



Abutilon menziesii, Ko'oloa'ula 2019 HCP Status Update

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Status update:

- Funding
- Overview of HCP Goals
 - Original HCP- current status; future plans
 - DOFAW Sites- current status; future plans
- CRA discussion preview



Abutilon menziesii, Ko'oloa'ula HCP Overview & Funding Update

- HCP covers a 20 year Ewa development timeline 2001-2021
- The incidental take license is issued to DOT/East Kapolei development partners (housing/HART/UH W. Oahu, etc.)
- implementation of HCP managed by DLNR DOFAW
- Funds ~1.1M (plus interest) over 20 years
 - ~55K/yr
 - 1 greenhouse, 2 vehicles (1 used, 1 new), supplies, 1 employee (salary+ fringe)
 - Some interest funds were lost temporarily, then recovered.
- FY 2018- funds supplemented by another project.
 - 2018-2020 employee 50% FTE on this HCP.
- Currently we expect funds to support this employee into the beginning of 2020 (Jan/Feb?)



HCP success criteria requirements

- Intersitu site- to represent 75% of original wild stock
- 3 wild populations- 80 mature plants; seedlings recruit into maturity without irrigation (averaged over 5 years)
- Contingency Reserve Area (CRA)*
 - Maintained as a representation of the wild site over the course of the HCP



Site Status Update



	Site	# mature current	# from onsite recruits
Wild sites	Honouliuli FWS Refuge	143	79 (55%)
	Diamond Head (state parks)	80	13 (16%)
	Pouhala marsh (DOFAW)	63	1
	Hamakua marsh (DOFAW 2018)	54	0
	Makua Keaau (DOFAW 2018)	30	0
	Waianae Kai (DOFAW 2018)	20	0
	Contingency Reserve Area, CRA	68	0
Inter-situ sites (genetic representation)	Koko Crater	68	0
	Ewa Villages	68	0

Beyond the HCP Timeline (~2020)

- DOFAW plans to incorporate *Abutilon menziesii* into current restoration strategies
 - Working with propagators, ex situ repositories to assess the easiest propagation methods for DOFAW. Seeds vs airlayers vs cuttings
- Plan to revise agreements with State Parks, FWS, Koko Crater BG beyond HCP timeline
- Working on a dry forest/shrubland restoration guide with examples from *Abutilon menziesii* as a legacy document to the HCP.



CRA

- 23ac; 18ac originally specified.
 - 5-6ac needed by developers now
 - CRA split or turnover wasn't supposed to happen until 1 of the populations met the short term success criteria.
 - Honouliuli FWS Refuge has met that criteria (3 years)
 - Ok to allow parcel to be split? ESRC
- Entire parcel ready to be signed over to DHHL (in Land Division, not DLNR)
- After HCP??? What happens to those wild plants?





Honouliuli FWS Refuge



Koko Crater



Hamakua Marsh



Waianae Kai



Makua Keaau



Pouhala



Short-term success criteria	1) At least 25% original survive in each outplanted population w/out irrigation 2a) seedlings in each population survive without irrigation 2b) min. 25% genetic representation
Long-term success criteria	1) Min of an avg. 80 reproducing mature plants in each of 3 populations; 5 years after irrigation ceased 2) Seedling recruits must survive to replace natural mortality of adult plants
Overall Success Criteria	If both Long-Term Success Criteria are met and >120 mature plants and 40 mature recruits from seed =then no further action required other than monitoring.