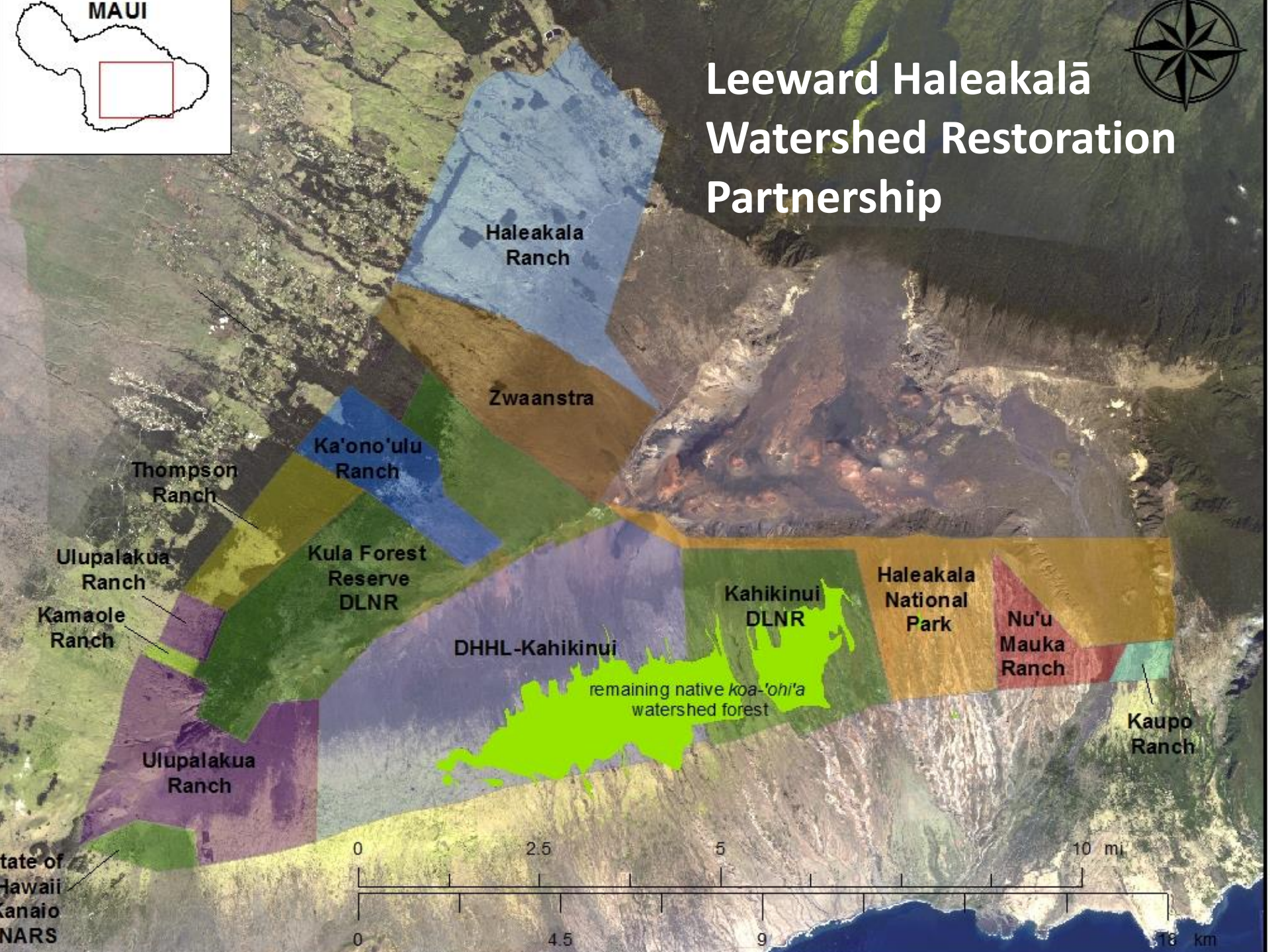
- **Natural Resource Management** - following 1995 Kahikinui Community Management Conceptual Plan
- **New Stewardship Economy for Kahikinui**- natural resource management, cultural educational programs, ecotourism
- **Homestead Facilitation Program** – to encourage settlement
- **Improve and Develop Roadway Network** – for settlement of lessees, community growth, fire breaks and fire response, resource management/restoration work.



DATA ON THE EXISTING FOREST ON THE SOUTHERN SLOPES OF HALEAKALĀ				
LANDOWNER	Existing Native Forest (acres)	Percent of Existing Native Forest	Existing Koa Forest (acres)	Percent of Existing Koa Forest
DHHL	2,300	64.6%	1,900	68.8%
State of Hawai'i DOFAW	1,250	35.1%	850	30.8%
Federal lands (Haleakalā NP)	10	0.3%	10	0.4%
TOTAL	3,560	100%	2,760	100%



Leeward Haleakalā Watershed Restoration Partnership



Haleakala
Ranch

Zwaanstra

Ka'ono'ulu
Ranch

Thompson
Ranch

Ulupalakua
Ranch

Kula Forest
Reserve
DLNR

Kamaole
Ranch

Ulupalakua
Ranch

DHHL-Kahikinui

remaining native *koa-'ohi'a*
watershed forest

Kahikinui
DLNR

Haleakala
National
Park

Nu'u
Mauka
Ranch

Kaupo
Ranch

State of
Hawaii
Kanaio
NARS











LEEWARD HALEAKALĀ WATERSHED RESTORATION PARTNERSHIP



MEMORANDUM OF UNDERSTANDING

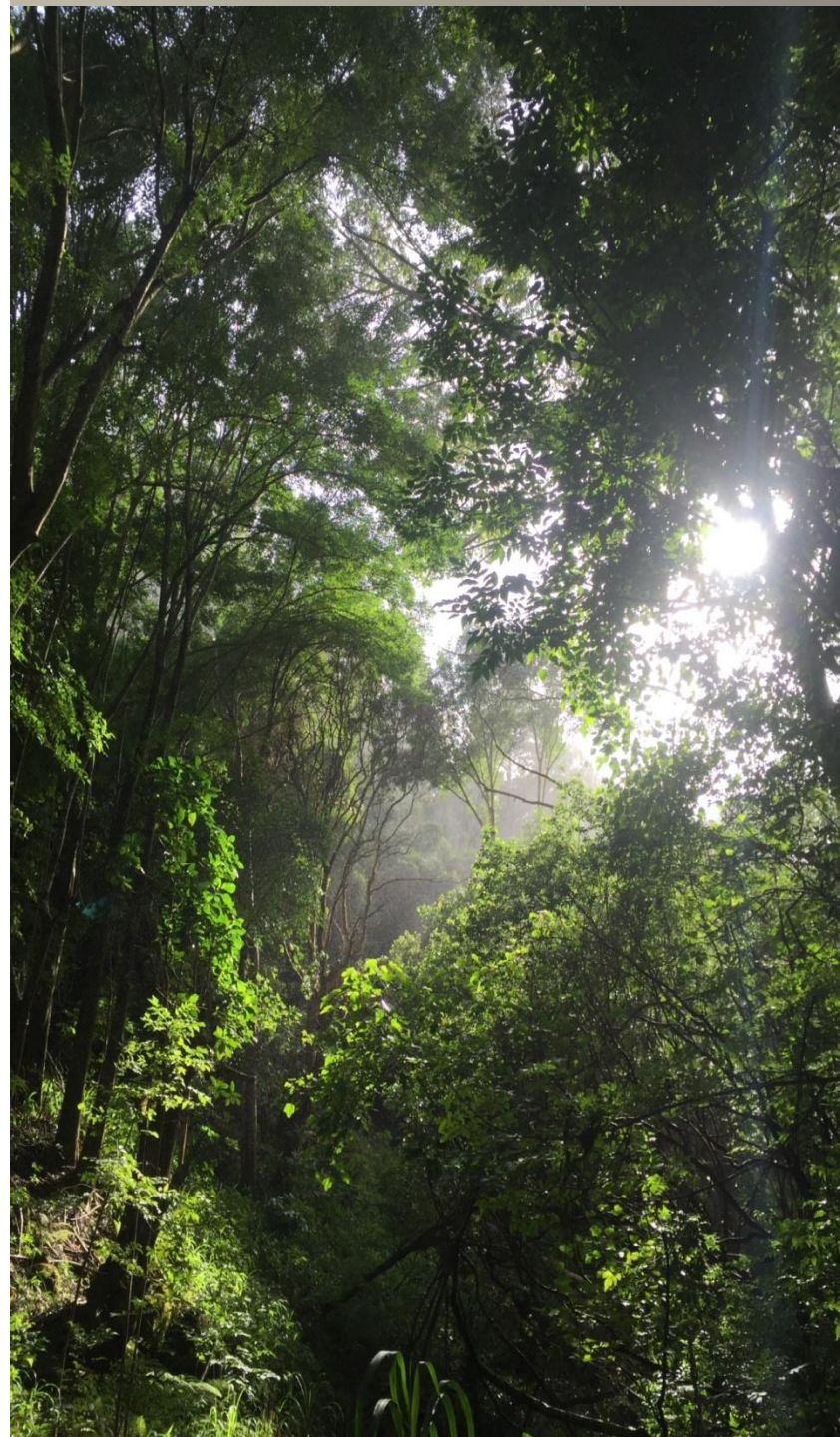
June 2, 2003

Parties:

- State: DHHL, DLNR/DOFAW,
- Federal: Haleakalā National Park, U.S. Geological Survey
- Private: Haleakalā Ranch, James Campbell Estate, Kaonoulu Ranch, Kaupō Ranch, Living Indigenous Forest Ecosystems, Nu'u Mauka Ranch, 'Ulupalakua Ranch, and John Zwaanstra

Agreed to:

- Form the Leeward Haleakalā Watershed Restoration Partnership (LHWRP)
- Participate in cooperative management activities of native watershed forests of leeward Haleakalā, Maui

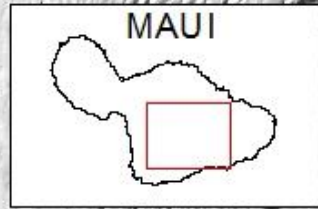




Working together to restore the native watershed forests from Makawao to Kaupō for perpetuation of ecological, cultural, water, and economic resources

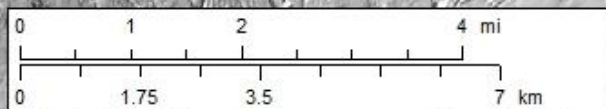
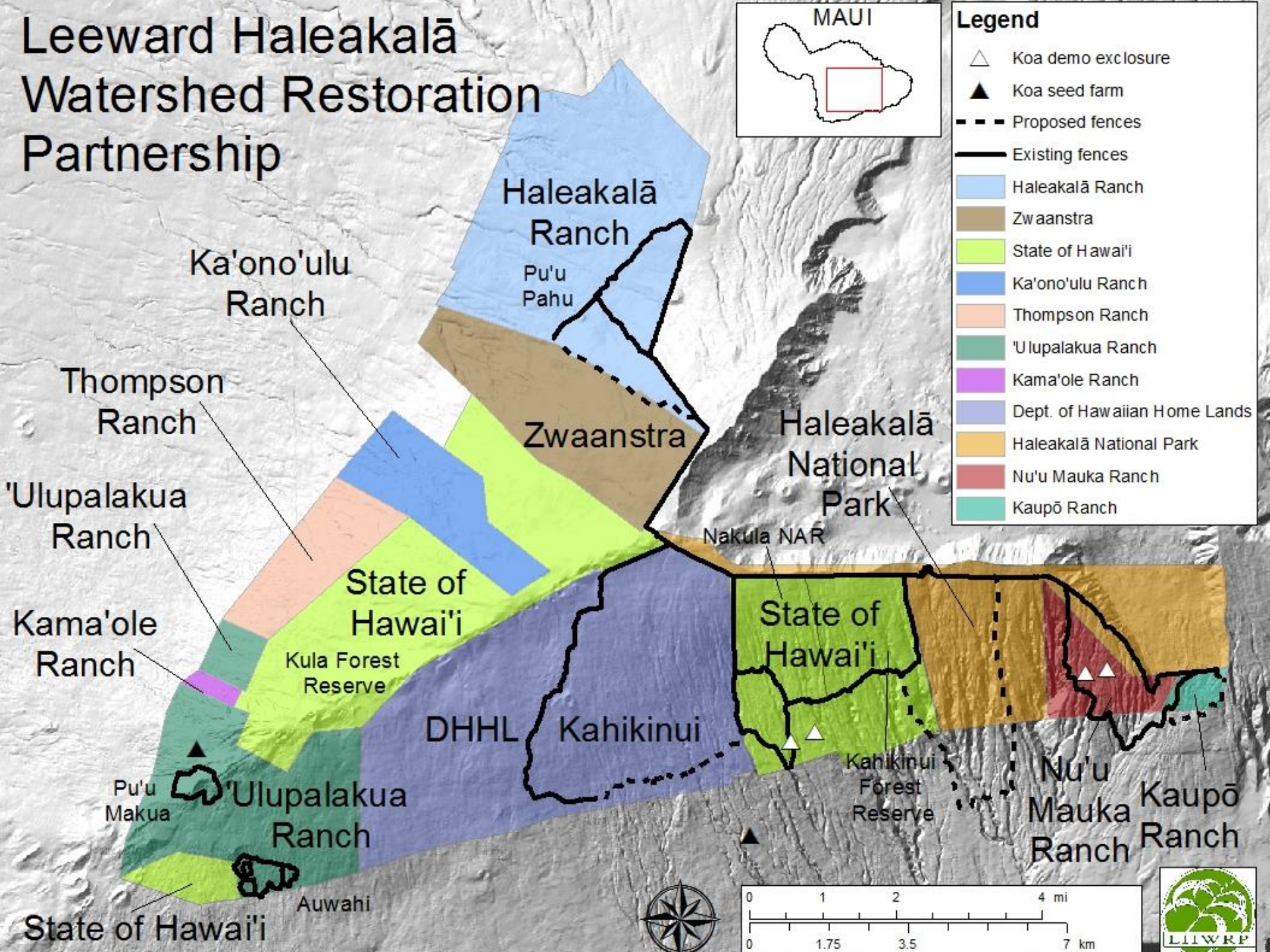


Leeward Haleakalā Watershed Restoration Partnership



Legend

- Koa demo enclosure
- Koa seed farm
- Proposed fences
- Existing fences
- Haleakalā Ranch
- Zwaanstra
- State of Hawai'i
- Ka'ono'ulu Ranch
- Thompson Ranch
- 'Ulupalakua Ranch
- Kama'ole Ranch
- Dept. of Hawaiian Home Lands
- Haleakalā National Park
- Nu'u Mauka Ranch
- Kaupō Ranch

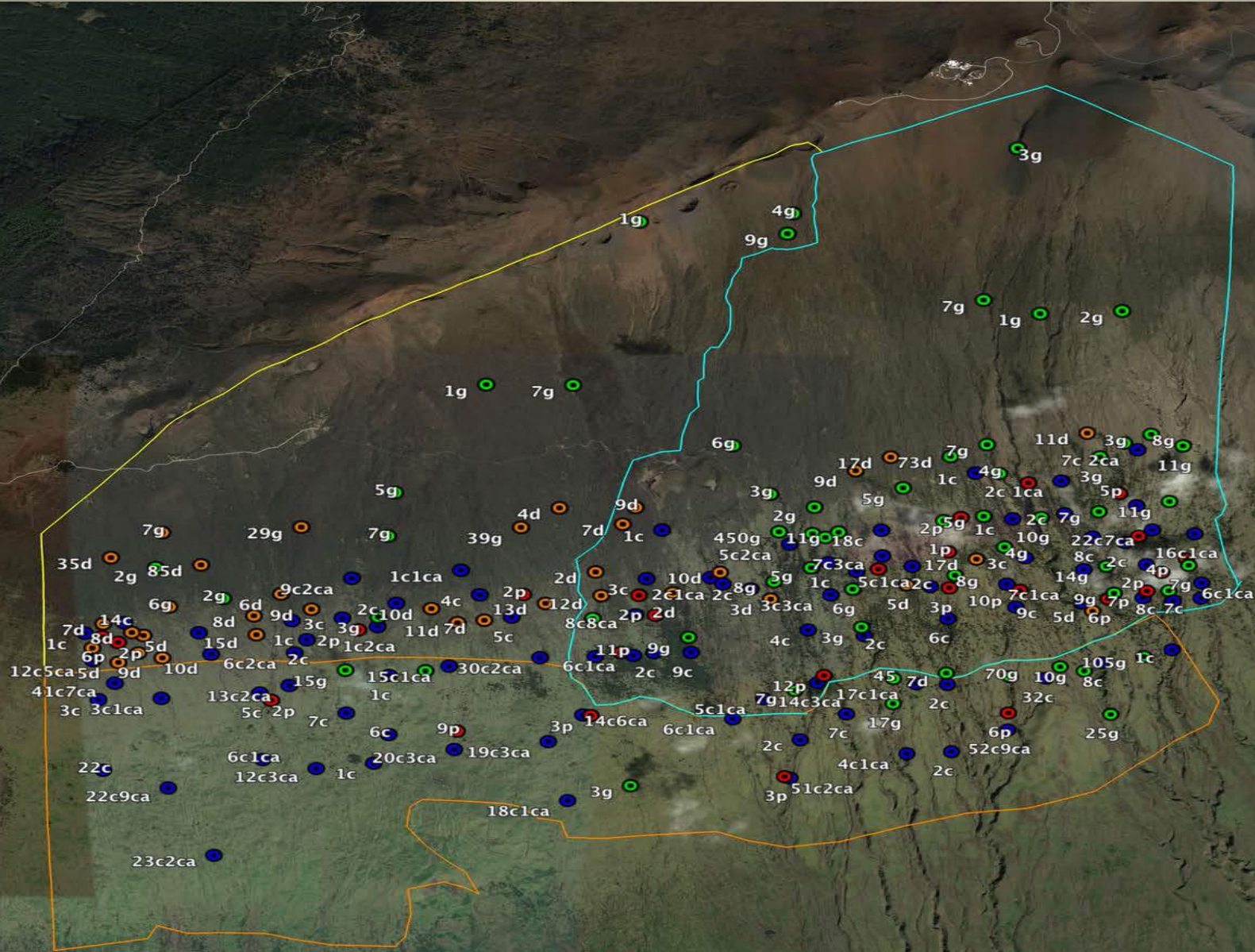


Challenge to watershed forest restoration: feral ungulates – cattle, goats, pigs, deer



Kahikinui ungulate management planning

at minimum...988 (389) cows, 1324 (931) goats, 449 (131) deer, 123 pigs (89)



Meat salvage program with KIA Hawai'i



<https://vimeo.com/250240123>

Timeline for Ungulate Removal

1. Complete final 3.5 mile leg of fence any needed repairs to stop ingress
2. Within 6-8 months remove all large, aggressive, problematic bulls from both the interior and exterior of the fence. Removal will start as soon as funding is available to do so.
3. Within 12 months remove all cattle and deer from the interior of the fence.
4. Within 16-18 months remove all ungulates from the interior of the fence
5. Within 24-30 months remove and or relocate all cattle on the exterior of the fence to the communities desired density and locations, TBD.

Wild Meat Salvage Program

- Meat will be harvested pending available funding, safe operational conditions for staff to remove the ungulates, and food safety considerations such as the health of the ungulates
- Priority for harvest will go in the following order:
 - Funding for the ungulate management costs
 - Distribution of meat to Kahikinui and other Maui DHHL communities
 - Distribution to DHHL communities outside of Maui
 - Foodbanks, homeless shelters, low-income communities

Next Steps

- One-year ROE request for KIA Hawai'i
- Future internal fence
- Install Restoration Infrastructure – helicopter landing zones, water catchment, base camps, native plant nursery
- Secure funding for seed collection, outplanting, invasive species control, fire management, outreach, and monitoring
- Meanwhile...

Priority invasive species control



New technologies- rappelling, drones and HBT



Wildfire preparedness and prevention



Fire and storm effects at Kahikinui



Erosion mitigation



Restoration Technique Development



Expanding native seed collection and storage capacity



Creating regional seed farms and on-site nursery



Fog drip capture with Dr. Jim Juvik



MAHALO

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