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
	Proctor Valley	3347.3	36018.0	150	1%	7	17%	7	98%	Continue to miantain fences and gates, herbicide cynara (2 ind.) ASAP	134	39
Dudleya blochmaniae* ssp. *Brevifolia (Short-Leaved Dudleya)	Carmel Mountain Obs. 1	450.0	4842.0	1142	0.5%	8	14%	4	4%	Maintain	138	40
	Carmel Mountain Obs. 2	250.0	2691.0	344	1.0%	12	46%	2	2%	Maintain fencing and educational kiosk	140	41
	Carmel Mountain Obs. 3	279.0	3000.0	1052	1.0%	13	27%	3	4%	Maintain fence and educational kiosk	142	42
	Crest Canyon North	158.0	1700.0	1200	1%	11	29%	2	2%	Contact nearby owner RE black cord	144	43
	Crest Canyon South	25.0	270.0	9	0.5%	10	14%	0	0%	Maintain fancing	146	44
	Skeleton Canyon	†	†	†	†	†	†	†	†	†	†	†
Dudleya variegata (Variegated Dudleya)	Black Mountain East	0.0	0.0	0	0%	9	25%	5	37%	Weeding	150	45
	East Elliot - Creek	0.0	0.0	0	0%	6	19%	4	32%	Monitor trail-fence if necessary, large scale weed control?	152	46
	East Elliot - Hilltop	10.0	108.0	57	1%	13	35%	2	2%	None	154	47
	East Elliot - Slope	500.0	5380.0	85	1.0%	5	14%	5	34%	Weed control if possible given remote location and steep terrain	156	48
	Goat Mesa (Spring Canyon)	802.6	8636.0	0	0%	9	21%	6	24%	None	158	49
	Lake Murray	0.0	0.0	0	0%	7	27%	4	16%	Weed if possible given difficult location-especially weed by trail	160	50
	Marron Valley	150.0	1614.0	1200	1%	12	15%	5	44%	Maintain existing signage	162	51
	Mercy Road	35.0	377.0	150	1%	9	18%	5	35%	None	166	52
	Mission Trails #1	12.0	130.0	5	1%	10	23%	5	18%	Extend fence if trail impacts in future, weeding if Avena enters Dudleya area	168	53
	Mission Trails #2	241.4	2598.0	129	1%	10	18%	5	25%	Weed control if grasses enter Dudleya site	170	54
	Mission Trails #3	50.0	358.0	66	1%	7	18%	6	18%	Weed control if grasses enter Dudleya site	172	55
	Navajo/Mission Gorge	8926.0	96044.0	1500	3%	11	18.0%	10	42%	Monitor weeds-weeding if necessary	174	56
	Otay Lakes	72702.0	782557.6	500		8	14%	3	101%	Weed control implemented 2007-2009	178	57
	Ocean View Hills	†	†	†	†	†	†	†	†	†	†	†
	Paradise Valley	†	†	†	†	†	†	†	†	†	†	†
	Santa Luz	10.0	108.0	24	1%	10	30%	4	22%	Weeding	180	58, 59
Eryngium aristulatum* var. *parishii (San Diego Button Celery)	Del Mar Mesa #1	1047.0	11266.0	4000	7%	18	26%	6	26%	Weeding in uplands	186	60
	Del Mar Mesa #2	3278.0	35284.0	350	7%	15	22%	6	21%	Continue to restrict access via fencing	190	61
	Del Mar Mesa #3	6351.2	68363.9	150000	15%	10	38%	3	3%	Remove Brassica, repair fence	194	62
	General Dynamics	266.8	2872.1	950	2%	15	27%	6	9%	Continue maintaing fence as needed	196	63
	Goat Mesa #1 (Spring Canyon)	293.0	3150.0	350	3%	6	11%	9	39%	Maintain perimeter fence, weed	200	64
	Goat Mesa #2 (Spring Canyon)	1930.7	20778.4	500	3%	6	25%	12	44%	Weeding	202	65
	Otay Lakes	†	†	†	†	†	†	†	†	†	†	†
Lessingia filaginifolia* var. *linifolia (Del Mar Sand Aster)	Carmel Mountain	1658.29	17843.2	100	1%	11	34%	4	6%	Monitor trail; fence/reroute as needed	206	66
	Crest Canyon #1	140	1506	450	13%	7	40%	4	6%	Remove ice plant; monitor trail and fence if expanding	208	67
	Crest Canyon #2	75	807	80	3%	12%	22%	3	3%	None	210	68
	Del Mar Mesa	†	†	†	†	†	†	†	†	†	†	†
	Overlook Park	3052	32842	1000	5%	11	22%	2	2%	Maintain fence	212	69

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

Scientific Name:	Lessingina filaginifolia var. linifolia	*Common Name:*	Del Mar Sand Aster
Site Name:	Crest Canyon- Obs 1	*Management Unit #:*	TBD
Date:	7/7/09	*Management Regime:*	TBD
Surveyors and Affiliation/Agency:	Rory Miller City of San Diego Park and Recreation Melia Logan City of San Diego Park and Recreation		

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

Total No. Individuals: 450 ☐ Exact ☑ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 140 m^2 (Units) ☐ Exact (based on GPS mapping) ☑ Estimate

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: 6253253.09 1929139.26 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: open ass, southern maritime chaparral

Landowner/Manager: City of San Diego and Del Mar Park and Recreation

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

Surrounding land use: open space

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):	Management Recommendation/s:
nearby trail, ice plant	remove ice plant; monitor trail + fence if expanding

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. #
Lessingia filiganifolia var. lin.	13			* Bromus diandrus	1		
Isocoma menziesii	15			* Centaurea melitensis	1		
Artemesia californica	5			Encelia californica	3		
Eriogonum fasiculatum	5			Oak plant	2		
Pinus torreyana	5						
Lotus scoparius	3						
* Carpobrotus edulis	3						
* Bromus madritensis ssp. rubens	1						

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix S560

Location [State Plane (ft)]		Direction (facing)	Height	Camera Angle	Photo #	File location/s
6253253.09	1929139.26	S, SW, W	1.1 m	Level	208-211	S/OS/MSCP

V. OTHER FIELD NOTES

Other Field Notes/Comments: high cover bare ground

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

Continue on back if needed.

Photo 67. *Lessingina filaginifolia* var. *linifolia* (San Diego Sand Aster) Crest Canyon #1

Panorama from Southern edge of population, facing South, Southwest, West.
Panorama location is 6253253.09 1929139.26 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:	Lessingina filaginifilia var. linifolia	*Common Name:*	San Diego Sand Aster
Site Name:	Crest Canyon- Obs 2	*Management Unit #:*	TBD
Date: 7/7/09		*Management Regime:*	TBD
Surveyors and Affiliation/Agency:	Betsy Miller City of San Diego Park and Recreation Melia Logan City of San Diego Park and Recreation		

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

Total No. Individuals: 80 ☐ Exact ☑ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 75 m^2 (Units) ☐ Exact (based on GPS mapping) ☑ Estimate

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: 6253508.28 1930813.34 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: coastal sage scrub with torrey pines

Landowner/Manager: City of San Diego Park and Recreation

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

Surrounding land use: open space

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):	Management Recommendation/s:
none	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. #
Lessingia filaginifolia var. lin.	3			Encelia californica	2		
Rhus integrifolia	1			Pinus torreyana	2		
Eriogonum fasciculatum	7			Stephanomeria sp.	1		
Opuntia sp.	2			Marah macrocarpha	1		
Malosma laurina	1			* Avena sp.	1		
Artemesia californica	2			* Bromus madritensis ssp. rubens	1		
Croton californicus	1			* Bromus diandrus	1		
Chaenactis glabriuscula	1			Solanum sp.	1		

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix S560

Location [State Plane (ft)]		Direction (facing)	Height	Camera Angle	Photo #	File location/s
6253508.28	1930813.34	S, SE, E	1.1 m	5* up	212-215	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.

Photo 68. *Lessingina filaginifolia* var. *linifolia* (San Diego Sand Aster) Crest Canyon #2

Panorama from Eastern edge of population, facing South, Southeast, East.
Panorama location is 6253508.28 1930813.34 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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