City of San Diego MSCP Rare Plant Monitoring: 2009 Summary Results

		Population				Native		Non-Native				
Species	Site Name	Area (m^2)[1]	Area (ft^2)[1]	# Individuals	Percent cover	Number of Species[2]	Percent Cover[2,3]	Number of Species	Percent Cover[3]	Management Recommendation's	Field Data Sht (pg.#)	Photo number
Bloomeria clevelandii (San Diego Goldenstar)	Del Mar Mesa Obs. 1	62.2	669.9	29	1%	21	26%	5	8%	Remove old rebar aand chicken wire around vernal pools	42	11
	Del Mar Mesa Obs. 2	1.0	10.8	1	1%	15	28%	6	21%	Continue access restrictions via fences	46	12
	East Elliot Obs. 1	14141.0	152212.0	100	1%	9	9%	4	21%	Weeding-difficult area to access because of topography	50	13
	East Elliot Obs. 2	488.8	5261.6	10	1%	8	43%	5	26%	N/A	52	14
	East Elliot Obs. 3	3215.9	34615.2	20	0.5%	7	32%	3	5%	None	54	15
	East Elliot Obs. 4	11546.8	124289.0	10	1%	10	47%	3	18%	None	56	16
	East Elliot Obs. 5	42486.6	457321.9	21	1%	10	57%	4	10%	Manage fire regime, continue to restrict vehicle access along abandoned roadway	58	17
	Lopez Ridge	450.0	4842.0	37	1%	16	46%	6	21%	Maintain existing access restrictions	60	18
	Marron Valley Obs. 1	68512.4	737460.6	12000	10%	15	20%	5	65%	Maintain signs, no road expansion	64	19
	Marron Valley Obs. 2	68512.4	737460.6	5000	3%	14	15%	5	62%	Maintain signage	68	20
	Marron Valley Obs. 3	68512.4	737460.6	30,000	15%	15	28%	7	33%	Maintain signage, ro road expansion	72	21
	Marron Valley Obs. 4	†	†	†	†	†	†	†	†	†	†	†
	Mission Trails Regional Park	N/A	N/A	0	0%	9	32%	6	45%	Possible weeding-difficult due to remote location	76	22
	Otay Lakes East Obs. 1	336998.0	3626094.9	750	1%	7	102%	1	3%	Water Dept. installed fence and vehicle barricades and signs-no current visible trespassing	78	23
	Otay Lakes West Obs. 2	336998.0	3626049.9	1,000	3%	8	44%	6	93%	Area detached 2007-2009, fencing installed 2008/2009, no visible impacts from trespass	80	24
Brodiaea orcuttii (Orcutt's Brodiaea)	Carroll Canyon	1046.5	11263.9	93	1%	15	30%	6	40%	Continue annual inspections and trash removal, continue fence maintenance as needed	84	25
	Del Mar Mesa Obs. 1	135.5	1458.0	450	1%	18	32%	6	26%	Weeding in uplands	88	26
	Del Mar Mesa Obs. 2	2301.7	24774.9	300	1%	9	43%	6	7%	Continue access restrictions	92	27
	General Dynamics East Obs. 1	3561.2	38332.5	300	1%	15	27%	6	9%	None	94	28
	General Dynamics West Obs. 2	7028.4	75653.0	32	1%	13	26%	4	32%	Expand weeding, maintain access restrictions	98	29
	Lopez Ridge	450.0	4842.0	150	1%	15	45%	7	22%	Maintain existing access restrictions	100	30
	Nobel Drive	112.0	1205.0	5	1%	12	19%	9	21%	Continue to maintain fence	104	31
	USIU/Scripps Miramar Ranch	N/A	N/A	0	0%	15	16%	12	82%	Weed removal-difficult due to limited access	108	32
Ceanothus verrocosus (Wart-Stem Lilac)	Carmel Mountain	20270.6	218190.3	200	60%	7	73%	0	0%	None		
	Crest Canyon	1529.0	16458.0	1	0.5%	8	42%	1	2%	None		
Cordylanthus orcuttianus (Orcutt's Bird's Beak)	Otay River Valley	692.8	7456.8	5000	20%	12	33%	4	17%	None	114	33
Cylindropuntia californica (Snake Cholla)	Balboa Park	†	†	30	1%	15	43%	1	1%	None	118	34
	Otay Mesa	3036.0	32670.0	25	1%	11	33%	5	23%	Purchase land for conservation	120	35
	Goat Mesa (Spring Canyon)	1012.0	10890.0	30	1%	12	27%	7	22%	None	122	36
Deinandra conjugens (Otay Tarplant)	Dennery Ranch East	400.0	4303.0	2000	5.0%	8	14%	10	44%	Weeding	130	38
	Dennery Ranch	250.0	2690.0	1	1.0%	10	24%	8	44%	Weed control	126	37

Multiple Species Conservation Program (MSCP) Rare Plant Field Survey Form

Scientific Name: Brodiaea orcuttii — Common Name: Orcutt's brodiaea

Site Name: General Dynamics E Pt (#1) — Management Unit #: TBD

Date: 4/22/08 — Management Regime: TBD

Surveyors and Affiliation/Agency: Betsy Miller City of San Diego Open Space; Kelli Bolo City of San Diego Metro

Species Found? ☑ Yes ☐ No — If not, why (if reason known or suspected)?

Total No. Individuals: 300 ☐ Exact ☑ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 3561.21 m² (Units) ☑ Exact (based on GPS mapping) ☐ Estimate — 2005 GPS data

Collection (if not collected previously)? ☐ Yes ☑ No ☐ Collected Previously

If yes: Collector ____ Collection Number ____ Museum/Herbarium ____

I. OBSERVATION AREA/MANAGEMENT UNIT LOCATION

Accuracy of Coordinates/GPS Error: +/- <1 ☑ meters ☐ feet

Observation Location: 6291939.00 1880820.84 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: disturbed coastal sage scrub + vernal pools

Landowner/Manager: LNR Kearny Mesa Inc.

Overall Site Quality** ☐ Very Good-Excellent ☑ Fair to Good ☐ Poor ☐ Very Poor

Surrounding land use: industrial

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible): some cover non-native, minimum visible trespass/dumping disturbance

Management Recommendation/s: none

III. ASSOCIATED SPECIES

List dominant, subdominant and invasive species in/near target species observation area/management unit.

*Species'=List all species (sci. name). Use * to indicate non-native species; 'Cover'= % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted).*

Species	Cover	Coll?	Coll. #	Species	Cover	Coll?	Coll. #
Brodiaea orcuttii	2			Crassula aquatica	1		
Pogogyne abramsii	1			Artemesia californica	5		
Eryngium aristulatum	2			Baccharis sarothroides	2		
Deschampsia danthonoides	1			* Vulpia sp.	2		
Juncus bufonius	1			* Erodium sp.	3		
Pilularia sp.	<1			Isocoma menziesii	1		
Psilocarphus brevissimus	3			Opuntia littoralis	1		
* Centaurea melitensis	1			Eriophyllum confertiflorum	1		
				* Lythrum hyssopifolium	<1		

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix S560

Location [State Plane (ft)]		Direction (facing)	Height	Camera Angle	Photo #	File location/s
6291939.00	1880820.84	SE, S, SW, W	1.1 m	~10° down	45-52	S/OS/MSCP

V. OTHER FIELD NOTES

Other Field Notes/Comments: also point for Eryngium aristulatum

** Use Trudgen & Keighery Vegetation Condition Scale Descriptions (see back of form or instructions)

Continue on back if needed.

SPECIES	% cover
Navarretia homata	<1
Trichostema lanceolatum	<1
* Hypochaeris glabra	1
Eriogonum fasiculatum	5
* Polypogon monospeliensis	1

Photo 28. *Brodiaea orcuttia* (Orcutt's Brodiaea) General Dynamics Eastern Observation # 1

Panorama from Southwestern edge of population, facing Southeast, South, Southwest, West.
Panorama location is 6291939.00 1880820.84 NAD83 State Plane California Zone 6 (feet)
Photos merged using ArcSoft Panorama Maker 4.

Multiple Species Conservation Program (MSCP) Rare Plant Field Survey Form

Scientific Name: Brodiaea orcuttii Common Name: Orcutt's brodiaea
Site Name: General Dynamics W Pt (#2) Management Unit #: TBD
Date: 4/22/09 Management Regime: TBD
Surveyors and Affiliation/Agency: Betsy Miller City of San Diego Open Space
Keli Balo City of San Diego Metro

Species Found? ☑ Yes ☐ No _____ If not, why (if reason known or suspected)?

Total No. Individuals: 32 ☑ Exact ☑ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 7028.404 m^2 (Units) ☑ Exact (based on GPS mapping) ☐ Estimate
see 2005 EIS data

Collection (if not collected previously)? ☐ Yes ☑ No ☐ Collected Previously
If yes: _____ Collector _____ Collection Number _____ Museum/Herbarium

I. OBSERVATION AREA/MANAGEMENT UNIT LOCATION

Accuracy of Coordinates/GPS Error: +/- <1 ☑ meters ☐ feet

Observation Location: 6291522.83 1880729.22 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: disturbed coastal sage scrub + vernal pools

Landowner/Manager: LNR Kearny Mesa Inc.

Overall Site Quality** ☐ Very Good-Excellent ☐ Fair to Good ☑ Poor ☐ Very Poor

Surrounding land use: industrial

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):
high cover invasive species in uplands

Management Recommendation/s:
upland weeding; maintain access restrictions

III. ASSOCIATED SPECIES

List dominant, subdominant and invasive species in/near target species observation area/management unit.

*Species'=List all species (sci. name). Use * to indicate non-native species; 'Cover'= % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted).*

Species	Cover	Coll?	Coll. #
* Hypochaeris glabra	1		
Brodiaea orcuttii	1		
Pogogyne abramsii	5		
Deinandra fasciculata	7		
* Erodium sp.	5		
Isocoma menziesii	2		
Juncus bufonius	1		
* Polypogon monospeliensis	20		
Bulbocaphus brevissimus	2		
Eriogonum fasciculatum	5		
* Vulpia sp.	1		
Deschampsia danthonioides	2		
Plantago elongata	<1		
* Lythrum hyssopifolium	1		
Trichostema lanceolatum	1		
Baccharis sarothroides	<1		
Navarretia homata	1		
Crassula aquatica	<1		
Centaurium venustum			

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix S560

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
6291522.83 1880729.22	SW, W, NW, N	1.1 m	~10° down	44-49, 162-159	S/OS/MSCP

V. OTHER FIELD NOTES

Other Field Notes/Comments: also print for Pogogyne abramsii

** Use Trudgen & Keighery Vegetation Condition Scale Descriptions (see back of form or instructions)

Continue on back if needed.

Photo 29. *Brodiaea orcuttia* (Orcutt's Brodiaea) General Dynamics Western Observation # 2

Panorama from Southern edge of population, facing Southwest, West, Northwest, North.
Panorama location is 6291522.83 1880729.22 NAD83 State Plane California Zone 6 (feet)
Photos merged using ArcSoft Panorama Maker 4.

Acknowledgments

The following staff assisted in the preparation of this report:

Betsy Miller, Biologist III
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