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
	Torrey Highlands	391	4207	750	10%	13	28%	2	3%	Monitor trail, fence if expanding	214	70
Lotus nuttallianus (Nuttall's Lotus)	Mission Bay Mariner's Point	200.0	2152.0	†	Presence/absence only	†	†	†	†	None	222	73
	Mission Bay Dune Triangle	50.7	546.0	0	0%	4	14%	5	23%	Weeding	218	71
	Mission Bay Hospitality Point	5505.0	59258.0	500	4%	3	13%	4	5%	None	220	72
	No Man's Land (Mission Bay Site #1)	35465.7	381762.0	1500	3%	4	15%	6	38%	Weed removal	224	74
	SD River Rip Rap (Mission Bay Site #3)	107724.3	115973.5	100	Presence/absence only	†	†	†	†	None	226	75
	South Shores (Mission Bay Site #6)	27668.8	297834.0	50	1%	3	5%	5	89%	Weeding	228	76
		Note: Presence/absence only surveys conducted at Mariner's Point and San Diego River Rip Rap.										
Monardella stoneana (Jennifer's Monardella)	Marron Valley	13340.0	142539.0	95	2%	15	34%	7	23%	Area fire management plan was prepared in 2006/2007	232	77
Monardella viminea (Willowy Mondardella)	Lopez Canyon West Terrace #1	1459.2	15700.0	1	1%	11	29%	1	20%	Focused weed removal-mustard, grasses	238	78
	Lopez Canyon East of Bridge #2	404.0	4347.0	5	1%	12	15%	4	14%	None	240	79
	Lopez Canyon East of Bridge #3	1650.0	17754.0	3	0%	7	12%	4	4%	Erosion control	242	80
	Marron Valley (Monardella stoneana)	13340.0	143539.0	95	200%	15	34%	7	23%	Area fire management plan was prepared in 2006/2007	228	76
	Otay Lakes	0.0	0.0	0	0%	22	57%	8	22%	None	244	81
	Sycamore Canyon	15970.4	171842.0	43	5%	14	17%	9	75%	Weed if possible given remote location	248	82
Navarretia fossalis (Spreading Navarretia)	Carroll Canyon	1866.5	20090.3	118	1%	16	58%	4	4%	Continue annual maintenance and fence repair as needed	254	83
	Goat Mesa (Spring Canyon)	293.0	3150.0	0	0%	7	14%	9	39.0%	Maintain perimeter fernce, weed	258	84
	Nobel Drive	15781.0	169867.3	87	1%	12	20%	9	21%	Continue to maintain fences	260	85
	Otay Lakes	2.7	30.0	53	0.5%	9	80%	7	31%	Vehicle barriers installed 2008	264	86
	Robinhood Ridge	71.5	770.0	50	1%	11	28%	5	19%	Weeding in upland areas	266	87
Pinus torreyana* ssp. *torreyana (Torrey Pine)	Crest Canyon Obs. 1	†	†	†	†	†	†	†	†	†	†	†
	Crest Canyon Obs. 2	†	†	†	†	†	†	†	†	†	†	†
Pogogyne abramsii (San Diego Mesa Mint)	Carroll Canyon	173.0	1865.9	250	7%	19	25%	5	9%	Continue annual maintenance and fence repair as necessary	270	88
	Del Mar Mesa Obs. 1	50.0	538.0	500	1%	21	26%	5	8%	Remove old rebar and chicken wire around reval pool	274	89
	Del Mar Mesa Obs. 2	304.5	3278.0	800	2%	15	27%	6	21%	Continue to restrict access via fencing	278	90
	General Dynamics West	42.0	452.5	300	5%	13	22%	5	32%	Upland weeding, maintain access restrictions	282	91
	Lopez Canyon	419.0	4509.0	5000	10%	16	96%	7	22%	Maintain access restrictions via fencing	286	92
Pogogyne nudiuscula (Otay Mesa Mint)	Robinhood Ridge	71.5	770.0	120	4	10	29	6	21	Weeding in upland areas	292	93
Rosa minutifolia (Small-leaved Rose)	Dennery Ranch	250.0	2690.0	13	2%	8	21%	9	45%	Weed control	296	94
† No data collected												

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

Scientific Name: Navarretia fossalis
Common Name: Spreading navarretia
Site Name: Carroll Canyon
Management Unit #: TBD
Date: 4/22/09
Management Regime: TBD
Surveyors and Affiliation/Agency: Betty 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: 118 ☑ Exact ☐ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 1866.45 m² (Units) ☑ Exact (based on GPS mapping) ☐ Estimate
2003 GPS data - VPI

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: 6282852.814 1907472.208 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: vernal pools, chamise chaparral

Landowner/Manager: City of San Diego Park + Recreation Open Space

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

Surrounding land use: open space, residential

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):

no visible current threats

Management Recommendation/s:

continue annual maintenance + fence repair as needed

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. #
Navarretia fossalis	1			Deinandra fasciculata	25		
Eryngium aristulatum	10			* Hypochaeris glabra	1		
Pogogyne abramsii	3			* Polypogon monospeliensis	<1		
Psilocarphus brevissimus	2			Adenostema fasciculata	3		
Deschampsia danthonoides	1			Brodiaea orcuttii	<1		
* Vulpia sp.	1			Crassula aquatica	1		
Navarretia homata	1			Selaginella sp.	1		
Cuscuta sp.	5			Lasthenia californica	1		

IV. SITE PHOTOMONITORING

Camera type: Nikon S560 Coolpix

Location [State Plane (ft)]		Direction (facing)	Height	Camera Angle	Photo #	File location/s
6282852.814	1907472.268	S, SW, W, NW	0.8 m	15° down	63-67	S/os/MSCP

V. OTHER FIELD NOTES

Other Field Notes/Comments: _____

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

Continue on back if needed.

SPECIES	% Cover
Downingia cuspidata	<1
Sisyrinchium bellum	1
* Bromus madritensis ssp. rubens	1
Plantago ~~[illegible]~~ erecta	<1
Plantago elongata	<1

Photo 83. *Navarretia fossalis* (Spreading Navarretia) Carroll Canyon

Panorama from Northern edge of population, facing South, Southwest, West, Northwest.
Panorama location is 6282852.81 1907472.26 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
Jeanie Gaudette, Open Space Intern
Melea Logan, Open Space Intern