

# Population Unit Status - Makua Implementation Plan

## Action Area: In

**TaxonName: Alectryon macrococcus var. macrococcus**

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Keawapilau	Manage for stability	2	6	0	1	1	0	1	1	0	1	0	0	0	1	0	2016-05-18	No monitoring in the last year
Makua	Manage for stability	15	0	0	6	0	0	4	0	0	4	0	0	0	0	0	2017-02-14	Several trees have died in the last year
South Mohiakea	Genetic Storage	16	1	0	2	0	0	2	0	0	2	0	0	0	0	0	2017-01-24	No changes observed in the last year
West Makaleha	Genetic Storage	40	4	0	13	0	0	13	0	0	13	0	0	0	0	0	2015-05-11	No monitoring in the last year
<b>In Total:</b>		73	11	0	22	1	0	20	1	0	20	0	0	0	1	0		

## Action Area: Out

**TaxonName: Alectryon macrococcus var. macrococcus**

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Central Kaluaa to Central Waiehi	Manage for stability	50	3	0	3	5	0	3	1	0	3	0	0	0	1	0	2017-02-16	Monitoring in the last year showed a decline Monitoring in the last year showed a decline
Makaha	Manage for stability	75	0	2	29	0	0	29	0	0	29	0	0	0	0	0	2015-12-03	No changes observed in the last year
Waianae Kai	Genetic Storage	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2016-06-13	No monitoring in the last year
<b>Out Total:</b>		141	3	2	32	5	0	32	1	0	32	0	0	0	1	0		
<b>Total for Taxon:</b>		214	14	2	54	6	0	52	2	0	52	0	0	0	2	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Cenchrus agrimonioides var. agrimonioides

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki and Pahole	Manage for stability	210	66	0	210	82	22	200	76	20	65	26	15	135	50	5	2016-10-24	Small changes were noted during monitoring in the last year
Kuaokala	Genetic Storage				1	3	0	1	3	0	1	3	0	0	0	0	2014-04-30	No monitoring in the last year
<b>In Total:</b>		210	66	0	211	85	22	201	79	20	66	29	15	135	50	5		

## Action Area: Out

### TaxonName: Cenchrus agrimonioides var. agrimonioides

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Central Ekahanui	Manage for stability	20	0	0	183	136	54	184	118	54	61	52	42	123	66	12	2016-09-14	A new census was initiated but not yet completed
Makaha and Waianae Kai	Manage for stability	9	3	0	161	128	5	161	128	5	5	7	5	156	121	0	2015-10-14	A new census was initiated but not yet completed
South Huliwai	Genetic Storage	27	0	0	17	13	23	17	17	2	17	17	2	0	0	0	2016-10-13	A thorough census has shown a substantial decline in the seedling age class
<b>Out Total:</b>		56	3	0	361	277	82	362	263	61	83	76	49	279	187	12		
<b>Total for Taxon:</b>		266	69	0	572	362	104	563	342	81	149	105	64	414	237	17		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Cyanea grimesiana* subsp. *obatae*

Target # of Matures: 100

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Pahole to West Makaleha	Manage for stability	22	24	0	75	36	0	70	36	0	6	11	0	64	25	0	2017-05-09	Small changes were noted during monitoring in the last year
<b>In Total:</b>		22	24	0	75	36	0	70	36	0	6	11	0	64	25	0		

## Action Area: Out

### TaxonName: *Cyanea grimesiana* subsp. *obatae*

Target # of Matures: 100

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kaluaa	Manage for stability	0	0	0	124	17	0	124	17	0	2	1	0	122	16	0	2016-04-07	A new census was initiated but not yet completed
Makaha	Genetic Storage				13	56	0	13	56	0	0	0	0	13	56	0	2016-02-09	A new census was initiated but not yet completed
North branch of South Ekahanui	Manage reintroduction for stability	5	0	0	82	65	0	82	65	0	0	0	0	82	65	0	2016-05-11	A new census was initiated but not yet completed
Palikea (South Palawai)	Manage for stability	3	60	0	120	19	1	911	10	0	8	4	0	903	6	0	2017-04-25	Additional plants were reintroduced last year
<b>Out Total:</b>		8	60	0	339	157	1	1130	148	0	10	5	0	1120	143	0		
<b>Total for Taxon:</b>		30	84	0	414	193	1	1200	184	0	16	16	0	1184	168	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Cyanea longiflora*

Target # of Matures: 75

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kapuna to West Makaleha	Manage for stability	66	0	0	63	196	2	61	196	2	12	18	2	49	178	0	2017-04-17	Small changes were noted during monitoring in the last year
Pahole	Manage for stability	114	0	0	60	18	2	59	15	2	59	15	2	0	0	0	2017-04-10	Small changes were noted during monitoring in the last year
<b>In Total:</b>		180	0	0	123	214	4	120	211	4	71	33	4	49	178	0		

## Action Area: Out

### TaxonName: *Cyanea longiflora*

Target # of Matures: 75

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha and Waianae Kai	Manage for stability	4	0	0	119	187	0	116	130	0	7	2	0	109	128	0	2017-05-23	Thorough monitoring in the last year showed a decline
<b>Out Total:</b>		4	0	0	119	187	0	116	130	0	7	2	0	109	128	0		
<b>Total for Taxon:</b>		184	0	0	242	401	4	236	341	4	78	35	4	158	306	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Cyanea superba* subsp. *superba*

Target # of Matures: 50

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki	Manage reintroduction for stability	3	149	0	48	178	1	48	178	1	0	0	0	48	178	1	2016-04-18	A new census was initiated but not yet completed
Pahole to Kapuna	Manage reintroduction for stability	31	139	0	95	71	4	95	71	4	0	0	0	95	71	4	2015-06-08	No monitoring in the last year
<b>In Total:</b>		34	288	0	143	249	5	143	249	5	0	0	0	143	249	5		

## Action Area: Out

### TaxonName: *Cyanea superba* subsp. *superba*

Target # of Matures: 50

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Manage reintroduction for stability				27	172	246	27	172	246	0	0	0	27	172	246	2015-04-14	A new census was initiated but not yet completed
Manuwai	Manage reintroduction for stability	0	0	0	0	108	0	0	79	0	0	0	0	0	79	0	2017-04-25	Thorough monitoring in the last year showed a decline
<b>Out Total:</b>		0	0	0	27	280	246	27	251	246	0	0	0	27	251	246		
<b>Total for Taxon:</b>		34	288	0	170	529	251	170	500	251	0	0	0	170	500	251		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

TaxonName: <i>Cyrtandra dentata</i>		Target # of Matures: 50									# MFS PU Met Goal: 1 of 4							
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki	Manage for stability	52	45	0	33	142	9	33	142	9	33	142	9	0	0	0	2016-05-13	A new census was initiated but not yet completed
Kawaiiki (Koolaus)	Manage for stability	50	0	0	13	79	2	2	19	1	2	19	1	0	0	0	2016-06-23	Thorough monitoring in the last year showed a decline
Opaeula (Koolaus)	Manage for stability	21	5	0	35	161	2	35	161	2	35	161	2	0	0	0	2016-04-27	A new census was initiated but not yet completed
Pahole to West Makaleha	Manage for stability	300	0	0	610	892	261	330	484	97	330	484	97	0	0	0	2016-09-22	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		423	50	0	691	1274	274	400	806	109	400	806	109	0	0	0		

## Action Area: Out

TaxonName: <i>Cyrtandra dentata</i>		Target # of Matures: 50									# MFS PU Met Goal: 1 of 4							
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Central Makaleha	Genetic Storage				3	0	0	3	0	0	3	0	0	0	0	0	2006-10-23	No monitoring in the last year
<b>Out Total:</b>					3	0	0	3	0	0	3	0	0	0	0	0		
<b>Total for Taxon:</b>		423	50	0	694	1274	274	403	806	109	403	806	109	0	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Delissea waianaensis*

Target # of Matures: 100

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Keawapilau	Manage for stability	33	1	0	240	17	0	185	9	0	5	1	0	180	8	0	2017-07-06	Thorough monitoring in the last year showed a decline
Kaluakauila	Manage reintroduction for storage				15	3	0	15	3	0	0	0	0	15	3	0	2014-04-30	No monitoring in the last year
Kapuna	Manage reintroduction for storage				113	46	0	113	46	0	0	0	0	113	46	0	2014-04-29	No monitoring in the last year
Paliikea Gulch	Genetic Storage	2	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2014-05-28	No monitoring in the last year
South Mohiakea	Genetic Storage	2	0	0	10	15	3	10	15	3	10	15	3	0	0	0	2016-05-25	No monitoring in the last year
<b>In Total:</b>		37	1	0	379	81	3	324	73	3	16	16	3	308	57	0		

## Action Area: Out

### TaxonName: *Delissea waianaensis*

Target # of Matures: 100

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Ekahanui	Manage for stability	14	44	0	196	23	0	196	23	0	2	1	0	194	22	0	2015-05-28	No monitoring in the last year
Kaluaa	Manage for stability	44	0	0	598	63	0	499	39	0	5	2	0	494	37	0	2017-04-12	Thorough monitoring in the last year showed a decline
Kealia	Genetic Storage	0	7	0	4	13	0	4	13	0	4	13	0	0	0	0	2016-06-01	No monitoring in the last year
Manuwai	Manage reintroduction for stability				88	44	0	132	36	0	0	0	0	132	36	0	2017-06-06	A thorough census has shown immature plants transition into mature plants
Palawai	Genetic Storage	1	0	0	24	30	0	24	30	0	24	30	0	0	0	0	2016-06-22	No monitoring in the last year
<b>Out Total:</b>		59	51	0	910	173	0	855	141	0	35	46	0	820	95	0		
<b>Total for Taxon:</b>		96	52	0	1289	254	3	1179	214	3	51	62	3	1128	152	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Dubautia herbstobatae

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keaau	Genetic Storage	70	0	0	70	0	0	70	0	0	70	0	0	0	0	0	2000-01-01	No monitoring in the last year
Makaha/Ohikilolo	Genetic Storage				229	0	0	229	0	0	229	0	0	0	0	0	2016-06-21	A new census was initiated but not yet completed
Ohikilolo Makai	Manage for stability	700	0	0	89	2	0	133	4	0	133	4	0	0	0	0	2016-09-27	A thorough census led to more plants being discovered
Ohikilolo Mauka	Manage for stability	1300	0	0	415	9	0	373	27	0	373	27	0	0	0	0	2016-09-29	Small changes were noted during monitoring in the last year
<b>In Total:</b>		2070	0	0	803	11	0	805	31	0	805	31	0	0	0	0		

## Action Area: Out

### TaxonName: Dubautia herbstobatae

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kamaileunu	Genetic Storage	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2001-01-01	No monitoring in the last year
Makaha	Manage for stability	0	0	0	79	2	0	52	2	0	23	2	0	29	0	0	2017-06-13	Thorough monitoring in the last year showed a decline
Waianae Kai	Genetic Storage	5	0	0	10	4	0	10	4	0	10	4	0	0	0	0	2005-06-22	No monitoring in the last year
<b>Out Total:</b>		6	0	0	89	6	0	62	6	0	33	6	0	29	0	0		
<b>Total for Taxon:</b>		2076	0	0	892	17	0	867	37	0	838	37	0	29	0	0		



# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Euphorbia celastroides var. kaenana

Target # of Matures: 25

# MFS PU Met Goal: 3 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
East Kahanahaiki	Genetic Storage	2	0	0	2	0	0	2	0	0	2	0	0	0	0	0	2010-11-18	No monitoring in the last year
Kaluakauila	Genetic Storage	17	1	0	11	3	0	11	3	0	11	3	0	0	0	0	2010-06-24	No monitoring in the last year
Makua	Manage for stability	36	4	0	85	0	0	85	0	0	85	0	0	0	0	0	2014-12-09	No monitoring in the last year
North Kahanahaiki	Genetic Storage	218	0	0	115	36	0	115	36	0	115	36	0	0	0	0	2013-03-21	No monitoring in the last year
Puaakanoa	Manage for stability	147	10	0	120	11	0	135	15	0	135	15	0	0	0	0	2016-02-24	A thorough census led to more plants being discovered
<b>In Total:</b>		420	15	0	333	50	0	348	54	0	348	54	0	0	0	0		

## Action Area: Out

### TaxonName: Euphorbia celastroides var. kaenana

Target # of Matures: 25

# MFS PU Met Goal: 3 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
East of Alau	Manage for stability	21	5	0	20	2	66	20	2	66	20	2	66	0	0	0	2015-09-28	No monitoring in the last year
Kaena	Manage for stability	300	0	0	880	274	0	880	274	0	880	274	0	0	0	0	2015-09-15	No monitoring in the last year
Keawaula	Genetic Storage	69	6	0	43	1	2	43	1	2	43	1	2	0	0	0	2014-08-25	No monitoring in the last year
Waianae Kai	Genetic Storage	48	0	0	34	0	0	34	0	0	34	0	0	0	0	0	2011-06-13	No monitoring in the last year
<b>Out Total:</b>		438	11	0	977	277	68	977	277	68	977	277	68	0	0	0		
<b>Total for Taxon:</b>		858	26	0	1310	327	68	1325	331	68	1325	331	68	0	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Euphorbia herbstii

Target # of Matures: 25

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kapuna to Pahole	Manage for stability	170	0	0	54	44	1	54	43	1	13	8	1	41	35	0	2017-05-23	Monitoring showed a slight decline
Manuwai	Manage reintroduction for stability				0	0	0	0	0	0	0	0	0	0	0	0		No monitoring in the last year
<b>In Total:</b>		170	0	0	54	44	1	54	43	1	13	8	1	41	35	0		

## Action Area: Out

### TaxonName: Euphorbia herbstii

Target # of Matures: 25

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kaluaa	Manage reintroduction for stability				0	0	0	0	20	0	0	0	0	0	20	0	2017-03-30	Plants were added to the outplanting site
Makaha	Manage reintroduction for storage				3	12	0	2	7	0	0	0	0	2	7	0	2017-03-22	Monitoring showed a slight decline
<b>Out Total:</b>					3	12	0	2	27	0	0	0	0	2	27	0		
<b>Total for Taxon:</b>		170	0	0	57	56	1	56	70	1	13	8	1	43	62	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Flueggea neowawraea

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Kapuna	Manage for stability	6	26	0	6	130	0	5	138	0	5	0	0	0	138	0	2017-07-06	More plants were added to the outplanting site
Ohikilolo	Manage for stability	3	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2016-03-02	No monitoring in the last year
West Makaleha	Genetic Storage	3	0	0	6	0	0	6	0	0	6	0	0	0	0	0	2014-01-29	No monitoring in the last year
<b>In Total:</b>		12	26	0	13	130	0	12	138	0	12	0	0	0	138	0		

## Action Area: Out

### TaxonName: Flueggea neowawraea

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Central and East Makaleha	Genetic Storage	6	0	0	4	0	0	4	0	0	4	0	0	0	0	0	2015-09-23	No monitoring in the last year
Halona	Genetic Storage	2	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2010-12-07	No monitoring in the last year
Kauhiuhi	Genetic Storage	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2006-11-22	No monitoring in the last year
Makaha	Manage for stability	4	0	0	9	55	0	9	55	0	9	0	0	0	55	0	2017-06-14	A new census was initiated but not yet completed
Manuwai	Manage reintroduction for stability	0	0	0	0	45	0	0	16	0	0	0	0	0	16	0	2017-04-12	Thorough monitoring in the last year showed a decline
Mt. Kaala NAR	Genetic Storage	4	0	0	3	0	0	2	0	0	2	0	0	0	0	0	2017-04-25	Thorough monitoring in the last year showed a decline
Nanakuli, south branch	Genetic Storage	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2010-10-19	No monitoring in the last year
Waianae Kai	Genetic Storage	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2017-05-23	No changes observed in the last year
<b>Out Total:</b>		19	0	0	20	100	0	19	71	0	19	0	0	0	71	0		
<b>Total for Taxon:</b>		31	26	0	33	230	0	31	209	0	31	0	0	0	209	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Gouania vitifolia*

Target # of Matures: 50

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keaau	Manage for stability				51	0	0	51	0	0	51	0	0	0	0	0	2016-06-14	No monitoring in the last year
<b>In Total:</b>					51	0	0	51	0	0	51	0	0	0	0	0		

## Action Area: Out

### TaxonName: *Gouania vitifolia*

Target # of Matures: 50

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha (Future Introduction)	Manage reintroduction for stability				0	0	0	0	0	0	0	0	0	0	0	0		Introduction has not begun
Manuwai (Future Introduction)	Manage reintroduction for stability				0	0	0	0	0	0	0	0	0	0	0	0		Introduction has not begun
Waianae Kai	Genetic Storage				3	0	0	3	0	0	3	0	0	0	0	0	2016-06-13	No monitoring in the last year
<b>Out Total:</b>					3	0	0	3	0	0	3	0	0	0	0	0		
<b>Total for Taxon:</b>					54	0	0	54	0	0	54	0	0	0	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Hesperomannia oahuensis

Target # of Matures: 75

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Haleauau	Manage for stability				1	0	0	1	4	0	1	0	0	0	4	0	2017-05-24	More plants were added to the outplanting site
Pahole NAR	Manage reintroduction for stability	8	0	0	2	32	0	3	21	0	0	0	0	3	21	0	2017-04-03	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		8	0	0	3	32	0	4	25	0	1	0	0	3	25	0		

## Action Area: Out

### TaxonName: Hesperomannia oahuensis

Target # of Matures: 75

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Manage for stability	13	0	0	11	35	0	11	34	0	5	0	0	6	34	0	2017-03-22	Small changes were noted during monitoring in the last year
Pualii	Manage reintroduction for stability				16	52	0	14	58	1	0	0	0	14	58	1	2017-04-04	More plants were added to the outplanting site
Waianae Kai	Genetic Storage	9	0	1	0	1	0	0	1	0	0	1	0	0	0	0	2014-08-12	No monitoring in the last year
<b>Out Total:</b>		22	0	1	27	88	0	25	93	1	5	1	0	20	92	1		
<b>Total for Taxon:</b>		30	0	1	30	120	0	29	118	1	6	1	0	23	117	1		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Hibiscus brackenridgei subsp. mokuleianus

Target # of Matures: 50

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keaau	Manage for stability				20	38	0	82	4	0	0	3	0	82	1	0	2017-06-01	More plants were added to the outplanting site
Makua	Manage for stability	4	3	0	124	20	0	124	20	0	16	5	0	108	15	0	2016-04-06	A new census was initiated but not yet completed
<b>In Total:</b>		4	3	0	144	58	0	206	24	0	16	8	0	190	16	0		

## Action Area: Out

### TaxonName: Hibiscus brackenridgei subsp. mokuleianus

Target # of Matures: 50

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Haili to Kawaii	Manage for stability	3	1	0	44	22	0	117	5	0	1	5	0	116	0	0	2017-01-24	More plants were added to the outplanting site
Manuwai	Manage reintroduction for stability				145	6	0	102	8	20	0	0	0	102	8	20	2017-03-14	Thorough monitoring in the last year showed a decline
Waialua	Genetic Storage	4	9	0	49	85	9	49	85	9	49	85	9	0	0	0	2013-04-02	No monitoring in the last year
<b>Out Total:</b>		7	10	0	238	113	9	268	98	29	50	90	9	218	8	20		
<b>Total for Taxon:</b>		11	13	0	382	171	9	474	122	29	66	98	9	408	24	20		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Kadua degeneri subsp. degeneri

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Pahole	Manage for stability	161	0	0	102	100	150	102	100	150	102	100	150	0	0	0	2016-08-10	A new census was initiated but not yet completed
Outplanting site to be determined	Manage reintroduction for stability				0	0	0	0	0	0	0	0	0	0	0	0		Outplanting site to be determined
<b>In Total:</b>		161	0	0	102	100	150	102	100	150	102	100	150	0	0	0		

## Action Area: Out

### TaxonName: Kadua degeneri subsp. degeneri

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Alaiheie and Manuwai	Manage for stability	60	0	0	81	64	28	77	84	4	19	18	4	58	66	0	2017-06-06	A thorough census has shown an increase in the immature age class
Central Makaleha and West Branch of East Makaleha	Manage for stability	47	0	0	22	10	22	22	10	22	22	10	22	0	0	0	2016-09-15	No changes observed in the last year
East branch of East Makaleha	Genetic Storage	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2010-09-22	No monitoring in the last year
<b>Out Total:</b>		117	0	0	103	74	50	99	94	26	41	28	26	58	66	0		
<b>Total for Taxon:</b>		278	0	0	205	174	200	201	194	176	143	128	176	58	66	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Kadua parvula

Target # of Matures: 50

# MFS PU Met Goal: 2 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Ohikilolo	Manage for stability	66	0	0	112	103	0	129	101	0	76	86	0	53	15	0	2017-03-23	More plants were added to the outplanting site
<b>In Total:</b>		66	0	0	112	103	0	129	101	0	76	86	0	53	15	0		

## Action Area: Out

### TaxonName: Kadua parvula

Target # of Matures: 50

# MFS PU Met Goal: 2 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Ekahanui	Manage reintroduction for stability				6	39	0	58	29	0	0	0	0	58	29	0	2017-03-28	More plants were added to the outplanting site
Halona	Manage for stability	64	0	0	31	4	0	31	4	0	31	4	0	0	0	0	2016-06-29	A new census was initiated but not yet completed
<b>Out Total:</b>		64	0	0	37	43	0	89	33	0	31	4	0	58	29	0		
<b>Total for Taxon:</b>		130	0	0	149	146	0	218	134	0	107	90	0	111	44	0		



# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Melanthera tenuifolia

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki	Genetic Storage	300	0	0	13	6	0	1	0	0	1	0	0	0	0	0	2016-09-20	Thorough monitoring in the last year showed a decline
Kaluakauila	Genetic Storage	113	0	0	4	80	0	4	80	0	4	80	0	0	0	0	2011-03-07	No monitoring in the last year
Keawaula	Genetic Storage	20	20	0	200	50	0	200	50	0	200	50	0	0	0	0	2016-03-30	No monitoring in the last year
Ohikilolo	Manage for stability	2008	1	0	1088	11	0	571	11	0	571	11	0	0	0	0	2016-09-27	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		2441	21	0	1305	147	0	776	141	0	776	141	0	0	0	0		

## Action Area: Out

### TaxonName: Melanthera tenuifolia

Target # of Matures: 50

# MFS PU Met Goal: 3 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kamaileunu and Waianae Kai	Manage for stability	880	0	0	815	246	274	815	246	274	815	246	274	0	0	0	2010-04-28	No monitoring in the last year
Mt. Kaala NAR	Manage for stability	250	0	0	131	24	0	131	24	0	131	24	0	0	0	0	2015-09-22	No monitoring in the last year
<b>Out Total:</b>		1130	0	0	946	270	274	946	270	274	946	270	274	0	0	0		
<b>Total for Taxon:</b>		3571	21	0	2251	417	274	1722	411	274	1722	411	274	0	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Neraudia angulata

Target # of Matures: 100

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kaluakauila	Manage reintroduction for stability				100	24	1	100	24	1	0	0	0	100	24	1	2016-03-30	No monitoring in the last year
Kapuna	Genetic Storage	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2016-05-16	No monitoring in the last year
Makua	Manage for stability	29	0	22	68	7	13	67	11	0	21	4	0	46	7	0	2017-02-13	Small changes were noted during monitoring in the last year
Punapohaku	Genetic Storage				4	0	0	2	0	0	2	0	0	0	0	0	2016-05-23	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		30	0	22	172	31	14	169	35	1	23	4	0	146	31	1		

## Action Area: Out

### TaxonName: Neraudia angulata

Target # of Matures: 100

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Halona	Genetic Storage	15	0	0	4	10	1	4	10	1	4	10	1	0	0	0	2016-08-15	No changes observed in the last year
Leeward Puu Kaua	Genetic Storage	3	0	0	9	0	0	9	0	0	9	0	0	0	0	0	2006-11-21	No monitoring in the last year
Makaha	Manage for stability (backup site)	56	14	0	142	8	0	131	8	0	3	8	0	128	0	0	2017-03-20	Thorough monitoring in the last year showed a decline
Manuwai	Manage for stability	12	0	0	110	97	14	97	64	10	0	4	0	97	60	10	2017-03-14	Thorough monitoring in the last year showed a decline
Waianae Kai Makai	Genetic Storage	4	0	0	13	0	0	13	0	0	13	0	0	0	0	0	2013-11-25	No monitoring in the last year
Waianae Kai Mauka	Manage for stability	21	25	0	11	2	0	11	2	0	7	2	0	4	0	0	2016-03-15	No monitoring in the last year
<b>Out Total:</b>		111	39	0	289	117	15	265	84	11	36	24	1	229	60	10		
<b>Total for Taxon:</b>		141	39	22	461	148	29	434	119	12	59	28	1	375	91	11		

# Population Unit Status - Makua Implementation Plan

Action Area: In

TaxonName: *Nototrichium humile*

Target # of Matures: 25

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki	Genetic Storage	140	0	0	78	4	0	79	5	0	79	5	0	0	0	0	2017-05-31	Small changes were noted during monitoring in the last year
Kaluakauila	Manage for stability	200	0	0	160	48	0	140	48	0	140	48	0	0	0	0	2016-10-10	Thorough monitoring in the last year showed a decline
Keaau	Genetic Storage	21	31	0	21	31	0	20	31	0	20	31	0	0	0	0	2016-09-07	No monitoring in the last year
Keawaula	Genetic Storage	200	30	0	70	70	10	70	70	10	70	70	10	0	0	0	2016-03-30	No monitoring in the last year
Makua (East rim)	Genetic Storage	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	1997-01-01	No monitoring in the last year
Makua (south side)	Manage for stability	120	18	0	50	3	0	50	3	0	43	3	0	7	0	0	2013-07-11	No monitoring in the last year
Punapohaku	Genetic Storage	152	14	0	178	77	0	178	77	0	178	77	0	0	0	0	2013-10-08	No monitoring in the last year
<b>In Total:</b>		834	93	0	558	233	10	538	234	10	531	234	10	7	0	0		

# Population Unit Status - Makua Implementation Plan

Action Area: Out

TaxonName: *Nototrichium humile*

Target # of Matures: 25

# MFS PU Met Goal: 4 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kaimuhole and Paliikea Gulch	Genetic Storage	48	6	0	29	1	0	29	1	0	29	1	0	0	0	0	2013-09-26	No monitoring in the last year
Keawapilau	Genetic Storage	9	1	0	1	0	0	1	0	0	1	0	0	0	0	0	2013-04-17	No monitoring in the last year
Kolekole	Genetic Storage	13	0	0	12	0	0	12	0	0	12	0	0	0	0	0	2005-01-01	No monitoring in the last year
Makaha	Genetic Storage	159	0	0	22	5	0	22	5	0	22	5	0	0	0	0	2010-03-02	No monitoring in the last year
Manuwai	Manage reintroduction for stability				112	0	0	111	0	0	0	0	0	111	0	0	2017-04-11	No monitoring in the last year
Nanakuli	Genetic Storage	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2016-03-29	No monitoring in the last year
Puu Kaua (Leeward side)	Genetic Storage	12	0	0	2	0	0	2	0	0	2	0	0	0	0	0	2006-11-21	No monitoring in the last year
Waianae Kai	Manage for stability	200	0	0	155	135	0	204	101	0	204	101	0	0	0	0	2017-06-29	A thorough census led to more plants being discovered
<b>Out Total:</b>		446	7	0	333	141	0	381	107	0	270	107	0	111	0	0		
<b>Total for Taxon:</b>		1280	100	0	891	374	10	919	341	10	801	341	10	118	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: *Phyllostegia kaalaensis*

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keawapilau to Kapuna	Manage reintroduction for stability	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2010-08-02	No monitoring in the last year
Pahole	Manage reintroduction for stability	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2010-08-10	No monitoring in the last year
Palikea Gulch	Genetic Storage	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2004-09-01	No monitoring in the last year
<b>In Total:</b>		20	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

## Action Area: Out

### TaxonName: *Phyllostegia kaalaensis*

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Manage reintroduction for stability	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2015-01-01	No monitoring in the last year
Manuwai	Manage reintroduction for stability	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2015-03-18	No monitoring in the last year
Waianae Kai	Genetic Storage	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2004-01-01	No monitoring in the last year
<b>Out Total:</b>		6	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Total for Taxon:</b>		26	2	0	0	0	0	0	0	0	0	0	0	0	0	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Plantago princeps var. princeps

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
North Mohiakea	Manage for stability	20	10	0	39	12	0	39	12	0	39	12	0	0	0	0	2013-05-21	No monitoring in the last year
Ohikilolo	Manage for stability	14	0	0	8	0	0	28	22	0	0	0	0	28	22	0	2017-03-23	More plants were added to the outplanting site
Pahole	Genetic Storage	12	0	0	4	5	0	4	5	0	4	5	0	0	0	0	2016-05-25	No monitoring in the last year
<b>In Total:</b>		46	10	0	51	17	0	71	39	0	43	17	0	28	22	0		

## Action Area: Out

### TaxonName: Plantago princeps var. princeps

Target # of Matures: 50

# MFS PU Met Goal: 0 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Ekahanui	Manage for stability	16	17	0	7	76	0	5	52	0	5	50	0	0	2	0	2017-05-17	Thorough monitoring in the last year showed a decline
Halona	Manage for stability	50	0	0	6	9	0	6	9	0	6	9	0	0	0	0	2016-06-30	No monitoring in the last year
North Palawai	Genetic Storage	32	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2016-05-23	No monitoring in the last year
Waieli	Manage reintroduction for storage				12	30	0	12	30	0	0	0	0	12	30	0	2014-04-14	No monitoring in the last year
<b>Out Total:</b>		98	17	0	26	115	0	24	91	0	12	59	0	12	32	0		
<b>Total for Taxon:</b>		144	27	0	77	132	0	95	130	0	55	76	0	40	54	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Pritchardia kaalae

Target # of Matures: 25

# MFS PU Met Goal: 2 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Ohikilolo	Manage for stability	65	408	0	85	1590	0	85	1590	0	72	1178	0	13	412	0	2014-04-23	No monitoring in the last year
Ohikilolo East and West Makaleha	Manage reintroduction for stability	0	75	0	6	328	0	6	328	0	0	0	0	6	328	0	2016-04-20	No monitoring in the last year
<b>In Total:</b>		65	483	0	91	1918	0	91	1918	0	72	1178	0	19	740	0		

## Action Area: Out

### TaxonName: Pritchardia kaalae

Target # of Matures: 25

# MFS PU Met Goal: 2 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Genetic Storage	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	2014-09-17	No monitoring in the last year
Makaleha to Manuwai	Manage for stability	138	3	0	123	11	0	123	11	0	123	11	0	0	0	0	2016-07-12	No changes observed in the last year
Waianae Kai	Genetic Storage	7	2	0	4	5	0	4	5	0	4	5	0	0	0	0	2002-06-12	No monitoring in the last year
<b>Out Total:</b>		146	5	0	128	16	0	128	16	0	128	16	0	0	0	0		
<b>Total for Taxon:</b>		211	488	0	219	1934	0	219	1934	0	200	1194	0	19	740	0		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

TaxonName: <i>Sanicula mariverosa</i>			Target # of Matures: 100									# MFS PU Met Goal: 0 of 3						
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keaau	Manage for stability	16	125	0	0	13	16	0	28	34	0	28	34	0	0	0	2017-03-21	A thorough census led to more plants being discovered
Ohikilolo	Manage for stability	34	128	0	2	158	180	0	229	0	0	97	0	0	132	0	2017-03-22	A thorough census has shown seedlings transition into immature plants
<b>In Total:</b>		50	253	0	2	171	196	0	257	34	0	125	34	0	132	0		

## Action Area: Out

TaxonName: <i>Sanicula mariverosa</i>			Target # of Matures: 100									# MFS PU Met Goal: 0 of 3						
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kamaileunu	Manage for stability	26	0	0	3	264	6	31	182	1	31	182	1	0	0	0	2017-03-21	Thorough monitoring in the last year showed a decline
Puu Kawiwi	Genetic Storage	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2016-03-15	No monitoring in the last year
<b>Out Total:</b>		28	0	0	3	264	6	31	182	1	31	182	1	0	0	0		
<b>Total for Taxon:</b>		78	253	0	5	435	202	31	439	35	31	307	35	0	132	0		



# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Schiedea kaalae

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Pahole	Manage for stability	3	0	0	58	67	7	45	39	3	2	0	0	43	39	3	2017-03-13	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		3	0	0	58	67	7	45	39	3	2	0	0	43	39	3		

## Action Area: Out

### TaxonName: Schiedea kaalae

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahana	Genetic Storage	0	0	0	8	0	2	8	0	2	5	0	1	3	0	1	2012-08-09	No monitoring in the last year
Kaluaa and Waieli	Manage for stability	2	53	0	164	4	0	164	4	0	0	0	0	164	4	0	2016-05-10	A new census was initiated but not yet completed
Maakua (Koolaus)	Manage for stability	4	0	0	10	0	0	10	0	0	10	0	0	0	0	0	2008-07-02	No monitoring in the last year
Makaua (Koolaus)	Genetic Storage	2	0	0	85	0	0	85	0	0	1	0	0	84	0	0	2012-02-29	No monitoring in the last year
North Palawai	Genetic Storage	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2011-04-18	No monitoring in the last year
South Ekahanui	Manage for stability	10	75	0	149	148	0	172	96	1	9	2	0	163	94	1	2017-03-20	Thorough monitoring in the last year showed a decline
<b>Out Total:</b>		19	128	0	416	152	2	439	100	3	25	2	1	414	98	2		
<b>Total for Taxon:</b>		22	128	0	474	219	9	484	139	6	27	2	1	457	137	5		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

TaxonName: <i>Schiedea nuttallii</i>		Target # of Matures: 50											# MFS PU Met Goal: 3 of 3					
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Pahole	Manage for stability	48	17	0	88	35	317	88	35	317	6	0	0	82	35	317	2016-06-13	A new census was initiated but not yet completed
Kapuna-Keawapilau Ridge	Manage for stability	3	1	0	55	2	0	55	2	0	0	0	0	55	2	0	2015-12-28	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		51	18	0	143	37	317	143	37	317	6	0	0	137	37	317		

## Action Area: Out

TaxonName: <i>Schiedea nuttallii</i>		Target # of Matures: 50											# MFS PU Met Goal: 3 of 3					
Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Manage reintroduction for stability	0	0	0	91	5	0	91	5	0	0	0	0	91	5	0	2016-04-12	A new census was initiated but not yet completed
<b>Out Total:</b>		0	0	0	91	5	0	91	5	0	0	0	0	91	5	0		
<b>Total for Taxon:</b>		51	18	0	234	42	317	234	42	317	6	0	0	228	42	317		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Schiedea obovata

Target # of Matures: 100

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki to Pahole	Manage for stability	65	25	0	232	216	182	229	122	23	0	0	0	229	122	23	2017-04-10	Thorough monitoring in the last year showed a decline
Keawapilau to West Makaleha	Manage for stability	24	12	0	36	458	36	42	363	16	24	363	16	18	0	0	2017-03-28	Thorough monitoring in the last year showed a decline
<b>In Total:</b>		89	37	0	268	674	218	271	485	39	24	363	16	247	122	23		

## Action Area: Out

### TaxonName: Schiedea obovata

Target # of Matures: 100

# MFS PU Met Goal: 1 of 3

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Makaha	Manage reintroduction for stability	0	0	0	76	14	0	76	14	0	0	0	0	76	14	0	2016-06-15	A new census was initiated but not yet completed
<b>Out Total:</b>		0	0	0	76	14	0	76	14	0	0	0	0	76	14	0		
<b>Total for Taxon:</b>		89	37	0	344	688	218	347	499	39	24	363	16	323	136	23		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

### TaxonName: Tetramolopium filiforme

Target # of Matures: 50

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Kahanahaiki	Genetic Storage	50	0	0	40	0	0	40	0	0	40	0	0	0	0	0	2006-10-04	No monitoring in the last year
Kalena	Manage for stability				24	93	0	24	93	0	24	93	0	0	0	0	2013-05-21	No monitoring in the last year
Keaau	Genetic Storage	25	0	0	30	41	17	30	41	17	30	41	17	0	0	0	2005-11-07	No monitoring in the last year
Makaha/Ohikilolo Ridge	Genetic Storage				350	200	0	350	200	0	350	200	0	0	0	0	2016-06-21	A new census was initiated but not yet completed
Ohikilolo	Manage for stability	2500	0	0	1902	1464	20	1903	1464	20	1903	1464	20	0	0	0	2016-09-27	A new census was initiated but not yet completed
Puhawai	Manage for stability	6	6	0	3	3	1	3	3	1	0	0	0	3	3	1	2016-04-21	No changes observed in the last year
<b>In Total:</b>		2581	6	0	2349	1801	38	2350	1801	38	2347	1798	37	3	3	1		

## Action Area: Out

### TaxonName: Tetramolopium filiforme

Target # of Matures: 50

# MFS PU Met Goal: 1 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Waianae Kai	Manage for stability	20	2	0	20	0	0	20	0	0	20	0	0	0	0	0	2016-07-11	No changes observed in the last year
<b>Out Total:</b>		20	2	0	20	0	0	20	0	0	20	0	0	0	0	0		
<b>Total for Taxon:</b>		2601	8	0	2369	1801	38	2370	1801	38	2367	1798	37	3	3	1		

# Population Unit Status - Makua Implementation Plan

## Action Area: In

**TaxonName: Viola chamissoniana subsp. chamissoniana**

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Keaau	Genetic Storage	40	10	0	40	10	0	40	10	0	40	10	0	0	0	0	2002-06-04	No monitoring in the last year
Makaha/Ohikilolo Ridge	Genetic Storage	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2016-06-21	No monitoring in the last year
Ohikilolo	Manage for stability				208	55	0	191	52	0	191	52	0	0	0	0	2016-09-27	Thorough monitoring in the last year showed a decline
Puu Kumakalii	Manage for stability	19	1	0	44	0	0	44	0	0	44	0	0	0	0	0	2004-10-21	No monitoring in the last year
<b>In Total:</b>		309	11	0	292	65	0	275	62	0	275	62	0	0	0	0		

## Action Area: Out

**TaxonName: Viola chamissoniana subsp. chamissoniana**

Target # of Matures: 50

# MFS PU Met Goal: 2 of 4

Population Unit Name	Management Designation	Total Mature Original IP	Total Imm Original IP	Total Seedling Original IP	Total Mature 2016	Total Immature 2016	Total Seedling 2016	Total Mature Current	Total Immature Current	Total Seedling Current	Wild Mature Current	Wild Immature Current	Wild Seedling Current	Outplanted Mature Current	Outplanted Immature Current	Outplanted Seedling Current	PU LastObs Date	Population Trend Notes
Halona	Manage for stability	3	0	0	15	5	0	16	5	0	16	5	0	0	0	0	2016-06-29	Small changes were noted during monitoring in the last year
Kamaileunu	Genetic Storage	38	0	0	35	0	0	35	0	0	35	0	0	0	0	0	2000-05-23	No monitoring in the last year
Makaha	Manage for stability	50	0	0	68	11	0	68	11	0	68	11	0	0	0	0	2014-05-14	No monitoring in the last year
Makaleha	Genetic Storage				19	9	1	19	9	1	19	9	1	0	0	0	2015-06-03	No monitoring in the last year
Puu Hapapa	Genetic Storage	10	3	0	6	1	0	6	1	0	6	1	0	0	0	0	2016-05-11	No monitoring in the last year
<b>Out Total:</b>		101	3	0	143	26	1	144	26	1	144	26	1	0	0	0		
<b>Total for Taxon:</b>		410	14	0	435	91	1	419	88	1	419	88	1	0	0	0		