

City of San Diego MSCP Rare Plant Monitoring: 2006 Summary Results

Species	Site Name	Population				Native		Non-Native		Management Recommendation	Field Data Sht (pg. #)	Photo (pg. #)
		Area (m ²) ¹	Area (ft ²) ¹	# Individuals	% Cover	Number of Species ²	Percent Cover ^{2,3}	Number of Species	% Cover ³			
<i>Dudleya blochmaniae</i> ssp. <i>brevifolia</i> (Short-Leaf Dudleya)	Carmel Mountain - 1	313	3,372	80 (Est)	0.5%	9	34%	4	2%	Monitor access-control if needed (install railing along trail edge?)	36	37
	Carmel Mountain - 2	669	7,206	5 (Est)	<1%	6	10%	NA	NA	Recent access control efforts successful; no add'l management activities needed	38	29
	Carmel Mountain - 3	1,487	16,011	175 (Est)	<1%	7	31%	NA	NA	"	40	41
	Crest Canyon - North	158	1,704	250 (Est)	1%	12	20%	NA	NA	Control invasives at perimeter (iceplant) & control access	42	43-44
	Crest Canyon - South	11	123	10 (Est)	0.5%	3	2%	1	1%	Fence north-south trail & close trail from east	45	46
	Skeleton Canyon	27	294	10 (Est)	0.5%	7	44%	2	1%	Relocate trail or fence sides of trail	47	48

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

Scientific Name: *Dudleya brevifolia* Common Name: Short-Leaf Dudleya
 Site Name: Carmel Mountain Subsp #1 Management Unit #: TBD
 Date: June 2, 2006 Management Regime: TBD
 Surveyors and Affiliation/Agency: Keith Greer, Melanie Johnson Rocks - City of San Diego MSCP
 Species Found? ☒ Yes ☐ No *Lauren Hierl - SDSN*
 If not, why (if reason known or suspected)?
 Total No. Individuals: <100 ☐ Exact ☒ Estimate (use orders of 10, 100 and 1000 for estimates)
 Population/Subpopulation Area: 300 m² ☐ Exact (based on GPS mapping) ☒ Estimate
 Units
 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: +/- _____ ☐ meters ☐ feet
 Observation Location: _____ ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: *Opening in Chamise scrub*
 Landowner/Manager: *City of San Diego Park & Rec Open Space*
 Overall Site Quality** ☒ Very Good-Excellent ☐ Fair to Good ☐ Poor ☐ Very Poor
 Surrounding land use: *Open space/preserve*

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

Trail nearby

Management Recommendation/s:

Put railing along trail edge

III. ASSOCIATED SPECIES

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

Form: Tree=T, Shrub=S, Herb/Grainoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<i>Selaginella cinerascens</i>	30		H	<i>Antirrhinum</i> sp.	<1	
H	<i>Dudleya brevifolia</i>	<1		H	<i>Bromus madritensis</i> *	<1	
H	<i>Deinandra fasciculata</i>	<1		S	<i>Ferocactus viridescens</i>	<1	
H	<i>Centauria melitensis</i> *	<1		S	<i>Eriogonum fasciculatum</i>	<1	
H	<i>Osmorhiza fendleri</i>	<1		S	<i>Adenostoma fasciculatum</i>	<1	
H	<i>Sonchus asper</i> *	<1		H	<i>Eriophyllum confertiflorum</i>	<1	
H	<i>Crassula comata</i>	<1					
H	<i>Filago gallica</i> *	<1					

IV. SITE PHOTOMONITORING

Camera type: *Canon Powershot A7S*

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
<i>SW, W, NW, N</i>	<i>52"</i>	<i>Down 5-10°</i>	<i>55-58</i>	<i>E: Monitoring</i>	

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 16. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya)
Carmel Mountain – Subpopulation One**



Panorama from eastern edge of subpopulation, facing southwest, west, northwest and north (photos merged using Canon PhotoStitch, v. 3.1).

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

Scientific Name: *Dudleya brevifolia* Common Name: Short-Leaf Dudleya
 Site Name: Carmel Mtn - Subpop 2 Management Unit #: TBD
 Date: June 2, 2006 Management Regime: TBD
 Surveyors and Affiliation/Agency: Keith Green, Melanie Johnson Rocks, Betsy Miller - City of SD
 Species Found? ☒ Yes ☐ No *Lauren Hierl - SDSU mscpr*
 If not, why (if reason known or suspected)?
 Total No. Individuals: 5 ☐ Exact ☒ Estimate (use orders of 10, 100 and 1000 for estimates)
 Population/Subpopulation Area: 250 m² ☐ Exact (based on GPS mapping) ☒ Estimate
 Units
 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: +/- _____ ☐ meters ☐ feet
 Observation Location: _____ ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: *Opening in Southern Mixed Chaparral / Maritime Chaparral*
 Landowner/Manager: *City of San Diego Park & Rec Open Space*
 Overall Site Quality** ☐ Very Good-Excellent ☒ Fair to Good ☐ Poor ☐ Very Poor
 Surrounding land use: _____

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

Trail near population (now closed)
Broken glass in area

Management Recommendation/s:

Remove litter/glass

III. ASSOCIATED SPECIES

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

Form: Tree=T, Shrub=S, Herb/Graminoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<i>Selaginella cinerascens</i>	5					
S	<i>Adenostoma fasciculata</i>	2					
S	<i>Eriogonum fasciculatum</i>	1					
H	<i>Deinandra fasciculata</i>	<1					
H	<i>Dudleya brevifolia</i>	<1					
H	<i>Navarretia hamata</i>	<1					

IV. SITE PHOTOMONITORING

Camera type: *Canon Powershot A7S*
 Location [State Plane (ft)] N, NE, E, SE Direction (facing) 53" Height Down ~10° Camera Angle 48-51 Photo # E: Monitoring File location/s
 Location [State Plane (ft)] _____ Direction (facing) _____ Height _____ Camera Angle _____ Photo # _____ File location/s

V. OTHER FIELD NOTES

Other Field Notes/Comments: _____

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

**Photo 17. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya)
Carmel Mountain - Subpopulation Two**



Panorama from southern side (across closed trail) of subpopulation, facing north, northeast, east and southeast (photos merged using Canon PhotoStitch, v. 3.1).

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

Scientific Name: <u>Dudleya brevifolia</u>		Common Name: <u>Short-Leaf Dudleya</u>	
Site Name: <u>Carmel Mountain - Subpage 3</u>		Management Unit #: <u>TBD</u>	
Date: <u>June 2, 2006</u>		Management Regime: <u>TBD</u>	
Surveyors and Affiliation/Agency: <u>Keith Greer, Melanie Johnson Rocks, Betsy Miller - City of SD MSCP</u>			
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If not, why (if reason known or suspected)? <u>Lauren Hiert SDSU</u>		
Total No. Individuals: <u>DATA 175</u>	<input type="checkbox"/> Exact	<input checked="" type="checkbox"/> Estimate (use orders of 10, 100 and 1000 for estimates)	
Population/Subpopulation Area: <u>670</u>	<u>m²</u>	<input type="checkbox"/> Exact (based on GPS mapping)	<input checked="" type="checkbox"/> Estimate
Units			
Collection (if not collected previously)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Collected Previously		
If yes: _____			
Collector	Collection Number	Museum/Herbarium	

I. OBSERVATION AREA/MANAGEMENT UNIT LOCATION

Accuracy of Coordinates/GPS Error: +/- _____ ☐ meters ☐ feet

Observation Location: _____ ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: Opening in Southern Mixed Chaparral/Marine Chaparral/CSS

Landowner/Manager: City of San Diego Park & Rec Open Space

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

Surrounding land use: _____

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible): <u>Trail through center of population (now closed)</u>	Management Recommendation/s:
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III. ASSOCIATED SPECIES

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

Form: Tree=T, Shrub=S, Herb/Grainoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<u>Selaginella cinerascens</u>	<u>25</u>					
S	<u>Adenostoma fasciculata</u>	<u>1</u>					
H	<u>Deinandra fasciculata</u>	<u>1</u>					
H	<u>Dudleya brevifolia</u>	<u><1</u>					
S	<u>Eriogonum fasciculatum</u>	<u>1</u>					
H	<u>Navarretia hamata</u>	<u><1</u>					
S	<u>Malosma laurina</u>	<u>1</u>					
S	<u>Opuntia littoralis</u>	<u>1</u>					

IV. SITE PHOTOMONITORING

Camera type: Canon Powershot A7S

Location [State Plane (ft)]	Direction (facing) <u>SE, S, SW, W, NW</u>	Height <u>53"</u>	Camera Angle <u>Down 5-10°</u>	Photo # <u>43-47</u>	File location/s <u>E: Monitoring</u>
Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s

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 18. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya) Carmel Mountain - Subpopulation Three



Panorama from eastern edge of subpopulation, facing southwest, west and northwest (photos merged using Canon PhotoStitch, v. 3.1).

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

Scientific Name: *Dudleya brevifolia* Common Name: Short-Leaf Dudleya
 Site Name: Crest Canyon - Northern Subpop Management Unit #: TBD
 Date: June 2, 2006 Management Regime: TBD
 Surveyors and Affiliation/Agency: Keith Greer, Melanie Johnson Ricks - City of San Diego
 Species Found? ☒ Yes ☐ No *Lauren Hiert - SDSU*
 If not, why (if reason known or suspected)?
 Total No. Individuals: 250 ☐ Exact ☒ Estimate (use orders of 10, 100 and 1000 for estimates)
 Population/Subpopulation Area: _____ ☐ Exact (based on GPS mapping) ☐ Estimate
 Units
 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: +/- _____ ☐ meters ☐ feet
 Observation Location: _____ ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: *opening in S. Maritime Chaparral*
 Landowner/Manager: *City of San Diego Park & Rec open space*
 Overall Site Quality** ☐ Very Good-Excellent ☒ Fair to Good ☐ Poor ☐ Very Poor
 Surrounding land use: _____

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

Iceplant on perimeter, trespass from adjacent properties

Management Recommendation/s:

Control invasives; access control at perimeter

III. ASSOCIATED SPECIES

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

Form: Tree=T, Shrub=S, Herb/Graminoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<i>Selaginella cinerascens</i>	10		S	<i>Artemisia californica</i>	<1	
S	<i>Adenostoma fasciculatum</i>	2		H	<i>Dudleya pulverulenta</i>	<1	
S	<i>Eriogonum fasciculatum</i>	2		H	<i>Nasella (c.f. stipa)</i>	<1	
S	<i>Crocodyrium durosom</i>	1		H	<i>Mimulus aurantiacus</i>	<1	
H	<i>Corethrogyne filaginifolia</i>	1		S	<i>Rhus integrifolia</i>	<1	
H	<i>Euphorbia californica</i>	1					
H	<i>Dudleya brevifolia</i>	21					
H	<i>Dichostemma capitatum</i>	<1					

IV. SITE PHOTOMONITORING

Camera type: *Canon Powershot A7S*
 Location [State Plane (ft)] _____ Direction (facing) *W, NW, N, NE, E* Height *52"* Camera Angle *Down ~10°* Photo # *65-69* File location/s *E:Monitoring*
 Location [State Plane (ft)] _____ Direction (facing) _____ Height _____ Camera Angle _____ Photo # _____ File location/s _____

V. OTHER FIELD NOTES

Other Field Notes/Comments: _____

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

**Photo 19. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya)
Crest Canyon – Northern Subpopulation**



Panorama from southern edge of subpopulation, facing west and northwest (photos merged using Canon PhotoStitch, v. 3.1).

**Photo 20. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya)
Crest Canyon – Northern Subpopulation**



Panorama from southern edge of subpopulation, facing north, northeast and east (photos merged using Canon PhotoStitch, v. 3.1).

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

Scientific Name: *Dudleya brevifolia* Common Name: Short-Leaf Dudleya
 Site Name: Crest Canyon - Southern Subpop Management Unit #: TBD
 Date: June 2, 2006 Management Regime: TBD
 Surveyors and Affiliation/Agency: Keith Greer, Melanie Johnson Ricks - City of SD MSCP; Lauren Hierl, SDSU

Species Found? ☒ Yes ☐ No If not, why (if reason known or suspected)?
 Total No. Individuals: 10 ☐ Exact ☒ Estimate (use orders of 10, 100 and 1000 for estimates)
 Population/Subpopulation Area: ☐ Exact (based on GPS mapping) ☐ Estimate
 Units
 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: +/- ☐ meters ☐ feet
 Observation Location: ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT
 Vegetation Community: Opening in Southern Maritime Chaparral
 Landowner/Manager: City of San Diego Park & Recreation Open Space Div.
 Overall Site Quality** ☐ Very Good-Excellent ☒ Fair to Good ☐ Poor ☐ Very Poor
 Surrounding land use: Open space preserve; road/homes ~50 to east

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):
 Trail through population and evidence of pedestrian use throughout

Management Recommendation/s:
 Fence NPS trail and close off trail from east

III. ASSOCIATED SPECIES
 List dominant, subdominant and invasive species in/near target species observation area/management unit.
 Form: Tree=T, Shrub=S, Herb/Graminoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<i>Dudleya brevifolia</i>	<1					
H	<i>Peinandra conjugens</i>	<1					
H	<i>Chlorogalum</i> sp.	<1					
H	<i>Gnaphalium</i> sp.	<1					
H	(cf. <i>Spergularia</i> sp.)*	<1					

IV. SITE PHOTOMONITORING
 Camera type: Canon Powershot A75

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
	NW, N, NE	52"	Down -5°	62-64	E: Monitoring

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 21. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya) Crest Canyon – Southern Subpopulation



Panorama from southern edge of subpopulation, facing northwest, north and northeast (photos merged using Canon PhotoStitch, v. 3.1).

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

Scientific Name: <u>Dudleya brevifolia</u>		Common Name: <u>Short-Leaf Dudleya</u>	
Site Name: <u>Skeleton Canyon</u>		Management Unit #: <u>TBD</u>	
Date: <u>June 2, 2006</u>		Management Regime: <u>TBD</u>	
Surveyors and Affiliation/Agency: <u>Keith Graer, Melanie Johnson Rocks - City of SD MSCP;</u>			
Species Found? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<u>Lauren Hierl - SDSU</u>	
If not, why (if reason known or suspected)?			
Total No. Individuals: <u>10</u>		<input type="checkbox"/> Exact <input checked="" type="checkbox"/> Estimate (use orders of 10, 100 and 1000 for estimates)	
Population/Subpopulation Area: _____		<input type="checkbox"/> Exact (based on GPS mapping) <input type="checkbox"/> Estimate	
Units			
Collection (if not collected previously)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Collected Previously			
If yes: _____			
Collector	Collection Number	Museum/Herbarium	

I. OBSERVATION AREA/MANAGEMENT UNIT LOCATION

Accuracy of Coordinates/GPS Error: +/- _____ ☐ meters ☐ feet

Observation Location: _____ ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: Opening in Diegan Coastal Sage Scrub

Landowner/Manager: University of California, San Diego

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

Surrounding land use: _____

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible): <u>Trails Through population; evidence of pedestrian use / damage</u>	Management Recommendation/s: <u>Re-locate trail or fence along sides of trail</u>
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III. ASSOCIATED SPECIES

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

Form: Tree=T, Shrub=S, Herb/Graminoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<u>Selaginella cinerascens</u>	<u>40</u>		H	<u>Gnaphalium sp.</u>	<u><1</u>	
S	<u>Eriogonum fasciculatum</u>	<u>1</u>		H	<u>Lotus scoparius</u>	<u><1</u>	
H	<u>Bromus madritensis*</u>	<u><1</u>					
S	<u>Artemisia californica</u>	<u><1</u>					
H	<u>Deinandra fasciculata</u>	<u><1</u>					
H	<u>Dudleya brevifolia</u>	<u><1</u>					
H	<u>Dudleya edulis</u>	<u><1</u>					
H	<u>Erodium sp.*</u>	<u><1</u>					

IV. SITE PHOTOMONITORING

Camera type: Canon A75 Powershot

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
	<u>W, NW, N</u>	<u>52"</u>	<u>Down ~5°</u>	<u>59-61</u>	<u>E-Monitoring</u>

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 22. *Dudleya blochmaniae* ssp. *brevifolia* (Short-Leaf Dudleya)
Skeleton Canyon**



Panorama from southeastern edge of population, facing west, northwest and north (photos merged using Canon PhotoStitch, v. 3.1).

Acknowledgments

The following staff assisted in the preparation of this report:

Melanie Johnson Rocks, Biologist III

Keith Greer, Deputy Planning Director

Lisa Markovchick-Nicholls, MSCP Intern

City of San Diego MSCP Rare Plant Monitoring: 2006 Field Dates and Staff

Species	Risk Group (SDSU 3/06)	Site	Survey Date	Field Staff	Methodology
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> (Del Mar Manzanita)	First	Crest Canyon	14-Apr	MJR, JG	
			20-Apr	MJR, JG	Photo, Habitat Assessment
		Carmel Mountain	28-Apr	MJR, JG, KG	Photo, Habitat Assessment
<i>Navarretia fossalis</i> (Spreading Navarretia)	First	Carroll Canyon	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		Nobel Drive	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Orcuttia californica</i> (California Orcutt Grass)	First	Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Pogogyne nudiuscula</i> (Otay Mesa Mint)	First	Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Acanthomintha illicifolia</i> (San Diego Thorn-mint)		Black Mountain Pk W (BMR)	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
		Mission Trails ^	26-May	MJR, KG, JF, LH	Census, Photo, Habitat Assessment, Quantitative
		Penasquitos Cyn	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
		Sabre Springs	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
<i>Ambrosia pumila</i> (San Diego Ambrosia)	First	Mission Trails Regional Park	8-Jun	MJR, LMN	Photo, Habitat Assessment
<i>Dudleya variegata</i> (Variegated Dudleya)	Second	Black Mtn Pk - E (BMR)	10-May	MJR, BM	Photo, Habitat Assessment
		Black Mountain Pk W (BMR)	19-May	MJR, MK	Photo, Habitat Assessment
		East Elliot	26-May	KG, MJR, BM	Photo, Habitat Assessment
			1-Jun	MJR, JG	
		Goat Mesa	16-May	MJR, BM, LMN	Photo, Habitat Assessment
		Marron Valley	2-May	MJR	Photo, Habitat Assessment
		Mercy Road	10-May	MJR, BM	Photo, Habitat Assessment
		Mission Trails ^	26-May	MJR, KG, JF, LH	Photo, Habitat Assessment
		Otay Lakes ^	24-May	MJR, LMN	Photo, Habitat Assessment
		Santa Luz (BMR)	10-May	MJR, BM	Photo, Habitat Assessment
<i>Dudleya blochmaniae</i> subsp. <i>brevifolia</i> (Short-Leaf Dudleya)	First	Carmel Mountain	2-Jun	KG, MJR, BM, LH	Photo, Habitat Assessment, Quantitative @ Pop 3
		Crest Canyon	2-Jun	KG, MJR, LH	Photo, Habitat Assessment
		Skeleton Canyon	2-Jun	KG, MJR, LH	Photo, Habitat Assessment

City of San Diego MSCP Rare Plant Monitoring: 2006 Field Dates and Staff

Species	Risk Group (SDSU 3/06)	Site	Survey Date	Field Staff	Methodology
<i>Lotus nuttallianus</i> (Nuttall's lotus)	First	Hospitality Pt	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		No Men's Land	1-Jun	MJR, JG	Photo, Habitat Assessment
		South Shores	1-Jun	MJR, JG	Photo, Habitat Assessment
		Dunes Triangle	1-Jun	MJR, JG	Photo, Habitat Assessment
<i>Monardella viminea</i> (Willow Monardella)	Second	Lopez Canyon	14-Jun	MJR, LMN, MKI	Quantitative, Photo, Habitat Assessment
		Marron Valley	30-Jun	MJR, BM, PS	Quantitative
		Sycamore Canyon^	20-Jun	KG, LMN	Quantitative, Photo, Habitat Assessment
		Otay Lakes^	12-Jul	MJR, PS, LMN	Habitat Assessment, Photo
<i>Deinandra conjugens</i> (Otay Tarplant)	First	Proctor Valley^	16-Jun	MJR, PS	Photo, Habitat Assessment
<i>Cordylanthus orcuttianus</i> (Orcutt's Bird's Beak)	First	Otay River Valley	7-Jul	MJR, JG	Quantitative, Photo, Habitat Assessment

^ Survey site is located in Oct 2003 fire-affected area

City Staff, Planning Department

KG = Keith Greer, Planning Deputy Director
MJR = Melanie Johnson Rocks, MSCP Biologist
BM = Betsy Miller, MSCP Planner
LMN = Lisa Markovchick-Nicholls, MSCP Intern
MKI = Michael Klein, Information Systems Analyst II

City Staff, Park and Recreation Department

J. Garcia = Joshua Garcia, Open Space Natural Resources Manager

City Staff, Water Department

PS = Paul Schlitt, Water Operations Biologist

Volunteer (Non-Staff) Monitors:

MK = Mike Kelly, Conservation Resources Network
JF = Dr. Janet Franklin, MSCP Monitoring Plan Revision Grant Lead, SDSU
LH = Lauren Hierl, MSCP Monitoring Plan Revision Grant Staff, SDSU