

- PKW visited nurseries and plant material sites throughout the islands with the USDA Diane Haase to learn of different methods and approaches that help the planning process and team effort.
 - Began identification and gathering of post fire stabilization materials including native site specific seed from West Maui.
 - Secured large stainless steel water tank for storage for use in staging future plantings.
 - Walk in fridge secured and set up for seed storage.
 - Field prepped for hydro-mulch pilot.
 - Pre-monitoring of koa seed stock- koa is flowering while aalii is ready for harvest and dry weather has facilitated more ready seed.
 - Started flats of ohia, aalii and koa in the nursery managed by PKW.
 - Planning and species selection for different rainfall regions is underway- in general, weather is drier which is not typical of this time of year and flowering cycles are harder to predict. Seed collection schedule has been adapted.
 - Pre-monitored erosiveness and existing vegetation at target site for hydro-mulching
 - Hydromulcher purchased along with tacifier, bales of mulch and other supplies needed for operation
 - Hydromulcher testing included pre-monitoring of the site, site preparations at two sites; one was barren and the other, planted with aalii with hydromulching in between the plants to allow comparisons of germination rates
 - Secured threshing and winnowing materials and supplies: blowers, weed trimmer, de-bearder, generator, buckets, trash cans, trailer
 - Purchased final materials for seed storage in the reefer, such as shelves, plastic boxes, racks for drying seed etc.
 - Additional native seeds were threshed, winnowed stored in containers using staff and volunteer time
 - Identified and documented final protocols for seed saving and storage
 - Collected seed totaled ~500,000 aalii seeds, a 5 gallon bucket of koa seed, 4.5 viles of ohia seed
3. Mitigate pre-fire hazard by managing vegetative fuels
- Worked with Kaonoulu Ranch to coordinate on cattle grazing, and fire breaks. Waterlines and additional fencing have been set up to prepare for grazing.
 - Cut several vegetative fire breaks totaling 400m in Napili and Honokahua area
 - Identified and mapped out areas for future fire breaks to include in a planned WUI grant proposal to allow continuation of fire prevention work

3. **Deliverables and Outcomes** (*How did this project address critical management needs?*)

This project achieved a key management need by developing the methods, infrastructure and equipment needed, along with a significant supply of native seeds that will be critical to stabilizing the landscape in West Maui following a fire. Having the seed stock and means to distribute broadly is the first step in being able to prevent mass erosion that can be deliver large sediment loads to coastal ecosystems. Given than fire is, and will continue with climate change to be a meaningful threat to this landscape, this project represents a meaningful step towards addressing this management concern. It should be noted that while not in the R2R management area, during the life of this project 10,000 acres of land on Maui was impacted by fire reinforcing the importance of this work.

4. Obstacles or Delays:

The purchase of the equipment was delayed by issues related to shipping, which was why an extension until Sept. 2016 was needed to complete the project.

5. Future needs:

While this project and its funding has ended, there is an ongoing labor and supply input to maintain a viable seedbank of native plants to be used for post-fire and disturbance restoration.

Progress Report Prepared by: Pōmaika'i Kaniaupio-Crozier

Signature of Point of Contact:



Appendix 1

West Maui Ridge to Reef Post-Fire Response Team and “Go-time” Plan

Post-fire Response Team

The post fire response team in the West Maui Ridge to Reef (R2R) area from Wahikuli to Honolua Watersheds will include:

1. A Natural Area Reserves System (NARS) (individual in charge at the time if incident occurred in upper regions in the West Maui NARS),
2. A land owner representative and,
3. The conservation manager from Maui Land & Pineapple Company, Inc. (MLP) who manages the seed storage and available resources.

Note that given the high percentage of R2R lands owned by MLP, if the fire incident is on Maui Land & Pineapple Lands then MLP would be both the NARS representative (if in NARS) and the conservation manager for ML&P.

The "Go-time" Plan to Respond to Wildfire in West Maui

