## *Brodiaea filifolia* Thread-leaved Brodiaea



© City of San Diego, 2014

MSP - Rare Plant Oc	currenc	e Me	onitori					Page 1	
Scientific Name: Brodiaea filifolia				MSI	<sup>&gt;</sup> Occurrenc	∋ <i>ID;</i> BRFI	_6BMRA002	1	
Common Name: Thread-leaved broc	liaea		. •		CNDDB E	E0#: EO8	39 Transloc	ated?	no
Preserve: Black Mountain Open Space							Management	t Unit:	6
Land Owner: City of San Diego					Land Mana	ger: City	of San Diego Pl	RD	•
Occurrence Name: Black Mountain							Sample Po	oint #: 📝	•
Surveyors & Affiliation: Betry Miller,	Kim	R	oela.	nd k	lender	Roger	5 - City -	1 Jan 0	Diego
Date: 5/8/14		,			Time S			inish: 2 : ;	30 pm
I. OCCÚRÉENCE STATUS - Assess # plants in t extent . See page 4 for definitions of categories descri any notes on page 3.	ibing phè	nolog	y & evid	ence of her	bivory, diseas	e & stunted	dius circle) & in the growth within the s	ampling area	a. Record
# Plants/Sampling Area: 3	V	Exac	t 🗌	Estimate (	extrapolate p	artial coun	t) Uncertainty?_	low	
# Plants/Current Mapped Extent: \$0		ΓF	xact Co	unt 🗌	Estimate (1)	00s 10.00	)0s) Uncertainty?	low	
Area of Current Mapped Extent: 252		L] =			units	· · · · · · · · · · · · · · · · · · ·	t (GPS mapping)		stimate
Phenology in Current Mapped Extent (Categories 1-5):	Vegetat	ve:							
Evidence in Current Mapped Extent (Categories 1-5) o						-			
	Yes	_	No					·	
Species Found in Maximum Extent?	No —			If not wh	y (if reason kno		ted)2		
Collection (if not collected previously)?	Yes				_	i		· · · ·	··
If yes:		i	I			ted Previo	usiy		
Collector			Colle	ction Numb	per	Mu	seum/Herbarium		
II. SAMPLING AREA LOCATION & SITE PHOT	·	TORI	NG				····	···	
GPS Accuracy: +/ <1 v meta		fee		Datum:					
Coordinates; E: <u>0296151.048</u> N: <u>193</u>	53 50	<u></u>	30-1	· · ·	State	Plane (ft)	UTM (m) [	 Lat-Long	(dec deg)
Camera type: Pentrax Optio	N90	>					-	· · · · · •	
Location 1 (see coordinates above)	5, <i>E</i> , (	SZE	· · ·	<u>3,4 4</u>	4 _5	up_		5:05/1	nscr
	uon (iacinį	3)		Height	Camera	Angle	Photo #	File loo	ation
Location 2 [Coordinates] Direct	tion (facing	g)		Height	Camera	Angle	Photo #	File loc	ation
III. ASSOCIATED SPECIES IN SAMPLING ARE	A If need	d more	room, re				oge 3.		
Invasive? Species/Substrate	% Cover	Coll?	Coll. #	Invasive?	Species/	Substrate		%	Coll? Coll. #
Brodiaca filifalia	1								
Bloomeria crocea									
Dichelostemma capitatur						·····			
Malosma Jaurina	2						·		
V Cynara cardunentus	1								
V Brassice nigra	1				· ·				
V Focnienhum vulgare	1								<b> </b>
V Lacture Serviolle	1								
V Srachy podium distachyon V Avena Sp.	15 8								
V Centaure melitensis	0								
Luginas connecinus	1 .			Bare Grou	ind:			0	
Calystegia macrostegia	3			Litter:				0	
Stiph pulchra	/			Rock:				3	
Total % Cover: % Herb Cover:	28	% Sh	rub Cov	er: 2	% Tre	e Cover:	Ó		

MSP - Rare Plant Habitat and Threats Assessment Form Page 2
Scientific Name: Brodiaea filifolia MSP Occurrence ID: BRFI_6BMRA002
Preserve: Black Mountain Open Space Occurrence Name: Black Mountain
Date:         5/8/14         Time Start:         1:35         Time Finish:         2:30
Surveyors & Affiliation/Agency: BM, KR, WR
IV. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10-m radius circle). Vegetation alliance/association can be assigned using San Diego vegetation key (AECOM 2012) in the office or field, using "Associated Species" data from page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.
SANDAG 2012 Vegetation Alliance/Association: Branus (cliandms, hordeaceus) - Brachy podium
<u>distuchyon Semi-Natural stands; Brachypodium distachyon Semi-Natural</u> Cover Classes: 1 (0%); 2 (>0-<10%); 3 (10 to <25%); 4 (25 to <50%); 5 (>50%) Stand Type.
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <50%); 5 (>50%) Stand Type.
Cryptogamic Crust Cover: Thatch Cover: Thatch Depth: Ave cm Max: cm
Dead Standing Biomass? 🗹 Yes 🗌 No If Yes, Species/Cover Class: Brassico rigio. / 2 Ave. Height? <u>25</u> cm
Mammal Species Activity Categories (1-4): Feral Pig Activity: Ground Squirrel Activity: Gopher Activity:
Sampling Area Representative of Maximum Extent? If No. If No, Note Differences on Page 3.
V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years of monitoring) plus 10-m surrounding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.
Surrounding Land Use at Site (>Maximum Extent): <u>open space</u> , high school, residential
Argentine Ant Abundance at Bait Station (1-4): n/a Time Start: Temp. Start: Time Finish: Temp. Finish: Temp. Finish:
Ant Sample Collected?: Yes Mo Ant Sample #: Ant Station Photo #:
Disturbances (rank each as 1-6):
Non-Native Forbs Feral Pig Activity Altered Hydrology
Non-Native Grasses <u>5</u> Trampling <u>/</u> Erosion <u>/</u>
Non-Native Woody Plants Vandalism Urban Runoff
Competitive Native Plants Current Grazing Slope Movement
Dumping/Trash Historic Grazing Soil Compaction
Encampments Historic Agriculture
Fuel Modification Zone/Fire Break
Road Construction/Maintenance
Vegetation Clearing
ORV/ If Observed, List Type(s) of ORV/Bike Activity:
Evidence of Recent Fire If Sign of Recent Fire: Year Burned? Unknown Burn Year:
Trails If Trails are Present, are They Authorized?
Type of Trail Use?
Hiking Biking Equestrian Dog Motorcycle ORV Service Vehicles
Overall Site Quality (see page 5): Very Good-Excellent Fair to Good Very Poor

MSP - Management Needs and Notes Occurrence ID: BRFI\_6BMRA002 Species: Page 3 Species: BRFZ Date: 5/8/14 **VI. MANAGEMENT RECOMMENDATIONS** dethatch + treat weeds with herbicide over St acre area **VII. MANAGEMENT ACTIONS IN LAST YEAR** - Fence installed year between population + trail lact mechanical + herbicide methods treated with invasive bл over 4 handweeded within sampling invasire grasses area **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

#### Brodiaea filifolia (Threadleaf Brodiaea) Black Mountain Ranch



Panorama from Northeastern end of population, facing Northeast, East, Southeast. Panorama location is 6296151.648 1933507.307 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



### *Brodiaea orcuttii* Orcutt's Brodiaea



© Scott McMillan, 2001

MSP - Rare Plant Occ	urrence Monitor	ing Form			Page 1	
Scientific Name: Brodiaea orcuttii		MSP C	ccurrence ID: 🧗	ROR_UCAL	AO	15
Common Name: Orcutt's brodiaea	· · ·	-	CNDDB EO#: EC	50 Translocate	d? n	0
Preserve: Carroll Canyon Vernal Pool Pre	eserve			Management Ui	nit: Le	
Land Owner: City of San Diego		L	and Manager: City	of San Diego PRD	•	
Occurrence Name: Carroll Canyon		· · ·		Sample Point		
Surveyors & Affiliation: Betsy Miller, K	im Roeland	, Sara	meszanos.	City of Sa.	n Di	ed D
Date: 4/21/14			Time Start: /p:	26 Time Finis		
I. OCCURRENCE STATUS – Assess # plants in be extent. See page 4 for definitions of categories describ any notes on page 3.						
# Plants/Sampling Area:	🖌 Exact 🗌	Estimate (ext	rapolate partial cou	nt) Uncertainty?	la	
# Plants/Current Mapped Extent:5 Area of Current Mapped Extent:5 Phenology in Current Mapped Extent (Categories 1-5): Evidence in Current Mapped Extent (Categories 1-5) of Is Sampling Area within Current Mapped Extent?	7. 6 Vegetative: 5 Herbivory: 1	m <sup>2</sup> Flowering:	units LExa	act (GPS mapping) g:Dead	Ī	Estimate
Species Found in Maximum Extent? Xres	No Very d	ry con	ditions			
		If not, why (i	reason known or suspe	ected)?		- <u></u>
Collection (if not collected previously)?	Yes	<b>M</b> No		ously		
If yes:Collector		ction Number		() tt		
II. SAMPLING AREA LOCATION & SITE PHOTO		cuon number	(V	useum/Herbarium		
GPS Accuracy: +/ <1 🗸 mete		Datum:				,
	1907633.765		1			
Camera type: Pentax W			State Plane (ft)		Lat-Long	(dec deg)
	, SE, S, SW	1.1m	40° down	100 1201	2012	/MSCP
· · · · · · · · · · · · · · · · · · ·	on (facing)	Height	Camera Angle		File lo	
				<u> </u>		
	on (facing)	Height	Camera Angle	Photo #	File lo	cation
III. ASSOCIATED SPECIES IN SAMPLING ARE Invasive? Species/Substrate	A If need more room, ro % Cover   Coll?   Coll. #	ecord additional		page 3.	1 0/	
Brodiala onutiti		IIIvasive !	Species/Substrate	55.000 (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970) (1970)	%	Coll? Coll. #
Adenostoma fosciculata	5 5					· ·
Cneoridium dumosa	<u> </u>	· ·	······			
Deinandra fasciculata						1
Acmispon glaber	1					1
Selaginella cinemacens-	dead -> sec	crust				
V Endium sp	(					
Navawetta hamata	<1			······		
V Centaurea melitensis	1					
		Bare Ground	5			
		Litter: 2				
		Ľ	- small	$\sim$		
Total % Cover: % Herb Cover:	% Shrub Cov	ver:	% Tree Cover://	<u> </u>		155

this.

MSP - Rare Plant Habit	at and Threats Assessment Fo		Page 2
Scientific Name: Brodiaea orcuttii	MSP Occurren	nce ID: BROR_6CACA0	15
Preserve: Carroll Canyon Vernal Pool Preserve	Occurrence N	lame: Carroll Canyo	n
Date: 4/21/14	Time Start:	10:26	Time Finish: 10:39
Surveyors & Affiliation/Agency: BM, KR. SM	Λ		
IV. HABITAT ASSESSMENT IN SAMPLING AREA circle). Vegetation alliance/association can be assigned us data from page 1. See page 4 for definitions of habitat asso	sing San Diego vegetation key (AECON	M 2012) in the office or field, us	
SANDAG 2012 Vegetation Alliance/Association: Dein Deinandra Fascicvlata	The second se	a Provisional	Alliance/
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <5	0%); 5 (>50%)		
Cryptogamic Crust Cover: Thatch Cover:	3 Thatch Depth: Ave1	cm Max: <u>3</u> c	m
Dead Standing Biomass? 🛛 Yes 🗌 No If Ye	s, Species/Cover Class: Delnar	rdra/2 A	we. Height? 6_cm
Mammal Species Activity Categories (1-4): Feral Pig Activit	y: Ground Squirrel Acti	ivity: Gopher A	Activity:
Sampling Area Representative of Maximum Extent?	Yes No	If No, Note Differences on P	age 3.
V. THREATS ASSESSMENT IN MAXIMUM EXTENT monitoring) plus 10-m surrounding buffer. See page 4 f notes on page 3.			
Surrounding Land Use at Site (>Maximum Extent): 0pen	nspace. Residentia	rl	
Argentine Ant Abundance at Bait Station (1-4): n/a	Time Start: Temp. Start:	Time Finish:	_ Temp. Finish:
Ant Sample Collected?: Yes Yes Ant San	nple #: Ant Stat	tion Photo #:	
Disturbances (rank each as 1-6):			
Non-Native Forbs Feral Pig	Activity 1	Altered Hydrology	
Non-Native Grasses Tramplir		Erosion	
Non-Native Woody Plants Vandalis		Urban Runoff	
Competitive Native Plants Current	Grazing	Slope Movement	
Dumping/Trash _ 3 _ Historic	Grazing	Soil Compaction	
Encampments Historic	Agriculture		
Fuel Modification Zone/Fire Break <u>1</u> Road Construction/Maintenance <u>1</u>			
Vegetation Clearing			
ORV/Mountain Bike Activity If Observed	d, List Type(s) of ORV/Bike Activity:		
	Recent Fire: Year Burned?	Unknown Burn Year:	
	Present, are They Authorized? Yes /		
Type of Trail Use?			
Hiking Biking Equestrian	Dog Motorcycle	ORV Service V	ehicles
Overall Site Quality (see page 5):			
Overall Site Quality (see page 5): Very Good-Exc	ellent Fair to Good	Poor	Very Poor

**MSP** - Management Needs and Notes Occurrence ID: BROR\_6CACA015 Species: BROR **VI. MANAGEMENT RECOMMENDATIONS** clean up proken glass VII. MANAGEMENT ACTIONS IN LAST YEAR VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: adjacent to pools, restoration underway grading + planting for spusp mitigation project

#### Brodiaea orcuttii (Orcutt's Brodiaea) Carroll Canyon



Panorama from Southern edge of population, facing East, Southeast, South, Southwest. Panorama location is 6282439.860 1907633.765 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occurrence Monit	oring Form Page 1
Scientific Name: Brodiaca orcu Hia	MSP Occurrence ID: BROR_6LORI018
Common Name: OrcuHis Endiaea	CNDDB EO#: EO63 Translocated? 10
Preserve: Los Peñasquitos Canyo	on Preserve Management Unit: (
Land Owner: City of San Diego	Land Manager: City of San Diego Env. Services
Occurrence Name: Lopez Ridge	Sample Point #: /
Surveyors & Affiliation: Boty Miller, Kim Roelan	
Date: 4/21/14	Time Start: 12:40 mm Time Finish: 2:00 mm
I. OCCURRENCE STATUS - Assess # plants in both the species-species	cific sampling area (typically 10-m radius circle) & in the current manned
<ul> <li>extent. See page 4 for definitions of categories describing phenology &amp; e any notes on page 3.</li> </ul>	vidence of herbivory, disease & stunted growth within the sampling area. Record
· · · · · · · · · · · · · · · · · · ·	
# Plants/Sampling Area: Z3 YExact	Estimate (extrapolate partial count) Uncertainty?
# Plants/Current Mapped Extent:23 Exact	Count Estimate (1,000s, 10,000s) Uncertainty?
Area of Current Mapped Extent: 25	
Phenology in Current Mapped Extent (Categories 1-5): Vegetative:	
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory:	/ Disease:/ Stunted Growth:/
Is Sampling Area within Current Mapped Extent? 🗹 Yes 🗌 No	<sup>*</sup> .
Species Found in Maximum Extent?	
	If not, why (if reason known or suspected)?
Collection (if not collected previously)?	No Collected Previously
If yes:	
Collector Co	llection Number Museum/Herbarium
GPS Accuracy: +/<1 reters feet	Datum:
Coordinates; E:6278246.403 N:1915522.734	
Camera type:	$\sim$ State Plane (ft) $\Box$ UTM (m) $\Box$ Lat-Long (dec deg)
Location 1 (see coordinates above) SW, W, NW	
Direction (facing)	1.1m         10° down         1.227-/232         S/OS/MSCP           Height         Camera Angle         Photo #         File location
• · · · · · · · · · · · · · · · · · · ·	
Location 2 [Coordinates] Direction (facing)	Height Camera Angle Photo # File location
III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover, Coll? Coll #	
Invasive? Species/Substrate % Cover Coll? Coll. # Bassync abramaii 5	
Brainea orcu tria	Ribrayphas Scaellus 1
Bloomeria chenelandii 1	<u>Ksibiaiphus brevissimus 1</u> <u>Lodium sp. 5</u>
Lasthenia californica 1	Lupians bicolor 1
Allium hormatochiton 3	V Avena sp. 2
Adenastoma fasciculatum 7	Stipa pulchra 1
Opuntia littoralis 3	V Tromus madritensis osp. C. 1
Selaginella ciremocens 3 Acmispon glaber 1	Bomus horderceaus
Preudognaplatium bioletti 1	Hardeum murinum 4 Planfago erecta <1
Malcoma Jaurina 2	V Sonchus oteracuus 1
Deingrafra fasciculatum 3	
Chlorogalum parvitolium 1	Bare Ground: 20
V Hypochaeris glabra 3	Litter: 7
Total % Cover: <u>35</u> % Herb Cover: <u>28</u> % Shrub Co	
	ver: <u>7</u> % Tree Cover: <u>0</u>

MSP - I	Rare Plant Habitat and Threats A	Assessment Form	Page 2
Scientific Name: Pogog	yne abramsii	MSP Occurrence ID: BROR_6I	_ORI018
Preserve: Los Pendogu	itos Canyon Preserve	Occurrence Name: Lope	z Ridge
Date: 4/21/14	0	Time Start: 12:40	Time Finish: 2:00
Surveyors & Affiliation/Agency:	SM. B.YM		
circle). Vegetation alliance/association	SAMPLING AREA - Assess habitat cov n can be assigned using San Diego vege nitions of habitat assessment categories.	tation key (AECOM 2012) in the office or	
fasciculation - La Cover Classes; 1 (0%); 2 (>0 - <10%); 3 (1	sociation: <u>Adenostoma</u> <u>otos Scoparios</u> A 0 to <25%); 4 (25 to <50%); 5 (>50%) Thatch Cover: <u>3</u> Thatch s No If Yes, Species/Cover CI	Douthi Aug 5 an Mari 8	cm
lammal Species Activity Categories (	1-4): Feral Pig Activity: G	round Squirrel Activity: _/ G	Sopher Activity:
Sampling Area Representative of Maxi	mum Extent?	No If No. Note Differenc	es on Page 3.
	MAXIMUM EXTENT - Assess threats w buffer. See page 4 for definitions of threat num Extent):		verall Site Quality Scale. Record
Argentine Ant Abundance at Bait Station	on (1-4): Time Start: No Ant Sample #:	Temp. Start: Time Finish: Ant Station Photo #:	Temp. Finish:
Disturbances (rank each as 1-6):			
Non-Native Forbs     3       Non-Native Grasses     3       Non-Native Woody Plants     /       Competitive Native Plants     /       Dumping/Trash     /       Encampments     /	Feral Pig Activity Trampling Vandalism Current Grazing Historic Grazing Historic Agriculture	Altered Hydrology Erosion Urban Runoff Slope Movement Soil Compaction	
Fuel Modification Zone/Fire Break	_/ If Trails are Present, are They A	ned? Unknown Burn Ye Authorized? Yes / No / Unknown	ervice Vehicles
Overall Site Quality (see page 5):	Very Good-Excellent	Fair to Good Poor	Very Poor

MSP - Management Needs and NotesOccurrence ID:BROR_6LORI018Species:	Brodiaea orcuttii	Pag Date:04/	ge 3 /21/14
VI. MANAGEMENT RECOMMENDATIONS			
continue to maintain fences/sign	9		·····
Continue trash nick-up			
		·····	-
			-
VII. MANAGEMENT ACTIONS IN LAST YEAR			
maintained fences / signs			_
trash removal			-
		·	
		······································	•
VIII. CNDDB SPECIES DETECTED & NOTES			
List any plant or animal species to add to the CNDDB:		•	
	· · · · · · · · · · · · · · · · · · ·		
	18		
·	an Marana an		
		· · · · ·	
		1	
	· · · · · · · · · · · · · · · · · · ·		
·			
			-

#### Brodiaea orcuttii (Orcutt's Brodiaea) Lopez Ridge



Panorama from Eastern edge of population, facing Southwest, West, Northwest. Panorama location is 6278246.405 1915522.734 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Oc	curren	ce M	onitori	ng Forr	n			Page 1		
Scientific Name: Brodiaea orcuttii				MS	SP Occurrenc	e ID: BR	OR_2NOB	D002		
Common Name: Orcutt's brodiaea				-	CNDDB I	<i>∃0#:</i> EO:	36 Transloo	cated? no	)	
Preserve: Rose Canyon Open Space							Managemen	nt Unit: 2		
Land Owner: City of San Diego					Land Mana	ager: City	of San Diego F	RD		
Occurrence Name: Nobel Drive							Sample P	oint #:		
Surveyors & Affiliation: Kim Roeland Be	HV A	1.1	u.c	ana /	Neszan	s - Cit	y of Sand	Diego		
Date: 4/21/14	1		_				s en Time I		10 pr	 ז
<ol> <li>OCCÚRREÍNCE STATUS - Assess # plants in l extent. See page 4 for definitions of categories descr any notes on page 3.</li> </ol>	both the s ibing phe	pecie nolog	s-specifi y & evid	c <b>sampli</b> ence of he	n <b>g area</b> (typic arbivory, diseas	ally 10-m rac se & stunted	lius circle) & in the growth within the s	current ma sampling area	<b>pped</b> a. Reco	rd
# Plants/Sampling Area:	V	Exac	t 🗌	Estimate	(extrapolate p	partial coun	t) Uncertainty?_	low		
# Plants/Current Mapped Extent:					2			low		
-					units		t (GPS mapping)		stimat	P
Phenology in Current Mapped Extent (Categories 1-5)										
Evidence in Current Mapped Extent (Categories 1-5) c									·	
	Yes		No							
	1			rista	A		0.011,1960			···
Species Found in Maximum Extent?	]No	700	<u>n ro</u>		hy (if reason kno	own or suspect	ted)?			
Collection (if not collected previously)?	🗌 Ye	-		No		cted Previo				
If yes:		·		• 110			цыу			
Collector				ction Num	ıber	Mu	seum/Herbarium			
II. SAMPLING AREA LOCATION & SITE PHOT	OMONI	TOR	NG							
GPS Accuracy: +/ <u>&lt;1</u> met	ers	fe	et [	Datum:	<b>-</b>					
Coordinates; E:6271105.37 N:	189				🗹 State	Plane (ft)	UTM (m)	Lat-Long	(dec d	leg)
Camera type: Ken	fax ,	k/9	0	,						
	IW, W, S			1.1m	20° d		1239-124	<u>'4 siosi</u>	MSCP	
Direc	tion (facin	g)		Height	Camera	a Angle	Photo #	File loc	ation	
Location 2 [Coordinates] Direc	tion (facin	a)		Height	Camera	Angle	 Photo #	File loc	ation	
III. ASSOCIATED SPECIES IN SAMPLING ARE			room, re							
Invasive? Species/Substrate	<sup>:</sup> % Cover		Coll. #	Invasive?	1	/Substrate	· .	%	Coll?	Coll. #
Navametia fossalis	×/	ļ								
Croten setigerus	1	ļ								
Deinandra fasciculata	7									
Halas hum angust ifo hun	<u>n -/</u>									
V promous norwallens	1	<u> </u>								
Keloracehus previssimu	10	1								
Kelora phus brezissimu V Hypo chaeries glabra	3						·			
	3					*****				
V Hypo chaesies glabra V Cofula correntegeifellia V Erodium go.										
<ul> <li>Hypochaeries glabra</li> <li>Cofula correnspissolia</li> <li>Erodium go.</li> <li>Anagallus argensis</li> </ul>	3					****				
<ul> <li>Hypo claesis glabra</li> <li>Cotula correspondítion</li> <li>Erodium go.</li> <li>V Aragallus aryensis</li> <li>Olarcus dabiup</li> </ul>	3									
<ul> <li>Hypo chaesies glabra</li> <li>V Cofula corenopeifelia</li> <li>Zipolium op.</li> <li>V Anagallus argensis</li> <li>Olincus Jubius</li> <li>Juncus bufonius</li> </ul>	3			Bare Gro	und:	20		· · · · · · · · · · · · · · · · · · ·		
V Hypochaeries glabra V Cofula correnspission V Erodium go. V Anagallus argensis Vacus dabius Juncus dabius Bulocarphus tenellus	3 1 5 1 1 1 1			Bare Grc		30				
<ul> <li>Hypo chaesies glabra</li> <li>V Cofula corenopeifelia</li> <li>Zipolium op.</li> <li>V Anagallus argensis</li> <li>Olincus Jubius</li> <li>Juncus bufonius</li> </ul>	3 1 5 1 1 1 1				und:					

MSP - Rare	Plant Habitat and Threats Asses	sment Form	Page 2
Scientific Name: Brodiaea ord	uttii MS	SP Occurrence ID: BROR_	2NOBD 002
Preserve: Rose Canyon Open Space	Oc	currence Name: Not	oel Drive
Date: 4/21/14	Tir	ne Start: 2:30	Time Finish: 3:10
Surveyors & Affiliation/Agency: KR,	sym, Sm		
IV. HABITAT ASSESSMENT IN SAMP circle). Vegetation alliance/association can data from page 1. See page 4 for definition	be assigned using San Diego vegetation k	ey (AECOM 2012) in the office of	
SANDAG 2012 Vegetation Alliance/Associa	ion: Erogenoun Fasciculation A	lliance/Giogonum	Fasciculatum Association
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <	25%); 4 (25 to <50%); 5 (>50%)		
Cryptogamic Crust Cover: Th	atch Cover: Thatch Depth	Ave cm Max:	<u>2_cm</u>
Dead Standing Biomass? Yes	No If Yes, Species/Cover Class:	Deinan dra fascica lat	2 Ave. Height? 10 cm
Mammal Species Activity Categories (1-4): F			
Sampling Area Representative of Maximum			the second s
Surrounding Land Use at Site (>Maximum E	- <del></del>	<	Temp. Finish:
Ant Sample Collected?: Yes 🗹		Ant Station Photo #:	
Disturbances (rank each as 6	-		
Non-Native Forbs	Feral Pig Activity	Altered Hydrolog	у _/
Non-Native Grasses 3	Trampling	Erosion	
Non-Native Woody Plants	Vandalism	Urban Runoff	<u> </u>
Competitive Native Plants	Current Grazing	Slope Movemen	
Dumping/Trash	Historic Grazing <u>unk</u> Historic Agriculture	Soil Compaction	
Fuel Modification Zone/Fire Break	4		1. A
Road Construction/Maintenance	- /	00	the time mint
Vegetation Clearing 5	non-native species	s removal tor re	1.1
ORV/Mountain Bike Activity	If Observed, List Type(s) of ORV/Bike	Activity: legal mta	bike use
Evidence of Recent Fire	If Sign of Recent Fire: Year Burned?	Unknown Burn	Year:
Trails	If Trails are Present, are They Authoriz	red (res) / No / Unknown	
Type of Trail Use?			2.437.2
	Equestrian 🛛 Dog 🗌 Mo	torcycle ORV	Service Vehicles
overall Site Quality (see page 5):	/ery Good-Excellent	r to Good Poor	Very Poor

MSP - Management Needs and Notes Occurrence ID: \_\_\_\_\_BROR\_2NOBD002 \_\_\_\_\_Species: \_\_\_\_\_ Page 3 Date: <u>4/24</u> BROR H **VI. MANAGEMENT RECOMMENDATIONS** 1.4 Continue ha enhancement **VII. MANAGEMENT ACTIONS IN LAST YEAR** saument eo dina A SAN 2009 2. qn. 15 **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

#### Brodiaea orcuttii (Orcutt's Brodiaea) Nobel Drive



Panorama from Northern end of population, facing Southwest, South, Southeast. Panorama location is 6271105.47 1896367.536 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



Area 2014: 0 sq. m.

Pop. Area 2003 - 2014 Max Area: 22.28 sq. m. Min Area: 0 sq. m.



Source: San GIS & City of San Diego Park & Rec Created by: Wendy Rogers, 2014



very reasonable effort has been made to assure the accuracy of is map. However, neither the SanGIS participants nor San Diego lata Processing Corporation assume any liability arising from s use.

THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIN EITHER EXPRESS OR IMPLED, INCLUDING, BUT NOT LIMIT TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AN FITNESS FOR A PARTICULAR PURPOSE.

FITNESS FOR A PARTICULAR PURPOSE. PROPRIETARY INFORMATION: The use of this information is pursuant to sublicense agreement only. Any resale or relicensing

This map contains information which has been reproduced permission granted by Thomas Bros. Maps.



MSP - Rare Plant Oc	currence Monitorin	g Form	Pa	age 1
Scientific Name: Brodiaea orcuttii		MSP Occurrence ID: BI2	OR_YUSIU	014
Common Name: Orcutt's brodiaea	- 	CNDDB EO#: EO4	19 Translocated	ho
Preserve: United States Inter	national University		Management Unit	: 4
Land Owner: City of San Diego		Land Manager: City	of San Diego PRD	
Occurrence Name: USIU/Scripps Mirar	nar Ranch		Sample Point #	: 1
Surveyors & Affiliation: Betsy Miller,	Kim Roela	nd Sara Meszanos		
Date: 4/21/14 and 5/2/14		Time Start: 9:0	5 Time Finish	•
I. OCCURRENCE STATUS - Assess # plants in a extent. See page 4 for definitions of categories descr any notes on page 3.	ooth the species-specific ibing phenology & evider	sampling area (typically 10-m rac ce of herbivory, disease & stunted	lius circle) & in the <b>curr</b> growth within the sampli	ent mapped ng area. Record
# Plants/Sampling Area: <u>See below: ~20</u>	Exact V Es	timate (extrapolate partial count	) Uncertainty? <u>/o</u>	N.
# Plants/Current Mapped Extent:				
Area of Current Mapped Extent: 30		-	t (GPS mapping)	Estimate
Phenology in Current Mapped Extent (Categories 1-5)	•			
Evidence in Current Mapped Extent (Categories 1-5) c	,			
	-	104+ 20 w/in 10-m a		ut continuous pop
N	No			i [
		If not, why (if reason known or suspec	ted)?	
Collection (if not collected previously)?	🗌 Yes 🛛 🔀	No Collected Previou	Isly	
If yes:				
Collector		on Number Mu	seum/Herbarium	
GPS Accuracy: +/<1 v v met		tum:	-	
Coordinates; E: <u>6302393.501</u> N:				-
			UTM (m) La	t-Long (dec deg)
	SW, S, SE, E	1.1m 10° down	1198-1198	CIOC/MCCD
· · · · · · · · · · · · · · · · · · ·		<u>1.1m</u> <u>10° down</u> leight Camera Angle	Photo #	S/OS/MSCP File location
<u> </u>				
		leight Camera Angle	Photo #	File location
III. ASSOCIATED SPECIES IN SAMPLING ARE	And a second		ge 3.	
Invasive? Species/Substrate	% Cover Coll? Coll. # 1	nvasive? Species/Substrate	New Market and a second se	% Coll? Coll. #
Bridiaea orcuttii Malosma laurina	5	V Erodium sp		5
		Juncus dubi		2
Eliogonum fasciculatum Anemisia californica	3	V. Bromus hore	us leavens - de	
V Alacia sp	3	Bromus mad	nitensi (	1
Armispon glaber		V Avena sp.		1
Bacchan's pilulan's	2	& Bromus dian	drus	
Rhamnus orocea	5	Salvia mell		1
Minulus auvantiacus	2	enus integr		1
Hetenmeles abutitolia				
Dichelosemma rapitatum				
CalochoAus splendens				
Sidalcea sparsitolia Sisyrinchium bellum		are Ground: 7		
Viaa villesa		itter: I		
	Z	lock:		
Total % Cover: % Herb Cover:	> % Shrub Cover:	5 % Tree Cover:		

Scientific Name:	MSP - Rare Plant Habitat and Threats As Brodiaea orcuttii	the second se	Page 2 ROR_4USIU014
	0 United States International University	Occurrence Name:	USIU/Scripps Miramar Ranch
Preserve: Date: 4/21/14		Time Start: 9:05	Time Finish: 9:55
	Agency: KR, BM, SM	Time Start.	Time Timan. 0.00
IV. HABITAT ASSE circle). Vegetation allia	SSMENT IN SAMPLING AREA - Assess habitat cova ance/association can be assigned using San Diego vegeta page 4 for definitions of habitat assessment categories. R	ation key (AECOM 2012) in th	
And Annual Contract of the second sec	tion Alliance/Association: <u>Malosma launr</u> Parivs Assuciation	na Alliance/M	Malusma launna -
Cover Classes: 1 (0%); 2	(>0 - <10%); 3 (10 to <25%); 4 (25 to <50%); 5 (>50%)		
Cryptogamic Crust Cov	er: Thatch Cover:3 Thatch I	Depth: Ave. 3 cm N	lax: <u>5</u> cm
Dead Standing Biomass	s? Yes No If Yes, Species/Cover Cla	ss: Bromus sp./2	Ave. Height? 10 cm
Mammal Species Activi	ty Categories (1-4): Feral Pig Activity: Gro	ound Squirrel Activity:	Gopher Activity: _/
Sampling Area Represe	entative of Maximum Extent?	No If No, Note	Differences on Page 3.
	ce at Bait Station (1-4): Time Start: Yes X No Ant Sample #:	Ant Station Photo #.	Finish: Temp. Finish:
Non-Native Woody Pla	ants Vandalism[	Urban R	Runoff
Competitive Native Pla		74777	lovement
Dumping/Trash	Historic Grazing	Soil Con	npaction
Encampments	Historic Agriculture		
Fuel Modification Zone Road Construction/Ma Vegetation Clearing ORV/Mountain Bike A	tintenance $\underbrace{I}_{l}$ ctivity $\underbrace{I}_{l}$ If Observed, List Type(s) of ORV re $\underbrace{I\varrho}_{l}$ If Sign of Recent Fire: Year Burn		vn Burn Year:
Evidence of Recent Fi Trails Type of Trail Use?	Biking Equestrian Dog	Motorcycle ORV	' Service Vehicles

MSP - Management Needs and Notes Occurrence ID: BROR\_4USIU014 Species: Page 3 BROR Date: 4/21/14 Species: **VI. MANAGEMENT RECOMMENDATIONS** treat non-native grasses VII. MANAGEMENT ACTIONS IN LAST YEAR Ø VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: return when & flowers are open to verify KR returned and venticed on SI 2 BM and convect species. We also mapped a few more areas whin the marshu baiss of the avea a+ the clope near photo point. Population countand drea Ar site including total thic the 5/2 USI+

#### Brodiaea orcuttii (Orcutt's Brodiaea) USIU/Scripps Miramar Ranch

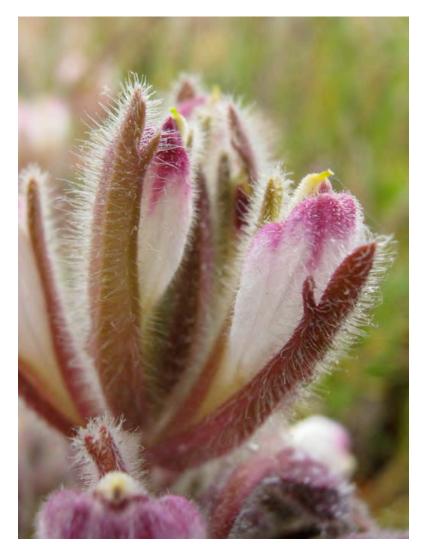


Panorama from Southern end of population, facing Southwest, South, Southeast, East. Panorama location is 6302393.50 1905898.59 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



This page is intentionally left blank.

## Chloropyron maritimum ssp. maritimum Salt-marsh Bird's Beak



© CNPS, San Luis Obispo Chapter

	ring Form	Page 1
Scientific Name: Chloropyron maritimum	MSP Occurrence ID: COMA	M3_1DOBE007
Common Name: Salt-marsh bird's beak	CNDDB EO#: none	Translocated? 10
Preserve: Flood Control Channel Southern Wildlife Preser	ve	Management Unit: 1
Land Owner: City of San Diego	Land Manager: City of	San Diego PRD
Occurrence Name: Dog Beach		Sample Point #: /
Surveyors & Affiliation: Betsy Miller, Kim Roelan	d. sava Muszanos-	city of san Diego
Date: 5/16/14	Time Start: 8:35	5
<ol> <li>OCCURRENCE STATUS - Assess # plants in both the species-spect extent. See page 4 for definitions of categories describing phenology &amp; evi any notes on page 3.</li> </ol>		
# Plants/Sampling Area: 1042 X Exact	Estimate (extrapolate partial count)	Uncertainty?_Modern te
# Plants/Current Mapped Extent: 1042 Exact C	Count Estimate (1,000s, 10,000s	(GPS mapping) Estimate
Phenology in Current Mapped Extent (Categories 1-5): Vegetative: 3	Flowering:	Dead: (
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory:		ed Growth: /
Is Sampling Area within Current Mapped Extent? X Yes No	Disease Stunie	
Species Found in Maximum Extent?	If not, why (if reason known or suspected	?(b
Collection (if not collected previously)?	No Collected Previous	
Collector Coll II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING	ection Number Muse	um/Herbarium
	Datum	
GPS Accuracy: +/- $\leq 1$ $\checkmark$ meters $\Box$ feet Coordinates; E: $(0254599.243)$ N: $1856054.397$ Camera type: <u>Pentax Optio</u> $W90$ Location 1 (see coordinates above) <u>NE, N, NW</u> Optio 0.90 Direction (facing)	Datum:State Plane (ft) [	UTM (m) Lat-Long (dec deg)
Coordinates; E:         6254599.243N:         1856054.397           Camera type:         Pentax Optio         W90	State Plane (ft)	1529-1541
Coordinates; E:       6254599.243N:       1856054.397         Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       NE, N, NW         Direction (facing)       Direction (facing)	State Plane (ft)	1529-1541       Photo #       File location
Coordinates; E:       6254599.243N:       1856054.397         Camera type:       Pentax Optio       M90         Location 1 (see coordinates above)       NE, N, NW         @ pi'kkuwud si'gn       Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E:       6254599.243N:       1856054.397         Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       NE.N.NW         Direction 1 (see coordinates above)       NE.N.NW         Direction 1 (see coordinates above)       Direction (facing)         It. Associated Sign       Direction (facing)         III. Associated Species IN SAMPLING AREA If need more room,       Invasive?         Species/Substrate       % Cover Coll? Coll.#	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541       Photo #       File location
Coordinates; E:       6254599.243N:       1856054.397         Camera type:       Pentax Optio       M90         Location 1 (see coordinates above)       NE, N, NW         Direction 1 (see coordinates above)       NE, N, NW         Direction 1 (see coordinates above)       Direction (facing)         Image: Direction 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate         % Cover       Coll?         Chloropyron       Maritimum	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: 1856054.397 Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>NE, N, NW</u> (De pi UKU WILD Sign Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover Coll? Coll.# <u>Chloropyron muritimum</u> 5 Salicomia pauifica 30	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio</u> <u>W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover Coll? Coll.# <u>Chloropypon maritimum 5</u> <u>Salicomia pauifica 30</u> <u>Frankenja Salina 10</u>	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio</u> W9D Location 1 (see coordinates above) <u>NE, N, NW</u> (D) piWWWW sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover Coll? Coll.# Chloropyron maritimum 5 Salitomia paufica 30 Frankenia Salina 10 V Limonium ramesissimum 50	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover Coll? Coll.# Chloropypon maritimum 5 Sali Lomia paufica 30 Frankenja Saliha 10 Limonium rame sissimum 50	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> (Depi 424 weld sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, Invasive? Species/Substrate % Cover Coll? Coll. # <u>Chloropyron maritimum 5</u> Salitomia paufica 30 Frankenia Saliha 10 V Limonium rame sissimum 50 Triglachin Manitima 3	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE. N. NW</u> (Depikkuwud sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron muritimum 5 Salitamia paufica 30 Frankenja Saliha 10 V Limonium ramesissimum 50 Triglachih mantima 3 Suaeda estroa 1	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> (D) pikkle weld sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron maritimum 5 Salitamia paufica 30 Frankenia Saliha 10 V Limonium ramesissimum 50 Triglachin manitima 3 Suaeda estroa 1	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE. N. NW</u> (Depikkuwud sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron muritimum 5 Salitamia paufica 30 Frankenja Saliha 10 V Limonium ramesissimum 50 Triglachih mantima 3 Suaeda estroa 1	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE. N. NW</u> (Depikkuwud sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron muritimum 5 Salitamia paufica 30 Frankenja Saliha 10 V Limonium ramesissimum 50 Triglachih mantima 3 Suaeda estroa 1	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> (D) pikkle weld sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron maritimum 5 Salitamia paufica 30 Frankenia Saliha 10 V Limonium ramesissimum 50 Triglachin manitima 3 Suaeda estroa 1	State Plane (ft)  State Plane (ft)  Camera Angle  Height Camera Angle  record additional data and any notes on page	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> (D) pikkle weld sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron maritimum 5 Salitamia paufica 30 Frankenia Saliha 10 V Limonium ramesissimum 50 Triglachin manitima 3 Suaeda estroa 1	State Plane (ft)           Image: State Plane (ft)<	1529-1541           Photo #         File location           Photo #         File location           3.         =
Coordinates; E: <u>6254599.243</u> N: <u>1856054.397</u> Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>NE, N, NW</u> (D) pikkle weld sign Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA It need more room, Invasive? Species/Substrate % Cover Coll? Coll. # Chloropyron maritimum 5 Salitamia paufica 30 Frankenia Saliha 10 V Limonium ramesissimum 50 Triglachin manitima 3 Suaeda estroa 1	State Plane (ft)           Image: State Plane (ft)         Height       Camera Angle         Height       Camera Angle         record additional data and any notes on page         Invasive?       Species/Substrate	1529-1541           Photo #         File location           Photo #         File location           3.         =

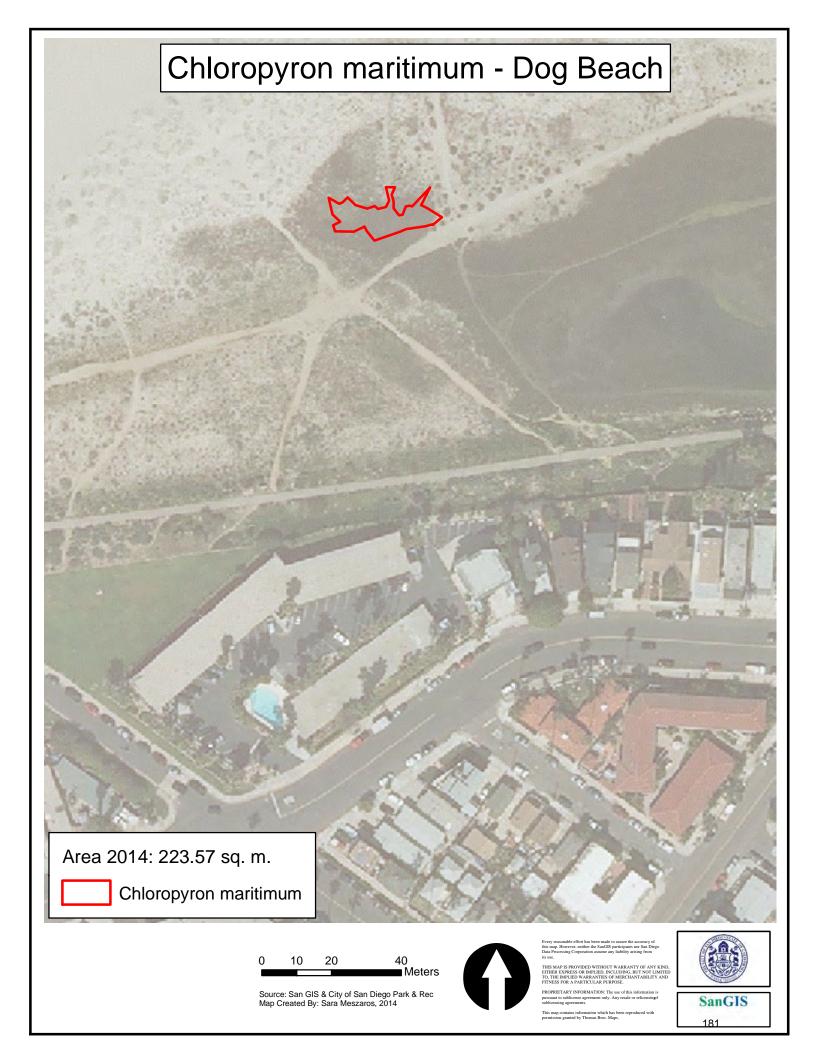
V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years o noncontroning jus 10-m surrounding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.         Surrounding Land Use at Site (>Maximum Extent):       Flood control charmed (charmed); dog beach         Argentine Ant Abundance at Bait Station (1-4):	MSP - Ra	are Plant Habitat and Threat	ts Assessment Form	Page 2
Date:       5 // b // 14       Time Stat:       8:35       Time Finist:       9:08         Surveyors & Affiliation/Agency:       B/M, K/C, S/M - Cr/M, cf       S_D         V. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sample of Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sample of Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sample of Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sample of Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sampling area (typically 10 m radius circle). Vegetation and inance/association:       Sampling area (typically 10 m radius circle). Vegetation and typically 10 m radius circle). Vegetation and typically 10 to <25% (typically 12 to <25%) (typica	Scientific Name: Chloropy	/ron maritimum	MSP Occurrence ID:	COMAM3_1DOBE007
Date:       9/16/14       Intervent       Intervent       Intervent         Surveyors & AffiliationAgency:       B/M. H/E, S/M Crient of S/D       Intervent       Surveyors & AffiliationAgency:       B/M. H/E, S/M Crient of S/D         V:       HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10 m radius circle).       Vegetation alliance/association can be assigned using San Diago vegetation hey (AECOM 2012) in the office or field, using 'Associated Species' data from page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association:       Savcocornin particles. Facultary and the second any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association:       Savcocornin particles. Facultary and the second any notes on page 3.         Cover Classes 1 (0%): 2 (r010%); 3 (10 to <25%); 4 (25 to <50%); 5 p 50%)	Preserve: Flood Control Channel S	Southern Wildlife Preserve	Occurrence Name:	Dog Beach
N. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10-m radius circle), Vegetation allience/essociation can be assigned using Sam Diago vegetation key (AECOM 2012) in the office or field, using "Associated Species" data from page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association: Savco coming particles - Franchania Salina Atsociation: Savco coming particles - Frankania Salina - Atsociation: Savco coming particles - Frankania Salina - Atsociation: Savco coming particles - Maximum Extent?         Cover Classes: 1 (Mk): 2 (PO -<10%): 3 (10 to <25%): 4 (25 to <50%): 5 po0%)	Date: 5/16/14		Time Start: 8:35	Time Finish: 9:08
N. HABITAT ASSESSIMENT IN SAMPLING AREA - Assess habital covariates within species-specific sampling area (typically 10-m radius circle), vegatation allience/association can be assigned using Sam Diago vegatation key (AECOM 2012) in the office or field, using "Associated Species" data fram page 1. See page 4 for definitions of habital assessment categories. Record any notes on page 3.         SANDAGS 2012 Vegetation Allience/Association: SAYCO COSM: a partifican (Sali Cornain degradin Allience/Association: SAYCO COSM: a partifican - Frankania Calina - Association: Sayco Cosmic partifican - Frankania Calina - Association: Sayco Cosmic partifican - Frankania Calina - Association: Cosmic Crasses: 1 (Mg): 2 (P0 - <10%): 3 (10 to <2%): 4 (25 to <50%): 5 (-50%):	Surveyors & Affiliation/Agency: Bn	1. KR. SM- city	of SD	
SATE OCON IN Profit Con-Franktania Salima Association         Cover Classes: 1 (0%): 2 (P0 - <10%): 3 (10 to <25%): 4 (25 to <50%)	circle). Vegetation alliance/association	can be assigned using San Diego v	regetation key (AECOM 2012)	in the office or field, using "Associated Species"
Cover Classes: 1 (0%): 2 (P0 - <10%): 3 (10 to <25%): 4 (25 to <50%): 5 (>50%)         Cryptogamic Crust Cover:	SANDAG 2012 Vegetation Alliance/Ass			
Cryptogamic Crust Cover:Thatch Cover:Thatch Depth: AveA/acmMax: _A/acmAve. Height?Orall Standing Biomass? Yes Sho If Yes, Species/Cover Class: Ave. Height? Gopter Activity: Gopter Activ	Cover Classes: 1 (0%): 2 (>0 - <10%): 3 (10		cificar interpa	shere /biouryion
Dead Standing Biomass?       Yes       Sho       If Yes, Species/Cover Class:			atch Depth: Ave. 1/6 ci	m Max: 1/2 cm
Mammal Species Activity Categories (1-4): Feral Pig Activity:				
Sampling Area Representative of Maximum Extent?       Yes       Into       If No, Note Differences on Page 3.         V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years o monitoring) plus 10-m surrounding buffer . See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.         Surrounding Land Use at Site (>Maximum Extent): <u>Flood contract</u> <u>charant</u> ; <u>dog branch</u> Argentine Ant Abundance at Bait Station (1-4):				
V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years o monitoring) plus 10-m surrounding buffer . See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.         Surrounding Land Use at Site (>Maximum Extent):       Flood control channel; dog beach         Argentine Ant Abundance at Bait Station (1-4):		and a straight the second straight the		
Argentine Ant Abundance at Bait Station (1-4):	Sampling Area Representative of Maxim		s LI No It No,	Note Differences on Page 3.
Argentine Ant Abundance at Bait Station (1-4):	monitoring) plus 10-m surrounding bu			
Argentine Ant Abundance at Bait Station (1.4):	Surrounding Land Use at Site (>Maximu	im Extent): Flood lond	the channel	dog beach
Ant Sample Collected?       Yes       Yes       No       Ant Sample #Ant Sample #Ant Station Photo #1542         Disturbances (rank each as 1-6);       Non-Native Forbs       6       Feral Pig Activity       1       Attered Hydrology       6         Non-Native Grasses       1       Trampling       1       Erosion       1         Non-Native Grasses       1       Vandalism       1       Urban Runoff       1         Competitive Native Plants       1       Current Grazing       Slope Movement       1         Dumping/Trash       3       Historic Grazing       Soil Compaction       1         Fuel Modification Zone/Fire Break       1       1       Ferai Pig Activity       1       Irboserved, List Type(s) of ORV/Bike Activity:       Soil Compaction       1         Fuel Modification Zone/Fire Break       1       1       Forserved, List Type(s) of ORV/Bike Activity:       Yes       Y		110-00 00011		
Ant Sample Collected?       Yes       Yes       No       Ant Sample #Ant Station Photo #1542	Argentine Ant Abundance at Bait Station	(1 A): 1 Time Start VI	7 Tomo Stat '80-	Time Einich 9:02 Tame Einich 80'
Disturbances (rank each as 1-6):         Non-Native Forbs       6         I       Trampling         Non-Native Grasses       1         Non-Native Grasses       1         Non-Native Woody Plants       Vandalism         Competitive Native Plants       1         Current Grazing       1         Dumping/Trash       3         Historic Grazing       1         Soil Compaction       1         Fuel Modification Zone/Fire Break       1         Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:				
Non-Native Forbs       6       Feral Pig Activity       1       Altered Hydrology       6         Non-Native Grasses       1       Trampling       1       Erosion       1         Non-Native Woody Plants       1       Vandalism       1       Urban Runoff       1         Competitive Native Plants       1       Current Grazing       1       Slope Movement       1         Dumping/Trash       3       Historic Grazing       Soil Compaction       1         Fuel Modification Zone/Fire Break       1       Historic Agriculture       Soil Compaction       1         Fuel Modification Zone/Fire Break       1       Historic Agriculture       1       Soil Compaction       1         Fuel Modification Zone/Fire Break       1       1       Forestructure       1       1         Fuel Modification Zone/Fire Break       1       1       Forestructure       1       1         Fuel Modification Zone/Fire Break       1       1       Forestructure       1       1         Fuel Modification Zone/Fire Break       1       1       Forestructure       1       1         GRV/Mountain Bike Activity       1       If Observed, List Type(s) of ORV/Bike Activity:       Unknown Burn Year:       1         Trails </td <td></td> <td>No Ant Sample #:</td> <td>Ant Station Pho</td> <td>to #:</td>		No Ant Sample #:	Ant Station Pho	to #:
Non-Native Grasses       1       Trampling       1       Erosion       1         Non-Native Woody Plants       1       Vandalism       1       Urban Runoff       1         Competitive Native Plants       3       Current Grazing       Slope Movement       1         Dumping/Trash       3       Historic Grazing       Soil Compaction       1         Encampments       2       Historic Agriculture       Soil Compaction       1         Fuel Modification Zone/Fire Break       1	Disturbances (rank each as 1-6):	•		- 1
Non-Native Woody Plants       I       Vandalism       I       Urban Runoff       I         Competitive Native Plants       I       Current Grazing       I       Slope Movement       I         Dumping/Trash       I       Historic Grazing       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       I       Historic Agriculture       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       I       I       Kistoric Agriculture       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       I       I       Kistoric Agriculture       I       I         Fuel Modification Zone/Fire Break       I       I       Kistoric Agriculture       I       I         Fuel Modification Zone/Fire Break       I       I       Kistoric Agriculture       I       I         Fuel Modification Zone/Fire Break       I       I       Kistoric Agriculture       I       I         Vegetation Clearing       I       I       If Observed, List Type(s) of ORV/Bike Activity:       I       Introversearconcertere         Evidence of Recent Fire       I       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:       Introversearconcertere         Trails       Z <t< td=""><td></td><td></td><td></td><td></td></t<>				
Competitive Native Plants       I       Current Grazing       I       Slope Movement       I         Dumping/Trash       3       Historic Grazing       I       Soil Compaction       I         Encampments       2       Historic Agriculture       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       1       Historic Agriculture       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       1       I       Koad Construction/Maintenance       I       I         Vegetation Clearing       1       I       Koserved, List Type(s) of ORV/Bike Activity:       Vegetation Clearing       I         ORV/Mountain Bike Activity       1       If Observed, List Type(s) of ORV/Bike Activity:       Unknown Burn Year:       I         Evidence of Recent Fire       1       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:       I         Trails       2       If Trails are Present, are They Authorized?       No / Unknown Ferried / Signed       Service Vehicles         Vipe of Trail Use?       I       Hiking       Biking       Equestrian       Dog       Motorcycle       ORV       Service Vehicles	A CONTRACTOR OF THE PARTY OF THE OWNER		<u>1 – – – – – – – – – – – – – – – – – – –</u>	
Dumping/Trash       3       Historic Grazing       I       Soil Compaction       I         Encampments       2       Historic Agriculture       I       Soil Compaction       I         Fuel Modification Zone/Fire Break       1       I       I       I       I         Road Construction/Maintenance       1       I       I       I       I         Vegetation Clearing       1       I       I       I       I         ORV/Mountain Bike Activity       1       If Observed, List Type(s) of ORV/Bike Activity:       Unknown Burn Year:       I         Evidence of Recent Fire       1       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:       I         Trails       2       If Trails are Present, are They Authorized?       I No / Unknown Ferried / Signed         Type of Trail Use?       I       Biking       Equestrian       I Dog       Motorcycle       ORV       Service Vehicles				
Encampments       2       Historic Agriculture         Fuel Modification Zone/Fire Break       1         Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:	2			
Fuel Modification Zone/Fire Break       1         Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:	1		Soil	Compaction
Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:	Encampments	Historic Agriculture		
Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:	Fuel Modification Zone/Fire Break			
Vegetation Clearing       1         ORV/Mountain Bike Activity       1         If Observed, List Type(s) of ORV/Bike Activity:         Evidence of Recent Fire       1         If Sign of Recent Fire:       1         If Sign of Recent Fire:       1         If Trails       2         If Trails are Present, are They Authorized?         Type of Trail Use?         Image: Provide the provided of the prov				
ORV/Mountain Bike Activity       1       If Observed, List Type(s) of ORV/Bike Activity:         Evidence of Recent Fire       1       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:         Trails       2       If Trails are Present, are They Authorized?       No / Unknown Fenced / Signed         Type of Trail Use?       1       Biking       Equestrian       Dog       Motorcycle       ORV       Service Vehicles				
Evidence of Recent Fire       1       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:         Trails       2       If Trails are Present, are They Authorized?       No / Unknown Fenced / Signed         Type of Trail Use?       If Hiking       Biking       Equestrian       Dog       Motorcycle       ORV       Service Vehicles		If Observed List Tunole) of	ORV/Bike Activity	
Trails	1.5 M			known Burn Vear
Type of Trail Use?		1		
🕅 Hiking 🗌 Biking 🗌 Equestrian 🖾 Dog 🗌 Motorcycle 🗌 ORV 🗔 Service Vehicles		m Trails are Present, are Th	ey Authonzed res / No / C	inknown Fenced / signed
		-		I I I I I I I I I I I I I I I I I I I
Dverall Site Quality (see page 5): Very Good-Excellent Fair to Good Very Poor	🕅 Hiking 🗌 Biking	Equestrian 🖾 Dog		V Lu Service Vehicles
	Overall Site Quality (see page 5):	Very Good-Excellent	Fair to Good	Very Poor

**MSP** - Management Needs and Notes Page 3 Occurrence ID: COMAM 3-1BOBE 007 Species: Chlompyron maritimum Date: 5/10/14 **VI. MANAGEMENT RECOMMENDATIONS** best available method for treating Limonium - Uce within maximum extent -continue to maintain fences and signs to kup people sensitive habital and dogs out of **VII. MANAGEMENT ACTIONS IN LAST YEAR** Foundation installor San Dirgo River Park fence post advore of native plants. fence with posts wil plants also installed Internevative native VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: Belding's savannah spame, read- pt taken 324.5

#### Chloropyron maritimum ssp. maritimum (Salt Marsh Bird's Beak) Dog Beach



Panorama from Eastern end of population, facing Northeast, North, Northwest. Panorama location is 6254599.243 1856054.397 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



# *Cylindropunita californica* var. *californica* Snake Cholla



© City of San Diego, 2002

MSP - Rare Plant Oc	Page 1					
Scientific Name: Cylindropuntia cal						
Common Name: Snake Cholla	CNDDB EO#: none T	ranslocated? <i>No</i>				
Preserve: Otay Mesa Open Space Management Unit: 3						
Land Owner: City of San Diego PRD						
Occurrence Name: Otay Mesa Sample Point #: /						
Surveyors & Affiliation: Kim Beland, Can Paver, Bosy Miller, Wendy Rogers - City of San Diego						
Date: 4/24/14	Time Start: 62:05 pm	Time Finish: 12:45 pm				
I. OCCURRENCE STATUS - Assess # plants in both the species-specific sampling area (typically 10-m radius circle) & in the current mapped extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunted growth within the sampling area. Record any notes on page 3.						
# Plants/Sampling Area:3	Exact Estimate (extrapolate partial count)	tainty?				
# Plants/Current Mapped Extent:       13       Image: Exact Count       Estimate (1,000s, 10,000s) Uncertainty?       Image:						
Species Found in Maximum Extent? Yes No If not, why (if reason known or suspected)?						
If yes:						
Collector Collection Number Museum/Herbarium						
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING						
GPS Accuracy:       +/<1						
Camera type: <u>Perstax</u> kl90						
Location 1 (see coordinates above)	E, NE, N 1.1m 5-10° up 309-	3/2 S/OS/MSCP				
Dire	ction (facing) Height Camera Angle Photo #	File location				
Location 2 [Coordinates] Dire	ction (facing) Height Camera Angle Photo #	File location				
III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, record additional data and any notes on page 3.						
Invasive? Species/Substrate	% Cover Coll? Coll. # Invasive? Species/Substrate	% Coll? Coll. #				
Cylindropuntia califarnica		-				
Alenstona faccialata	15					
America chenopodofolia	7					
Simmondia chinensis	12					
Encelia californica	15					
, Endiumsp.	10 .					
v Avena g.	5					
- Stomus madri leasis sep.	5					
V Bronus dia drus V Brassica tour portii	2					
Bare Ground: 20						
	Litter: 5					
	Rock: 2					
Total % Cover: 75 % Herb Cover:	% Shrub Cover:% Tree Cover:					

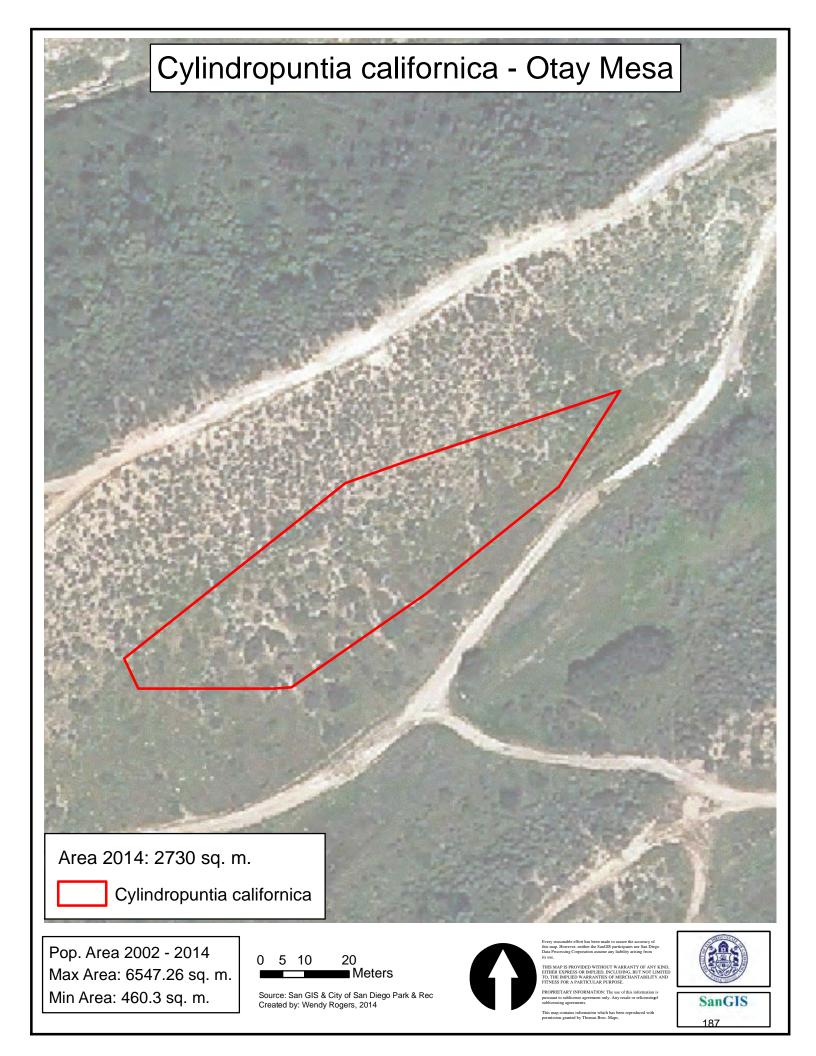
	MSP - Rare Pla	ant Habitat and Threats	s Assessment Form	1	Page 2
Scientific Name:	Cylindropuntia c	alifornica var. californica	MSP Occurrence	ID: TBD	
Preserve:	0tay Mesa Ope	en Space	Occurrence Name	: Otay Mesa	a
Date: 4/24/14			Time Start: 12:0	)5	Time Finish: 12:45
Surveyors & Affiliation/Ag	gency: KR. SP. A	SM. WK			
IV. HABITAT ASSES circle). Vegetation alliar	SMENT IN SAMPLI	NG AREA - Assess habitat of assigned using San Diego ve habitat assessment categorie	getation key (AECOM 20	12) in the office or field,	
(Giogonum +	asciulatura A	Adenostoma Fasc remisia californ ); 4 (25 10 < 50%); 5 (> 50%)			
Cryptogamic Crust Cove	Thatcl	h Cover: _20 Tha	tch Depth: Ave. 5	_cm Max: _/o	_cm
		No If Yes, Species/Cover			
		I Pig Activity:/	/		
Sampling Area Represen		14			and the second se
and the second s					
		M EXTENT - Assess threats See page 4 for definitions of the			
Surrounding Land Use at	Site (>Maximum Exter	nt):			
ourrounding Land 000 at	ono ( maximum Extor	open open			
		1			
		Time Start:			Temp. Finish: 65°F
Ant Sample Collected?:	Yes No	Ant Sample #:	Ant Station	Photo #:	
Disturbances (rank each	as 1-6):	1			
Non-Native Forbs	3	Feral Pig Activity		Altered Hydrology	
Non-Native Grasses	_4	Trampling		Erosion _	_/
Non-Native Woody Plan	nts	Vandalism	1	Urban Runoff	
Competitive Native Plan	nts	Current Grazing	1	Slope Movement _	
Dumping/Trash	_/	Historic Grazing	6	Soil Compaction	1
Encampments	_/	Historic Agriculture	1		
Fuel Modification Zone/					
Road Construction/Mair	ntenance /				
Vegetation Clearing	_/			1 21	1
ORV/Mountain Bike Act	ivity _2	If Observed, List Type(s) of	ORV/Bike Activity:	order Tattol	road
Evidence of Recent Fire		If Sign of Recent Fire: Year		Unknown Burn Year: _	
Trails	1	If Trails are Present, are The	y Authorized? (Tes) / No	/ Unknown	
Type of Trail Use?					
Hiking	Biking Ec	guestrian 🗌 Dog	Motorcycle	ORV Service	e Vehicles
					e venicies
			1		
			Fair to Good		

MSP - Management Needs and Notes Page 3 TBD Occurrence ID: Species: Cylindromentia californica Date: 4/24/14 **VI. MANAGEMENT RECOMMENDATIONS** sesticide applicator request submit non - nas fords near s from across 1000 spread up store towards ractus beginning 70 mulation **VII. MANAGEMENT ACTIONS IN LAST YEAR** none VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: CARNG point A she nore invaded with weeds - upsper on hill oristine MSS - seo GPS point potoi t STANSI ris - chollas #'s at this site alle 2006 - 30+ skeletons found today -all alive + flowering 10 years ago

# Cylindropuntia californica var. californica (Snake Cholla) Otay Mesa



Panorama from Northern edge of population, facing East, Northeast, North. Panorama location is 6323469.55 1779652.07 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



	je 1	
Scientific Name: Cylindropuntia californica var. californica MSP Occurrence ID: TBD		
Common Name: Snake Cholla CNDDB EO#: none Translocated?	No	
Preserve: Spring Canyon Open Space Management Unit:	3	
Land Owner: City of San Diego Land Manager: City of San Diego PRD		
Occurrence Name: Spring Canyon Sample Point #:	1	
Surveyors & Affiliation: Kim Roeland, Scan Taver, Boty Miller, Jalendy Rogers - City of San	Dieg	0
Date: 4/24/14 Time Start: 10:50 Am Time Finish:	11:20	AM
I. OCCÚRRÉNCE STATUS - Assess # plants in both the species-specific sampling area (typically 10-m radius circle) & in the current extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunted growth within the sampling any notes on page 3.	nt mappo	ed
# Plants/Sampling Area: <u>3</u> Zexact Estimate (extrapolate partial count) Uncertainty?		
# Plants/Current Mapped Extent: I 4		
Area of Current Mapped Extent: 559 M <sup>2</sup> units Exact (GPS mapping)	_	mate
Phenology in Current Mapped Extent (Categories 1-5): Vegetative: Flowering:/ Fruiting:/ Dead:	1	
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory: Disease: / Stunted Growth:/		
Is Sampling Area within Current Mapped Extent?		
Species Found in Maximum Extent?		
Collection (if not collected previously)?		
Collector Collection Number Museum/Herbarium		
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING		
GPS Accuracy: +/ <1	-	
Coordinates; E:6330060.051N:1781287.695	- :-Long (d	lec deg)
	- :-Long (d	lec deg)
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       Image: Ima	S/OS/MS	SCP
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       Image: Imag		SCP
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Option 1k/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       4305-1308         Direction (facing)       Height       Camera Angle       Photo #	S/OS/MS	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       ✓ State Plane (ft)       UTM (m)       Lat         Camera type:       Pantax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       €705 - /808         Direction (facing)       Height       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       A	S/OS/MS File locatio	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       235° -/ 208         Direction (facing)       Height       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       ✓ State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.         Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       ✓ State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       ctass-/308         Direction (facing)       Height       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate       Invasive?       Species/Substrate       Medicago       phymorpha         Gy/indropruntia califormica       I       I       I       Invasive?       Species/Substrate       Medicago       phymorpha	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       ✓ State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.         Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       ✓ State Plane (ft)       UTM (m)       Lat         Camera type:       Pantax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Direction (facing)       Height       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate       Invasive?       Invasive?       Species/Substrate       Invasive?       Species/Substrate       Invasive?       Invasive?       Species/Substrate<	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       State Plane (ft)       UTM (m)       Lat         Camera type:       Pantax       Optio       k/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       camera Angle       Photo #         Direction (facing)       Height       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       Invasive?       Species/Substrate       % Cover       Coll?       Coll. #       Invasive?       Species/Substrate       Invasive?       Invasive?       Species/Substrate       Invasive?       Species/Substrate       Invasive?       Species/Substrate       Invasive? <td>S/OS/MS File location</td> <td>SCP on</td>	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       Invasive?       Species/Substrate         V/Indepruntia Califormica       I       V       Medica go polymorpha       Image: Species/Substrate         Q/Indepruntia Califormica       I       V       Medica go polymorpha       Image: Species/Substrate         Mindepruntia Califormica       I       V       Medica go polymorpha       Image: Species/Substrate         Q/Indepruntia Califormica       I       V       Medica go polymorpha       Image: Species/Substrate         Mindepruntia Califormica       I       Image: Species/Substrate       Image: Species/Substrate       Image: Species/Substrate       Image: Species/Substrate         Mindepruntia Califormica       I       Image: Species/Substrate       Image: Species/Substrate       Image: Species/Substrate       Image: Species/Substrate	S/OS/MS File location	SCP on
Coordinates; E: <u>6330060.051</u> N: <u>1781287.695</u> State Plane (ft) UTM (m) Lat Camera type: <u>Pentax Optio IA/90</u> Location 1 (see coordinates above) N, NE, E, SE <u>1.1m</u> <u>5° up</u> <u>Etas/B08</u> Direction (tacing) Height Camera Angle Photo # Location 2 [Coordinates] Direction (tacing) Height Camera Angle Photo # III. ASSOCIATED SPECIES IN SAMPLING AREA <i>it need more room, record additional data and any notes on page 3.</i> Invasive? Species/Substrate % Cover Coll? Coll. # Invasive? Species/Substrate Cylinchopuntia Californica I V Medicago phymorpha Cylinchopuntia prolifera I Simmondsia chinemics I0 Acmingan glabar I Invasive? I III. Association (tacing) III. Invasive? Species/Substrate Cylinchopuntia for lifera I Simmondsia chinemics I0 Acmingan glabar I Acmingan glabar I Acmin	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M.90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.         Invasive?       Species/Substrate       % Cover       Coll?       Coll.#       Invasive?       Species/Substrate         Q/Indopruntia Califormica       I       V       Medica go po hymorpha       Image: Species/Substrate       <	S/OS/MS File location	SCP on
Coordinates; E:       6330060.051       N:       1781287.695       Image: State Plane (ft)       UTM (m)       Lat         Camera type:       Pentax       Optio       M/90         Location 1 (see coordinates above)       N, NE, E, SE       1.1m       5° up       Camera Angle       Photo #         Location 1 (see coordinates)       Direction (facing)       Height       Camera Angle       Photo #         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.         Invasive?       Species/Substrate       % Cover       Coll?       Coll.#       Invasive?       Species/Substrate         Q/Indopruntia Califormica       I       V       Medicago on hymorpha       Image: Species/Substrate       Species/Substrate       Species/Substrate       Species/Substrate       Species/Substrate       Image: Species/Substra	S/OS/MS File location	SCP on
Coordinates; E: <u>6330060.051</u> N: <u>1781287.695</u> State Plane (ft) UTM (m) Lat Camera type: <u>Renfax Optio M90</u> Location 1 (see coordinates above) <u>N, NE, E, SE</u> <u>1.1m</u> <u>5° up</u> <u>ATAS - 1508</u> Direction (facing) <u>Height</u> <u>Camera Angle</u> Photo # <u>Location 2 [Coordinates]</u> Direction (facing) <u>Height</u> <u>Camera Angle</u> Photo # <u>III. ASSOCIATED SPECIES IN SAMPLING AREA</u> <i>It need more room, record additional data and any notes on page 3.</i> <u>Invasive?</u> <u>Species/Substrate</u> <u>% Cover</u> <u>Coll?</u> <u>Coll.#</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>% Cover</u> <u>Coll?</u> <u>Coll.#</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>1</u> <u>V</u> <u>Mechica.go phymorpha</u> <u>Cylindorpuntia prolifera 1</u> <u>V</u> <u>Mechica.go phymorpha</u> <u>Cylindorpuntia facalifornica 1</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>Invasive?</u> <u>Invasive?</u> <u>Invasive</u> <u>Invas</u>	S/OS/MS File location	SCP on
Coordinates; E: <u>6330060.051</u> N: <u>1781287.695</u> State Plane (ft) UTM (m) Lat Camera type: <u>Pentax Out is M90</u> Location 1 (see coordinates above) <u>N, NE, E, SE</u> <u>1.1m</u> <u>5° up</u> <u>ATAS - 1708</u> Direction (facing) <u>Height</u> <u>Camera Angle</u> Photo # <u>Location 2 [Coordinates]</u> <u>Direction (facing)</u> <u>Height</u> <u>Camera Angle</u> Photo # <b>III. ASSOCIATED SPECIES IN SAMPLING AREA</b> <i>It need more room, record additional data and any notes on page 3.</i> <u>Invasive?</u> <u>Species/Substrate</u> <u>% Cover</u> <u>Coll?</u> <u>Coll. #</u> <u>Invasive?</u> <u>Species/Substrate</u> <i>Cylindrographica</i> <u>Californica</u> <u>I</u> <u>V</u> <u>Medicago polymorpha</u> <i>Cylindrographica</i> <u>Chipernica</u> <u>I</u> <u>V</u> <u>Medicago polymorpha</u> <i>Cylindrographica</i> <u>I</u> <u>V</u> <u>Contago polymorpha</u> <u>Cylindrographica</u> <u>I</u> <u>V</u> <u>Contago polymorpha</u> <u>Cylindrographica</u> <u>I</u> <u>V</u> <u>Contago polymorpha</u> <u>Cylindrographica</u> <u>I</u> <u>V</u> <u>Contago polymorpha</u> <u>Cylindrographica</u> <u>I</u> <u>V</u> <u>Contago polymorphica</u> <u>I</u> <u>V</u> <u>Contago polymorpha</u> <u>Contago polymorphica</u> <u>I</u> <u>Contago polymorphica</u> <u>I</u> <u>Contago </u>	S/OS/MS File location	SCP on
Coordinates; E: <u>6330060.051</u> N: <u>1781287.695</u> State Plane (ft) UTM (m) Lat Camera type: <u>Renfax Optio M90</u> Location 1 (see coordinates above) <u>N, NE, E, SE</u> <u>1.1m</u> <u>5° up</u> <u>ATAS - 1508</u> Direction (facing) <u>Height</u> <u>Camera Angle</u> Photo # <u>Location 2 [Coordinates]</u> Direction (facing) <u>Height</u> <u>Camera Angle</u> Photo # <u>III. ASSOCIATED SPECIES IN SAMPLING AREA</u> <i>It need more room, record additional data and any notes on page 3.</i> <u>Invasive?</u> <u>Species/Substrate</u> <u>% Cover</u> <u>Coll?</u> <u>Coll.#</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>% Cover</u> <u>Coll?</u> <u>Coll.#</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>1</u> <u>V</u> <u>Mechica.go phymorpha</u> <u>Cylindorpuntia prolifera 1</u> <u>V</u> <u>Mechica.go phymorpha</u> <u>Cylindorpuntia facalifornica 1</u> <u>Invasive?</u> <u>Species/Substrate</u> <u>Invasive?</u> <u>Invasive?</u> <u>Invasive</u> <u>Invas</u>	S/OS/MS File location	SCP on

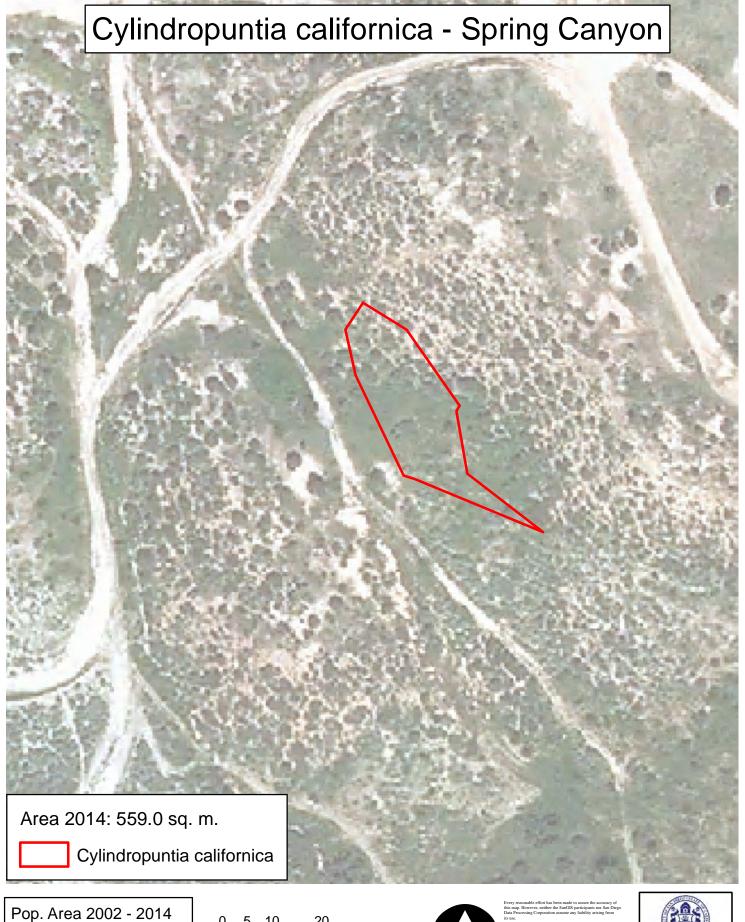
Preserve: Spring Canyon Open Space Occurrence Name: Spring Canyon		re Plant Habitat and Threat	the first of the second se	Page 2
Date: <u>H/Je4///4</u> Time Start:       10:50       Time Finish:       11:20         Surveyors & Affiliation/Agency: <u>KR, SP, WK, MK</u> <u>KM</u> <u>Finish:</u> 11:20         Surveyors & Affiliation/Agency: <u>KR, SP, WK, MK</u> <u>Finish:</u> 11:20         Surveyors & Affiliation/Agency: <u>KR, SP, WK, MK</u> <u>Finish:</u> 11:20         Surveyors & Affiliation/Agency: <u>KR, SP, WK, MK</u> <u>Finish:</u> 11:20         W. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10-n radius circle). <u>Vegetation alliance/Association:</u> <u>Simport Covariation of habitat assessment categories. Record any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association:       <u>Simport Covariation of habitat assessment categories.</u> <u>Alliance (marcination of habitat covariates on page 3.</u>         SANDAG 2012 Vegetation Alliance/Association:       <u>Chincenstia -</u> <u>Barbitagoria (Tovariation of habitat covariates on page 3.         Cover Classes 1 (0%): 2 (-0 -        <u>Thatch Cover:</u> <u>C</u>       Thatch Depth: Ave <u>4</u>       om Max: <u>6</u> or         Cover Classes 1 (0%): 2 (-0 -        <u>Thatch Cover:</u> <u>Thatch Depth: Ave <u>4</u>       om Max: <u>6</u> or         Cover Classes 1 (0%): 2 (-0 -        <u>Thatch Cover:</u> <u>Thatch Depth: Ave <u>4</u>       om Max: <u>6</u> or         Cover Classes 1 (0%</u></u></u></u>	Scientific Name: Cylindrop	ountia californica var. californica	MSP Occurrence ID: TBD	)
No. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat overlates within species-specific sampling area (typically 10-m radius circle). Vegetation alliance/association can be assigned using 3an Diago vegetation key (AECOM 2012) in the office of field, using "Associated Species data from page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association:       Simmp Asia Chinemsis Alliance (see the page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.         SANDAG 2012 Vegetation Alliance/Association:       Simmp Asia Chinemsis Alliance (see the page 1. See page 4 for definitions of habitat assessment categories is for the page 1. See page 4 for definitions of thread assessment categories and page 1. See page 4 for definitions of thread assessment categories & page 1. See page 4 for definitions of thread assessment categories & page 5 for Overal Stie Quality Scale. Record not see as page 3.         Cover Classes:       If No. Note Differences on Page 3.         V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years monitoring) plus 10-m straunding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overal Stie Quality Scale. Record notes on page 3.         V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years monitoring) plus 10-m straunding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overal Stie Quality Scale. Record notes on page 3.         V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years monitor	Preserve: Spring Canyon Open Spring	ace	Occurrence Name: Spr	ing Canyon
IV. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habital covariates within species-specific sampling area (typically 10-m radius circle). Vegetation alliance/association can be assigned using San Diego vegetation key (AECOM 2012) in the office or field, using 'Associated Species data from age1 . See page 4 for definitions of habitat assessment categories. Record any notes on page 3.           SANDAG 2012 Vegetation Alliance/Association:         SIMMED Addia         Summon Set 2 (25 to - 50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 0)         Cause (2 - 0 - 0)           Cover Classes:         (10%) 2 (25 to -50%)         Cover Classes:         Cause (2 - 0)         Cause (2 -	Date: 4/24/14		Time Start: 10:50	Time Finish: 11:20
IV. HABITAT ASSESSMENT IN SAMPLING AREA - Assess habital covariates within species-specific sampling area (typically 10-m radius circle). Vegetation alliance/association can be assigned using San Diego vegetation key (AECOM 2012) in the office or field, using 'Associated Species data from age1 . See page 4 for definitions of habitat assessment categories. Record any notes on page 3.           SANDAG 2012 Vegetation Alliance/Association:         SIMMED Addia         Summon Set 2 (25 to - 50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%) 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 10%), 3 (10 to -25%), 4 (25 to -50%)           Cover Classes:         (10%) 2 (25 to -50%)         Cover Classes:         Cause (2 - 0 - 0)         Cause (2 - 0 - 0)           Cover Classes:         (10%) 2 (25 to -50%)         Cover Classes:         Cause (2 - 0)         Cause (2 -	Surveyors & Affiliation/Agency: KR,	SP, WR. BUL		
Simmondsia       Chinemata -       Bubigsis       Luinta       Association         Cover Classes: 1 (0%): 2 (PO - <10%): 3 (10 to <25%): 4 (25 to <50%): 5 (PS0%)	circle) . Vegetation alliance/association	can be assigned using San Diego ve	egetation key (AECOM 2012) in the office	
Cover Classes: 1 (0%): 2 (>0-<10%): 3 (10 to <25%): 4 (25 to <50%): 5 (>50%)       Cryptogamic Crust Cover:	- I.			
Cryptogamic Crust Cover:       /			aliopsis lacinata	Association
Dead Standing Biomass?       Image: Species/Cover Class:       Casassica rights/2 frees/2       Ave. Height? Z m         Mammal Species Activity Categories (1.4): Feral Pig Activity:       Ground Squirrel Activity:       Image: Cover Class:       Casassica rights/2 frees/2       Ave. Height? Z m         Sampling Area Representative of Maximum Extent?       Image: Cover Class:       Casassica rights/2 frees/2       Ave. Height? Z m         Sampling Area Representative of Maximum Extent?       Image: Cover Class:       Casassica rights/2 frees/2       Ave. Height? Z m         V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threads within the occurrence's maximum extent (cumulative extent over years monitoring) plus 10-m surrounding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.         Surrounding Land Use at Site (>Maximum Extent):				
Mammal Species Activity Categories (1-4): Feral Pig Activity:				
Mammal Species Activity Categories (1-4): Feral Pig Activity:	Dead Standing Biomass? Yes	No If Yes, Species/Cove	Class: Brassica nigna /2; grass	Z Ave, Height? Z cm
V. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years monitoring) plus 10-m surrounding buffer . See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.         Surrounding Land Use at Site (>Maximum Extent):				
monitoring) plus 10-m surrounding buffer See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record notes on page 3.   Surrounding Land Use at Site (>Maximum Extent):	Sampling Area Representative of Maxim	um Extent? Yes	No * If No, Note Differer	nces on Page 3.
Disturbances (rank each as 1-6):         Non-Native Forbs       Image: Second secon	Argentine Ant Abundance at Bait Station	(1-4): <u>n/a</u>	Temp. Start: Time Finish:	
Non-Native Forbs       Image: second se		No Ant Sample #:	Ant Station Photo #:	
Non-Native Grasses       Image: second		Feral Pia Activity	/ Altered Hydrolog	w /
Non-Native Woody Plants       /       /       /       /       //			1	
Competitive Native Plants       /       /       /       Slope Movement       /         Dumping/Trash       /       /       Historic Grazing       /       Soil Compaction       /         Encampments       /       /       Historic Agriculture       /       Soil Compaction       /         Fuel Modification Zone/Fire Break       //       /       /       Soil Compaction       /         Fuel Modification Zone/Fire Break       //       /       /       /       Soil Compaction       /         Fuel Modification Zone/Fire Break       //       /       /       /       /       Soil Compaction       /         Fuel Modification Zone/Fire Break       //       /			7	1
Encampments       /       Historic Agriculture       /         Fuel Modification Zone/Fire Break       //       //         Road Construction/Maintenance       //       //         Vegetation Clearing       //       //         ORV/Mountain Bike Activity       /       If Observed, List Type(s) of ORV/Bike Activity:       .         Evidence of Recent Fire       //       If Sign of Recent Fire: Year Burned?       Unknown Burn Year:       .         Trails       _/       If Trails are Present, are They Authorized? Yes / No / Unknown       Type of Trail Use?		Current Grazing	/ Slope Movemen	
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          If Observed, List Type(s) of ORV/Bike Activity:          Evidence of Recent Fire          If Sign of Recent Fire:       Year Burned?          Trails        If Trails are Present, are They Authorized? Yes / No / Unknown         Type of Trail Use?	Dumping/Trash _/	Historic Grazing		1
Road Construction/Maintenance	Encampments /	Historic Agriculture		
	Road Construction/Maintenance	If Sign of Recent Fire: Year	Burned? Unknown Burn ey Authorized? Yes / No / Unknown	
Overall Site Quality (see page 5): Very Good-Excellent Fair to Good Over	Overall Site Quality (see page 5):			

MSP - Management Needs and Notes Page 3 Date: <u>4/24/14</u> Occurrence ID:\_\_\_\_\_\_\_ Species: <u>CyCA</u> **VI. MANAGEMENT RECOMMENDATIONS** continue to maintain arcess control-signs, finces + gates **VII. MANAGEMENT ACTIONS IN LAST YEAR** 11:2 lities Dept installes N in the Lensine Border Patro 1/ORY roads limit 1x VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: CAEN seen/heard 5 point \* sampling area is in old road is more highly distut / \_\_ 0 MISS that hillside. Shickie inter omage - throated whiptail - GPS pt taken

# Cylindropuntia californica var. californica (Snake Cholla) Spring Canyon



Panorama from Northeastern edge of population, facing North, Northeast, East, Southeast. Panorama location is 6330060.05 1781287.695 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



Max Area: 3138.6 sq. m. Min Area: 559.0 sq. m.



Source: San GIS & City of San Diego Park & Rec Created by: Wendy Rogers, 2014





This page is intentionally left blank.

*Deinandra conjugens* Otay Tarplant



© City of San Diego, 2005

Preserve:       Dennery Ranch Preserve       Management Unit:         Land Owner:       City of San Diego       Land Manager:       City of San Diego PRD         Occurrence Name:       Dennery Ranch       Sample Point #:         Surveyors & Affiliation:       Sin Roeland, Bets Miller, Wence Rogers - City of Can Diego	artial
Preserve:       Dennery Ranch Preserve       Management Unit:         Land Owner:       City of San Diego       Land Manager:       City of San Diego PRD         Occurrence Name:       Dennery Ranch       Sample Point #:         Surveyors & Affiliation:       Sin Roeland, Bets Miller, Wence Rogers - City of Can Diego	artial
Land Owner:       City of San Diego       Land Manager:       City of San Diego PRD         Occurrence Name:       Dennery Ranch       Sample Point #:         Surveyors & Affiliation:       Sin Roeland, Bets Miller, Wender Rogers - City of Can Diego	
Occurrence Name: Dennery Ranch Sample Point #: Surveyors & Affiliation: Kin Roeland, Bets Miller, Wender Rogers - City of Lan Biego	
Surveyors & Affiliation: Sin Roeland, Bety Millen, Wender Rogers - City of San Biego	
Surveyors & Affiliation: Kin Roeland, Bety Miller, Wender Rogers - City of Sun Biego	
Date: 5/3/14 Time Start: 11:13 pm Time Finish: 11:	40 Am
I. OCCURRENCE STATUS - Assess # plants in both the species-specific sampling area (typically 10-m radius circle) & in the current mapper extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunted growth within the sampling area. any notes on page 3.	ped
# Plants/Sampling Area: O Exact 🔲 Estimate (extrapolate partial count) Uncertainty?	
# Plants/Current Mapped Extent:	
Area of Current Mapped Extent: $\mathcal{O}$ $\mathcal{M}^{2}$ units $\mathcal{D}$ Exact (GPS mapping) $\Box$ Est	timate
Phenology in Current Mapped Extent (Categories 1-5): Vegetative: Flowering: Fruiting: Dead:	
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory:/ Disease: Stunted Growth:	
Is Sampling Area within Current Mapped Extent?	
Species Found in Maximum Extent? Ses No Low minfall, low # found in previous year.	1
Collection (if not collected previously)?	
If yes:	
Collector Collection Number Museum/Herbarium	
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING	
GPS Accuracy: +/ /	
Coordinates; E: U32_1437.419 N: 179.1601.507 State Plane (ft) UTM (m) Lat-Long (	(dec deg)
Camera type: <u>Pentax Oph'o W90</u>	
Location 1 (see coordinates above) S, SE, E 1.1m 5° up 1525 - 1528 S/OS/M Direction (facing) Height Camera Angle Photo # File local	
Location 2 [Coordinates] Direction (facing) Height Camera Angle Photo # File locat	tion
III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, record additional data and any notes on page 3.	
Invasive? Species/Substrate % Cover Coll? Coll. # Invasive? Species/Substrate %	Coll? Coll. #
Rosa minucifolia 3	
Rosa minutiplia 3 Artemisen californica 20	
Rosa minucifolia 3	
Rosa minutifelia 3 Artemisia californica 20 Simmendan chinensis 7	
Rosa minutifelia     3       Artemisia californica     20       Simmondsin chinensis     7       Bahiopsis lacinata     7       Encella californica     2       Rhus integrifelia     3	
Rosa minutifelia     3       Antemisian californica     20       Simmondsin chinensis     7       Bahiopsis lacinata     7       Encella californica     2       Rhus integrifelia     3       Erriogenum facciu la fum 1	
Assa minulife/ia     3       Andemission californica     20       Simmondsin chinensis     7       Bahiopsis lacinata     7       Encella californica     2       Rhus integrifella     3       Errogenum faxiu/a tum 1     1       Image: Integrifella     1	
Rosa minutifelia     3       Antemisian californica     20       Simmondsin chinensiis     7       Bahiopsis lacinata     7       Encella californica     2       Rhus integrifelia     3       Erriogenum facciulatum 1     1       V Errodium sp.     1	
Assa minutiplia     3       Amenissa californica     20       Simmendsin chinensis     7       Bahiopsis lacinata     7       Encella californica     2       Rhus integrifelia     3       Eriopanum faxiu/a fum 1     1       V Endium sp.     1       V Endium sp.     1	
Resa minutiplia     3       Arremisia californica     20       Simmondsin chinensis     7       Bahiopsis lacinata     7       Bahiopsis lacinata     7       Encelia californica     2       Rhus integrifolia     3       Erizganuen faxciulatum 1     1       V Erodium sp.     1       V Erodium sp.     1       V Erodium sp.     1       V Helia Hermum sa paríum 2     1	
Resa minutificia     3	
Resa minutificia     3       Arxenissa californica     20       Simmondsin chinensis     7       Bahiopsis lacinata     7       Bahiopsis lacinata     7       Encelía californica     2       Rhus integrifilia     3       Zrodnom Acciulatum I     1       V Erodium sp.     1       V Festuca myunos     1       V Festuca myunos     1       V Maganllus arvensis     1	

MSP - Rar	e Plant Habitat and Threats	Assessment Form	Page 2
Scientific Name: Deinandra	conjugens	MSP Occurrence ID:	DECO13_3DERA020
Preserve: Dennery Ranch Preserve		Occurrence Name:	Dennery Ranch
Date: 5/18/14		Time Start: 11:13	Time Finish: 11:40
Surveyors & Affiliation/Agency: KK,	BM. WR		
IV. HABITAT ASSESSMENT IN SAM	IPLING AREA - Assess habitat co on be assigned using San Diego veg	netation key (AECOM 2012) in	ific sampling area (typically 10-m radius the office or field, using "Associated Species"
SANDAG 2012 Vegetation Alliance/Associ	iation: Simmondia (	chinensis All	iance
Simmondsia (	hinensis - Bahio	psis lacinata	Association
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to			
Cryptogamic Crust Cover:	Thatch Cover: Thatc	ch Depth: Aven/a cm	Max:cm
			Ave. Height? <u>70</u> cm
Mammal Species Activity Categories (1-4)			
Sampling Area Representative of Maximur			te Differences on Page 3.
-			
			mum extent (cumulative extent over years o age 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum	Extent): Bran Spage	e, residential	
	- Open open	, real deal to	
Argentine Ant Abundance at Bait Station (1	A): a/a Time Start:	Tomo Start: Tim	e Finish: Temp Finish:
Ant Sample Collected?: Yes Z Disturbances (rank each as 1-6):	No Ant Sample #:	Ant Station Photo	#
		1	
Non-Native Forbs <u>3</u>	Feral Pig Activity		d Hydrology
Non-Native Grasses <u>3</u>	Trampling	Erosio	
Non-Native Woody Plants	Vandalism		Runoff
Competitive Native Plants	Current Grazing _/		Movement
Dumping/Trash		soil Co	ompaction _/
Encampments	Historic Agriculture	<u>/</u>	
Fuel Modification Zone/Fire Break	veg clearing	ble point is in	bruch management
Vegetation Clearing			Zone
ORV _/	If Observed, List Type(s) of O	RV/Bike Activity:	
Evidence of Recent Fire		urned? Unknow	own Burn Year:
Trails		Authorized? Yes / No / Unk	
Type of Trail Use?			
Hiking Biking [	Equestrian Dog	Motorcycle ORV	Service Vehicles
			JEIVICE VEHICLES
Overall Site Quality (see page 5):	tu a la ma		
Voran one adding (see page 5).	Very Good-Excellent	Fair to Good	Poor Very Poor

MSP - Occurrence ID:	Management Needs and Notes Deinandra Conjugens Page 3 DEC013_3DERA020 Species: (Dennery Rch) Date: 5/13/14
	NT RECOMMENDATIONS
continue to	maintain fences/qates
VII. MANAGEME	ENT ACTIONS IN LAST YEAR fences/gales
	ECIES DETECTED & NOTES
list any plant or animal	species to add to the CNDDB:
-	
	4

## Deinandra conjugens (Otay Tarplant) Dennery Ranch



Panorama from Southern edge of population, facing South, Southeast, East. Panorama location is 6321401.87 1791630.28 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occurrence Monitoring Form	Page 1
	DECO13_3DREA021
Common Name: Otay Tarplant CNDDB EO#:	EO27/29 Translocated? yes
Preserve: Dennery Ranch Preserve	Management Unit: 3
Land Owner: City of San Diego Land Manager: Ci	ty of San Diego PRD
Occurrence Name: Dennery Ranch East	Sample Point #: 1
Surveyors & Affiliation: Betsy Miller, Kim Rocland, Wendy Roger	s - city of SD
Date: 5/13/14 Time Start: j0	:35 Time Finish: 10:47
I. OCCURRENCE STATUS – Assess # plants in both the species-specific sampling area (typically 10-m extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stuni any notes on page 3.	
# Plants/Sampling Area: I	ount) Uncertainty?
# Plants/Current Mapped Extent: 2.	000s) Uncertainty? 10w
· · · · · · · · · · · · · · · · · · ·	xact (GPS mapping)
Phenology in Current Mapped Extent (Categories 1-5): Vegetative:/Flowering:5 Fruit	
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory: Disease:	· · · · · · · · · · · · · · · · · · ·
Is Sampling Area within Current Mapped Extent?	
	a + loutside = 2 total population
Collection (if not collected previously)?	viously
If yes:	
	Museum/Herbarium
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING	
GPS Accuracy: +/ <1	
Coordinates; E: <u>6323139.660</u> N: <u>1792737.03</u> State Plane (fi	t) 🗌 UTM (m) 🗌 Lat-Long (dec deg)
Camera type: Pentax Optio W90	
Location 1 (see coordinates above) SW, S, SE <u>1.1m</u> <u>5° up</u> Direction (facing) Height Camera Angle	1521-1524 S/OS/MSCP
Direction (facing) Height Camera Angle	Photo # File location
Location 2 [Coordinates] Direction (facing) Height Camera Angle	Photo # File location
III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, record additional data and any notes of	n page 3.
Invasive? Species/Substrate % Cover Coll? Coll. # Invasive? Species/Substrate	e % Coll? Coll. #
Deinandra conjugens Anagalis	
Simmondsia chinensis 5 Bradhypodiu	m distanyon 5
Peritoma arborea 2 V Hedypriois cr	etila
Ambrosia chenopodifolia 2	
Eriogonum fasciculatum 3 Isocoma menziesii I	
Bloomenia aveca 1	
Centaurea melitensis 10	
Sisyninchium bellum 1	
V Bromus madrixusis 1	
V Avena sp. 15	
Brassica nigra 5	
V Festura perennis 1 Bare Ground: 10	
Province percenting	
Stipa pulchra l Litter: 0	
Stipa pulchra       I       Litter:       0         V       Bromus pordeacens       I       Rock:       5         Total % Cover:       40       % Herb Cover:       35       % Shrub Cover:       5	

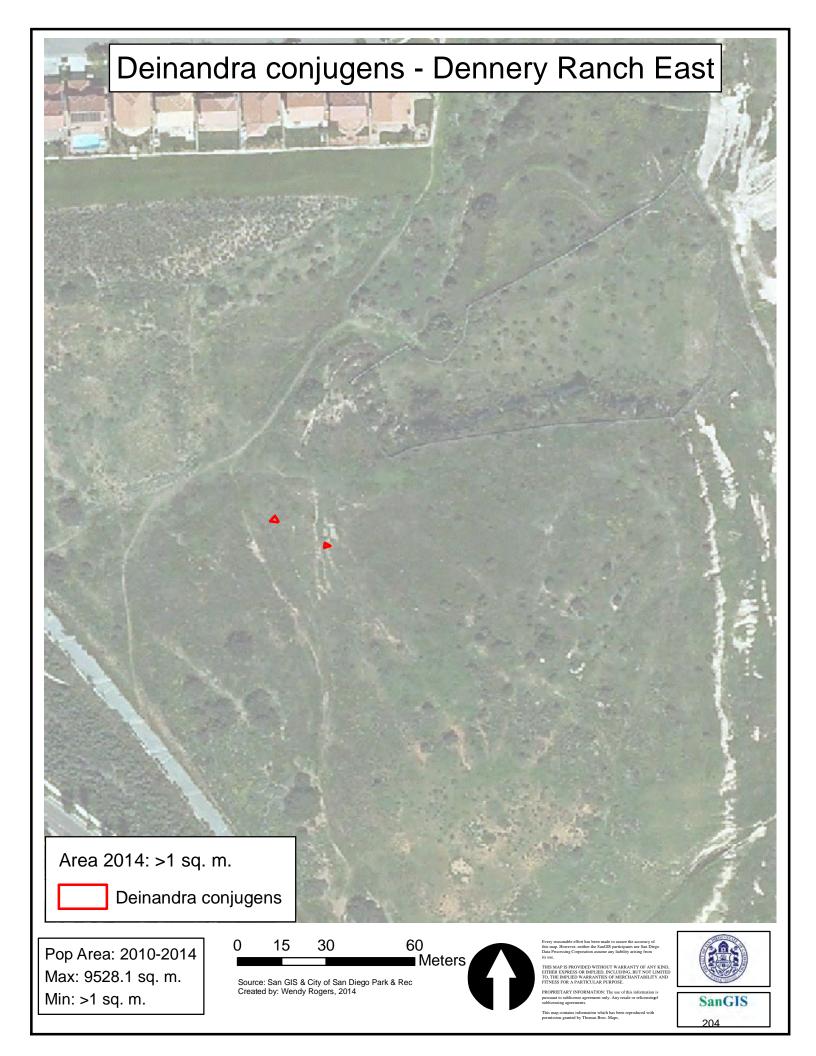
MSP - Rare	Plant Habitat and Threats Asse	ssment Forn		Page 2
Scientific Name: Deinandra	conjugens	ISP Occurrence	ID: DECO	13_3DREA021
Preserve: Dennery Ranch Preserve		Occurrence Name	e: Denn	ery Ranch East
Date: 5/13/14		ime Start: 10	):35	Time Finish: 10:47
Surveyors & Affiliation/Agency: BM, K	R. WR			
IV. HABITAT ASSESSMENT IN SAM circle). Vegetation alliance/association ca data from page 1. See page 4 for definition	n be assigned using San Diego vegetation	key (AECOM 20	12) in the office or	
SANDAG 2012 Vegetation Alliance/Associ	ation: Simmondera chinen Simmonderia chine			lacinata Associatio
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to + Cryptogamic Crust Cover:	:25%); 4 (25 to <50%); 5 (>50%) hatch Cover: Thatch Dep	h: Ave. <u> </u>	_ cm Max:	
Mammal Species Activity Categories (1-4):	the second se			Sopher Activity:/
Sampling Area Representative of Maximum	and the second		No, Note Difference	
notes on page 3. Surrounding Land Use at Site (>Maximum I Argentine Ant Abundance at Bait Station (1 Ant Sample Collected?: Yes X	4): _N/A Time Start: To			
Disturbances (rank each as 1-6):				
Non-Native Forbs     5       Non-Native Grasses     5       Non-Native Woody Plants     1       Competitive Native Plants     1       Dumping/Trash     1       Encampments     1	Feral Pig Activity       1         Trampling       1         Vandalism       1         Current Grazing       1         Historic Grazing       Nalc         Historic Agriculture       1		Altered Hydrology Erosion Urban Runoff Slope Movement Soil Compaction	
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          Evidence of Recent Fire          Trails          Type of Trail Use?          Maintenance          Image: Structure of Provide the Providet	If Observed, List Type(s) of ORV/Bik If Sign of Recent Fire: Year Burned? If Trails are Present, are They Autho	ized? Yes (No	Y Unknown	ear:
Overall Site Quality (see page 5):	Very Good-Excellent	air to Good	Poor	Very Poor

MSP - Management Needs and Notes Deinandra conjugens Page 3 Occurrence ID: DECO13_3DREA021 Species: (Denney Rich Fast) Date: 05/13/14
VI. MANAGEMENT RECOMMENDATIONS
- treat non-native fortes and grasses
- Vistrict access on unauthorized trail
VII. MANAGEMENT ACTIONS IN LAST YEAR
- Ó
T
VIII. CNDDB SPECIES DETECTED & NOTES
List any plant or animal species to add to the CNDDB:

## Deinandra conjugens (Otay Tarplant) Dennery Ranch East



Panorama from Southern edge of population, facing Southwest, South, Southeast. Panorama location is 6323139.66 1792737.05 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Oco	currenc	e Mo	nitorii	ng Form	l		Page 1	
Scientific Name: Deinandra conjuge	ns			MSI	P Occurrence ID:	DECO13_3P	RVA013	
Common Name: Otay Tarplant			1. A. A.	,	CNDDB EO#: E	O22 Tran	slocated?	no
Preserve: Proctor Valley						Manager	nent Unit:	3
Land Owner: City of San Diego					Land Manager: C	ity of San Dieg	o PUD	
Occurrence Name: Proctor Valley							le Point #:	1
Surveyors & Affiliation: Kim Roeland, C	etsy 1	<u>[i][</u>	er k	<u>lendy</u>	Rogers - Cix	4 of Sand	Bregs	
Date: 5/13/14					Time Start: 8	35 AM TIN	ne Finish: 9:	
<ol> <li>OCCURRENCE STATUS - Assess # plants in t extent. See page 4 for definitions of categories descr any notes on page 3.</li> </ol>								
# Plants/Sampling Area:		Exact		Estimate (	extrapolate partial co	ount) Uncertain	ty?	
# Plants/Current Mapped Extent:0		<b>V</b> E	xact Co	unt []	Estimate (1,000s, 10	),000s) Uncertain	ty? low	
Area of Current Mapped Extent:				mz	-	xact (GPS mapp		stimate
Phenology in Current Mapped Extent (Categories 1-5)	: Vegetati	ve:	1	_ Floweri	ng:/ Frui	ting:	_ Dead:/	
Evidence in Current Mapped Extent (Categories 1-5) c	f: Herbivo	ory:		Dis	ease: /	Stunted Growth:_	_/	
Is Sampling Area within Current Mapped Extent?	<b>⊿</b> Yes		No			•		
Species Found in Maximum Extent? 🗌 Yes 🗹	Kno →	low	rai	in falle	y (if reason known or su	spected)?	tyears	
Collection (if not collected previously)?	🗌 Yes	5	[	√ No	Collected Pre	viously		
If yes:								
	ONON			ction Num	ber	Museum/Herbari	um	
II. SAMPLING AREA LOCATION & SITE PHOT				) otumi		· · ·		
GPS Accuracy: +/- <u>&lt;1</u>		fee 82532		)atum:	State Plane (1	3. Πιστω ()		
Camera type:		1	<u></u> .	5 W90		U <u>[</u> ]UIM (m)	) 🔄 Lat-Long	(dec deg)
Location 1 (see coordinates above)	E, SE,	4.7.8		1.1m	5° down	1517-151	19 S/OS/	MSCP
	tion (facing			Height	Camera Angle	Photo #	File loo	
	tion (facing			Height	Camera Angle	Photo #	File loo	ation
III. ASSOCIATED SPECIES IN SAMPLING ARE Invasive? Species/Substrate	A If nee % Cover	-parteration (Pro-	Coll. #	cora adaltic Invasive?	Species/Substra		%	Coll? Coll. #
Jocoma Menzinii	3	1						·
Armispon glaker	3							
Calochortus splendens	1	<u> </u>						
Stipa pulchra	15							
V Brachypedium distachyp	20							
Avena Sp.	7							
V Festuca perennes	1							
V Brassica Nigra	2							
	<u> </u>	ļ						
	1	L						
	1			Bare Gro	und		14	
·				Bare Gro Litter:	und:		7	
					und:		7 2 3	

	are Plant Habitat and Threats Asses ra conjugens M	and the second se	Page 2 3_3PRVA013
<u> </u>			ctor Valley
	/	me Start: 8:35	Time Finish: 9:15
Date: 5/13/14		në Start:	Time Finish:
Surveyors & Affiliation/Agency:	the first of the second s		
circle). Vegetation alliance/association	AMPLING AREA - Assess habitat covariates can be assigned using San Diego vegetation itions of habitat assessment categories. Record	ey (AECOM 2012) in the office	
SANDAG 2012 Vegetation Alliance/Ass	ociation: <u>Isocoma menzie</u> .		socoma meneriesii ovisional Association
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10	to <25%); 4 (25 to <50%); 5 (>50%)		WISP AN ASSOCIAL
Cryptogamic Crust Cover:/	_Thatch Cover: Thatch Depth	Ave cm Max:	o _cm
	No If Yes, Species/Cover Class:		
	-4): Feral Pig Activity: Ground	// /	
Sampling Area Representative of Maxin			
			5 40 C 17 4 C
	AXIMUM EXTENT - Assess threats within th uffer. See page 4 for definitions of threat asse		
Surrounding Land Use at Site (>Maximu	um Extent\:	-11.1	
	im Extent): <u>open space</u> , n	exidential	
Contractory and a state and a	the state of the second state and the		4
Argentine Ant Abundance at Bait Station			9:05 m Temp. Finish: 82°F
Ant Sample Collected?: Yes	No Ant Sample #:	Ant Station Photo #:	20
Disturbances (rank each as 1-6):			
Non-Native Forbs	Feral Pig Activity	Altered Hydrolog	IY
Non-Native Grasses _5	Trampling	Erosion	_/
Non-Native Woody Plants	Vandalism	Urban Runoff	
Competitive Native Plants	Current Grazing	Slope Movemen	
Dumping/Trash	Historic Grazing	Soil Compaction	
Encampments /	Historic Agriculture		
Fuel Modification Zone/Fire Break	1		
Road Construction/Maintenance	2		
Vegetation Clearing	1		
ORV.	/ If Observed, List Type(s) of ORV/Bike	Activity	
Evidence of Recent Fire	6 If Sign of Recent Fire: Year Burned?		rear:
Trails	If Trails are Present, are They Authori:	cea? Yes / No / Unknown	
Type of Trail Use?			
Hiking Biking	Equestrian Dog Mo	torcycle ORV []	Service Vehicles
	and the second		
Overall Site Quality (see page 5):	The second se	r to Good 🛛 🗹 Poor	

MSP - Management Needs and Notes Deinandra Conjugens Page 3 Occurrence ID: DECO13\_3PRVA013 (Proctor VIy) Species: Date: 05/13/14 **VI. MANAGEMENT RECOMMENDATIONS** exotic grasses treat continue arcus contro VII. MANAGEMENT ACTIONS IN LAST YEAR project along Proctor Valley Road (SANDAG fundar ress contro tained gates + main VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: family of 5 CAEN (9:14-9:20)

## Deinandra conjugens (Otay Tarplant) Proctor Valley



Panorama from Southeastern edge of population, facing East, Southeast, South. Panorama location is 6353224.49 18525326.86 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



*Dicranostegia orcuttiana* Orcutt's Bird's Beak



© City of San Diego, 2005

MSP - Rare Plant Oc	currence Monit	oring Form		P	Page 1	
Scientific Name: Dicranostegia orcu	ittiana	MSP Occ	currence ID: CO	OR7_3ORVA001		
Common Name: Orcutt's Bird's Bea	k	Cl	NDDB EO#: EC	D6Translocated	1?	no
Preserve: Otay Valley Regional Park				Management Un	it:	3
Land Owner: City of San Diego		Lan	d Manager: City	of San Diego PRD	· · ·	
Occurrence Name: Otay River Valley	· · · · ·			Sample Point	#:	1
Surveyors & Affiliation: Kim Roeland, S	ara Meszan	os, Wendyk	ogers- City			
Date: 5/29/14			Time Start: 1:1			41
I. OCCURRENCE STATUS - Assess # plants in	both the species-spe					
extent. See page 4 for definitions of categories desc	ribing phenology & e	vidence of herbivory	y, disease & stunted	l growth within the samp		
any notes on page 3.	an a			*		*. <sup>1</sup>
# Plants/Sampling Area:	🔀 Exact	Estimate (extra	polate partial cour	nt) Uncertainty? 1	ow_	
# Plants/Current Mapped Extent:	Exact	Count 🗌 Estim	nate (1.000s, 10.0	00s) Uncertainty?/	ow	
Area of Current Mapped Extent:9		u		ct (GPS mapping)	Πe	stimate
Phenology in Current Mapped Extent (Categories 1-5		•	-			
Evidence in Current Mapped Extent (Categories 1-5)	-	-				
,	Yes 📈 No					
	No		eason known or suspe	cted)?		
Collection (if not collected previously)?	Yes					
If yes:	L les			JUSIY		
Collector	C	ollection Number	M	useum/Herbarium		
II. SAMPLING AREA LOCATION & SITE PHO	TOMONITORING		· .			
GPS Accuracy: +/- <u>&lt;1</u>	ters 🗌 feet	Datum:				
Coordinates; E: <u>6316914.067</u> N:	<u>1794310.86</u>	<u>4</u> 🗸	State Plane (ft)	□ UTM (m) □ L	.at-Long	(dec deg)
Camera type:	Pentax Opti	io W90				
Location 1 (see coordinates above)	N, NE, E	<u>1.1m</u>	10-15° down	1033-1035	S/OS/	MSCP
Dire	ction (facing)	Height	Camera Angle	Photo #	File loc	ation
Location 2 [Coordinates]	ction (facing)	Flaight	Camoro Anala		<b>F</b> H- I	
III. ASSOCIATED SPECIES IN SAMPLING AR			Camera Angle	Photo #	File loc	ation
Invasive? Species/Substrate	% Cover   Coll?   Coll	a passe of the second se	Species/Substrate	aye s.	%	Coll? Coll. #
Dicranostegia ormitiara	21			um californicu		
Bacchan's sarothroides	7	/ Bru	ssica nigra	X	1	
Malosma laurina	2	AVE	ma sp.			
Bauharis salicifolia	2	- Br	omus ma	dutensis	1	
Salix lusiolepis	7					
Toxicodendron diversilabur	n 1			******		
Bacchan's pilulan's				•		
Artemisia collifornica	20					
Isocoma menziesi	5					
Phus integrifolia Mimulus awantiacus						
	10				-	
Phamnus crocea	1	Bare Ground:	In		+	
Dudliya pulvurnienta Hotevomelis arbutitolia	+ <del>i</del> + +	Litter: S	10	******	-	
Balium nuttallii		Rock: 5	****		+	
Total % Cover: % Herb Cover:	5 % Shrub (		% Tree Cover:	D		hannan hairman l

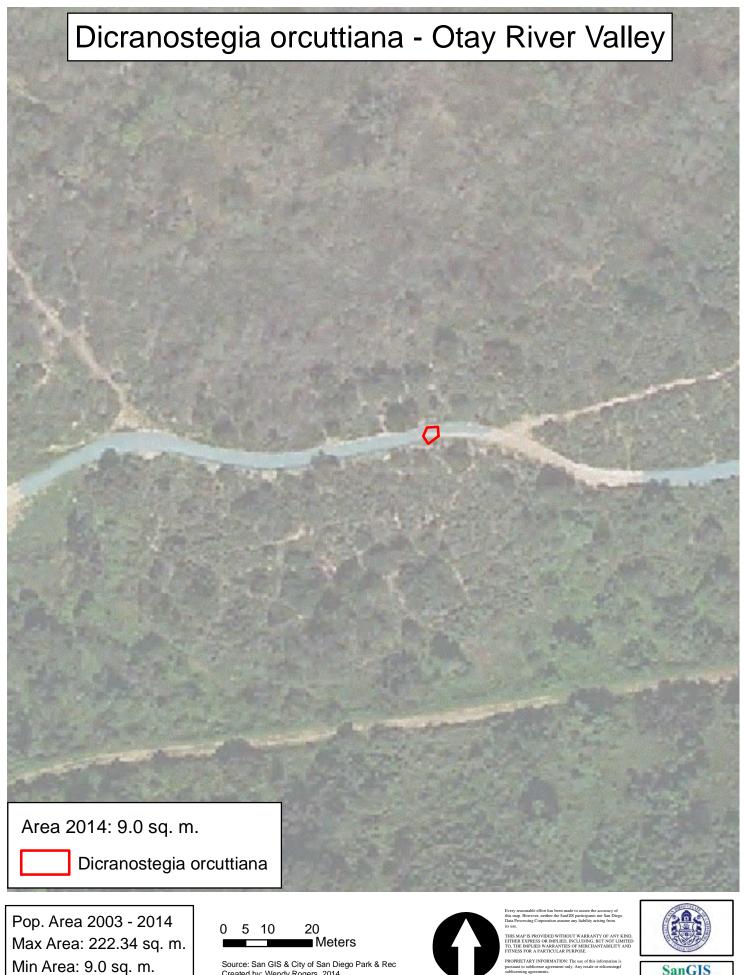
MSP - Rare Plant Habitat and Threats Assessment Form Page 2
cientific Name: Dicranostegia orcuttiana MSP Occurrence ID: COOR7_30RVA001
eserve: Otay Valley Regional Park Occurrence Name: Otay River-Valley
ate: 5/29/14 Time Start: 9:10 Time Finish: 9:41
Irveyors & Affiliation/Agency: KR, WR, SM
A HABITAT ASSESSMENT IN SAMPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10-m radius rcle). Vegetation alliance/association can be assigned using San Diego vegetation key (AECOM 2012) in the office or field, using "Associated Species" ta from page 1. See page 4 for definitions of habitat assessment categories. Record any notes on page 3.
ANDAG 2012 Vegetation Alliance/Association: Artemisia californica alliance; Artemisia
californica-Minulus aurantians association
ver Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <50%); 5 (>50%)
yptogamic Crust Cover: Thatch Cover: Thatch Depth: Ave cm_Max: cm_
ad Standing Biomass? Xes No If Yes, Species/Cover Class: <i>Phamnus</i> wolds: 2 Ave. Height? <u>50</u> cm
ammal Species Activity Categories (1-4): Feral Pig Activity: Ground Squirrel Activity: Gopher Activity:
If No, Note Differences on Page 3.
THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years of onitoring) plus 10-m surrounding buffer. See page 4 for definitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record tes on page 3.
irrounding Land Use at Site (>Maximum Extent): Dpm Space
gentine Ant Abundance at Bait Station (1-4): 2 Time Start: 9:12 Temp. Start: 70 F Time Finish: 931 Temp. Finish: 72 F
t Sample Collected?: Xes No Ant Sample #: 5 Ant Station Photo # 1636 - 1637
sturbances (rank each as 1-6):
Jon-Native Forbs       3       Feral Pig Activity       1       Altered Hydrology       1         Jon-Native Grasses       3       Trampling       1       Erosion       1         Jon-Native Woody Plants       1       Vandalism       1       Urban Runoff       1         Competitive Native Plants       1       Current Grazing       1       Slope Movement       1         Dumping/Trash       1       Historic Grazing       MML       Soil Compaction       1
The Imming of Shrubs along trail - routine trail         Road Construction/Maintenance         /egetation Clearing         0RV/Mountain Bike Activity         1         If Observed, List Type(s) of ORV/Bike Activity:         1         If Sign of Recent Fire         1         If Sign of Recent Fire:         1         If Sign of Recent Fire:         1         If Trails are Present, are They Authorized?         1         Vipe of Trail Use?
I Hiking I Equestrian Dog Motorcycle ORV I Service Vehicles
erall Site Quality (see page 5): Very Good-Excellent Fair to Good Very Poor

MSP - Management Needs and Notes Page 3 Occurrence ID: COOR7\_30RVABOI Species: Dicranostegia orentiana Date: 5/29/14 VI. MANAGEMENT RECOMMENDATIONS - continue to maintain access control of fencing pick up cut shrubs Idebris along trail VII. MANAGEMENT ACTIONS IN LAST YEAR -access control through fencing VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: LBU calling in creek area just hown of photoppint MISCH, YEWA, LBVI from nipanian comidor calling near the trail on the east cirle Dark LBVI -3 total YEWA- 1 total YBCH- 2 total - CAGN heard calling from CSS/ Bauhan's on canyou vin to the south

## *Dicranostegia orcuttiana* (Orcutt's Bird's Beak) Otay River Valley



Panorama from Southwestern end of population, facing North, Northeast, East. Panorama location is 6316914.07 1794310.86 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



Source: San GIS & City of San Diego Park & Rec Created by: Wendy Rogers, 2014



# *Dudleya blochmaniae* ssp. *brevifolia* Short-Leaved Dudleya



© City of San Diego, 2005

Scientific M	WOF - Rale Fla	nt Occurrence Monito	oring Form		P	Page 1	1.1
Scientific Name: Dudleya brevifolia			MSP	Occurrence ID: DUB	LB2_6CMPR001		
Common Na	ame: Short-leaved	dudleya		CNDDB EO#: EO	8 Translocated	d? no	
Preserve:	Carmel Mountain Preser	rve			Management Un	it:	6
Land Owner	r: City of San Diego			Land Manager: City of	of San Diego PRD		
Occurrence	Name: Carmel Moun	tain Preserve Obs. #1			Sample Point	#:	1
Surveyors &	Affiliation: Betsy Mi	Her, Kim Ro	reland,	Sara Meste	gros- city.	SD Savah	
Date: 4/3		Gina Washing		Time Start: 9:00		h: 10:30	St
	RENCE STATUS - Assess # pla page 4 for definitions of categorie page 3.						
# Plants/Sam	pling Area:O	🖾 Exact	Estimate (ex	trapolate partial count	) Uncertainty?	w	
# Plants/Curre	ent Mapped Extent:762	Fract		stimate (1,000s, 10,00	on Uncertainty?	W	
	nt Mapped Extent: 174	. 55	m <sup>2</sup>		t (GPS mapping)	Estimate	
	Current Mapped Extent (Categori	es 1-5): Vegetative:	Flowering			Lounde	
	Current Mapped Extent (Categorie		Disea		nted Growth: 5		
	area within Current Mapped Exten						
Species Found	d in Maximum Extent?	es 🗌 No					
			If not, why	(if reason known or suspect	ted)?		_
Collection (if n If yes	not collected previously)?	Yes	No No	Collected Previou	isly		
	Collector	Co	llection Numbe	r Mus	seum/Herbarium		
II. SAMPLIN	NG AREA LOCATION & SITE	PHOTOMONITORING					
GPS Accuracy	y: +/- <u>≤1</u>	✓ meters □ feet	Datum:				
Coordinates:	E: 6264028.673 N	1920613.917	7				
Coordinates; Camera type:	E: <u>6264028.673</u> N		State of the second		UTM (m) 🗌 L	at-Long (dec deg)	
Camera type:		- Pentax Or	otio wa	0	UTM (m)		_
Camera type:	E: <u>6264028.673</u> N	and the second se	State of the second		UTM (m) [] L - <u>1391-1394</u> Photo #	Lat-Long (dec deg) S/OS/MSCP File location	-
Camera type:		- Pentax Or SW, W, NW, N Direction (facing)	<u>1.1m</u> Height	10° down Camera Angle	<u>1391-1394</u> Photo #	S/OS/MSCP	-
Camera type: Location 1 (see Locatio	e coordinates above) on 2 [Coordinates]	- Pentax Of SW, W, NW, N Direction (facing) Direction (facing)	1.1m Height Height	10° down       Camera Angle       Camera Angle	<u>1391-1394</u> Photo # Photo #	S/OS/MSCP	-
Camera type: Location 1 (see Location III. ASSOCIA	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) GAREA If need more room	1.1m Height Height	10° down         Camera Angle         Camera Angle         I data and any notes on page	<u>1391-1394</u> Photo # Photo #	S/OS/MSCP File location File location	-
Camera type: Location 1 (see Locatin III. ASSOCIA Invasive?	on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate	- Pentax Of SW, W, NW, N Direction (facing) Direction (facing)	1.1m Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate	<u>1391-1394</u> Photo # Photo #	S/OS/MSCP File location File location	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive?	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll.	1.1m Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on pay Species/Substrate Vama 5P-	<u>1391-1394</u> Photo # Photo # ge 3.	S/OS/MSCP File location File location	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive?	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia denostoma fusucu	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) <b>G AREA</b> If need more room % Cover Coll? Coll.	1.1m Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on particulation Species/Substrate Vana Sp- typochalens g	<u>1391-1394</u> Photo # Photo # ge 3.	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Do Aco Fen	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia denostôma fascicu moca ctas vividesce	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 Jatum 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Du Ac Fen Er	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalla duya brevifalla duya brevifalla duya brevifalla duya brevifalla duya brevifalla duya brevifalla duya brevifalla duya brevifalla	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 Jatum 1 ins 1 atum 5	Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on particulation Species/Substrate Vana Sp- typochalens g	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Du Ac Fea Er Xy1	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia denostoma fuscion rocactas viridesce riogonum fascical, lococcus bicolor	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Locatin III. ASSOCIA Invasive? Do Ac Fea Ex Xyi Av	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia duya brevif	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Du Ac Fea Er Xyn Ar- Qpu	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia denostoma fuscion rocactas viridesce riogonum fascical, lococcus bicolor	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Height Height , record additiona # Invasive?	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Du Ac Fea Er Xyp Ar Ar Opt if e	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia duya brevif	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Definition       1.1m       Height       Height       , record additiona       #       Invasive?       J       J       J       S       S	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Do Ac Fea Ex Ex Xyn Av Opti iFe Sel	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalla denostoma fuscion rocactas vividesce riogonam fascical lococcus bicolor demisia california untia littoralis	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Definition       1.1m       Height       Height       , record additiona       #       Invasive?       J       J       J       S       S	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Do Ac Fea Ex Ex Xyn Ar Opti iF e Sel, Plo	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalla denostoma fuscion pocactas vividesce iogonam fascical lococcus bicolor temisia california untia littoralis terometes avbutifi aginella cinevasce an tago erecta	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Definition       1.1m       Height       Height       , record additiona       #       Invasive?       J       J       J       S       S	D 10° down Camera Angle Camera Angle I data and any notes on page Species/Substrate Vana Sp- hypschaens g. Sclaginolla	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Do Ac Fea Ex Xyr Av C Do I Fea Ex Xyr Av C Do I Fea Ex Xyr Av C Do I Fea Ex Do Do Do Do Do Do Do Do Do Do Do Do Do	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia duya brevifalia duya brevifalia duya brevifalia duya brevifalia duya brevifalia benostóma fascical iogonam fascical iogonam fascical iogonam fascical duntia litteralis devome les avbatta eginella cinevasce an tago erecta agiobothnys sp nandra fascicalata	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room, % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	hto W9     1.1m     Height     Height     nrecord additiona     # Invasive?     A     F     S     S	D 10° down Camera Angle Camera Angle I data and any notes on par Species/Substrate Vana Sp- typo:Maens g. Selaginalla conchus asp	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Do Ac Fea Ex Xyr Av Copri if e Sel, Plo Deir	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia denostoma fuscicu denostoma fuscicu denostoma fuscicu denostoma fuscicu denostoma fuscicu denostoma fuscicu iogonum fascicu lococcus bicolor demisia californic untia littoralis devome les avouta eginella cinevasce an tago erecta agio bothomas sp	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room, % Cover Coll? Coll. 1 1 1 1 1 1 1 1 1 1 1 1 1	Atto     Wg       1.1m       Height       record additiona       #     Invasive?       Y     Y       Y     Y       Y     Y       S       Bare Ground	d: 20	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-
Camera type: Location 1 (see Location III. ASSOCIA Invasive? Du Acc Fea Er Xyp Arc Du It e Sel Pla Deip Loc Er	e coordinates above) on 2 [Coordinates] ATED SPECIES IN SAMPLIN Species/Substrate Aduya brevifalia duya brevifalia duya brevifalia duya brevifalia duya brevifalia duya brevifalia benostóma fascical iogonam fascical iogonam fascical iogonam fascical duntia litteralis devome les avbatta eginella cinevasce an tago erecta agiobothnys sp nandra fascicalata	- Pentax Or SW, W, NW, N Direction (facing) Direction (facing) G AREA If need more room, % Cover Coll? Coll. 1 Intern 1 Intern 1 Intern 1 Intern 5 Signa 2 Intern 5 Intern 5	hto W9     1.1m     Height     Height     nrecord additiona     # Invasive?     A     F     S     S	d: 20	<u>1391-1394</u> Photo# Photo# ge 3. Iabra bigelovii	S/OS/MSCP File location File location % Coll? Coll. 2 1	-

MSP - Ra	e Plant Habitat and Threats	Assessment Form	Page 2
Scientific Name: Dudleya b	revifolia	MSP Occurrence ID:	DUBLB2_6CMPR001
Preserve: Carmel Mountain Preserv	e	Occurrence Name:	Carmel Mountain Preserve Obs. #1
Date: 4/30/14		Time Start: 9:00	Time Finish: 10:30
Surveyors & Affiliation/Agency: BM,	KR. GW. SM. SM.	-	
	an be assigned using San Diego veg	netation key (AECOM 2012) in	ific sampling area (typically 10-m radius the office or field, using "Associated Species"
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to	Image: System         Image: S	Attemisia califo ch Depth: Ave cm Class: Ground Squirrel Activity: No If No, No within the occurrence's maximum	<u>rnica i salha mellificta)</u> a S(UCiQUO) Max:cm Ave. Height?cm
Argentine Ant Abundance at Bait Station ( Ant Sample Collected?: Yes [ Disturbances (rank each as 1-6): Non-Native Forbs 3 Non-Native Grasses 3 Non-Native Woody Plants 1 Competitive Native Plants 1		Ant Station Photo Altered Erosic Urban	d Hydrology
Dumping/Trash     Encampments	Historic Grazing	1.	ompaction
Fuel Modification Zone/Fire Break       1         Road Construction/Maintenance       1         Vegetation Clearing       1         ORV/Mountain Bike Activity       1         Evidence of Recent Fire       1         Trails       1         Type of Trail Use?       1         Hiking       1         Biking	If Observed, List Type(s) of O In If Sign of Recent Fire: Year B If Trails are Present, are They Equestrian Dog	urned? Unkn	own Burn Year: known
Overall Site Quality (see page 5):	Very Good-Excellent	Fair to Good	Poor Very Poor

VI. MANAGEMENT	RECOMMENDATIONS
Continue to	Maintain arress control via fending, signs, bumid
VII. MANAGEMEN	T ACTIONS IN LAST YEAR
Fencing,	signs and other pamiers installed to
	f- trail activity around vernal pool
vestoration	
chapana	al Lands conservancy
/III. CNDDB SPEC	IES DETECTED & NOTES
ist any plant or animal spe	ecies to add to the CNDDB:
Peregvine	fallon figing overhead (low)
J	
Dubr 1 :	32.933131 -117.219995
2:	32.933/22 -117.219984
3:	32.933061 -117.219996 32.933047 -117.72001
5	32. 932993 -117. 2200 25
6.	32. 932969 -117. 22009
7:	32,93291 -117.220125
8:	32.932917 -117. 220136
9	32.932913 -117.220169
10 :	37,932912 -117,220216 32,932917 -117,2202553
11 · 12 :	
13:	32.932999 -117.220131
1.4	

### Dudleya blochmaniae spp. brevifolia (Short-Leaved Dudleya) Carmel Mountain Subpopulation # 1



Panorama from Northwestern edge of population, Southwest, West, Northwest, North. Panorama location is 6264028.67 1920613.92 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plan	t Occurrence Monitori	ng Form		Page 1		
Scientific Name: Dudleya brevife	olia	MSP Occurrence ID:	DUBLB2_6CMPR001	1		
Common Name: Short-leaved d	udleya	CNDDB EO#:	EO8 Transloca	ted?	no	
Preserve: Carmel Mountain Preserve	'e		Management	Unit:	6	6
Land Owner: City of San Diego		Land Manager:	City of San Diego PR	D		
Occurrence Name: Carmel Mounta	ain Preserve Obs. #2		Sample Poi	nt #:	2	2
Surveyors & Affiliation: Betsy Mille	er, Kim Roelanc	l. Ginawashir	aton. Sava V	Nesza	ws-c	= ty
Date: 4/30/14	Sarah McCute		10:56 Time Fir		19	
I. OCCURRENCE STATUS - Assess # plan extent. See page 4 for definitions of categories any notes on page 3.						
# Plants/Sampling Area: <u>See below</u>	<u>~</u> /∂ □ Exact 🔯	Estimate (extrapolate partia	I count) Uncertainty?	tow		
# Plants/Current Mapped Extent: 63		ount Estimate (1,000s,		1000		
Area of Current Mapped Extent:	F 1 1 1 1		Exact (GPS mapping)	ΠEs	stimate	
Phenology in Current Mapped Extent (Categories	s 1-5): Vegetative: 5	2	Fruiting: Dea	1	and co	
Evidence in Current Mapped Extent (Categories		Disease:	Stunted Growth: 5	1		
Is Sampling Area within Current Mapped Extent?						
Species Found in Maximum Extent?		1.00.00				
		If not, why (if reason known or	suspected)?			
Collection (if not collected previously)?	Yes		Previously			
If yes:		a.e. 1	- 1157 			
Collector	Colle	ction Number	Museum/Herbarium			
IL SAMPLING APEAL OCATION & SITE P						-
II. SAMPLING AREA LOCATION & SITE F		Dotumi				
GPS Accuracy: +/<1	] meters 🗌 feet 🛛	Datum:		_		
GPS Accuracy:         +/<1         I           Coordinates;         E:         6265696.736         N:	meters feet [ 	✓ State Plane		Lat-Long	(dec deg)	
GPS Accuracy:         +/<1	meters feet [ <u>1920365.462</u> Penton Optic	State Plane	e (ft) 🗍 UTM (m) 📋			
GPS Accuracy:         +/<1         I           Coordinates;         E:         6265696.736         N:	meters feet [ 	✓ State Plane	e (ft) □ UTM (m) □ 12510-1858	Lat-Long S/OS/N File loca	MSCP	
GPS Accuracy:         +/<1	] meters ☐ feet [ 	State Plane	e (ft) □ UTM (m) □ 12510-1858	S/OS/N	MSCP	-
GPS Accuracy: +/- <u>&lt;1</u> ✓ Coordinates; E: <u>6265696.736</u> N:_ Camera type: Location 1 (see coordinates above) Location 2 [Coordinates]	meters feet feet feet feet feet feet feet fee	State Plane State	e (ft) UTM (m) [ <u>13/16-1945</u> e Photo # e Photo #	S/OS/N	ASCP ation	
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       I         Direction (facing)       I         Direction (facing)       I         AREA       If need more room, references	State Plane DUGD 1.1m 10° down Height Camera Angle Height Camera Angle cord additional data and any note	e (ft) UTM (m) <u>1340-1348</u> e Photo # e Photo # so n page 3.	S/OS/N File loca File loca	ASCP ation ation	-
GPS Accuracy: +/<1	meters feet feet feet feet feet feet feet fee	State Plane State	e (ft) UTM (m) [ <u>13/16-1848</u> e Photo # e Photo # s on page 3. trate	S/OS/N File loca	ASCP ation	-
GPS Accuracy: +/<1	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       I         Direction (facing)       I         Direction (facing)       I         AREA       If need more room, references	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: +/<1	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       Direction (facing)         Direction (facing)       I         SAREA       If need more room, res         % Cover       Coll?         1       1	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	=
GPS Accuracy: +/<1	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       Direction (facing)         Direction (facing)       I         SAREA       If need more room, res         % Cover       Coll?         1       1	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: +/<1	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       0         Direction (facing)       0         Direction (facing)       0         AREA       If need more room, restriction         % Cover       Coll?         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	=
GPS Accuracy: +/<1 ✓ Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate DudWya brevifolia Acmispon glaben Adenostoma fascicum Salvia mellifera Cardionema ramosis Eniogonum fascicuitot	meters       feet       I         1920365.462       1920365.462         Pentar       Optic         N, NE, E, SE       0         Direction (facing)       0         Direction (facing)       0         AREA       If need more room, re         % Cover       Coll?         1       1	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	=
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate DudUya brevitolia Acmispon glaben Adenostoma fasciculat Cardionema ramosis Eniogonum fasciculat Deinandra fasciculat	meters       feet       I         1920365.462       Pentar Optic         Pentar Optic       N, NE, E, SE         Direction (facing)       Direction (facing)         Direction (facing)       Direction (facing)         AREA If need more room, re       % Cover         Value       1         1       1	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	=
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Dudluja brevi folia Acmispon glaben Adenostoma fascicula Salvia mellifera Cardionema ramosis Eniogonum fascicula 4 Peinandra fascicula	meters       feet       I         1920365.462       Pentan       Optic         N, NE, E, SE       Direction (facing)       I         Direction (facing)       I       I         i       I       I         1       I       I	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: +/<1 ✓ Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Duduya brevifolia Acmispon glaben Adenosfoma fascicula Salvia mellifera Cardionema ramosis Eniogonum fascicula Vylocolcue bicolor Navawetia hamata	meters       feet       I         1920365.462       Pentan       Optic         N, NE, E, SE       Direction (facing)       I         Direction (facing)       I       I         i       I       I         1       I       I	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	=
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Dudluja brevitolia Acmispon glaben Ademostoma fascicula Salvia mellifera Cardionema ramosis Eniogonum fascicula Deinandra fascicula Vilocolicue bicolor	meters       feet       I         1920365.462       Pentan       Optic         N, NE, E, SE       Direction (facing)       I         Direction (facing)       I       I         i       I       I         1       I       I	State Plane State	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate DudWya brevitolia Accmispon glaben Adenostoma fascicula Salvia mellifera Cardionema ramosis En ogonum fasciculat Deinandra fasciculat Deinandra fasciculat Deinandra fasciculat Deinandra fasciculat Nylocolcus brietor Naravetra hamata Plantago erecta	meters       feet       I         1920365.462 $pentar 0ptic         pentar 0ptic       n, NE, E, SE n         Direction (facing)       n n         Direction (facing)       n n deltarrow converter c$	✓ State Plane         1.1m       10° down         Height       Camera Angle         Height       Camera Angle         Invasive?       Species/Subs         Malosma       Emalum         ✓       Emalum         ✓       Emalum	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: +/<1 Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Dudluya brevitolia Accmispon glaben Adenostoma fascicula Salvia mellifera Cardionema ramosis En ogonum fasciculat Deinandra fasciculat Salvio biolor Navaretia hamata Plantago erecta Jepsonia pumpi Plagio bothnys sp. Sclaginellacine rascen	meters       feet       I $1920365.462$ $pentar Optic         pentar Optic       n, NE, E, SE pirection (facing)         Direction (facing)       pirection (facing) pirection (facing)         I       pirection (facing) pirection$	State Plane	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	
GPS Accuracy: + <i v<br="">Coordinates; E: <u>6265696.736</u> N: Camera type: Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Dudluya brevifolia Accrnispon glaben Adenostoma fascicula Salvia mellifera Cardionema ramosis Eniogonum fascicula Vilocolicus bicolor Navawetra hamata Plantago erecta Jepsonia pumji Plagio bo thus sp.</i>	meters       feet       I         1920365.462 $Pentar Optic         Pentar Optic       Pintar Optic         N, NE, E, SE       Direction (facing)         Direction (facing)       Oirection (facing)         Direction (facing)       Oirection (facing)     <$	✓ State Plane         1.1m       10° down         Height       Camera Angle         Height       Camera Angle         Invasive?       Species/Subs         Malosma       Emalum         ✓       Emalum         ✓       Emalum	e (ft) UTM (m) [ <u>12910-1898</u> e Photo # e Photo # son page 3. trate 1 AUMMA	S/OS/N File loca File loca	ASCP ation ation	

MSP - Rare F	lant Habitat and Threa	ts Assessment Fo	orm	Page 2	
Scientific Name: Dudleya brevi	olia	MSP Occurren	nce ID:	DUBLB2_6CMPR001	
Preserve: Carmel Mountain Preserve		Occurrence Na	ame:	Carmel Mountain Preserve Ol	bs. #2
Date: 4/30/14		Time Start:	10:56	Time Finish:	11:19
Surveyors & Affiliation/Agency: BM, K	R. GW, SM. S	Mc			
IV. HABITAT ASSESSMENT IN SAMPL circle). Vegetation alliance/association can b data from page 1. See page 4 for definitions	e assigned using San Diego	vegetation key (AECOM	1 2012) in the o		
SANDAG 2012 Vegetation Alliance/Association Fasciculatum - (Eriogony)	n: Adenostoma fo fasci cularum la	nemisia caliti	Alliano ornical	e/Adenostoma salvia mellifera)	-
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25				ANUC	iation
Cryptogamic Crust Cover: _5 Tha	tch Cover: Th	atch Depth: Ave	cm Max	cm	
Dead Standing Biomass? Yes	No If Yes, Species/Cov	er Class:		Ave. Height?	_cm
Mammal Species Activity Categories (1-4): Fe	eral Pig Activity:	Ground Squirrel Activ	vity:	Gopher Activity:	
Sampling Area Representative of Maximum E	xtent?	s 🗌 No	If No, Note Di	ferences on Page 3.	
monitoring) plus 10-m surrounding buffer . notes on page 3. Surrounding Land Use at Site (>Maximum Ext		DA LE			
Argentine Ant Abundance at Bait Station (1-4)         Ant Sample Collected?:       Yes         Disturbances (rank each as 1-6):         Non-Native Forbs       1         Non-Native Grasses       1         Non-Native Woody Plants       1         Competitive Native Plants       1         Dumping/Trash       3         Incampments       1	Ant Sample #: <u>N/A</u> Feral Pig Activity _ Trampling _ Vandalism _ Current Grazing _ Historic Grazing _			rology /	70-
Fuel Modification Zone/Fire Break	_ If Sign of Recent Fire: Yea	r Burned?	Unknown E	tracks outside of burn Year: - the traii / ha ipec in close a [] sonice Vehicles	exte
Overall Site Quality (see page 5):	ery Good-Excellent	Fair to Good	D Poo	or 🗌 Very Poor	

/I. MANAGEMENT RECOMMEND	<u>MPROOI</u> Species: <u>Dudlaya</u> brevitolia Date: <u>4/30/1</u> DATIONS
continue to main	tain trail closure
with fences, size	ans native plants, and our baniers
VII. MANAGEMENT ACTIONS IN I	LAST YEAR
off trail USP reduce	end with Course anoun inciting
plantings	ed with fences, signs, native
proceedings	
VIII. CNDDB SPECIES DETECTED	2 & NOTES
List any plant or animal species to add to the CN	
DUBR 1: 32.932285	
2:32.932.301	-117. 214498
<u>3:32.93234</u> 4:32.932 <u>5</u> 44	-117. 21451
	-117.21458488 -117.214561
6: 32.932469	
0 26 12 4901	

### Dudleya blochmaniae ssp. brevifolia (Short-Leaved Dudleya) Carmel Mountain Subpopulation # 2



Panorama from Northeastern edge of population, North, Northeast, East, Southeast. Panorama location is 6265696.74 1920365.46 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



	11	MSP - Rare Plant Oc	currence N	lonitori	ng Form	n -	Pa	ige 1		
Scient	tific Name:	Dudleya brevifolia			MS	P Occurrence ID: DUI	BLB2_6CMPR001			
Comn	non Name:	Short-leaved dudle	eya			CNDDB EO#: EO	8 Translocated?	? n	0	$\leq$
Prese	rve: Ca	rmel Mountain Preserve					Management Unit			6
Land	Owner: City	y of San Diego				Land Manager: City	of San Diego PRD			
Occur	rence Name.	: Carmel Mountain F	Preserve Ob	s. #3			Sample Point #		3	3
Surve	yors & Affilia	tion: Betsy Miller, Ki	Im Roel	and	Ginal	Washington.	Sava Maszau	- 20	city	si
	4/30/1	0				V	20 Time Finish.		9	
extent		STATUS - Assess # plants in for definitions of categories desc	N. C. L.				and the second			I
# Plant	s/Sampling Ar	rea: <u>see lactow-noc</u>	Exa	ct 🗌	Estimate	(extrapolate partial cour	nt) Uncertainty? 101	U		_
# Plant	s/Current Map	oped Extent		Exact Co	unt 🗌	Estimate (1,000s, 10,0	00s) Uncertainty? 10	w		
Area of	Current Map	ped Extent: 321. 50					act (GPS mapping)	E	stimate	
		t Mapped Extent (Categories 1-5	): Vegetative:	5	Flower			(		
		Mapped Extent (Categories 1-5)								
							of sampling pt,	but	pop	
							, <u> </u>	nco	nhqu	104
opecie	S I Ouriu in Ma	aximum Extent? 🛛 Yes	NO		lf not, w	hy (if reason known or suspe			U	- 1
Collect		ected previously)?	Yes	)	No		pusly			
		Collector			ction Num	nber M	useum/Herbarium		_	
II. SA	MPLING AR	EA LOCATION & SITE PHO		RING						-
GPS A	ccuracy: +/-	<u>&lt;1</u>	eters f	eet [	Datum:	10.77 C		-		
Coordin	nates; E:	<u>6265528.098</u> N:	<u>1920</u>	724.116		✓ State Plane (ft)	UTM (m)	at-Long	(dec de	eg)
Camera	a type:		Pentax	Opti	0 10	90				_
Locatio	n 1 (see coord		SE, S, SW, NV	<u> </u>	1.1m	10° down	1400-1406 Photo#	S/OS/		_
		Dire	ection (facing)		Height	Camera Angle	Photo #	File loc	auon	117
	Location 2 [Co	oordinates] Dire	ection (facing)		Height	Camera Angle	Photo #	File loc	ation	
III. AS	SOCIATED	SPECIES IN SAMPLING AR	EA If need mo	re room, re	ecord additi	onal data and any notes on p	bage 3.	-		
Invasive	Spec	cies/Substrate	% Cover Col	I? Coll. #	Invasive?	Species/Substrate		%	Coll? Co	oll. #
	m 1 2	a brevifolia	i	-			ramos assum	1		_
		integrifolia	5	_		Navametra		1		_
	Enoge	ostoma fascicula	teren 2	-		Ferriactus 1	Inaestens	1		-
	1.1.2.1	ma laurina	5	-						-
		mellifera	5	-						_
		icus bicolor	10	1						
		pulchica	1							
		pella cinevasiens	-serves	-				1		
		ago evecta	1	1.000	1.1.1			1		
		ndra fascilulata	1							
V		ns hordeaceus								_
17		ponmicranthy		-	Bare Gro	ound: 50				_
V	10	uvea melitonsi	5	-	Litter:	20- 11-00				_
T	Cover:		1	No. 1 O	Rock:	20- 110n	25			
I otal %	Cover:	30 % Herb Cover:	%	onrup Cov	ver: 3	D % Tree Cover:_	0			

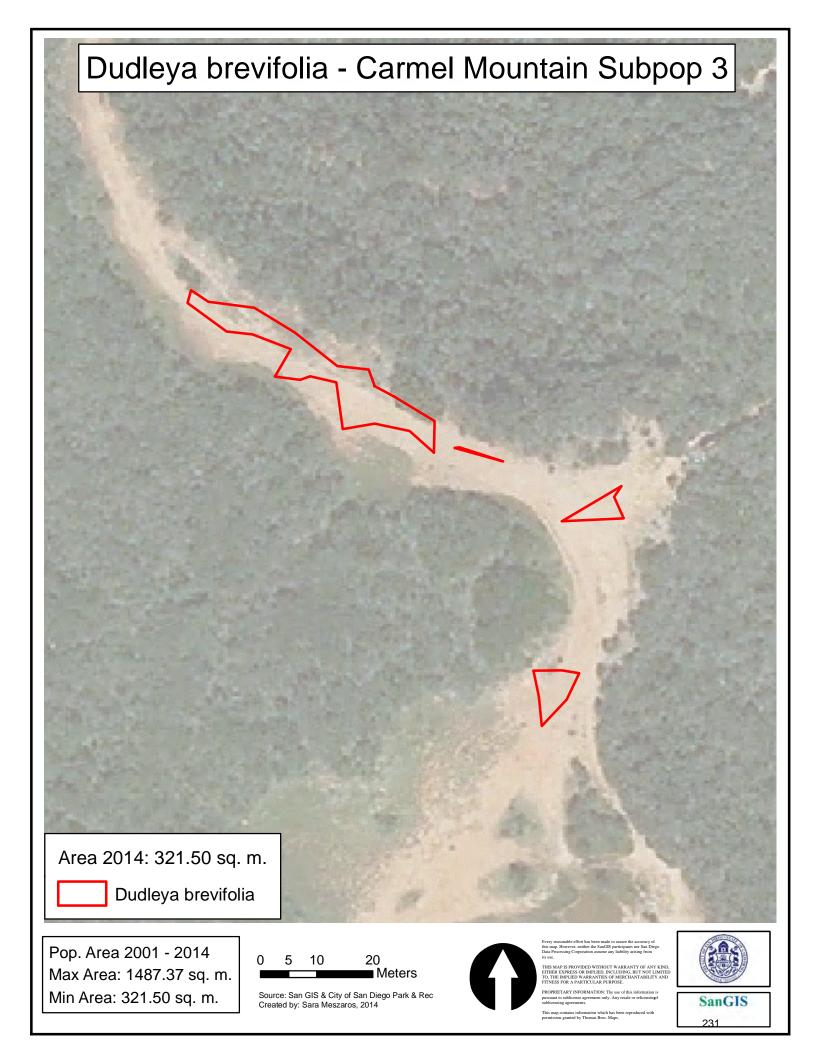
Scientific Name: Dudleya brevifolia	MSP Occur	ence ID: DU	BLB2_6CMPR001	
Preserve: Carmel Mountain Preserve	Occurrence	Name: Car	mel Mountain Preserve Ol	bs. #3
Date: 4/30/14	Time Start:	11:20	Time Finish:	12:30
Surveyors & Affiliation/Agency: BM, KR, GW, SM	1. SMc			
IV. HABITAT ASSESSMENT IN SAMPLING AREA - Ass circle). Vegetation alliance/association can be assigned using data from page 1. See page 4 for definitions of habitat assessm	San Diego vegetation key (AECO	OM 2012) in the office of		
SANDAG 2012 Vegetation Alliance/Association: Adenas	toma fasciculat	1m - Xyloci	occus bicolov	_
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <50%);	5 (>50%)			
Cryptogamic Crust Cover: 3 Thatch Cover: 1	Thatch Depth: Ave	cm Max:	cm	
Dead Standing Biomass? Yes KNo If Yes, S	pecies/Cover Class:		Ave. Height?	cm
Mammal Species Activity Categories (1-4): Feral Pig Activity:			/	
Sampling Area Representative of Maximum Extent?				
V. THREATS ASSESSMENT IN MAXIMUM EXTENT - A	anne llevente coltin ll	and a second	at laund it is to t	
notes on page 3.				
Argentine Ant Abundance at Bait Station (1-4):       Image: Argentine Ant Abundance at Bait Station (1-4):         Ant Sample Collected?:       Yes         Disturbances (rank each as 1-6):         Non-Native Forbs       3         Image: Station (1-4):       Feral Pig Act         Non-Native Grasses       3         Non-Native Woody Plants       1	#: Ant S	Time Finish: ation Photo #: Altered Hydrolog Erosion Urban Runoff	Temp. Finish: y  	
Argentine Ant Abundance at Bait Station (1-4):      A	Start:     Temp. Start:       #:     Ant Start:       tivity	Time Finish: ation Photo #: Altered Hydrolog Erosion Urban Runoff Slope Movement	Temp. Finish: y   	
Argentine Ant Abundance at Bait Station (1-4):       Ard A         Ant Sample Collected?:       Yes         Disturbances (rank each as 1-6):         Non-Native Forbs       3         Non-Native Grasses       3         Non-Native Woody Plants       1         Competitive Native Plants       1         Dumping/Trash       4	Start:	Time Finish: ation Photo #: Altered Hydrolog Erosion Urban Runoff	Temp. Finish: y   	
Argentine Ant Abundance at Bait Station (1-4):      A	Start:	Time Finish: ation Photo #: Altered Hydrolog Erosion Urban Runoff Slope Movement	Temp. Finish: y   	

VI. MANAGEMENT RECOMMENDATIONS	
- continue to maintain access co	ntul w/ fencing signs,
other barriers	3 0 7
VII. MANAGEMENT ACTIONS IN LAST YEAR	
maintained access control w/-	tending, signs, barniers
VIII. CNDDB SPECIES DETECTED & NOTES	
List any plant or animal species to add to the CNDDB:	
Polygon 1 113 total	Polygon 4 477 total
DUBR 1: 32.932853 -117.214817	1: 32.933254 -117. 21502
7: 32.93.281 -117.214858	2: 32.933246 -117.2150
3: 32, 932856 -117. 214865	3:32.933281 -117.2151
<u>4.32.932898 -117.214875</u>	4:32.93336 -117.215/4
5: 32 932899 -117. 214821 10: 32 932895 -117. 214788	- <u>5:32.933292 -117.21518</u> - 0. 32.933296 -117.21517
10: 32.932895 -117.214788 7: 32.932	7: 32.933353 -17.2151
1: 34: 484	8.32.933283 -117.2152
Polygon 2 23 total	32.933353 -117.24518
DUBR	9: 32.933297 -117.21506
	10: 32.93341 -117.215342
	11: 32.933384 -117.215254
1 32 933138 -117.214824	12: 32.933476 -117.215416
2 - 32. 933144 -117.214707	13. 32.933497 -117 215885
3: 32.933175 -117.214723	14: 32.933489 -117, 21545
4: 32.933192 -117.214711	15: 32.933503 -117 21553
	16: 32.933481 -112 215538
Polygon 3 2 total	17: 32.733484 -117215499
1: 32,933255 -117.21502	18: 32.933437 -117.215464
2: 32.933233 -117.214937	19: 32.933434 -17.215414
	20: 32.933366 -117.215373
	21: 32.933301 717. 215325
	22: 32.933 378 -117.215194
- we removed some folding	22: 32.933 378 -117.215194 23: 32.933 391 -117.21528
- We removed some folding mains that had been Stacked near photo pt	22: 32.933 378 -117.215194

## Dudleya blochmaniae spp. brevifolia (Short-Leaved Dudleya) Carmel Mountain Subpopulation # 3



Panorama from Southwestern edge of population, Southeast, South, Southwest, West, Northwest. Panorama location is 6265528.09 1920724.12 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



Scientific Name:	MSP - Rare Pla Dudleya bre	vifolia	MS	P. Occurronce ID:		700040	02		
Common Name:			IVIC	CNDDB EO#:	EO1				
	Short-leaved st Canyon Preserve			CNDDB EO#:		Translo		no	-
Land Owner: City		3		Land Managary		Managemer			
Occurrence Name:	Acres and a second second	N. Subasa		Land Manager: (	Sity of S				
		on- N. Subpop.				Sample P		10.1	1
Date: 4/30/1		Kim Rorland	Saval	Time Start:			Finish: J		
I. OCCURRENCE S extent. See page 4 for any notes on page 3.	STATUS - Assess # p or definitions of categori	plants in both the species-species describing phenology & e	ecific <b>sampli</b> vidence of he	ng area (typically 10- erbivory, disease & stu	m radius o Inted grov	circle) & in the	current n	napped	
# Plants/Sampling Are	ea: 57	Exact [	Estimate	(extrapolate partial of	count)	Uncertainty?_	100	0	
Evidence in Current M	10/1	ries 1-5): Vegetative: s 1-5) of: Herbivory:	Flower	,	Exact (G	Uncertainty?_ PS mapping) D Growth:	ead:(	) Estima	ate -
Species Found in Maxi	imum Extent?	res 🗌 No	If not w	hy (if reason known or s	(spectod)				
Collection (if not collec	ted previously)?		250						
		Yes	No	Collected Pr	eviously				
If yes:			1						
PS Accuracy: +/	<u>&lt;1</u>	Co E PHOTOMONITORING	Dillection Num	iber	Museur	n/Herbarium			
I. SAMPLING ARE	A LOCATION & SITI	Ca E PHOTOMONITORING ✓ meters ☐ feet N: <u>1928311.1</u> - Pentax Opti W, NW, N, NE, E	Datum: 2 0 W90 1.1m	iber State Plane (	Museur (ft) []	UTM (m)		S/MSCI	
I. SAMPLING ARE. GPS Accuracy: +/ Coordinates; E: Camera type:	A LOCATION & SITI	Ca E PHOTOMONITORING Image: meters feet M: 1928311.1 - Pentax Optic	Datum:	iber	Museur (ft) []	UTM (m)	S/O	-	
. SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type:	A LOCATION & SITI	Ca E PHOTOMONITORING ✓ meters ☐ feet N: <u>1928311.1</u> - Pentax Opti W, NW, N, NE, E	Datum: 2 0 W90 1.1m	iber State Plane (	<u>Museur</u> (ft) []  F	UTM (m)	S/O File I	S/MSCI	
SAMPLING ARE     SPS Accuracy: +/ Coordinates; E:     amera type:     ocation 1 (see coordin     Location 2 [Coordinates]	A LOCATION & SITI	E PHOTOMONITORING	Datum: Datum: <u>2</u> <u>0 W90</u> <u>1.1m</u> Height Height	ber State Plane ( <u>10° down</u> Camera Angle Camera Angle	Museur (ft) []  F F	UTM (m) 07-1911	S/O File I	S/MSCI ocation	
SAMPLING ARE     SPS Accuracy: +/      coordinates; E:     amera type:     ocation 1 (see coordin     Location 2 [Coordinates]     Location 2 [Coordinates]     Specie	A LOCATION & SITI	E PHOTOMONITORING         ✓ meters       feet         N:       1928311.1         - Pentax       Gpti         W, NW, N, NE, E       Direction (facing)         Direction (facing)       NG AREA // need more room         % Cover       Coll?	Datum:2 	ID° down Camera Angle Camera Angle Dnal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Docation 1 (see coordin Location 2 [Coordin Location 2 [Coordin ASSOCIATED SI vasive? Specie Dudly	A LOCATION & SITI	E PHOTOMONITORING         ✓ meters       feet         ✓ meters       1928311.1         - Pentax       Optimization         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         NG AREA       If need more room         % Cover       Coll?         Coll       Coll	Datum:2 	Iber State Plane ( 10° down Camera Angle Camera Angle Danal data and any notes	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Docation 1 (see coordin Location 2 [Coor ASSOCIATED SI vasive? Specie Duduy Eniogon	A LOCATION & SITI $\leq 1$ 6253917.074 M hates above) rdinates] PECIES IN SAMPLIN es/Substrate $\mu_{L}$ brevifolition fastic and	E PHOTOMONITORING         ✓ meters       feet         N:       1928311.1         - Pentax       Gpt         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         NG AREA       If need more room         % Cover       Coll?         Coll       Coll.         A       I	Datum:2 	ID° down Camera Angle Camera Angle Dnal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
. SAMPLING ARE PS Accuracy: +/ coordinates; E: amera type: cocation 1 (see coordin Location 2 [Coordin Location 2 [Coordin Lo	A LOCATION & SITI	E PHOTOMONITORING	Datum:2 	ID° down Camera Angle Camera Angle Dnal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
I. SAMPLING ARE SPS Accuracy: +/ Coordinates; E: Camera type: Occation 1 (see coordin Location 2 [Coordinates] Location 2 [Coordinates] Location 2 [Coordinates] Coordinates] Location 2 [Coordinates] Coordinates] Location 2 [Coordinates] Location 2 [Coordinates] Coordinates] Location 2 [Coordinates] Location 2 [Coord	A LOCATION & SITI	E PHOTOMONITORING	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Docation 1 (see coordin Location 2 [Coor ASSOCIATED SI vasive? Specie Dindlug Enogon Rhus ii Adeno sto Kylococcu	A LOCATION & SITI $\leq 1$ $\leq 253917.074$ hates above) rdinates] PECIES IN SAMPLIN es/Substrate $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita $j_{A}$ brevifolita	Ca E PHOTOMONITORING	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Location 2 [Coordinates] Location 2 [Coordinates] Location 2 [Coordinates] Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Coordinates; E: Associated 2 Coordinates; E: Specie Coordinates; E: Associated 2 Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Specie Coordinates; E: Coordinates; E: Specie Coordinates; E: Specie Coordinat	A LOCATION & SITI $\leq 1$ $\leq 253917.074$ hates above) rdinates] PECIES IN SAMPLIN es/Substrate jh brevifolia hegisfolia ma fascicula is bicd or is aurantiau	Ca E PHOTOMONITORING	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Docation 1 (see coordin Location 2 [Coordinates] Location 2 [	A LOCATION & SITI	Ca E PHOTOMONITORING	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE PS Accuracy: +/ oordinates; E: amera type: Docation 1 (see coordin Location 2 [Coor ASSOCIATED SI rasive? Specie Dudly Enogen Rhus in Adeno sto Kylococu Mimuly Salvia I Stipa pu	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       1928311.1         - Pentax       Gpt         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         VG AREA       If need more room         % Cover       Coll?         Coll       3         Image: meters       3         Image: meters       5         Image: meters       1         Image: meters       1	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
I. SAMPLING ARE SPS Accuracy: +/ Coordinates; E: Camera type: ocation 1 (see coordin Location 2 [Coordinates; Location 2 [Coordinates; Location 2 [Coordinates; Coordinates; E: Camera type: Location 2 [Coordinates; Coordinates; E: Camera type: Location 2 [Coordinates; Coordinates; E: Coordinates; E: Coordinate	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       1928311.1         -       Pentax       Optimization         M, NW, N, NE, E       Direction (facing)         Direction (facing)         NG AREA       If need more room         % Cover       Coll?         NG AREA       If need more room         % Cover       Coll?         In them       5         In them       5         In them       5         In them       5         In them       1         In them       1         In them       1         In the       1	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE      PS Accuracy: +/ oordinates; E:     amera type:       Docation 1 (see coordin      Location 2 [Coordinates)     Location 2 [Coo	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       1928311.1         -       Pentax       Optimization         M, NW, N, NE, E       Direction (facing)         Direction (facing)         NG AREA       If need more room         % Cover       Coll?         NG AREA       If need more room         % Cover       Coll?         In them       5         In them       5         In them       5         In them       5         In them       1         In them       1         In them       1         In the       1	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE     SPS Accuracy: +/     Soordinates; E:     amera type:      ocation 1 (see coordin     Location 2 [Coordinates]     Location 2 [C	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       1928311.1         - Pentax $0ptile         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         NG AREA       If need more room         % Cover       Coll?         In them       5         In them       5         S       5         S       5         S       5         S       1         In them       1         In them       1         In the set       1   $	Datum:2 	ber State Plane ( 10° down Camera Angle Camera Angle onal data and any notes Species/Substra	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE     SPS Accuracy: +/      Soordinates; E:     amera type:      cocation 1 (see coordin      Location 2 [Coordinates]     Location 2	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       1928311.1         - Pentax       Gpt         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         NG AREA       If need more room         % Cover       Coll?         NG AREA       If need more room         % Cover       Coll?         In the S       S         S       S         S       S         S       S         S       S         In the S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S         S       S	Datum:2 	Inber State Plane ( 10° down Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
SAMPLING ARE     SPS Accuracy: +/      Soordinates; E:     amera type:      Location 2 [Coordinates]     Location 2	A LOCATION & SITI	E PHOTOMONITORING	Datum: Datum: 2 0 W90 1.1m Height Height 1 Invasive?	Inber I State Plane ( 10° down Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u>,</u>
I. SAMPLING ARE SPS Accuracy: +/ Coordinates; E: Camera type: Coation 1 (see coordin Location 2 [Coordinates] Location 2 [Coordinates] Loc	A LOCATION & SITI	E PHOTOMONITORING         Image: meters       feet         Image: meters       feet         N:       1928311.1         - Pentax $0ptile         W, NW, N, NE, E       Direction (facing)         Direction (facing)       Direction (facing)         NG AREA       If need more room         % Cover       Coll?         In the size       S         In the size       S   $	Datum:2 Datum:2 0 W90 1.1m Height Height # Invasive? 1.1 Height Bare Gro	Inber I State Plane ( 10° down Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle	Museur	UTM (m) 07-1911	S/O File I File I	S/MSCI ocation ocation	<u></u>

MSP - Rare	e Plant Habitat and Threat	s Assessment Fo	rm	Page 2	
Scientific Name: Dudleya br	evifolia	MSP Occurrent	ce ID: DUBL	B2_7CRCA003	
Preserve: Crest Canyon Preserve		Occurrence Na	me: Crest (	Canyon- N. Subpop.	
Date: 4/30/14		Time Start:	2:30	Time Finish:	2:54
Surveyors & Affiliation/Agency: 13M	4R, SM, SML				
V. HABITAT ASSESSMENT IN SAN ircle). Vegetation alliance/association ca lata from page 1. See page 4 for definitio	n be assigned using San Diego ve	egetation key (AECOM	2012) in the office or f		
ANDAG 2012 Vegetation Alliance/Associ	ation: Adenostoma f	asciculatum	Alliance	Adenoston	na
asciculatum - (Eriogo					
over Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to		11 Million	contro mee	Mellifera)	
ryptogamic Crust Cover:		atch Depth: Ave	cm Max:	ASS	sciatli
ead Standing Biomass? Yes	No If Yes, Species/Cove				cm
lammal Species Activity Categories (1-4)					1
ampling Area Representative of Maximur	Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.		If No, Note Difference		
7. THREATS ASSESSMENT IN MAX nonitoring) plus 10-m surrounding buffe otes on page 3.				the second	and the second se
urrounding Land Use at Site (>Maximum	Eviant):	11 12 11	a the A		
unounding Land Use at Site (-Maximum	Extent. Dren spar	u; Restal	evenal		
		2			_
rgentine Ant Abundance at Bait Station (*				Temp. Finish:	
nt Sample Collected?: Yes	No Ant Sample #:	Ant Stati	on Photo #:		
isturbances (rank each as 1-6):	1	1		4	
Non-Native Forbs	Feral Pig Activity	(	Altered Hydrology	1	
Non-Native Grasses	Trampling		Erosion		
Non-Native Woody Plants	Vandalism		Urban Runoff		
Competitive Native Plants	Current Grazing		Slope Movement		
Dumping/Trash	Historic Grazing	1	Soil Compaction	1	
Encampments	Historic Agriculture	1			
Fuel Modification Zone/Fire Break					
Road Construction/Maintenance	<del></del>				
Vegetation Clearing					
DRV/Mountain Bike Activity	If Observed, List Type(s) of	ORV/Bike Activity:			-
Evidence of Recent Fire	If Sign of Recent Fire: Year	Burned?	Unknown Burn Yea	ar:	
Trails	If Trails are Present, are The	ey Authorized? Yes / I	No / Unknown		
Type of Trail Use?					
Hiking Biking	Equestrian Dog	Motorcycle	ORV Se	rvice Vehicles	
verall Site Quality (see page 5):	Very Good-Excellent	Fair to Good	Poor	Very Poor	

. MANAGE	P - Management Needs and Notes Dudleya brevitolia Page 3 D: OUBLB2_7CRCA003 Species: (Crest Cyn N.) Date: 4/30/ MENT RECOMMENDATIONS
	to manage access and monitor for
tramp	ling by adjacent nomeowner
	5 1 1
II. MANAG	MENT ACTIONS IN LAST YEAR
III. CNDDB	SPECIES DETECTED & NOTES
	nimal species to add to the CNDDB:
stary plant of a	
DUBR	: 32.953894 -117.25349
	21 32.953949 -117.253425
	3: 32. 953911 -117. 253358
	4 32.983883 -117 253375
	5 32.953855 -117.25338
	p: 32.953834 -117.253279
	1 . 453010 11 . 253221
	8: 32.953846 -117.25319 9: 32.953889 -117.253276
-	9: 32.953889 -117.253226

### Dudleya blochmaniae spp. brevifolia (Short-Leaved Dudleya) Crest Canyon – Northern Subpopulation



Panorama from Northeastern edge of population, West, North, East. Panorama location is 6253917.07 1928311.12 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.

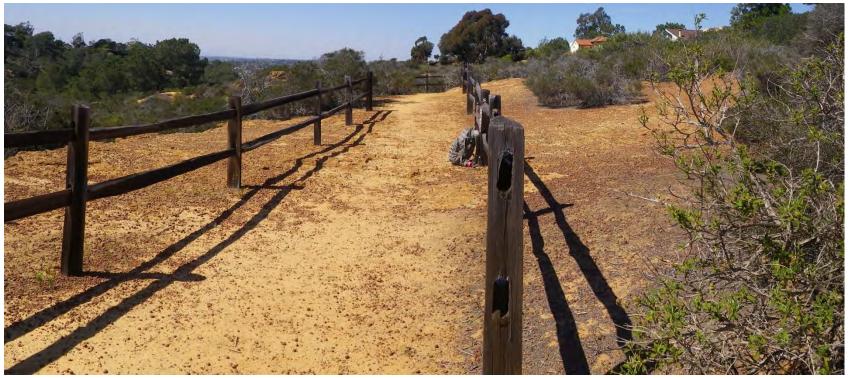


0-1		ni occurrenc	e wor	nitorn	ng Form		_		Page 1	_	_
Scientific Name:	Dudleya brev	ifolia			MSP	Occurrence I	D: DUE	LB2_7CRCA003			
Common Name:	Short-leaved	dudleya				CNDDB EC	#: EO	1 Translocat	ed?	r	าด
Preserve: C	rest Canyon Preserve							Management L	Init:		
Land Owner: C	ity of San Diego					Land Manage	er: City	of San Diego PR	D		
Occurrence Nam	e: Crest Canyon	- S. Subpop.						Sample Poir	nt #:		1
Surveyors & Affili	iation: Kim Roelar		1570	nos	-liter	of SD	Sara	h Melutch	ech-s	AND	AL
Date: 4/30/1		aquere a			1	Time Sta	rt: 3: 10	> Time Fin	ish: 3:	26	
	E STATUS - Assess # pla 4 for definitions of categorie 3.								Contraction of the second		rd
# Plants/Sampling /	Area: 20		Exact		Estimate (e	extrapolate par	tial coun	t) Uncertainty?	tow		
# Plants/Current Ma	apped Extent: See ab							00s) Uncertainty?	on		
Area of Current Ma	211	N			mz			t (GPS mapping)	_	stimate	
	ent Mapped Extent (Categori		/A'			-				Sundu	
	t Mapped Extent (Categorie						1.101	7	u		
	vithin Current Mapped Exten		1000		Dise		0	inted Growth			
	the second second			NO							
Species Found in M	Aaximum Extent?	es 🗌 No 👝			If not why	(if reason know		ted)?			-
Collection (if not col	llected previously)?	Yes		•	<b>⊿</b> No						
ii yes	Collector		-	Collec	tion Numb	er	Mu	seum/Herbarium			-
II. SAMPLING A	<b>REA LOCATION &amp; SITE</b>	PHOTOMONI	OPIN	0							
				-	_						_
and a state of the	/ <u>&lt;1</u> [ <u>6253843.223</u> N	☑ meters [	] feet	: D 19.02	)atum:	State Pl	ane (ft)	Ш UTM (m)	Lat-Long	) (dec c	deg)
Coordinates; E: Camera type:	<u>6253843.223</u> N	] meters [ : <i>Pentax (</i>	] feet 192760 Opti	: D 19.02	90						deg)
Coordinates; E:	<u>6253843.223</u> N	☑ meters [	] feet 192760 <i>Dph</i> IE	: D 19.02		State Pl 5° dov Camera A	vn	UTM (m) [ ]4 <u>12-14</u> /4 Photo #		MSCP	ieg)
Coordinates; E: Camera type: Location 1 (see coo	<u>6253843.223</u> N	2 meters [ :	] feet 192760 Opti IE )	: D 19.02	)90 1.1m	5° dov	vn ngle	1412-1414	S/OS/	/MSCP cation	leg)
Coordinates; E: Camera type: Location 1 (see coo Location 2 (	6253843.223 N	meters  meters meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters	] feet 192760 0 <i>pth</i> IE )	: D 09.02 10 U	1.1m Height Height	5° dov Camera A Camera A	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loc	/MSCP cation	leg)
Coordinates; E: Camera type: Location 1 (see coo Location 2 ( III. ASSOCIATED Invasive? Spe	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate	meters  meters meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters	] feet 192760 0 <i>pth</i> IE )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loc	/MSCP cation	
Coordinates; E: Camera type: Location 1 (see coo Location 2 ( III. ASSOCIATEE Invasive? Spu Dudlug	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate y & by cuifo 11 a	meters  meters meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters  meters	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coo Location 2 (r III. ASSOCIATEE Invasive? Spi Mudlug Adam	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya bravifolla estrama fasercula	meters	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (C III. ASSOCIATED Invasive? Spi Nudlug Adem Salu	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate y a bravifolla oshama fascicula in mellifera	meters <u>Pentax</u> NW, N, N Direction (facing Direction (facing G AREA If need % Cover 1 thum 40 5	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Contemported) Location 2 (	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate y a brevitolla estema fascicula ia mellifera galium dumosu	meters	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (r Invasive? Spin Nucley Adem Salvi Cheor Chloro	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate yabrzwifolla estema fasuula ta mellifera ridium dumosu ogalum pawifio	meters	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (c III. ASSOCIATEL Invasive? Spa Dudling Adem Salui Checr Chloro Malos	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya brzwiłolla estoma fasciula ia mellifera idium dumosu ogalum pawifio sha faurina	meters	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (C III. ASSOCIATEL Invasive? Spa Dudles Adem Salui Check Chloro Malos Selagi	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate yabrevito/1a estema fascicula ia mellifera idium dumosu ogalum pavvitio sha faurina peila cinerasci	meters <u>Pentax</u> NW, N, N Direction (facing Direction (facing <u>Direction (facing </u> <u>Direction (facing <u>Direction (facing </u> <u>Direction (facing </u></u>	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (f III. ASSOCIATEE Invasive? Spa Dudling Ademic Salvin Check Chloro Malos Selagi Deinen	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya brevitolla estema fasciculat a mellifera galum pawifio galum pawifio paina fasciculat	meters <u>Pentax</u> NW, N, N Direction (facing Direction (facing <u>Direction (facing </u> <u>Direction (facing <u>Direction (facing </u> <u>Direction (facing </u></u>	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (r III. ASSOCIATEL Invasive? Spi Dudley Adem Salvi Cheor Chloro Malos Selagi Deinai Dudley	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya bravifolla ecies/Substrate ya bravifolla in clifera indum dumosu ogalum pavifio ina faurina ineila cinerasu indra fasciculat ya lancedata	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Content Invasive? Spa Dudling Ademic Salvi Creer Chloro Malos Selagi Deinar Dudling Mirm	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate y a brevitolla estema fasciculat in mellifera indium dumosu ogalum pavvitio ma fasciculat y a lancedata vujus auvantia	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Content Invasive? Spanner Dudling Ademic Salvin Chevr Chloro Malos Selagi Deinan Dudlin Mim Unik	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya brevitolla estema fasciculat in mellifera india cinerasci ndra fasciculat ya lancedata ulus auvantia glass	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Height	5° dov Camera A Camera A al data and any	vn ngle ngle	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Content Invasive? Spanner Dudling Ademic Salvin Checr Chloro Malos Selagi Deinan Dudlin Mim Unit	6253843.223 N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate y a brevitolla estema fasciculat in mellifera indium dumosu ogalum pavvitio ma fasciculat y a lancedata vujus auvantia	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Cord addition Invasive?	5° dov Camera A Camera A al data and any Species/S	vn ngle notes on pu ubstrate	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Content Invasive? Sput Dudling Ademic Salvin Check Chloro Malos Selagi Deinan Dudlin Mim Unit	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya brevitolla estema fasciculat in mellifera india cinerasci ndra fasciculat ya lancedata ulus auvantia glass	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Cord addition Invasive?	Camera A Camera A al data and any Species/S	vn ngle notes on pu ubstrate	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	
Coordinates; E: Camera type: Location 1 (see coordinates) Location 2 (Content Invasive? Sput Dudling Ademic Salvin Check Chloro Malos Selagi Deinan Dudlin Mim Unit	<u>6253843.223</u> N ordinates above) Coordinates] D SPECIES IN SAMPLIN ecies/Substrate ya brevitolla estema fasciculat in mellifera india cinerasci ndra fasciculat ya lancedata ulus auvantia glass	meters me	] feet 192760 <i>O_pH</i> IE ) )	: D 09.02 10 U 000m, re	1.1m Height Cord addition Invasive?	- 5° dov Camera A al data and any Species/S	vn ngle notes on pu ubstrate	1412-1414 Photo # Photo #	S/OS/ File loo File loo	/MSCP cation cation	

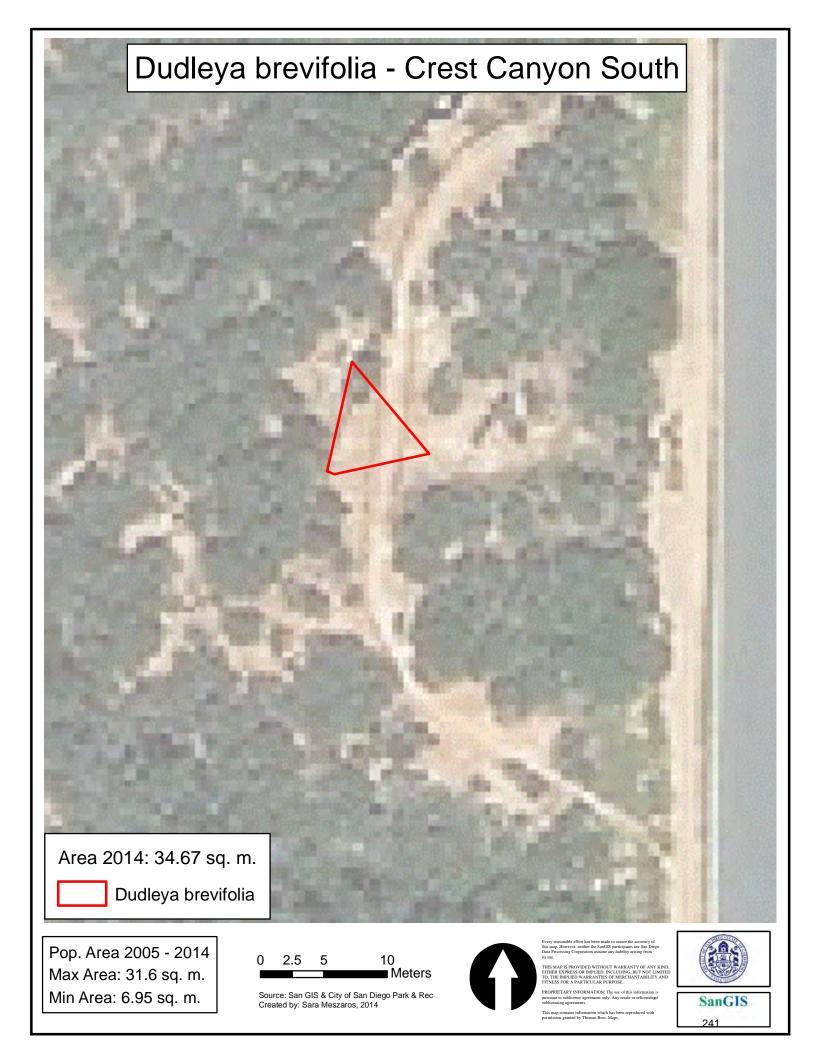
	e Plant Habitat and Threats As		Page 2
Scientific Name: Dudleya br	evifolia	MSP Occurrence ID	DUBLB2_7CRCA003
Preserve: Crest Canyon Preserve		Occurrence Name:	Crest Canyon- S. Subpop.
Date: 4/30/14		Time Start: 3:10	Time Finish: 3:26
Surveyors & Affiliation/Agency: Kell,	SM, SML		
	an be assigned using San Diego vegetal	tion key (AECOM 2012	pecific sampling area (typically 10-m radius 2) in the office or field, using "Associated Species" ge 3.
ANDAG 2012 Vegetation Alliance/Associ	iation: Adenostima Fasc	iculatum A	lliance / Adenostoma
fasciculatum souch			,
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to		500101011	
Cryptogamic Crust Cover: <u>5</u> 7		epth: Ave.	cm Max: cm
			Ave. Height?cm
			Gopher Activity: _/
Sampling Area Representative of Maximur			o, Note Differences on Page 3.
Surrounding Land Use at Site (>Maximum	Extent): Open space, 1	Residentia	l
rgentine Ant Abundance at Bait Station (1	1-4):/// A Time Start:	Temp. Start: <u>95+</u>	Time Finish: Temp. Finish:
nt Sample Collected?: Yes 🔀			
ant Sample Collected?: Yes X			
		Ant Station Pl	
Ant Sample Collected?: Yes X Disturbances (rank each as 1-6):	No Ant Sample #:	Ant Station Pl	noto #
Image: State Stat	No Ant Sample #:	Ant Station Pl	noto #: tered Hydrology rosion rban Runoff
Int Sample Collected?:       Yes         Visturbances (rank each as 1-6):         Non-Native Forbs         I	Ant Sample #:       1         Feral Pig Activity       1         Trampling       1         Vandalism       1         Current Grazing       1	Ant Station PI	tered Hydrology rosion rban Runoff ope Movement
Image: State Stat	Ant Sample #:       1         Feral Pig Activity       1         Trampling       1         Vandalism       1         Current Grazing       1         Historic Grazing       1	Ant Station PI	noto #: tered Hydrology rosion rban Runoff
Ant Sample Collected?:       Yes         Disturbances (rank each as 1-6):         Non-Native Forbs       1         Non-Native Grasses       1         Non-Native Woody Plants       1         Competitive Native Plants       1	Ant Sample #:       1         Feral Pig Activity       1         Trampling       1         Vandalism       1         Current Grazing       1	Ant Station PI	tered Hydrology rosion rban Runoff ope Movement
Image: State Stat	Ant Sample #:         Feral Pig Activity         Trampling         Vandalism         Current Grazing         Historic Grazing         Historic Agriculture	Ant Station PI	Inknown Burn Year:
Ant Sample Collected?:       Yes         Visturbances (rank each as 1-6):         Non-Native Forbs       1         Non-Native Grasses       1         Non-Native Woody Plants       1         Competitive Native Plants       1         Dumping/Trash       1         Encampments       1	Ant Sample #:         Feral Pig Activity         Trampling         Vandalism         Current Grazing         Historic Grazing         Historic Agriculture	Ant Station PI	Intered Hydrology       1         resion       1         rban Runoff       1         ope Movement       1         oil Compaction       1         Inknown Burn Year:

MSP - Management Needs and Notes Decurrence ID: DUBLB2 - FORCA #3 Species: Dudley a brevitation (Crests Date /I. MANAGEMENT RECOMMENDATIONS	
continue to maintain access control with fenang	
/II. MANAGEMENT ACTIONS IN LAST YEAR	
Access control maintained of fencing	
III. CNDDB SPECIES DETECTED & NOTES	
st any plant or animal species to add to the CNDDB:	
32.951998 -117.253439	- <u></u>
952063 . 253505	
.951984 .253519 .951985 .253524	

### Dudleya blochmaniae spp. brevifolia (Short-Leaved Dudleya) Crest Canyon – Southern Subpopulation



Panorama from Northern edge of population, Northwest, North, Northeast. Panorama location is 6253843.22 1927609.02 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



# *Dudleya variegata* Variegated Dudleya



© City of San Diego, 2004

	MSP - Rare Plant Oco	urrence	Monitori	ng Forn	<b>1</b>	Pa	ge 1	
Scientific Name:	Dudleya variegata			MS	P Occurrence ID: DUVA	_6BMRA020		
Common Name:	Variegated dudleya	2			CNDDB EO#: EO5	1 Translocated?	o no	
Preserve:	Black Mountain Op	en Space				Management Unit		6
Land Owner: City of	f San Diego				Land Manager: City of	f San Diego		
Occurrence Name:	Black Mountain Rai	nch East				Sample Point #		1
Surveyors & Affiliation	Betsy miller	Kim	Foeld	and,	Wendy Roge	ers		
Date: 5/8/14	· · · ·					Z 5 Time Finish.	12:	52
	<b>ATUS</b> - Assess # plants in t definitions of categories descr							
# Plants/Sampling Area:		∭Ex	act 🔲 I	Estimate	(extrapolate partial count)	Uncertainty? 10	W	·
# Plants/Current Mapped	d Extent: D	D	Exact Co	unt 🗌	Estimate (1,000s, 10,000	s) Uncertainty?lc	SNS	
Area of Current Mapped	A			$m^2$		(GPS mapping)	Es	timate
Phenology in Current Ma	apped Extent (Categories 1-5):	Vegetative		Flower			1	
Evidence in Current Map	ped Extent (Categories 1-5) o	f: Herbivory:	/	Di	sease: / Stunt	ted Growth: /		
Is Sampling Area within	Current Mapped Extent?	Yes	No		· · · · · · · · · · · · · · · · · · ·	•		
Species Found in Maxim	ium Extent? 🗌 Yes 🕅	[No			hy (if reason known or suspecte	ed)?		
Collection (if not collecte	d previously)?	Yes	ſ	No		slv		
If yes:					<u></u>			
	Collector			ction Num	nber Mus	eum/Herbarium		
	LOCATION & SITE PHOT					· · · ·		
GPS Accuracy: +/ Coordinates; E:929	<1 √ met <i>  992.₀2<u>1</u>@2_</i> N:]9				✓ State Plane (ft) [			(dec deg)
	entax Optio 1						it-cong (	(dec deg)
Location 1 (see coordina	· · · · ·	N, NE, E, SE	 -	1.1m	10° up	1473-1476	S/OS/N	/ISCP
	Direc	tion (facing)		Height	Camera Angle	Photo #	File loca	ition
Location 2 [Coord	inates] Direc	tion (facing)		Height	Camera Angle	Photo #	File loca	ation
	ECIES IN SAMPLING ARE		ore room, re					
Invasive? Species	/Substrate	% Cover C	oli? Coll. #	Invasive?	Species/Substrate		%	Coll? Coll. #
	apiana	7			Isocoma menza	esti		
	ia calitomica	5		~	Cynaka cardu		1D	
	<u>a launina</u>	. <u>.</u>		V	Brassica V	i gra	1	
	nellifera	3			Sonchus asp Eniogonum t	er	1	
	js pilulan's	1			Foeniculum VM			
Solanum		1			JOCOLLAINPO- 000	igun	·	
	Ans splenden	1						
	Mium bellum	1						
	mia civica	1						
	gra macnostegia	1						
	Stemma capitati	1						
	pulchia	30		Bare Gro				
	vea melifensis	14		Litter: Rock:	0			
	Dinm Aistachyr D% Herb Cover:		Shrub Cov		D% Tree Cover:	0		l
		/0	Strub COV	···/	/0 1166 00Vel	<u> </u>		

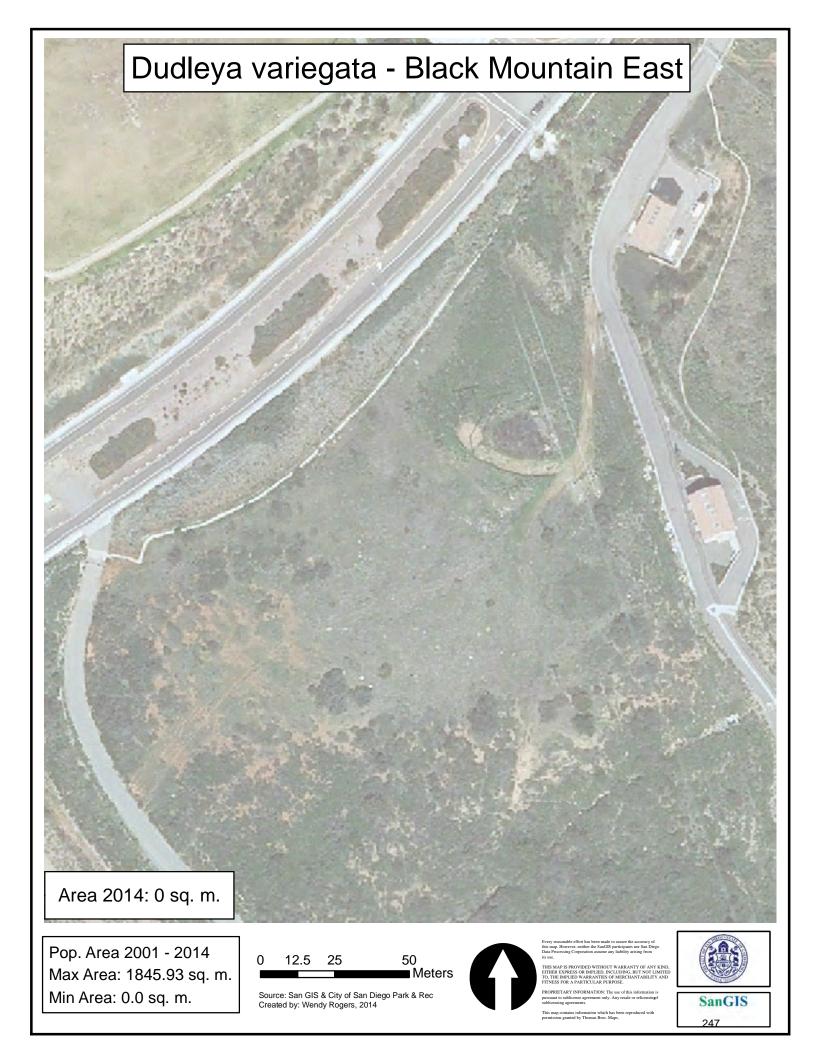
	Plant Habitat and Threats		Page 2
Scientific Name: Dudleya vari	and the second se		DUVA-6BMRA020
Preserve: Black Mountain	r open space	Occurrence Name: 12:25	Black Mountain Ranch East
Date: 5/8/14		Time Start: 12.23	Time Finish: 12:52
Surveyors & Affiliation/Agency: 1314, 4	ER, WR		
	be assigned using San Diego vege	tation key (AECOM 2012)	pecific sampling area (typically 10-m radius in the office or field, using "Associated Species" 9 3.
SANDAG 2012 Vegetation Alliance/Associa	tion: Salvia apian Artemisia		
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <		0	
Cryptogamic Crust Cover: Th	atch Cover: Thatch	Depth: Ave. 3c	m Max: <u>6</u> cm
	No If Yes, Species/Cover C		
그 같아요. 이 것 모든 것 같아요. 아님, 아님, 아님, 이 것 같아요. 이 것 같아요. 이 것	전자 옷에 드며 가지 않는 것 같아요.		I Gopher Activity:3
Sampling Area Representative of Maximum			Note Differences on Page 3.
			aximum extent (cumulative extent over years o & page 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum E	xtent): Open spac	1	
	nony. <u>Operator</u>	<	
	1		
Argentine Ant Abundance at Bait Station (1-4			Time Finish: 12:51 Temp. Finish: 707-
Ant Sample Collected?: Yes X	No Ant Sample #: 1/A	Ant Station Pho	bto #:
Disturbances (rank each as 1-6):			
Non-Native Forbs	Feral Pig Activity	Alte	ered Hydrology
Non-Native Grasses	Trampling /	Ero	sion
Non-Native Woody Plants	Vandalism	Urb	an Runoff
Competitive Native Plants	Current Grazing		pe Movement
Dumping/Trash3	Historic Grazing	K Soi	Compaction
Encampments	Historic Agriculture	K	
1			
Fuel Modification Zone/Fire Break	-		
Road Construction/Maintenance			
Vegetation Clearing			
ORV/Mountain Bike Activity	If Observed, List Type(s) of OR	V/Bike Activity:	
Evidence of Recent Fire	If Sign of Recent Fire: Year Bu	rned? Un	known Burn Year:
Trails	If Trails are Present, are They /	Authorized? Yes / No / U	Jnknown
Type of Trail Use?			
Hiking Biking	Equestrian Dog	Motorcycle OF	V Service Vehicles
		9 M M E	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		1.1.1.1.1.1.1.1.1	
Overall Site Quality (see page 5):	Very Good-Excellent	Fair to Good	Poor Very Poor

**MSP** - Management Needs and Notes Page 3 Date:<u>5/8///</u> Occurrence ID: DINNA\_ (0 BMRA 020 Species: DUVA **VI. MANAGEMENT RECOMMENDATIONS** - treat non-native grasses and forbs and vernove thatch to the to get Dudleya to return VII. MANAGEMENT ACTIONS IN LAST YEAR -none VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: - orange throated whiptail - point taken

#### Dudleya variegata (Variegated Dudleya) Black Mountain East



Panorama from Southeastern edge of population, facing East, Southeast, South. Panorama location is 6291985.663 1939628.817 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Oc	currenc	e Mo	onitori	ng Form			Page 1		
Scientific Name: Dudleya variegata				MSF	Occurrence ID: DU	/A_4EAEL012			
Common Name: Variegated dudleya	à				CNDDB EO#: EC	D22 Translocate	d? no		
Preserve: Mission Trails Regional Park						Management U	nit:		4
Land Owner: City of San Diego					Land Manager: City	of San Diego			
Occurrence Name: East Elliott - Creek						Sample Point	#:		2
Surveyors & Affiliation: Kim Rockard,	3ch	M	iller	. Jules	dy Rogers -	City of Sun	Bier	20	
Date: 5/6/14		{			Time Start: 1:4	<b>Opm</b> Time Finis	sh: /:{	55,	m
I. OCCÚRRENCE STATUS - Assess # plants in a extent. See page 4 for definitions of categories descu any notes on page 3.	both the sp ribing pher	oecies nology	s-specifi v & evid	c sampling	<b>g area</b> (typically 10-m ra bivory, disease & stunteo	dius circle) & in the <b>cu</b> I growth within the sam	<b>rrent ma</b> pling area	pped a. Reco	rd
# Plants/Sampling Area:	V	Exact		Estimate (	extrapolate partial cour	t) Uncertainty?	low		
# Plants/Current Mapped Extent:		<b>V</b> E	xact Co	unt 🗌	Estimate (1.000s, 10.0	00s) Uncertainty?	10w		
Area of Current Mapped Extent:						ct (GPS mapping)		stimat	e
Phenology in Current Mapped Extent (Categories 1-5)	: Vegetativ	/e:		Flowerin			/		
Evidence in Current Mapped Extent (Categories 1-5) of	of: Herbivo	ry:		Dise	ease: Stu	unted Growth:			
Is Sampling Area within Current Mapped Extent?	Yes		No						
Species Found in Maximum Extent?	No 4	ow	rai	nfa/1	y (if reason known or suspe	recent year	7		
Collection (if not collected previously)?									
If yes:	[_] Yes		Ĺ	No	Collected Previo	ousiy			
Collector			Colle	ction Numb	per Mu	useum/Herbarium			
II. SAMPLING AREA LOCATION & SITE PHOT		ORI	NG						
GPS Accuracy: +/ <1		fee		Datum:					
Coordinates; E: <u>6356396.908</u> N:		7139.	545		— 🗹 State Plane (ft)	UTM (m)	Lat-Long	(dec o	deg)
Camera type: <u>Pentax Optio</u>									
· · · · —	N, NE, E,		<u> </u>	1.1m Height	10° up	_/4 <u>/4/4//4/4/7</u> Photo #	S/OS/ File loc	MSCP	
	aon (laoing	)		rieigint	Camera Angle		FILE IOU	Jauon	
Location 2 [Coordinates] Direct	tion (facing	)		Height	Camera Angle	Photo #	File loc	ation	
III. ASSOCIATED SPECIES IN SAMPLING AR	EA if need	more	room, re	cord additior	nal data and any notes on p	age 3.			
Invasive? Species/Substrate	% Cover	Coll?	Coll. #	Invasive?	Species/Substrate		%	Coll?	Coll. #
Erigganum füscica la tum	5								
- Bhus integrifolia	5								
Calochortus Solenders	$\frac{1}{1}$								
Selaginella cinerascens	3								
- Ebdium borrys	3								
Sipa pulakra	10								
V Brachymolium distachyon	5					*******	-		
V Stormas hordaceus						****			
V Bromus madrilensis sop. V Avena so.	$\frac{1}{1}$								
V Centaures melítensis	1								
Convolvalus simulars	1			Bare Grou	<sup>nd:</sup> 20				
Sanicula bipinna tifida	1			Litter:	7			ļ	
	<u> </u>		Station in the state		25				
Total % Cover: % Herb Cover:	10	% Shi	rub Cov	er:/0	% Tree Cover:	0			

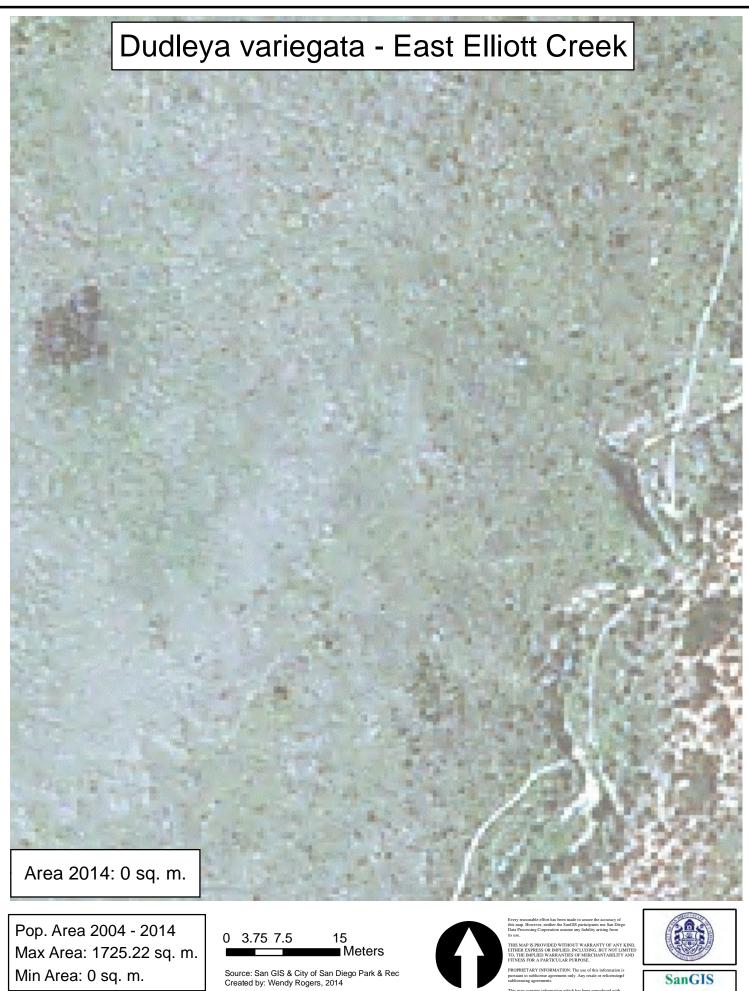
MSP - Rare Plant Habitat a	nd Threats Assessment Form Page 2
Scientific Name: Dudleya variegata	MSP Occurrence ID: DUVA_4EAEL012
Preserve: Mission Trails Regional Park	Occurrence Name: East Elliott - Creek
Date: 5/10/14	Time Start: 1:40 Time Finish: 1:55
Surveyors & Affiliation/Agency: KR, RM, WR	
IV. HABITAT ASSESSMENT IN SAMPLING AREA - AS	sess habitat covariates within <b>species-specific sampling area (typically 10-m radius</b> San Diego vegetation key (AECOM 2012) in the office or field, using "Associated Species" ent categories. Record any notes on page 3.
SANDAG 2012 Vegetation Alliance/Association:	a menziesii alliance; Isocoma
menzilsii provisional asso	viation
<u>Memails Ii provisional asso</u> Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <50%)	5 (>50%)
Cryptogamic Crust Cover: Thatch Cover:	<b>?</b> Thatch Depth: Ave <b>4</b> cm_Max: <b>1</b> 0cm
Dead Standing Biomass? 🗹 Yes 🗌 No If Yes, S	pecies/Cover Class: Iso como menzeisio / 2 Ave. Height? 25 cm
Mammal Species Activity Categories (1-4): Feral Pig Activity:	Ground Squirrel Activity: Gopher Activity:
Sampling Area Representative of Maximum Extent?	Yes No If No, Note Differences on Page 3.
	ssess threats within the <b>occurrence's maximum extent</b> (cumulative extent over years of finitions of threat assessment categories & page 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum Extent):	n space
Argentine Ant Abundance at Bait Station (1-4): Time	Start: Temp. Start: Time Finish: Temp. Finish:
	#: Ant Station Photo #:
Disturbances (rank each as 1-6):	
Non-Native Forbs       3       Feral Pig Active Act	Image: Lemma definition         Erosion         Image: Lemma definition           ing         Image: Lemma definition         Image: Lemma definition         Image: Lemma definition           ing         Image: Lemma definition         Image: Lemma definition         Image: Lemma definition         Image: Lemma definition
Evidence of Recent Fire        If Sign of Recent Fire         Trails         If Trails are Present Fire         Type of Trail Use?	t Type(s) of ORV/Bike Activity: nt Fire: Year Burned? <i>_ <b>2007</b></i> Unknown Burn Year: sent, are They Authorized? Yes / ੴ/ Unknown I Dog ☐ Motorcycle ☐ ORV │ ] Service Vehicles
Overall Site Quality (see page 5):	nt 🔄 Fair to Good 🗌 Poor 🗌 Very Poor

MSP - Management Needs and Notes
Occurrence ID: DUVA\_4EAEL012 Species: Page 3 Date: 5/6/14 DUVA **VI. MANAGEMENT RECOMMENDATIONS** none **VII. MANAGEMENT ACTIONS IN LAST YEAR** general oneserve actions ÷ No 7/ 25 Signs Hace an East Ellist are bein + the trac illegal trails in  $-\infty$ Man revised via Massler Plan Update process **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

#### Dudleya variegata (Variegated Dudleya) East Elliott - Creek



Panorama from Northwestern edge of population, facing Southwest, West, Northwest, North. Panorama location is 6316694.86 1897093.54 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.





MSP - Rare Plant Occurrence Monitor	ing Form	Page 1
Scientific Name: Dudleya variegata	MSP Occurrence ID: DUVA_4EAEL012	-
Common Name: Variegated dudleya	CNDDB EO#: EO22 Translocate	ed? no
Preserve: Mission Trails Regional Park	Management U	Init: 4
Land Owner: City of San Diego	Land Manager: City of San Diego	
Occurrence Name: East Elliott - Hilltop	Sample Poin	<i>t#:</i> 1
Surveyors & Affiliation: Betsy Miller, Kim Roeland	Wendy Rogers - City of Se	un Dieao
Date: 5/6/14	Time Start: 2:35 Time Fini	ish: 3:00
I. OCCURRENCE STATUS - Assess # plants in both the species-speci	fic sampling area (typically 10-m radius circle) & in the cu	urrent mapped
extent. See page 4 for definitions of categories describing phenology & evi		
any notes on page 3.		
# Plants/Sampling Area: D XExact	Estimate (extrapolate partial count) Uncertainty?	nW
# Plants/Current Mapped Extent:	ount 🛛 Estimate (1,000s, 10,000s) Uncertainty?/	NU
Area of Current Mapped Extent: < 1.0	$M^2$ units $K$ Exact (GPS mapping)	Estimate
Phenology in Current Mapped Extent (Categories 1-5): Vegetative:	Flowering:/ Fruiting:/ Deac	l:
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory:/	Disease: Stunted Growth:/	
Is Sampling Area within Current Mapped Extent?		
Species Found in Maximum Extent? Kyres No		
	If not, why (if reason known or suspected)?	
Collection (if not collected previously)?		
If yes:	-	
	ection Number Museum/Herbarium	
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING		
	Detune	
GPS Accuracy: +/ <1 / meters feet	Datum:	·
Coordinates; E:6356396.908 N:1807139.545	·	Lat-Long (dec deg)
Coordinates;         E:         6356396.908         N:         1807139.545           Camera type:         Pentax Oph'o         W90	State Plane (ft) UTM (m)	
Coordinates; E:6356396.908 N:1807139.545	·	Lat-Long (dec deg) S/OS/MSCP File location
Coordinates;         E:6356396.908         N:1807139.545           Camera type:	✓ State Plane (ft) UTM (m)     1.1m     10° up     1455-1458	S/OS/MSCP
Coordinates;         E:         6356396.908         N:         1807139.545           Camera type:         Pentax Optio         W90           Location 1 (see coordinates above)         N, NE, E, SE           Direction (facing)         Direction (facing)	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455 - 1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #	S/OS/MSCP
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Pentax Optics       W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455 - 1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       3.	S/OS/MSCP File location File location
Coordinates;         E:         6356396.908         N:         1807139.545           Camera type:         Pentax Optio         W90           Location 1 (see coordinates above)         N, NE, E, SE         Direction (facing)           Location 2 [Coordinates]         Direction (facing)         Direction (facing)           III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Species/Substrate         % Cover         Coll?         Coll.*	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455 - 145%         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate	S/OS/MSCP File location File location
Coordinates;         E:         6356396.908         N:         1807139.545           Camera type: <i>Pentax Optio W 9 0</i> Location 1 (see coordinates above)         N, NE, E, SE         Direction (facing)           Location 2 [Coordinates]         Direction (facing)           III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need more room,</i> Invasive?         Species/Substrate         % Cover           DndUya vanegata         I         I	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate       % Cover         DndUya vanegata       1         Adenostown fasciculationation       20	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455 - 145%         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA if need more room,         Invasive?       Species/Substrate         DndUya vanegata       1         Adenostoma Fasciculatan       20         Xylococcus bicolor       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate         DndUya vanegata       1         Adenostoma fasciculatama 20         Xylococcus bicolor       1         Malosma Jaunina       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio W90</i> Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need more room</i> ,         Invasive?       Species/Substrate       % Cover Coll? Coll.#         DndUya vanegata       1       1         Adenostoma fasciculatum 20       Xylococcus bicolor       1         Malosma launina       1       1         Ening onum fasciculatum 5       5       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Pentax Optio W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate         Malaya vanegata       1         Adenostoma fasciculatum 20       Xylococcus bicolov         Xylococcus bicolov       1         Malosma laurina       1         Enogonum fasciculatum 5       0         Dichondina ciccidenta lis       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio W90</i> Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate       % Cover Coll? Coll.#         DndLya vanegata       1       1         Adenostoma fasciculatama       20         Xylococcus       bicolor       1         Malosma laurina       1       1         Dichondira occidenta lis       1       1         Salvia mellifera       3       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio</i> W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate       % Cover         Dnd U ya Van egath       1       1         Adenostoma fasciculatam       20         Xylococcus bicolor       1         Malosma laurina       1         Dichondira eccidenta [jis       1         Salvia mellifera       3         Fewcactus viridescuns       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Image: Ima	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type:       Image: Ima	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E: <u>6356396.908</u> N: <u>1807139.545</u> Camera type: <u>Pentax Ophio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, SE</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need more room</i> , Invasive? Species/Substrate % Cover Coll? Coll.# Dnd U yn Van egata <u>1</u> Advenostomn fasciculatam <u>20</u> Xylococcus bicolor <u>1</u> Malosma laurina <u>1</u> Enogonum fasciculatam <u>5</u> Dichondra eccidenta fils <u>1</u> Dichondra eccidenta fils <u>1</u> Salvia mellifera <u>3</u> Feretactus visiclestens <u>1</u> Hispenyucca whipplei <u>1</u> Poroph gllum gracile <u>5</u> Chlorogalum parvitiomm <u>1</u>	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio W90</i> Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate         Male ostoma       1         Adenostoma       1         Malosma       1         Malosma       1         Malosma       1         Salvia       mellifera         Salvia       1         Hispenyucca       1         Porophyllum       gravite         Salvia       1         Asthenia cover       1         Location 2 [Coordinates]       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Arriemisia       Carliformica	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio</i> W90         Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room,         Invasive?       Species/Substrate       % Cover         Dnd U ya Van egath       1         Adenostoma fasciculatam       20         Xylococcus       bicolor       1         Malosma       1       1         Malosma       1       1         Bichondra occidenta liss       1       1         Salvia mellifera       3       1         Hispenyuc ca whipplei       1       1         Poroph gllum       gravite       5         Chlorogalum       1       1	✓ State Plane (ft)       UTM (m)         1.1m       10° up       1455-1458         Height       Camera Angle       Photo #         Height       Camera Angle       Photo #         record additional data and any notes on page 3.       Invasive?       Species/Substrate         Artemisia       californica         Artemisia       californica         Artemisia       glabre	S/OS/MSCP File location File location
Coordinates; E:       6356396.908       N:       1807139.545         Camera type: <i>Pentax Optio W90</i> Location 1 (see coordinates above)       N, NE, E, SE         Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need more room</i> ,         Invasive?       Species/Substrate         Malagna Angelan       1         Adenostoma fascriculatam       20         Xylococcus bicolor       1         Malosma Iaunna       1         Malosma Iaunna       1         Bichondra occidentalis       1         Salvia mellifera       3         Ferocactus visidescens       1         Hispenyucca whipplei       1         Porophyllum gracile       5         Chlorogalum parvifiorm       1         Stipa pulming Town in       1	State Plane (ft) UTM (m) <u>1.1m</u> <u>10° up</u> <u>1455-1458</u> Height Camera Angle Photo # <u>Height Camera Angle Photo #</u> <u>record additional data and any notes on page 3.</u> <u>Invasive? Species/Substrate</u> <u>Artemisia californica</u> <u>Artemisia californica</u> <u>Artemisia californica</u> <u>Bare Ground: 20</u>	S/OS/MSCP File location File location

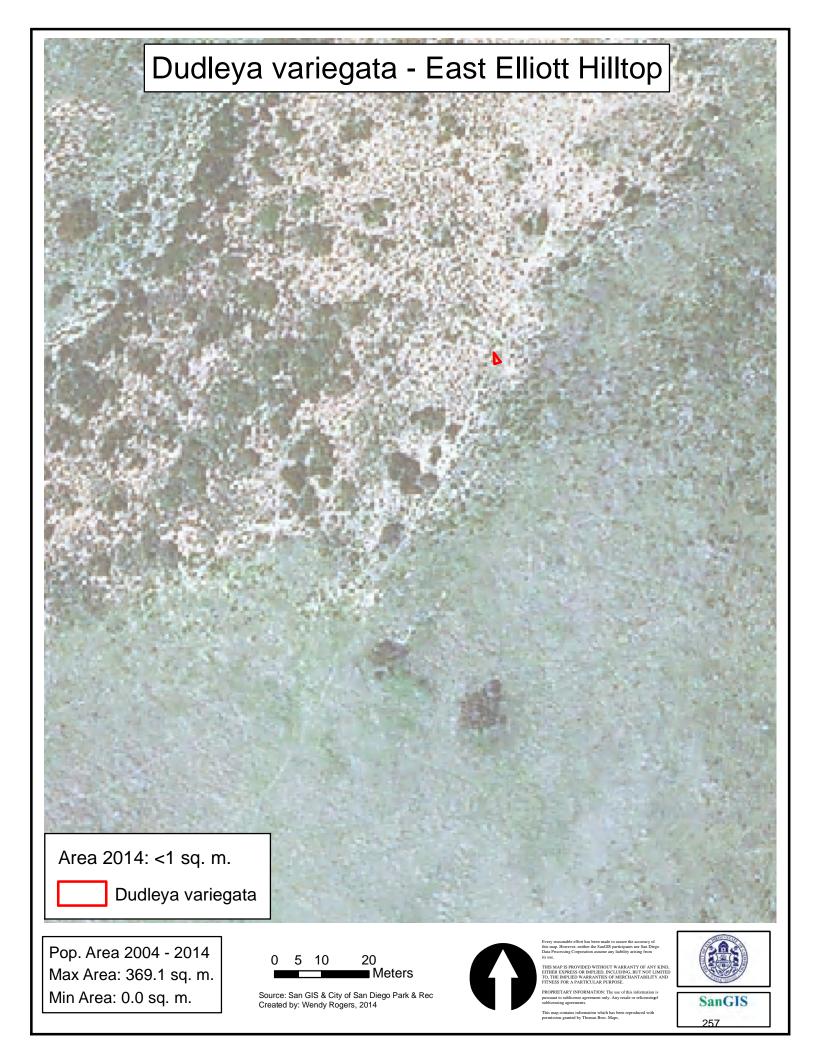
Scientific Name: Dudleya	vorienata Von	Occurrence ID: DUVA_4EA	Page 2 AEL012
Preserve: Mission Trails Regional			Elliott - Hilltop
Date: 5/6/14		Start: 2:35	Time Finish: 3:00
Surveyors & Affiliation/Agency: Br	M, KR, WR		
circle). Vegetation alliance/association	AMPLING AREA - Assess habitat covariates wi a can be assigned using San Diego vegetation key itions of habitat assessment categories. Record a	(AECOM 2012) in the office of	-
(Eriogonum Fascicus Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10		Salvia mellitera	Association
ryptogamic Crust Cover: 2	_ Thatch Cover: Thatch Depth: A	veX cm_ Max:X	<u>(</u>
ead Standing Biomass? Xes	No If Yes, Species/Cover Class: Er	rogonum: 2	Ave. Height? 20cm
Aammal Species Activity Categories (1	-4): Feral Pig Activity:/ Ground Squ	uirrel Activity: 1 0	Gopher Activity:/
ampling Area Representative of Maxin	num Extent? Yes No	If No, Note Difference	ces on Page 3.
	n (1-4): <u>NA</u> Time Start: Temp.	Start: Time Finish:	Temp. Finish:
nt Sample Collected?: Yes isturbances (rank each as 1-6):	No Ant Sample #	Ant Station Photo #:	
Non-Native Forbs 3	Feral Pig Activity	Altered Hydrology Erosion	1
Non-Native Grasses     2       Non-Native Woody Plants     1       Competitive Native Plants     1       Dumping/Trash     1       Encampments     1	Vandalism <u>I</u> Current Grazing <u>I</u> Historic Grazing <u>Unl</u> Historic Agriculture <u>Unk</u>	Urban Runoff Slope Movement Soil Compaction	
Non-Native Woody Plants Competitive Native Plants Dumping/Trash	Vandalism Current Grazing Historic Grazing	Slope Movement Soil Compaction tivity: <u>MHA Billee</u> Unknown Burn Y ? Yes / No Unknown	

MSP - Management Needs and Notes Occurrence ID: <u>DUVA\_ HEAEL DIZ</u> Species: <u>DUVA</u> Page 3 Date: <u>5/4/14</u> VI. MANAGEMENT RECOMMENDATIONS - continue to prevent use of illegal trail by closing trails wi fencing, signs, etc. VII. MANAGEMENT ACTIONS IN LAST YEAR closed with trail bouching - rilegal trail **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB: .

### Dudleya variegata (Variegated Dudleya) East Elliott - Hilltop



Panorama from the Southwestern edge of population, facing Southeast, South, Southwest. Panorama location is 6316264.13 1897663.71 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occu	urrence Monito	oring Form	<b></b>		Page 1	
Scientific Name: Dudleya variegata		MSP	Occurrence ID: DU	VA_4EAEL012		
Common Name: Variegated dudleya			CNDDB EO#: EC	22 Translocate	ed? no	
Preserve: Mission Trails Regional Park		•		Management U	nit:	4
Land Owner: City of San Diego		l	Land Manager: City	of San Diego		
Occurrence Name: East Elliott - Slope				Sample Point	t#:	3
Surveyors & Affiliation: Kim Rocland Fr	Miller H	Jendy Ro	gers - City	of San Dien	e)	
Date: 5/16/14	/ ( , .	10		05 on Time Fini		27 pm
<ol> <li>OCCURRÉNCE STATUS - Assess # plants in bo extent. See page 4 for definitions of categories describ any notes on page 3.</li> </ol>			area (typically 10-m ra	dius circle) & in the <b>cu</b>	irrent maj	oped
# Plants/Sampling Area:	Exact	Estimate (ex	trapolate partial cour	nt) Uncertainty?	low	
# Plants/Current Mapped Extent: Area of Current Mapped Extent: Phenology in Current Mapped Extent (Categories 1-5): N Evidence in Current Mapped Extent (Categories 1-5) of:	vegetative:	<u></u> <i>n</i> ² Flowering	_ units	ct (GPS mapping) g: Dead	E	stimate
la Sampling Area within Current Mannad Extent?	v					
Species Found in Maximum Extent?	No <u>low m</u>	in fall, If not, why	if reason known or suspe	tion or previous yr poted)?	cars_	
Collection (if not collected previously)?	Yes	No No		pusly		
If yes:			<u> </u>			
		llection Numbe	r M	useum/Herbarium		
II. SAMPLING AREA LOCATION & SITE PHOTO		Deture				
GPS Accuracy: +/ <1		Datum:				i
			- 🗹 State Plane (ft)	UTM (m)	Lat-Long	(dec deg)
Camera type: <u>Pentax Optio k</u>	-	` 				
	, NE, E, SE on (facing)	1.1m Height	10° up Camera Angle		S/OS/ File loc	
Location 2 [Coordinates] Direction	on (facing)	Height	Camera Angle	Photo #	File loo	ation
III. ASSOCIATED SPECIES IN SAMPLING AREA	and the second			age 3.		
Invasive? Species/Substrate	% Cover Coll? Coll.	# Invasive?	Species/Substrate		%	Coll? Coll. #
Acmispon glaber	7					
Erioganum fascien la Lum	7					
Isocoma Menzaisii	7		***************************************			
V Endium betrus	5			*****		
V Brachypoolium distaching	n.10					
Stipa pulchra	10					
Bomuo madrifensis sep a			****			
Lomatium dasgrappum						
Calochortus Token dans	/					
Lepidium Sp.	1			***************	1	
		Bare Groun	d: <b>20</b>			
		Litter:	5			
		Rock: 🖊	5			
Total % Cover: % Herb Cover:	) % Shrub C	over: 60	% Tree Cover:	0		

MSP - Rar	e Plant Habitat and Threats Assessme	
Scientific Name: Dudleya v	ariegata MSP Oc	ccurrence ID: DUVA_4EAEL012
Preserve: Mission Trails Regional Preserve:	ark Occurre	nce Name: East Elliott - Slope
Date: 5/a/14	Time St	art: 2:05 Time Finish: 2:27
Surveyors & Affiliation/Agency: KR	BM, WR	
circle). Vegetation alliance/association c		n species-specific sampling area (typically 10-m radius ECOM 2012) in the office or field, using "Associated Species" notes on page 3.
SANDAG 2012 Vegetation Alliance/Assoc	iation: ISOCOMA MENZiesii	Alliance Provisional Association
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to		Frovisional Association
	Thatch Cover: Thatch Depth: Ave.	3 cm Max: 5 cm
	No If Yes, Species/Cover Class: <u>Aem</u>	
	: Feral Pig Activity: Ground Squirr	0
		If No, Note Differences on Page 3.
Sampling Area Representative of Maximu		
		currence's maximum extent (cumulative extent over years on nt categories & page 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum	Extent): open space	
Argentine Ant Abundance at Bait Station (	1-4): Time Start: Temp. St	art: Time Finish: Temp. Finish:
Ant Sample Collected?: Yes		nt Station Photo #:
Disturbances (rank each as 1-6):		
Non-Native Forbs 3	Feral Pig Activity	Altered Hydrology
Non-Native Grasses 4	Trampling /	Erosion
Non-Native Woody Plants	Vandalism /	Urban Runoff /
Competitive Native Plants _/	Current Grazing	Slope Movement
Dumping/Trash	Historic Grazing	Soil Compaction
Encampments _/	Historic Agriculture	
Fuel Modification Zone/Fire Break	<u>/</u>	
Vegetation Clearing	If Observed, List Type(s) of ORV/Bike Activ	iter
Evidence of Recent Fire		
	If Sign of Recent Fire: Year Burned?	
Trails Type of Trail Use?	/ If Trails are Present, are They Authorized?	Tes / NO / UNKNOWN
	7	
Hiking Biking	_ Equestrian _ Dog _ Motorcy(	cle 🔄 ORV 🛛 Service Vehicles
	~	
Overall Site Quality (see page 5):	Very Good-Excellent 🗌 Fair to G	Good Poor Very Poor

MSP - Management Needs and Notes
Occurrence ID: \_\_\_\_\_\_ Species: \_\_\_\_\_\_ Species Page 3 Species: DUVA Date: 05/06/14 **VI. MANAGEMENT RECOMMENDATIONS** none **VII. MANAGEMENT ACTIONS IN LAST YEAR** odin' Survey none at actions: 9enera oneserve chil 7 tences / signs / gales **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

# Dudleya variegata (Variegated Dudleya) East Elliott - Slope



Panorama from the Southern edge of population, facing West, Northwest, North, Northeast. Panorama location is 6315780.58 1896466.98 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



Source: San GIS & City of San Diego Park & Rec Created by: Wendy Rogers, 2014



MSP - Rare Plant Oc	currence Monitoring Form	Page 1
Scientific Name: Dudleya variegata	MSP Occurrence ID: DUVA_	_3GOME003
Common Name: Variegated dudleys	a CNDDB EO#: EO57	Translocated?
Preserve: Spring Canyon Open Space	· · · · · · · · · · · · · · · · · · ·	Management Unit: 3
Land Owner: City of San Diego	Land Manager: City of	San Diego PUD
Occurrence Name: Goat Mesa / Spring	g Canyon	Sample Point #: /
Surveyors & Affiliation: Kim Roeland, Lea	in Paver, Boby Miller, Hendy Rogers .	- City of San Diego
Date: 1/24/14	Time Start. 9:10	Time Finish: 9:45
<b>extent</b> . See page 4 for definitions of categories desc any notes on page 3.	both the species-specific <b>sampling area</b> (typically 10-m radius ribing phenology & evidence of herbivory, disease & stunted gro	
# Plants/Sampling Area: 21	Exact Estimate (extrapolate partial count)	Uncertainty? /ow
# Plants/Current Mapped Extent:	Exact Count Estimate (1,000s, 10,000s	;) Uncertainty?
Area of Current Mapped Extent:37		(GPS mapping) Estimate
Phenology in Current Mapped Extent (Categories 1-5	): Vegetative: <u>5</u> Flowering: <u>4</u> Fruiting:	<b>2</b> Dead:
Evidence in Current Mapped Extent (Categories 1-5)	of: Herbivory:/ Disease:/ Stunte	ed Growth: <u>5</u>
Is Sampling Area within Current Mapped Extent?	Yes No	
Species Found in Maximum Extent?	]No	
	If not, why (if reason known or suspected	i)?
Collection (if not collected previously)?	Yes No Collected Previous	у
If yes:Collector	Collection Number Muse	um/Herbarium
II. SAMPLING AREA LOCATION & SITE PHO		
GPS Accuracy: +/<1 🗹 me	ters 🗌 feet Datum:	······································
Coordinates; E:6407136.242 N:N	1787954.48 State Plane (ft)	UTM (m) Lat-Long (dec deg)
Camera type: Pentax /	/90	
Location 1 (see coordinates above)	SE, S, SW 1.1m Level	1291-1294 S/OS/MSCP
Dire	ction (facing) Height Camera Angle	Photo # File location
	ction (facing) Height Camera Angle	Photo # File location
	ction (facing) Height Camera Angle EA If need more room, record additional data and any notes on page	
Invasive? Species/Substrate	% Cover Coll? Coll. # Invasive? Species/Substrate	%   Coll?  Coll. #
Simmondsia chineasis	17 Lepidium n	itidum 1
Erioganum fasciculatum	12 Cryptantha sp.	
Ambrosia chenopodiifolia	3 Bidleya variega	×a/
Artemisia californica	5 000	
Ulindropuntia prolifera	3	
Stipa pulchra	5	
Selaginella cherascens	7	
V Contaurer melitensis	1	
V Frodium sp.	7	
Avena sp.	3	
Binandra fasciculata	روج Bare Ground: مرجع	
- CNOregalum parviptorum_	/ Litter: 3	
Mirabiliis /acris	/ Rock: 15	
Total % Cover: 45 % Herb Cover: 2		

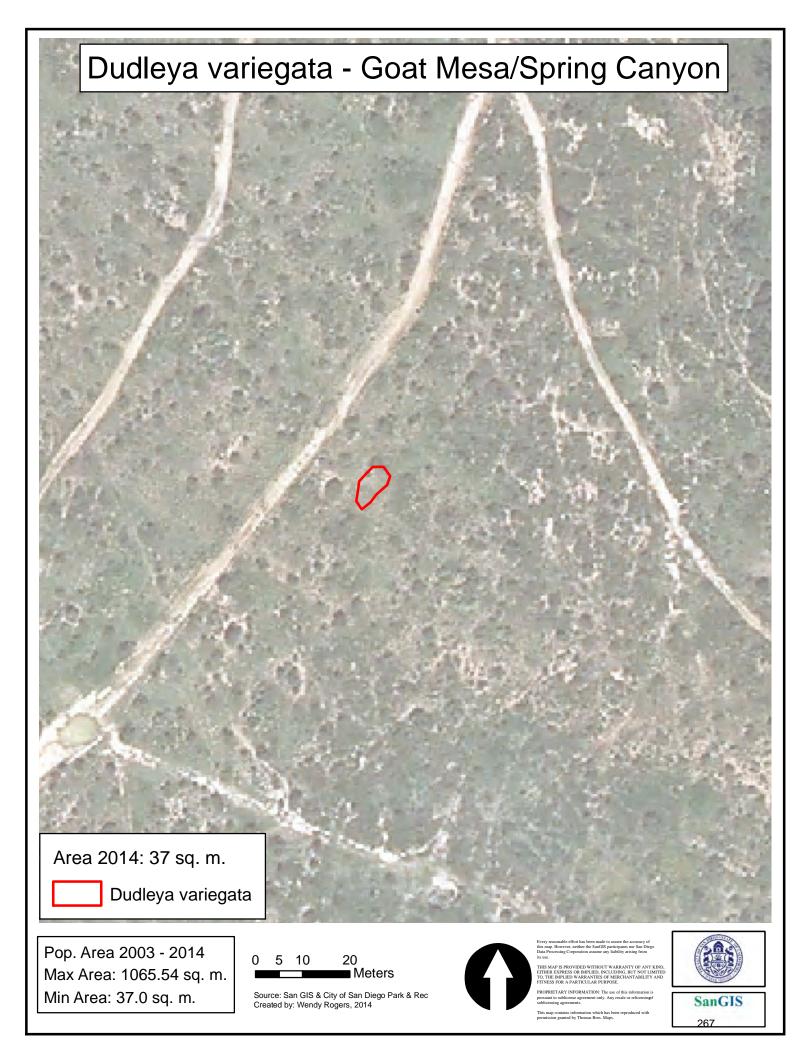
and the second sec	Plant Habitat and Threats Ass		Page 2
Scientific Name: Dudleya va			DUVA_3GOME003
Preserve: Spring Canyon Open Space		Occurrence Name:	Goat Mesa / Spring Canyon
Date: 4/24/14		Time Start: 9:10	Time Finish: 9:45
Surveyors & Affiliation/Agency: KK, S	B. WR, BM		
	n be assigned using San Diego vegetatio	n key (AECOM 2012) in	ific sampling area (typically 10-m radius the office or field, using "Associated Species"
SANDAG 2012 Vegetation Alliance/Associa	the second		
	vinensis- Bahiop	osis lacina	ta Association
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <		11. A	1- 15
Cryptogamic Crust Cover: T			and the second se
Dead Standing Biomass? Yes			
Mammal Species Activity Categories (1-4):		and the second se	
Sampling Area Representative of Maximum	Extent?	No If No, No	ote Differences on Page 3.
monitoring) plus 10-m surrounding buffe notes on page 3.	r. See page 4 for definitions of threat as		imum extent (cumulative extent over years o page 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum I	Extent): open space		
Argentine Ant Abundance at Balt Station (1- Ant Sample Collected?: Yes Disturbances (rank each as 1-6):			ne Finish: <u>9:45</u> Temp. Finish: <u>72°</u> #:
Non-Native Forbs	Feral Pig Activity/	Altere	d Hydrology
Non-Native Grasses	Trampling /	Erosic	on _/
Non-Native Woody Plants	Vandalism/	_ Urban	Runoff _/
Competitive Native Plants	Current Grazing	Slope	Movement
Dumping/Trash	Historic Grazing	Soil C	ompaction _/
Encampments	Historic Agriculture/		
Fuel Modification Zone/Fire Break /	_		
Vegetation Clearing	Second second		1
ORV/Mountain Bike Activity3	If Observed, List Type(s) of ORV/Bi	ke Activity: Bordes	Patrol road
Evidence of Recent Fire	If Sign of Recent Fire: Year Burned		
Trails 2	If Trails are Present, are They Author		
Type of Trail Use?			
Hiking Biking	Equestrian Dog N	1otorcycle ORV	Service Vehicles
	-	8. 6. S	
Overall Site Quality (see page 5):	Very Good-Excellent	air to Good	Poor Very Poor

MSP - Management Needs and Notes nce ID: DUVA\_3GOME003 Species: c Page 3 Date: 4/24/14 Occurrence ID: Species: Buva **VI. MANAGEMENT RECOMMENDATIONS** continue to maintain access control-signs + fences + gates **VII. MANAGEMENT ACTIONS IN LAST YEAR** Public Utility's Dept installed 3500 ft of Ancing to limit whensive Border Patrol/ORY roads in the area **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB: blacktailed pack rabbit a photo pain t in Spring Canyon on road to s BV \*

# *Dudleya variegata* (Variegated Dudleya) Goat Mesa/Spring Canyon



Panorama looking towards the Southwestern edge of the population, facing Southeast, South, Southwest. Panorama location is 6330814.78 1782263.11 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Oc	currenc	e Mo	onitori	ng Forr	n		an 1	Page 1		
Scientific Name: Dudleya variegata				MS	SP Occur	rence ID: DV	1VA_3MA	tvA004	!	
Common Name: Variegated dudleya					CND	DB EO#: 🔊	A Translo	cated? ND		
Preserve: Marron Valley Mitigation Bank							Managemer	nt Unit: 3		
Land Owner: City of San Diego					Land I	Aanaaer: Citv	of San Diego F			
Occurrence Name: Marron Valley						<u></u>	Sample P			1
Surveyors & Affiliation: Betsy Millen, K	lim	200	lan	d W.	endu	Rogers			ril	nof SI
Date: 4/22/14							15pm Time I		· · · · ·	
I. OCCURRENCE STATUS - Assess # plants in t extent. See page 4 for definitions of categories descri any notes on page 3.	ibing phe				ng area (	typically 10-m ra	ndius circle) & in the	e current ma	pped	
# Plants/Sampling Area: See below: ~50	X	Exact	t 🔲	Estimate	(extrapol	ate partial cou	nt) Uncertainty?	low		
# Plants/Current Mapped Extent: 1.878	<u> </u>	×ε	xact Co	ount 🗌	] Estimate	e (1,000s, 10,0	00s) Uncertainty?	low		
Area of Current Mapped Extent: 152		<u> </u>		mz			ict (GPS mapping)		stimat	e
Phenology in Current Mapped Extent (Categories 1-5):	Vegetati	ve:	5	Flower	ing: 🔮	-		rad: 1		
Evidence in Current Mapped Extent (Categories 1-5) o	-				•		•	1		
Is Sampling Area within Current Manned Extent?	<b>a</b>					•				
Species Found in Maximum Extent?	No _	a <i>hou</i>	1 + 50		<i>10 m</i>	n of phot	b pt, hut	contigu	100	sw/
Collection (if not collected previously)?			_					/		
If yes:	C Yes	5	)	X No		Collected Previo	ously			
Collector			Colle	ction Nun	nber	M	useum/Herbarium			
II. SAMPLING AREA LOCATION & SITE PHOT	OMONI	TORI	NG							
GPS Accuracy: +/ <1 I met	ers [	fee	et D	Datum:						
Coordinates; E:6407136.242 N:	<u>178</u>	7954.	48	-	— 🛙 s	tate Plane (ft)	UTM (m)	Lat-Long	(dec i	tea)
Camera type: <u>Pentax Optio W</u>	90								(400)	ucg)
Location 1 (see coordinates above)	SE, S, S	W		1.1m		Level	1272-1275	S/OS/	MSCP	
Direc	tion (facing	g)		Height	Ca	amera Angle	Photo #	File loo	ation	
Location 2 [Coordinates] Direc	tion (facing			Height		amera Angle	Photo #	File loc	ation	
Invasive? Species/Substrate	A IT need % Cover		Coll. #		7	nd any notes on p ecies/Substrate	age 3.	%	Coll2	Coll. #
Dudluya vanicgata	5				ohe		******			
Artemisia californica	7						******			
Isoloma menzicsii	3						1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -			
Malosma laurina	5									
autienezia culifornica	3									
Salvia aplana	5									
Erizgonum Fasuiculatur	- 10									
Calystegia macrostegia	25					*****				
Bromus madritensis										
Bromus diandrus	1									
Avena sp.	I									
Stipa puldhra	İ			Bare Gro	کی :bund	7				
selaginella cinerascons	->se	c an	nst-	Litter:	0					
mos	tly d	cad		Rock:	う					
Total % Cover: <u>30</u> % Herb Cover: <u>2</u>	5	% Sh	ruh Cov	or 5		% Tree Cover	0			

	e Plant Habitat and Threats Assessment Form Page 2
Scientific Name: Dudleya va	ariegata MSP Occurrence ID: DUVA _ 3 MAVADOY
Preserve: Marron Valley Mitigation Ba	ank Occurrence Name: Marron Valley
Date: 4/22/14	Time Start: 2:15 Time Finish: 2:40
Surveyors & Affiliation/Agency: BM,	KR. SP. WR
circle). Vegetation alliance/association ca	MPLING AREA - Assess habitat covariates within species-specific sampling area (typically 10-m radius an be assigned using San Diego vegetation key (AECOM 2012) in the office or field, using "Associated Species" ons of habitat assessment categories. Record any notes on page 3.
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to Cryptogamic Crust Cover:	Thatch Cover:       2       Thatch Depth: Ave.       3       cm       Max:       5       cm         No       If Yes, Species/Cover Class:       Ave.       Ave.       Height?       15       cm         :: Feral Pig Activity:       1       Ground Squirrel Activity:       2       Gopher Activity:       1
Argentine Ant Abundance at Bait Station (1         Ant Sample Collected?:       Yes         Disturbances (rank each as 1-6):         Non-Native Forbs       4         Non-Native Grasses       4         Non-Native Woody Plants       1         Competitive Native Plants       1         Dumping/Trash       1         Encampments       1	1-4):       NA       Time Start:       Time Finish:       Temp. Finish:         Image: Ant Sample #:       Ant Station Photo #:
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          Evidence of Recent Fire          Trails          Type of Trail Use?	If Observed, List Type(s) of ORV/Bike Activity: If Sign of Recent Fire: Year Burned? Unknown Burn Year: If Trails are Present, are They Authorized? (es)/ No / Unknown I Equestrian Dog Motorcycle ORV Service Vehicles Bordu Patrol

MSP - Management Needs and Notes Occurrence ID: DUVA\_ 3MAVA 00 4 Species: Page 3 DUVA Date: 4/22/14 **VI. MANAGEMENT RECOMMENDATIONS** non-native grass and control forts around high aveas Ø density possible nnted soil mst when continue to maintain access controlsign + gafe VII. MANAGEMENT ACTIONS IN LAST YEAR maintained aulss controlsign + aa-**VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB: ,

### *Dudleya variegata* (Variegated Dudleya) Marron Valley



Panorama from Northern edge of population, facing Southeast, South, Southwest. Panorama location is 6407136.24 1787954.48 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



	e Monitori	ng Forn	1	P	age 1	
Scientific Name: Dudleya variegata		MS	P Occurrence ID: DU	VA_4MERO014		
Common Name: Variegated dudleya			CNDDB EO#: nor	ne <i>Translocated</i>	l? no	
Preserve: Los Penasquitos Canyon Pr	eserve	, : · · ·		Management Un	it:	4
Land Owner: City of San Diego			Land Manager: City			
Occurrence Name: Mercy Road	<u>.</u>	÷		Sampla Daint	#:	1
Surveyors & Affiliation: Betsy miller, Kim	Roela	nd W	end, Roals	~		
Surveyors & Affiliation: Betsy Miller, Kim Date: 5/8/14	<u></u>	100	Time Start: 19:	50 Time Finisl	h: /]:	13
I. OCCURRENCE STATUS - Assess # plants in both the spe extent. See page 4 for definitions of categories describing pheno any notes on page 3.	ecies-specifi	c. <b>sampli</b> i	ng area (typically 10-m ra	ndius circle) & in the <b>cur</b> I growth within the samp	rent map	oped
# Plants/Sampling Area: <u>37</u> 🛛	xact 🗌 f	Estimate	(extrapolate partial cour	nt) Uncertainty? <i>[o</i>	ω	
			Estimate (1,000s, 10,0		J	
Area of Current Mapped Extent: 666				ict (GPS mapping)	·	stimate
Phenology in Current Mapped Extent (Categories 1-5): Vegetative				( 11 5)		sumate
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivor	,			unted Growth:/	_ (	
		Di	seaseSu	unted Growth:		
Is Sampling Area within Current Mapped Extent?	No					
Species Found in Maximum Extent?		lf not w	hy (if reason known or suspe	otod)?		
Collection (if not collected previously)?				,		
	Je	🗙 No	Collected Previo	pusly		
If yes: Collector	Collec	ction Num	iber M	useum/Herbarium		
II. SAMPLING AREA LOCATION & SITE PHOTOMONIT	ORING					
GPS Accuracy: +/ <1 meters	] feet 🛛 🛛	Datum:				
Coordinatory E: 6256206.000 N: 4007						
Coordinates; E: <u>6356396.908</u> N: <u>1807</u>	139,545				at-Long	(dec dea)
Camera type: <u>Pentax Optio</u> W90			— 🗹 State Plane (ft)	UTM (m)	.at-Long	(dec deg)
		 1.1m		□ UTM (m) □ L	at-Long	
Camera type: Pentax Optio W90	3E	1.1m Height		UTM (m) L		MSCP
Camera type: <u>Pentax Optrio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing)	SE	Height	10° up Camera Angle	<u>1470-14</u> 7 <u>2</u> Photo #	S/OS/I File loc	MSCP ation
Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, S         Direction (facing)         Location 2 [Coordinates]       Direction (facing)	<u>SE</u>	Height Height	10° up Camera Angle Camera Angle	<u>1470-1472</u> Photo # Photo #	S/OS/I	MSCP ation
Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, S         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA // fneed fill	SE	Height Height cord additie	10° up Camera Angle Camera Angle onal data and any notes on p	<u>1470-1472</u> Photo # Photo #	S/OS/I File loc File loc	MSCP ation ation
Carnera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, S         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need not invasive?         Species/Substrate       % Cover	<u>SE</u>	Height Height	10° up Camera Angle Camera Angle onal data and any notes on p Species/Substrate	<u>1470-1472</u> Photo # Photo # page 3.	S/OS/I File loc File loc	MSCP ation ation Coll? Coll. #
Camera type:       Pentax Optio       W90         Location 1 (see coordinates above)       N, NE, E, S         Direction (facing)         Location 2 [Coordinates]       Direction (facing)         III. ASSOCIATED SPECIES IN SAMPLING AREA // fneed fill	SE	Height Height cord additie	10° up Camera Angle Camera Angle Camera Angle Species/Substrate Selagine II a	<u>1470-1472</u> Photo # Photo # Dage 3. CINL MISCEMS	S/OS/I File loc File loc	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Rhus intrantolia 5	SE	Height Height cord additie	10° up Camera Angle Camera Angle Onal data and any notes on p Species/Substrate Sel a ginella Fenora Cfus	<u>1470-1472</u> Photo # Photo #	S/OS/I File loc File loc	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> Wao Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need 1 Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Phus integrifolia 5 Isoupma menziesii 3	SE	Height Height cord additie	10° up Camera Angle Camera Angle Camera Angle Species/Substrate Selagine II a	<u>1470-1472</u> Photo # Photo #	S/OS/I File loc File loc % *> \$C { (D {	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Phus integrifolia 5 I.Socoma menziesii 3 Eniogonum fusciculation 3	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincila Fenora Cfus Shipa pulch Contauvca Brachypodium	<u>1470-1472</u> Photo # Photo # page 3. cine vas cens vas prolitensis n distackyov	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover of Dudley a brevifolia 1 Adolphia californica 2 Phus integrifolia 5 Isocoma menziesii 3 Eniogonua fasciculation 3 Antemisia californica 1	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincilla Fenora Cfus Shipa pulch Centanvca Brachypodium Evodium bod	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> Wad Location 1 (see coordinates above) N. NE, E, S Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover a Dudley a brevifolia 1 Adolphia californica 2 Rhus integrifolia 5 Isocoma menziesii 3 Enegonum fasciculation 3 Adamisia californica 1 Pentoma avborea 1	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincila Fenora Cfus Shipa pulch Contauvca Brachypodium	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Rhus integrifolia 5 Isocoma menziesii 3 Enegonum fusciculation 3 Adamisia californica 1 Pentoma avborea 1 Lomatium dasycarpun 7	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincilla Fenora Cfus Shipa pulch Centanvca Brachypodium Evodium bod	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover of Dudley a brevifolia 1 Adolphia californica 2 Phus integrifolia 5 Isocoma menziesii 3 Eniogonum fusuiculatum 3 Anamisia californica 1 Pentoma avborea 1 Lomatium dasycarpun 7 Corethrogyne filoginifolia 1	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincilla Fenora Cfus Shipa pulch Centanvca Brachypodium Evodium bod	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> Wao Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover a Dudley a brevifolia 1 Adolphia californica 2 Rhus integrifolia 5 Isocoma menziesii 3 Eniogonum fusciculation 3 Adamisia californica 1 Penifoma avborea 1 Lomatium dasycarpum 7 Corethrogyne filoginifolia 1 Acmispon glaber 1	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincilla Fenora Cfus Shipa pulch Centanvca Brachypodium Evodium bod	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentar Optio W90</u> Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover of Dudley a brevitolia 1 Adolphia californica 2 Phus integritolia 5 Isocoma menziesii 3 Eniogonum fusuiculatum 3 Adamisia californica 1 Pentoma avborea 1 Lomatium dasycarpun 7 Corethrogyne filoginitolia 1	SE	Height Height cord additie	10° up Camera Angle Camera Angle Danal data and any notes on p Species/Substrate Sela gincilla Fenora Cfus Shipa pulch Centanvca Brachypodium Evodium bod	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need II Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Phus integrifolia 5 Isocoma menziesii 3 Enegonum fusciculatura 3 Adamisia californica 1 Pentoma adorea 1 Lomatium dasycarpum 7 Coretnrogyne filoginifolia 1 Acmispon glaber 1 Sisy ninchinm bellum 1	SE	Height Height cord additie	<u>10° up</u> Camera Angle Camera Angle Camera Angle Camera Angle Species/Substrate Sela gincila Fenora Cfus Stipa pulch Centauvca Brachypodium Erodium bot	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio W90</u> Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphia californica 2 Rhus integrifolia 5 Isocoma menziesii 3 Enegonum fusciculation 3 Adamisia californica 1 Pentoma avborea 1 Lomatium dasycarpum 7 Corethrogyne filoginifolia 1 Acmispon glaber 1 Sisy rinchimm bellum 1 Cirotor Setryems 1 Deinandra fasciculata 1	SE	Height Height cord additi Invasive?	<u>10° up</u> Camera Angle Camera Angle Camera Angle Camera Angle Species/Substrate Sela ginella Fenora Cfus Stipa pulla Cantantea Brachypodium Evodium bot Calochomus	<u>1470-1472</u> Photo # Photo # page 3. Cine vas cens cine vas cens va photo filensis n distacky or by c	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #
Camera type: <u>Pentax Optio</u> W90 Location 1 (see coordinates above) <u>N, NE, E, S</u> Direction (facing) Location 2 [Coordinates] Direction (facing) III. ASSOCIATED SPECIES IN SAMPLING AREA If need I Invasive? Species/Substrate % Cover ( Dudley a brevifolia 1 Adolphis californica 2 Phus integrifolia 5 Isocoma menziesii 3 Eniogonum fasciculatura 3 Adamisia californica 1 Pentoma avborea 1 Lomatium dasycarpum 7 Corethrogyne filoginitolia 1 Acmispon glaber 1 Sisy rinchinm bellum 1 Cortor Setrigems 1 Deinandra fasciculata 1 V Hypochaens glabra 1	SE	Height Height Cord addition Invasive? Height Invasive? Height Invasive? Bare Groot Litter: ( Rock:	<u>10° up</u> Camera Angle Camera Angle Camera Angle Camera Angle Camera Angle Species/Substrate Sela ginella Fenora Cfus Shipa pulla Cantaurca Brauhypodiur Calochorns Calochorns	<u>I470-1472</u> Photo # Photo #	S/OS/I File loc File loc % * * * * * * * (D (	MSCP ation ation Coll? Coll. #

MSP - Rare Pla	nt Habitat and Threats	s Assessment Fo	rm	Page 2	
Scientific Name: Dudleya variegata	3	MSP Occurrent	ce ID: DUVA_ 4	IMER-0014	
Preserve: Los Penasquitos	Consign Prese	Occurrence Na	<i>me:</i> Merc	cy Road	
Date: 5/8/14	0	Time Start:	10:50	Time Finish:	11:13
Surveyors & Affiliation/Agency: wp2, k	R, BM		n 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 -		
IV. HABITAT ASSESSMENT IN SAMPLIN circle). Vegetation alliance/association can be a data from page 1. See page 4 for definitions of h	ssigned using San Diego ve	getation key (AECOM	2012) in the office o		
SANDAG 2012 Vegetation Alliance/Association:	AAcmisia cali	<del>fomica - E</del>	nogonur	n fascicula	etum
<u>Allianu; Artemisia car</u> Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%), Cryptogamic Crust Cover: <u>4</u> Thatch	<u>lifo mica - Enio</u> 4 (25 to <50%); 5 (>50%) Cover: <u>3</u> That	ich Depth: Ave	cm Max: _2	<u>m-Opuntia li</u> Dud L	<u>Horalis</u> 4 a (edulis) assouiation
Dead Standing Biomass?					
Mammal Species Activity Categories (1-4): Feral			rity: (	Gopher Activity:/	
Sampling Area Representative of Maximum Exte	nt? 🕅 Yes	No	If No, Note Difference	ces on Page 3.	
V. THREATS ASSESSMENT IN MAXIMUM monitoring) plus 10-m surrounding buffer. Se notes on page 3.				,	
Surrounding Land Use at Site (>Maximum Exten	): <u>open spa</u>	Cl.			
Argentine Ant Abundance at Bait Station (1-4): 🧕	1.A Time Start:	Temp. Start:	Time Finish:	Temp. Finish:_	
Ant Sample Collected?: Yes 🗶 No	Ant Sample #:	Ant Statio	on Photo #:	<u> </u>	
Disturbances (rank each as 1-6):					
Non-Native Forbs       3         Non-Native Grasses       5         Non-Native Woody Plants       1         Competitive Native Plants       1         Dumping/Trash       1         Encampments       1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Altered Hydrology Erosion Urban Runoff Slope Movement Soil Compaction	_/ _/	
Evidence of Recent Fire Trails Type of Trail Use?	I If Observed, List Type(s) of ( If Sign of Recent Fire: Year f Trails are Present, are The uestrian Dog	Burned?	No / Unknown	'ear: Service Vehicles	
Overall Site Quality (see page 5):	Good-Excellent	Fair to Good	Poor	Very Poor	

MSP - Management Needs and Notes Page 3 Occurrence ID: DAVA - 4 MEDODI4 Species: DUVA Date: 5/8/14 VI. MANAGEMENT RECOMMENDATIONS -treat non-native grasses of CBI approved methods **VII. MANAGEMENT ACTIONS IN LAST YEAR** \* Ø VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: CAGN calling on s-facing slope near DDB DF taken noto

## *Dudleya variegata* (Variegated Dudleya) Mercy Road



Panorama from Northwestern edge of population, facing Southwest, West, Northwest. Panorama location is 6294492.70 1924435.77 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occurrence Monitoring Form	Pa	ge 1	
Scientific Name: Dudleya variegata MSP Occurrence ID: DU	VA_4MTRP015		
Common Name: Variegated dudleya CNDDB EO#; non	e Translocated?	no	
Preserve: Mission Trails Regional Park	Management Unit:		4
Land Owner: City of San Diego Land Manager: City	of San Diego		
Occurrence Name: Mission Trails Regional Park	Sample Point #:		1
Surveyors & Affiliation: Betsy Miller, Kim Roeland, Wendy Rogers - 0	atu of san Di	ego	
Date: 5/6/14 Time Start: //:			
I. OCCURRENCE STATUS – Assess # plants in both the species-specific sampling area (typically 10-m rextent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunte any notes on page 3.	d growth within the sampli	ng area	Record
# Plants/Sampling Area: () Exact Estimate (extrapolate partial cou	nt) Uncertainty? <b>/ou</b>	>	
# Plants/Current Mapped Extent:       24       Image: Exact Count       Estimate (1,000s, 10,00)         Area of Current Mapped Extent:       35       M <sup>2</sup> units       Image: Exact Count         Phenology in Current Mapped Extent (Categories 1-5):       Vegetative:       5       Flowering:       5       Fruiting:         Evidence in Current Mapped Extent (Categories 1-5):       Vegetative:       5       Flowering:       5       Fruiting:         Is Sampling Area within Current Mapped Extent?       Yes       Yes       Yes	act (GPS mapping) g: Dead:	□ E: _/	stimate
Species Found in Maximum Extent? Xes No			
If not, why (if reason known or susp	ected)?		
Collection (if not collected previously)?	ously		
If yes:Collector Collection Number M	luseum/Herbarium		I
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING			· · · · · · · · · · · · · · · · · · ·
GPS Accuracy: +/ <1	· · ·		
Coordinates; E:6356396.908 N:1807139.545 V: State Plane (ft)		t-l ong	(dec deg)
Camera type: Pentax optio W90		t-Long	(dec deg)
Location 1 (see coordinates above) N, NE, E, SE 1.1m 10° up	1440-1443	S/OS/	MSCP
Direction (facing) Height Camera Angle	Photo #	File loc	ation
Location 2 [Coordinates] Direction (facing) Height Camera Angle	Photo #	File loc	ation
III. ASSOCIATED SPECIES IN SAMPLING AREA         If need more room, record additional data and any notes on a species/Substrate           Invasive?         Species/Substrate         % Cover         Coll?         Coll.#         Invasive?         Species/Substrate	page 3.	%	Coll? Coll. #
		70 I	
	alulia	[	
Peritoma arborea 1 - Hypochaenis	glabra		
Peritoma arborea 1 - Hypochaenis	glabra	  	······
Peritoma arborea 1 - Hypochaenis	glabra	       <	
Peritoma arborea I - Hypochaen's Eriogonum fusciculatum 10 - Stylocline g Malosma laurina 2 - Pectocarya I Artemisi a californica J - Brachypodiu	glabra naphaloides neans m distachyon	       5	
Peritoma arborea I - Hypochaen's Eriogonum fusciculatum 10 - Stylocline g Malosma laurina 2 - Pectocarya I Artemisi a californica J - Brachypodiu	glabra	     5 	
Peritoma arboreaI- Hypochaen'sEriogonum fusciculatur10Stylocline gMalosma laurina2Pectocanya liArtemisi a californica1- BrachypodiuAcmispon glaber2- Avena sp.ForwactusVindescens1	glabra	     5 	
Peritoma arboreaIIHypochaen'sEriogonum fusciculatum 10Stylocline gMalosma laurina2Pectocanya IIArtemisi a californicaIIArtemisi a californicaIIBrachypodinAcmispon glaber2ForviactusVindescensIBahjopsisIaciniataI	glabra	       5	
Peritoma arboreaI- Hypochaen'sEriogonum fusciculatum 10Stylocline gMalosma laurina2Pectocanya 1Artemisi a californicaIArtemisi a californicaIBrachypodiuAcmispon glaber2FerocactusVindescensIIBahjopsisIaciniataDeinandra fusuculataI	glabra	     5 	
Peritoma arboreaI- Hypochaen'sEriogonum fusciculatur10Stylocline gMalosma laurina2Pectocarya liArtemisi a californica1- BrachypodiaArtemisi a californica1- BrachypodiaActmispon glaber2- Mena sp.FowcactusVindescens1Isahjopsis1- BrachypodiaDeinundra fusciculata1Selaginella cinerascens3	glabra	       	
Peritoma arboreaIHypochaen'sEriogonum fusciculatum 10Stylocline gMalosma laurina2Pectocanya 1Artemisi a californicaIArtemisi a californicaIPermispon glaber2PrachypodiuAcmispon glaber2ForocactusVindescensIIBahjopsis1Deinundra fusciculata1Selaginella cinerascens3Chlorogalum parviflornin1	glabra		
Peritoma arboreaI- Hypochaen'sEviogonum fusciculatum 10Stylocline gMalosma laurina2Pectocanya IIArtemisi a californicaIArtemisi a californicaIBrachypodiuAcmispon glaber2Pervene tus vindescensIIsahiopsis laciniataIDeinandra fusciculataISelaginella cinerascens3Chiorogalum parviflornin IIStipa pulchraI	glabra		
Peritoma arboreaI- Hypochaen'sEriogonum fusciculatur10Stylocline gMalosma laurina2Pectocanya laArtemisi a californica1- BrachypodiuArtemisi a californica1- BrachypodiuArtemisi a californica1- BrachypodiuActispon glaber2- Alvena sp.FerractusVindescens1Bahjopsis1- BrachypodiuDeinandra fusciculata1Selaginella cinerascens3Chlorogalum parviflornim1Stipa pulchra1VCentaurca melitensis1	glabra		
Peritoma arborcaI- Hypochaen'sEriogonum fusciculatur10Stylocline gMalosma laurina2Pectocarya liArtemisi a californica1- BrachypodiaArtemisi a californica1- BrachypodiaArtemisi a californica1- BrachypodiaActis pon glaber2- Alvena sp.ForvactusVindescens1Isah jopsis1 activitata1Deinundra fusciculata1Selaginella cinerascens3Chiorogalum parviflornim1Stipa pulchra1VCentaurca melitensis1Bare Ground:1	glabra		

MSP - Rar	e Plant Habitat and Threats Asses	sment Form	Page 2
Scientific Name: Dudleya va	ariegata M.	SP Occurrence ID: DU\	/A_4MTRP015
Preserve: Mission Trails Regional Pa	ark Od	ccurrence Name:	Mission Trails Regional Park
Date: 5/6/14	Ti	me Start: 11:30	Time Finish: 12:00
Surveyors & Affiliation/Agency: KR,	BM.WR		
circle). Vegetation alliance/association c	MPLING AREA - Assess habitat covariates an be assigned using San Diego vegetation ) ons of habitat assessment categories. Record	key (AECOM 2012) in the o	
	iation: Bahiopsis lacinata A		
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to	goning fasciculatu	n Msjogation	)
			0
	Thatch Cover: Thatch Depth		
	No If Yes, Species/Cover Class:		second
lammal Species Activity Categories (1-4)	: Feral Pig Activity: Ground		
ampling Area Representative of Maximu	m Extent? Xes No	If No, Note Di	ferences on Page 3.
rgentine Ant Abundance at Bait Station ( nt Sample Collected?: Yes Station (	1-4): <u>N/A</u> Time Start: Ter	np. Start: Time Fin _ Ant Station Photo #:	ish: Temp. Finish:
Non-Native Forbs3	Feral Pig Activity	Altered Hyd	rology
Non-Native Grasses 3	Trampling	Erosion	1 1
Non-Native Woody Plants	Vandalism	Urban Runo	off J
Competitive Native Plants	Current Grazing	Slope Move	
Dumping/Trash	Historic Grazing	Soil Compa	
Encampments 1	Historic Agriculture UNK	con compa	
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          Evidence of Recent Fire          Trails          Type of Trail Use?          Miking	If Observed, List Type(s) of ORV/Bike If Sign of Recent Fire: Year Burned? If Trails are Present, are They Authori Equestrian Dog Mo	Unknown I	Burn Year:
verall Site Quality (see page 5):	Very Good-Excellent	r to Good Po	or Very Poor

MSP - Management Needs and Notes       Page         Occurrence ID: DVVA_4MTPP 015       Species: DVVA         Date: 5/1	
VI. MANAGEMENT RECOMMENDATIONS	
- continue to maintain access control with fencing, et	ж, - -
VII. MANAGEMENT ACTIONS IN LAST YEAR	
Access controlled via fences and trail brushing	- -
	<b>-</b> .
VIII. CNDDB SPECIES DETECTED & NOTES	
List any plant or animal species to add to the CNDDB:	.
	-
	•
	• • •
· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·	
	,
	,
	. 📕

# *Dudleya variegata* (Variegated Dudleya) Mission Trails Regional Park Subpopulation # 1



Panorama from the Southern edge of population, facing Northwest, North, Northeast. Panorama location is 6309627.30 1879705.91 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



	e Monitoring Form Page 1
Scientific Name: Dudleya variegata	MSP Occurrence ID: DUVA_4MTRP015
Common Name: Variegated dudleya	CNDDB EO#: none Translocated? no
Preserve: Mission Trails Regional Park	Management Unit: 4
Land Owner: City of San Diego	Land Manager: City of San Diego
Occurrence Name: Mission Trails Regional Pa	rk Sample Point #: 2
Surveyors & Affiliation: Kim Roeland, Bets	Miller, Klendy Rogers - City of San Diego
Date: 5/10/14	Time Start: 10:05 Am Time Finish: 11:10 Am
	pecies-specific <b>sampling area</b> (typically 10-m radius circle) & in the <b>current mapped</b> nology & evidence of herbivory, disease & stunted growth within the sampling area. Record
# Plants/Sampling Area:	Exact Estimate (extrapolate partial count) Uncertainty?
Area of Current Mapped Extent: 109 Phenology in Current Mapped Extent (Categories 1-5): Vegetati	Exact Count       Estimate (1,000s, 10,000s) Uncertainty?       Image: Constrainty?         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of the structure       Image: Constraint of the structure       Image: Constraint of the structure         Image: Constraint of
	If not, why (if reason known or suspected)?
Collection (if not collected previously)?	No Collected Previously
Collector	Collection Number Museum/Herbarium
II. SAMPLING AREA LOCATION & SITE PHOTOMONI	TORING
	feet Datum:
	7139.545 State Plane (ft) UTM (m) Lat-Long (dec deg)
Camera type: Pentax Optico & 190	
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) N, NE, E,	SE     1.1m     10° up     14/33     S/OS/MSCP
Camera type: Pentax Optico & 190	SE     1.1m     10° up     14/33     S/OS/MSCP
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) N, NE, E, Direction (facing	SE     1.1m     10° up     1430 - 1433     S/OS/MSCP       g)     Height     Camera Angle     Photo #     File location
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) N, NE, E, Direction (facing	SE       1.1m       10° up       14/30 - 14/33       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Height       Camera Angle       Photo #       File location
Camera type:       Pentax Optico k/90         Location 1 (see coordinates above)       N, NE, E, Direction (facing         Location 2 [Coordinates]       Direction (facing	SE       1.1m       10° up       1435       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Height       Camera Angle       Photo #       File location         g)       Height       Camera Angle       Photo #       File location
Camera type:       Pentax Optico k/90         Location 1 (see coordinates above)       N, NE, E, Direction (facing         Location 2 [Coordinates]       Direction (facing         III. ASSOCIATED SPECIES IN SAMPLING AREA If need	SE       1.1m       10° up       1435       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Height       Camera Angle       Photo #       File location         g)       Height       Camera Angle       Photo #       File location
Camera type:       Pentax Optico k/90         Location 1 (see coordinates above)       N, NE, E, Direction (facing         Location 2 [Coordinates]       Direction (facing         III. ASSOCIATED SPECIES IN SAMPLING AREA If need         Invasive?       Species/Substrate       % Cover         Budleyn varriega ta       I         Jhub integrifatia       I	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Comgrang #       Photo #
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need</i> Invasive? Species/Substrate % Cover Dudleyn varriega ta 1 Shub integrifatia 1 Location 1	SE       1.1m       10° up       14/33       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Height       Species/Substrate       %       Coll? Coll. #
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dedleyn variegata 1 Shub integrifichia 1 Lorioganum facindatum 7 Addenissia Californica 5	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Comgrang #       Photo #
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA <i>If need</i> Invasive? Species/Substrate % Cover Dudleyn varriega ta 1 Shub integrifatia 1 Loring anum face ula tuan 7	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Coll #       Invasive?
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dedleyn variegata 1 Shub integrifotia 1 Erroganum facindatum 7 Addenissia Californica 5 Addenissia Californica 5	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Coll #       Invasive?
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dedleyn variegata 1 Shub integrifolia 1 Zhub integrifolia 1 Livioganum facindatum 7 Adamis ia californica 5 Adamis ja californica 5 Malaona Jaurina 3 Isocoma mensusii 1 Ferecactus viridiocens 1	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Coll #       Invasive?
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dudley variega ta 1 Shub integrificitia 1 Erroganum facciulatum 7 Advenisia Californica 5 Advenisia Californica 5 Advenisia Californica 3 Itocoma menzusii 1 Ferreactus viriduscens 1 Chlorogalum parviflorum 2	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Coll #       Invasive?
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dudleyn variegata 1 Shub integrifichia 1 Erioganum facinatatum 7 Advenissia californica 5 Advenissia californica 5 Advenissia californica 5 Advenissia californica 5 Advenissia californica 5 Malaona laurina 3 I. Erioganum passificorum 2 Secona menzusii 1 Fericactus viridiocens 1 Chlorogalum passificorum 2 Secona cincrascens 5	SE       1.1m       10° up       1430 - 1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         g)       Heighth       Coll #       Invasive?
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing <b>III. ASSOCIATED SPECIES IN SAMPLING AREA</b> <i>If need</i> Invasive? Species/Substrate % Cover Dudleya variegata 1 Shub integrifichia 1 Erioganum facinatatum 7 Addenissia californica 5 Addenissia californica 5 Addenissia californica 5 Malaona Jaurina 3 Malaona Jaurina 3 Malaona Jaurina 5 Chlorogalum paeviflorum 2 Seginella cincrascene 5 Verdura 50, 7	SE       1.1m       10° up       1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         d       Coll?       Coll?       Species/Substrate       %       Coll? Coll. #
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dedleya variegata 1 Shub integrifolia 1 Shub integrifolia 1 Lirrioganum facinatum, 7 Ademissia californica 5 Ademissia californica 5 Ademissia californica 5 Ademissia californica 5 Maloona laurina 3 Isocoma menzusii 1 Ferecactus viriduscens 1 Chlorogalum paeviflorum 2 Selaginella cincrascens 5	SE       1.1m       10° up       1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         d       Coll?       Coll ?       Species/Substrate       %       Coll?       Coll .#
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dudley variega ta 1 Shub integrifolia 1 Errioganum facindatum 7 Advenisia californica 5 Advenisia californica 5 Adventisia Californi 5 Adventisia Californica 5 Adventisia Califor	SE       1.1m       10° up       1433       S/OS/MSCP         g)       Height       Camera Angle       Photo #       File location         d       Coll?       Coll?       Species/Substrate       %       Coll? Coll. #
Camera type: <u>Pentax Optico k/90</u> Location 1 (see coordinates above) <u>N, NE, E,</u> Direction (facing Location 2 [Coordinates] Direction (facing III. ASSOCIATED SPECIES IN SAMPLING AREA If need Invasive? Species/Substrate % Cover Dudleya varriega ta 1 Shub integrifatia 1 Lirioganum facinatatum 7 Advenissia Californica 5 Advenissia Californica 5 Malaona Jaurina 3 Malaona Jaurina 3 Malaona Jaurina 3 Kacoma menzusii 1 Temcactus viridiocens 1 Chlorogalum paeviflorum 2 Selazinella circrascene 5 V Elazinella circrascene 5 V Elazinella circrascene 5 V Brachypodium distactypen 50	SE       1.1m       10° up       1433       S/OS/MSCP         a)       Height       Camera Angle       Photo #       File location         a)       Invasive?       Species/Substrate       %       Coll? Coll. #         a)       Avend spc.       1       1       1         a)       Avend spc.       1       1       1         a)       Avend spc.       1       1       1       1         a)       I       Invasive?       Invasive?       Invasive?       Invasive?      <

MSP - Rare	Plant Habitat and Threats A	ssessment Form	Page 2
Scientific Name: Dudleya va	riegata	MSP Occurrence ID:	DUVA_4MTRP015
Preserve: Mission Trails Regional Pa	rk	Occurrence Name:	Mission Trails Regional Park 74.2
Date: s/u/14		Time Start: 10:35	Time Finish: 11:10
Surveyors & Affiliation/Agency: KR,	BM. WR		
	n be assigned using San Diego vegel	tation key (AECOM 2012) in	cific sampling area (typically 10-m radius a the office or field, using "Associated Species" 3.
SANDAG 2012 Vegetation Alliance/Associ	ation: Artemisia californ	nica - Enlogonum	Fasciculatum Alliance
protunisia culifornica-Fr	ioaonum fasciculatum-	Opuntia littoralis	/Dudleya (edulis) Associa
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to	<25%); 4 (25 to <50%); 5 (>50%)		J
Cryptogamic Crust Cover:1	hatch Cover: Thatch	Depth: Ave cm	Max: <u>5</u> cm
Dead Standing Biomass? Yes	No If Yes, Species/Cover Cla	ass: Achier 2; m	Zsocoma /2 Ave. Height? 15 cm
Mammal Species Activity Categories (1-4):		and the second se	
Sampling Area Representative of Maximur			ote Differences on Page 3.
			<b>ximum extent</b> (cumulative extent over years of page 5 for Overall Site Quality Scale. Record
Surrounding Land Use at Site (>Maximum	Extent):		
3	- cpie spa	ce.	
Argentine Ant Abundance at Bait Station (1	A): / Time Start: In: Uni	KeTomo Start 62 Tir	ne Finish:And Temp. Finish:
			/
Ant Sample Collected?: Yes Disturbances (rank each as 1-6):	No Ant Sample #: <u>n/c</u>	Ant Station Photo	0#
2	5.15 LO.		10.1.1
	Feral Pig Activity		ed Hydrology
Non-Native Grasses	Trampling	Erosi	
Non-Native Woody Plants	Vandalism		n Runoff
Competitive Native Plants	Current Grazing		Movement
Dumping/Trash	Historic Grazing	Soil C	Compaction
Encampments	Historic Agriculture		
Fuel Modification Zone/Fire Break			
Road Construction/Maintenance			
Vegetation Clearing			
ORV/	If Observed, List Type(s) of OR	V/Rike Activity	
Evidence of Recent Fire	If Sign of Recent Fire: Year Bur		nown Burn Year:
Trails	If Trails are Present, are They A	unonzed? res / No / Un	IKNOW(1
Type of Trail Use?		-	112
🗹 Hiking 🗹 Biking [	Equestrian Dog	Motorcycle ORV	Service Vehicles
Overall Site Quality (see page 5):	Very Good-Excellent	Fair to Good	Poor Very Poor

Page 3 Species: DUVA Date: 5/6/14 **VI. MANAGEMENT RECOMMENDATIONS** Mone **VII. MANAGEMENT ACTIONS IN LAST YEAR** illega inclus 10ngol 11-0 m /3 10 prente nova **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

# *Dudleya variegata* (Variegated Dudleya) Mission Trails Regional Park Subpopulation # 2



Panorama from Northeastern edge of population, facing West, Northwest, North. Panorama location is 6309627.31 1879705.91 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occurrence Monitoring Form				Page 1			
Scientific Name: Dudleya variegata MSP Occurrence ID: DUVA_4MTRP015							
Common Name: Variegated dudleya CNDDB EO#: none Translocated? no							
Preserve: Mission Trails Regional Park					Management (	Jnit:	4
Land Owner: City of San Diego Land Manager: City of San Diego							
Occurrence Name: Mission Trails Region				· · · · ·	Sample Poir		3
Surveyors & Affiliation: Kim Roeland, Betsy Miller, Wandy Rogers - City of San Diego						>	
Date: 5/4/14			-	Time Start: //	:/S Am Time Fin	ish: 🎵 :	30 Am
I. OCCURRÉNCE STATUS – Assess # plants in both the species-specific sampling area (typically 10-m radius circle) & in the current mapped extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunted growth within the sampling area. Record any notes on page 3.							o <b>ped</b> a. Record
# Plants/Sampling Area: 48	Exa	act	Estimate (e:	xtrapolate partial co	unt) Uncertainty?	low	· .
# Plants/Current Mapped Extent:		Exact Co	unt 🗆 F	stimate (1.000s, 10	,000s) Uncertainty?	low	
			_m2		(act (GPS mapping)	_	stimate
Phenology in Current Mapped Extent (Categories 1-5):							
Evidence in Current Mapped Extent (Categories 1-5) o					•		
Is Sampling Area within Current Mapped Extent?	Yes	No					
Species Found in Maximum Extent?	No						
	If not, why (if reason known or suspected)?						
Collection (if not collected previously)?	🗌 Yes		No	Collected Prev	iously		
If yes:Collector	<u> </u>	Colle	ction Numbe		Museum/Herbarium	<u> </u>	
II. SAMPLING AREA LOCATION & SITE PHOT	OMONITO						
GPS Accuracy: +/<1 🗸 mete	ers 🗌 1	eet [	Datum:				
Coordinates; E: <u>6356396.908</u> N:	180713	9.545		– 🗹 State Plane (ft	) [] UTM (m) []	] lat-long	(dec deg)
Camera type: Rentax Opt	Yea h			_ `		J Lat Long	(uce ucg)
	N, NE, E, SE		1.1m	10° up	1#34-1439	S/OS/	MSCP
Direct	tion (facing)		Height	Camera Angle	Photo #	File loc	ation
Location 2 [Coordinates] Direct	tion (facing)		Height	Camera Angle	Photo #	File loc	ation
Location 2 [Coordinates]       Direction (facing)       Height       Camera Angle       Photo #       File location         III. ASSOCIATED SPECIES IN SAMPLING AREA       If need more room, record additional data and any notes on page 3.       File location							
Invasive? Species/Substrate	1	II? Coll. #	Invasive?	Species/Substrate		%	Coll? Coll. #
Buskeyn variegata	1						
Erieganum filouigulatum	5				**************************************		
Maloma Jaurina	7						
Palium anoustifulium	2					•	
Opuntia sp.	1				*****		
Calochortus splendens	1						
Selaginella cinerascens	15						
Alpa pulchra	1			****	******		
Chlorogalum parviflerum	30						
V Brachypool Ium Wistachypon	30						
<b>7</b>			Bare Groun	id: /5			
			Litter: 3	-	·		
			Rock: 2C	>			
Total % Cover:% Herb Cover:% Shrub Cover:% Tree Cover:%							

	are Plant Habitat and Threats		Page 2	
Scientific Name: Dudley	a variegata	MSP Occurrence ID: DUVA	_4MTRP015	
Preserve: Mission Trails Regional Park		Occurrence Name: Mission Trails Regional Park		
Date: 5/16/14		Time Start: 11:15	Time Finish: 11:30	
Surveyors & Affiliation/Agency:	C. BM, WR			
circle). Vegetation alliance/association	AMPLING AREA - Assess habitat co n can be assigned using San Diego veg nitions of habitat assessment categories	etation key (AECOM 2012) in the offic		
SANDAG 2012 Vegetation Alliance/As	sociation: Artemisia california	- Giogonum fasciculatu	m Alliance	
Arteniisia californica-Er	iogonum Fasciculatum - Opun	tia littoralis / Dudleya	(dulis) Association	
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (1				
Cryptogamic Crust Cover: 3	Thatch Cover: Thatch	h Depth: Ave. <u>3</u> cm Max: _	<u>5</u> cm	
	No If Yes, Species/Cover C		/	
	I-4): Feral Pig Activity: (	. // .		
Sampling Area Representative of Maxi			ences on Page 3.	
	AXIMUM EXTENT - Assess threats w uffer. See page 4 for definitions of thre			
Surrounding Land Use at Site (>Maxim	um Extent)			
Surrounding Land Ose at Site (-Iniaxini	un exient). Open spac	l		
		121.7212		
	n (1-4): 1/2 Time Start:		: Temp. Finish:	
Ant Sample Collected?: Yes	No Ant Sample #:	Ant Station Photo #:		
Disturbances (rank each as 1-6):				
Non-Native Forbs	Feral Pig Activity	Altered Hydrol	ogy	
Non-Native Grasses 4	Trampling	Erosion		
Non-Native Woody Plants	Vandalism	Urban Runoff	_1	
Competitive Native Plants/	Current Grazing	Slope Moveme	ent _/	
Dumping/Trash	Historic Grazing	Soil Compaction	on _/	
Encampments/	Historic Agriculture			
	,			
Fuel Modification Zone/Fire Break	1			
Road Construction/Maintenance _	1	*		
Vegetation Clearing	1			
ORV	If Observed, List Type(s) of OF	and the first second		
Evidence of Recent Fire	If Sign of Recent Fire: Year Bu	urned? Unknown Bur	n Year:	
Trails	∠ If Trails are Present, are They	Authorized? Yes / No / Unknown		
Type of Trail Use?				
Hiking Biking	Equestrian 🗹 Dog	Motorcycle ORV	Service Vehicles	
Overall Site Quality (see page 5):				
violan one duality (see page o).	Very Good-Excellent	Fair to Good Poor	Very Poor	

MSP - Management Needs			Page 3
Occurrence ID:DUVA_4MTRP015	_ Species:	DUVA	Date: <u>5/6/14</u>
VI. MANAGEMENT RECOMMENDATIO	ONS		· · · · · ·
none	<u> </u>		······································
	10.01.01.00.000		·
VII. MANAGEMENT ACTIONS IN LAST	YEAR	· · ·	
none & survey point -			
<u>general ongoing preserve</u>	actions	Jaily pat	no hs
/		signs Henry	no londes
		trach coll	en fins
	······		·
VIII. CNDDB SPECIES DETECTED & N	OTES		
List any plant or animal species to add to the CNDDB:			
·			
			······································
	<u></u>	······································	
		1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	
	- Wat		
		<u></u>	
······································	-		·
			· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·			
			· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·			
	-		

#### *Dudleya variegata* (Variegated Dudleya) Mission Trails Regional Park Subpopulation # 3



Panorama from Southwestern edge of population, facing Southeast, South, Southwest. Panorama location is 6309578.77 1880426.96 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plan	t Occurrence Monitor	ing Form		P	age 1	
Scientific Name: Dudleya varieg	gata	MSP	Occurrence ID: DU	VA_4NAVA016		
Common Name: Variegated du	dleya		CNDDB EO#: non	e Translocated	d? no	
Preserve: Rancho Missic	n Canyon			Management Un	it:	4
Land Owner: City of San Diego	1		Land Manager: City			
Occurrence Name:       Navajo / Mission Gorge       Sample Point #: 1         Surveyors & Affiliation:       B < type Miller, Kim Rocland, Wendy Pagers						
		d inter	J. Praex			
	Pin Rocari	a now			h. 4.	VA
				adius circle) & in the cur	rent map	ped
#Plants/Sampling Area: See pelow	Exact	Estimate (e:	xtrapolate partial cou	nt) Uncertainty?_/o	w	
# Plants/Current Mapped Extent: 552 Area of Current Mapped Extent: 7	9 Exact Co		and the second		-	timate
Phenology in Current Mapped Extent (Categorie	s 1-5): Vegetative: 5	Flowering	:	ig:/ Dead:_	1	_
Evidence in Current Mapped Extent (Categories	1-5) of: Herbivory:	Dise	ase: / Si	tunted Growth: /		
장애 아이지 않는 것이 같은 것이 많은 것이 없다.		oonula Hi			~~~~~	
the second s		1.1.1		w/ populatio	n w/i	n
Collection (if not collected previously)?	Yes	No	Collected Previ	ously		
Collector	PHOTOMONITORING		ər N	luseum/Herbarium		
Collector           II. SAMPLING AREA LOCATION & SITE I           GPS Accuracy:         +/<1         I           Coordinates;         E:        31        <0	PHOTOMONITORING meters feet 1873418.051 W90 N, NE, E, SE	Datum: 	– ☑ State Plane (ft) 10° up		S/OS/N	MSCP
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +/<1       Image: Coordinates;       Im	PHOTOMONITORING meters feet 1873-18.051 W90 N, NE, E, SE Direction (facing)	Datum: 1.1m Height	– ☑ State Plane (ft) – <u>10° up</u> Camera Angle	UTM (m) [] L <u>1459-14 &amp; 2</u> Photo #	S/OS/N File loca	/ISCP
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +/<1	PHOTOMONITORING meters feet 1873418.051 W90 N, NE, E, SE Direction (facing)	Datum: 1.1m Height Height	- ✓ State Plane (ft) 10° up Camera Angle Camera Angle	UTM (m) [] L   Photo #  Photo #	S/OS/N File loca	/ISCP
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +/<1	PHOTOMONITORING meters feet 1873418.051 W90 N, NE, E, SE Direction (facing)	Datum: 1.1m Height Height	- ✓ State Plane (ft) 10° up Camera Angle Camera Angle	UTM (m) [] L   Photo #  Photo #	S/OS/N File loca	/ISCP
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +/-       <1	PHOTOMONITORING meters feet %73%%.051 W90 N, NE, E, SE Direction (facing) Direction (facing) SAREA If need more room, m % Cover Coll? Coll. # 1	Datum: 1.1m Height Height Invasive?	<ul> <li>- ✓ State Plane (ft)</li> <li><u>10° up</u></li> <li>Camera Angle</li> <li>Camera Angle</li> <li>al data and any notes on p</li> <li>Species/Substrate</li> </ul>	UTM (m) [] L <u>1459-14 &amp; 2</u> Photo #  Photo #  page 3.	S/OS/M File loca File loca	ASCP ation
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +<1	PHOTOMONITORING meters feet Set Set Set Set Set Set Set Set Set	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. I M distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +/<1	PHOTOMONITORING meters feet %73%%.051 W90 N, NE, E, SE Direction (facing) Direction (facing) SAREA If need more room, m % Cover Coll? Coll. # 1	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] L <u>1459-1462</u> Photo # Photo # page 3. Im distacting of	S/OS/N File loca File loca % % 4D	ASCP ation
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +<1	PHOTOMONITORING meters feet % feet % 7 3 4 8 . 0 5 1 % M 4 0 N, NE, E, SE Direction (facing) Direction (facing) GAREA If need more room, n % Cover Coll? Coll. # 1 5 2 1 1 5 2 1 1 5 2 1 1 5 2 1 1 5 2 1 1 5 5 2 1 1 5 5 2 1 1 5 5 5 5	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. I M distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector II. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +/	PHOTOMONITORING meters feet Set Set Set Set Set Set Set Set Set	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy: +/<1	PHOTOMONITORING meters feet Set Set Set Set Set Set Set Set Set	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector II. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +/	PHOTOMONITORING meters feet 873018.051 W90 N, NE, E, SE Direction (facing) Direction (facing) GAREA If need more room, n % Cover Coll? Coll. # 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 1 5	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector II. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +<1 Coordinates; E:SI N: Camera type: <u>Pentax Optio</u> Location 1 (see coordinates above) Location 1 (see coordinates above) Location 2 [Coordinates] III. ASSOCIATED SPECIES IN SAMPLING Invasive? Species/Substrate Dualuya Variegata Mimulus aurantiacus Rhus integritolia Artemisia californica Barchan's Sarothroicle Malosma Jaunina Si syrinchium bellum Bocorra menziesij	PHOTOMONITORING         meters       feet         1873418.051         W90         N, NE, E, SE         Direction (facing)         Direction (facing)         SAREA If need more room, ro         % Cover       Coll?         Coll?       Coll. #         1       5         2       1         1       5         2       1         5       5	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
Collector         II. SAMPLING AREA LOCATION & SITE I         GPS Accuracy:       +<1	PHOTOMONITORING meters feet 873018.051 W90 N, NE, E, SE Direction (facing) Direction (facing) GAREA If need more room, n % Cover Coll? Coll. # 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 2 1 5 1 5	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
	PHOTOMONITORING         meters       feet         1873418.051         W90         N, NE, E, SE         Direction (facing)         Direction (facing)         SAREA If need more room, ro         % Cover       Coll?         Coll?       Coll. #         1       5         2       1         1       5         2       1         5       5	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
I. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +	PHOTOMONITORING         meters       feet         1873418.051         WAD         N.NE, E, SE         Direction (facing)         Direction (facing)         SAREA If need more room, ro         % Cover         Coll?         S         Coll?         S         Coll?         Coll?         S         Coll?         Coll?         Coll?         S         Direction         S         Direction         S         S         Coll         S         Coll         S         D         S         D         S         D         S         D         S         D	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on J Species/Substrate wath y podiu Bragalis aw	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
II. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +	PHOTOMONITORING meters feet 1873418.051  W90 N, NE, E, SE Direction (facing) Direction (facing)  AREA If need more room, ro % Cover Coll? Coll. # 1 5 2 1 5 2 1 5 2 1 1 5 5 2 1 1 1 1 1 1	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate brach y podition Anaga his and Qànun cutus	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
I. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +	PHOTOMONITORING         meters       feet $1873 \times 18.051$ $W90$ N, NE, E, SE         Direction (facing)         BarRed If need more room, n         % Cover         Coll?         Coll. #         1         5         2         1         5         2         1         5         2         1         5         2         1         5         2         1         5         2         1         5         2         1         5         2         1         5         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <td>Datum:</td> <td>- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate brach y podit Anaga Iis any Qánun cutus and: O</td> <td>UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5</td> <td>S/OS/N File loca File loca % % 4D</td> <td>ASCP ation</td>	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate brach y podit Anaga Iis any Qánun cutus and: O	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation
I. SAMPLING AREA LOCATION & SITE I GPS Accuracy: +	PHOTOMONITORING meters feet 1873418.051  W90 N, NE, E, SE Direction (facing)  AREA If need more room, ro % Cover Coll? Coll. # 1 5 2 1 5 2 1 5 2 1 5 2 1 1 5 2 1 1 5 2 1 1 5 2 1 1 5 2 2 1 1 1 5 5 2 2 1 1 1 1	Datum:	- ✓ State Plane (ft) <u>10° up</u> Camera Angle Camera Angle al data and any notes on p Species/Substrate brach y podition Anaga his and Qànun cutus	UTM (m) [] I <u>1459-1462</u> Photo # Photo # page 3. Rem distacting of ref15/5	S/OS/N File loca File loca % % 4D	ASCP ation

	Plant Habitat and Threats As	ssessment Form	Page 2
Scientific Name: Dudleya varie	gata	MSP Occurrence ID:	DUVA_4NAVA016
Preserve: Pancho Missi	on the Canyou	Occurrence Name:	Navajo / Mission Gorge
Date: 5/6/12		Time Start: 4:10	Time Finish: 4:40
Surveyors & Affiliation/Agency: BM, K	e, WR		
IV. HABITAT ASSESSMENT IN SAMPI circle). Vegetation alliance/association can b data from page 1. See page 4 for definitions	be assigned using San Diego vegeta	tion key (AECOM 2012) in t	
SANDAG 2012 Vegetation Alliance/Association	on: Bachanis saro	throides Prov	isional Alliance
Baccharis saroth	voides Arroy	intion	
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <2			
Cryptogamic Crust Cover: Tha	tch Cover: Thatch E	Depth: Ave. 2 cm	Max: <u>5</u> cm
Dead Standing Biomass? Xes	No If Yes, Species/Cover Clas	ss: Isocoma: 2	Ave. Height? / c _ cm
Mammal Species Activity Categories (1-4): Fe		Sector Contractor Contractor	
Sampling Area Representative of Maximum E			e Differences on Page 3.
Argentine Ant Abundance at Bait Station (1-4)			
Ant Sample Collected?: Yes X N Disturbances (rank each as 1-6):	Io Ant Sample #:	Ant Station Photo #	<u> </u>
Non-Native Forbs 3	Feral Pig Activity	Altered	Hydrology
Non-Native Grasses 5	Trampling	Erosior	
Non-Native Woody Plants	Vandalism	Urban	1
Competitive Native Plants	Current Grazing	Slope M	Novement
Dumping/Trash	Historic Grazing Unla	Soil Co	mpaction
Encampments	Historic Agriculture <u>Mula</u>	2	
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          Evidence of Recent Fire          Trails	If Observed, List Type(s) of ORV If Sign of Recent Fire: Year Burn If Trails are Present, are They Au	ed? Unkno	wn Burn Year:
Type of Trail Use?	Equestrian 🗌 Dog 🗌	Motorcycle ORV	[ ] Service Vehicles
Type of Trail Use?	Equestrian 🗌 Dog 🗌	] Motorcycle 🗌 ORV	[ ] Service Vehicles

MSP - Management Needs and Notes Occurrence ID: <u>DAVA_UNAVA DIG</u> Species: <u>DAVA</u>	Page 3 Date: 5/10/14
VI. MANAGEMENT RECOMMENDATIONS	
control non-native grass w/ herbicide treat Control non-native grass w/ herbicide treat CBI-recommended techniques when availed	te etc tment or ath
VII. MANAGEMENT ACTIONS IN LAST YEAR	
- locked gate a fence to keep people off open area	space
,	
VIII. CNDDB SPECIES DETECTED & NOTES	
List any plant or animal species to add to the CNDDB:	

## *Dudleya variegata* (Variegated Dudleya) Navajo/Mission Gorge



Panorama from Northwestern edge of population, facing Northeast, East, Southeast. Panorama location is 6313087.92 1873620.15 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occurrence Monitoring Form	Page 1						
Scientific Name:  Dudleya variegata MSP Occurrence ID: DUVA _ 30TLA	005						
Common Name: Variegated dudleya CNDDB EO#: N/A Translocated	d? no						
Preserve: Ofay Lakes Management Ur.	nit: <u>3</u>	<u>.</u>					
Land Owner: City of San Diego Land Manager: City of San Diego PUD							
Occurrence Name: Otay Lakes Sample Point	#:	1					
Surveyors & Affiliation: Kim Reland, Sean Pares, Bolay Miller, Wendy Rogers - City of San Diego							
Date: 4/22/14 Time Start: 9:22Time Finis	h: 11: 21						
I. OCĆURŔENCE STATUS - Assess # plants in both the species-specific sampling area (typically 10-m radius circle) & in the cure extent. See page 4 for definitions of categories describing phenology & evidence of herbivory, disease & stunted growth within the sampling any notes on page 3.							
# Plants/Sampling Area: Uncertainty?	w						
#Plants/Current Mapped Extent: <u>09</u> Uncertainty? <u>10</u>	ŵ						
Area of Current Mapped Extent: 475 M <sup>2</sup> - units Area (GPS mapping)	_	timate					
Phenology in Current Mapped Extent (Categories 1-5): Vegetative: 5 Flowering: 4 Fruiting: 1 Dead:	(						
Evidence in Current Mapped Extent (Categories 1-5) of: Herbivory: Disease: Stunted Growth:							
Is Sampling Area within Current Mapped Extent? I Yes No DUVA not found in sampling ar	ea						
Species Found in Maximum Extent? Xes No If not, why (if reason known or suspected)?							
Collection (if not collected previously)?		1					
If yes: Collector Collection Number Museum/Herbarium							
II. SAMPLING AREA LOCATION & SITE PHOTOMONITORING							
GPS Accuracy: +/ <1 I meters  feet Datum:							
Coordinates; E:6356396.908 N:1807139.545  State Plane (ft) UTM (m)	Lat-Long (	(dec deg)					
Camera type: Pentax optio W90							
Location 1 (see coordinates above)N, NE, E, SE1.1m10° up24_412.67	S/OS/N						
Direction (facing) Height Camera Angle Photo #	File loca	tion					
Location 2 [Coordinates] Direction (facing) Height Camera Angle Photo #	File loca	tion					
III. ASSOCIATED SPECIES IN SAMPLING AREA If need more room, record additional data and any notes on page 3.							
Invasive? Species/Substrate % Cover Coll? Coll. # Invasive? Species/Substrate	%	Coll? Coll. #					
Dudleya vanicaata 1-> did not occur in sampling area							
Eniogonum fuscicalatum 15 Isocoma menziesii 10							
Acmispon glaber 5							
Chlorogalum purvifismm 1							
Cuscuta californica 1	-						
V Erodium Sp. 5 Deirandra forsciculate 1							
V Fistuca gp. 1	++						
Bare Ground: 46	<u> .                                    </u>						
Litter: 3 Rock: 2-0							
Total % Cover:% Herb Cover:5% Shrub Cover:15% Tree Cover:0							

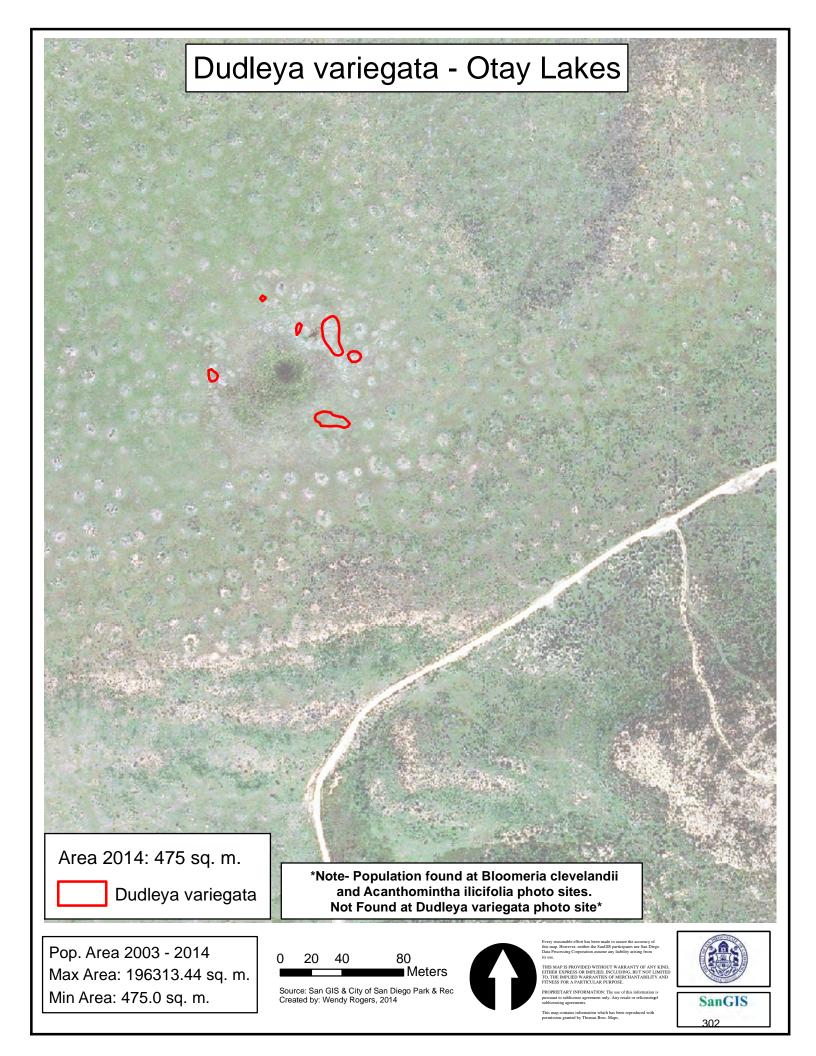
Scientific Name: Dudle Preserve:	eya variegata	MSP Occurrence ID: DUV	A-30TLA005
	Jane		Dtay Lakes
Date: 4/22/14		Time Start: 9:22	Time Finish: 11:26
Surveyors & Affiliation/Agency: B	M KR WR SP		Tind Tinian. 11.20
IV. HABITAT ASSESSMENT IN circle). Vegetation alliance/associat	I SAMPLING AREA - Assess habitat c tion can be assigned using San Diego ver afinitions of habitat assessment categorie	getation key (AECOM 2012) in the offic	
SANDAG 2012 Vegetation Alliance/	Association: <u>Eriogonum</u> t Eriogonum	Easciculatum Allian Associ	
Cover Classes: 1 (0%); 2 (>0 - <10%); 3			
Cryptogamic Crust Cover:	Thatch Cover: That	ch Depth: Ave. <u>3</u> cm Max: _	۲ cm
Dead Standing Biomass?	es No If Yes, Species/Cover	Class: Festuca / Dermandy	Ave. Height? Le cm
Mammal Species Activity Categories	s (1-4): Feral Pig Activity:)	Ground Squirrel Activity:	_ Gopher Activity:(
Sampling Area Representative of Ma	aximum Extent?	No If No, Note Diffe	rences on Page 3.
	- <u>_</u>	Ant Station Photo #:	
Non-Native Forbs	Feral Pig Activity	Altered Hydro	ology <u>1</u>
Non-Native Grasses 7 Non-Native Woody Plants	Trampling Vandalism	Erosion Urban Runoff	
Competitive Native Plants	Current Grazing	Slope Movem	
Dumping/Trash	Historic Grazing	1 Soil Compacti	1
Encampments	Historic Agriculture	<u>(                                    </u>	
Fuel Modification Zone/Fire Break Road Construction/Maintenance Vegetation Clearing ORV/Mountain Bike Activity		PRV/Bike Activity: Burned? Unknown Bu / Authorized? (res) No / Unknown	m Year:
Evidence of Recent Fire Trails Type of Trail Use?	Equestrian Dog		Service Vehicles

MSP - Management Needs and Notes Page 3 Date:\_\_<u>4/2 2 / 14</u> Occurrence ID: DMVA - 30TLA 005 Species: DNVA VI. MANAGEMENT RECOMMENDATIONS - moderate cover non-native grusses and forbs hand pull or treat w/ perbride continue to maintain access control- signs, gate, vehicle bumen VII. MANAGEMENT ACTIONS IN LAST YEAR gate, vehicle burniers -maintained access control- signs **VIII. CNDDB SPECIES DETECTED & NOTES** List any plant or animal species to add to the CNDDB:

## *Dudleya variegata* (Variegated Dudleya) Otay Lakes



Panorama from Northeastern edge of the population, facing North, Northeast, East, Southeast. Panorama location is 635639.91 1807139.55 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.



MSP - Rare Plant Occ	urrenc	e Mo	nitori	ng Form	1 <u> </u>	P	age 1
Scientific Name: Dudleya variegata				MS	P Occurrence ID: D	UVA_6SALU024	7
Common Name: Variegated dudleya	•				CNDDB EO#: E	O53 Translocated	? iges
Preserve: Black Mountain Open Space						Management Uni	0
Land Owner: City of San Diego					Land Manager: Ci	ty of San Diego	
Occurrence Name: Santa Luz						Sample Point‡	ŧ;
Surveyors & Affiliation: Betsy Miller, Ki	n Ro	ela	nd,	Wend	y Rogers - c	city of San D	lego
Date: 5/8/14 , post-fire	5/2	:3]	14	-	Time Start: 2	:40 Time Finisł	
I. OCCURRENCE STATUS - Assess # plants in b extent. See page 4 for definitions of categories descri any notes on page 3.							
# Plants/Sampling Area:	X	Exact		Estimate (	(extrapolate partial co	unt) Uncertainty?/c	2W
# Plants/Current Mapped Extent:		КE	xact Co	unt 🗌	Estimate (1.000s. 10	Uncertainty?	ow
Area of Current Mapped Extent:		φ <u>_</u> 3 ~		m2	units VE	xact (GPS mapping)	Estimate
Phenology in Current Mapped Extent (Categories 1-5):							
Evidence in Current Mapped Extent (Categories 1-5) o	-		v		-	-	
	Yes					· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·		ies n	<i>o≁ fo</i> If not, w	und at Mis hy (if reason known or sus	site past fer	u years
Collection (if not collected previously)?	Yes		. [	X No		• •	
If yes:			E	AĮ NU		viousiy	
Collector				ction Num	ber	Museum/Herbarium	
II. SAMPLING AREA LOCATION & SITE PHOT			NG	· .		·	
GPS Accuracy: +/- <u>&lt;1</u> mete		fee			· ·		
Coordinates; E:6356396.908 N:		<u>7139.</u>	545		— 🗹 State Plane (f	t) 🗌 UTM (m) 🗌 L	at-Long (dec deg)
Camera type: <u>Pentax Optio</u> U	290						
	NE, E,			1.1m	10° up	E:1494-1499	S/OS/MSCP
100 10	ion (facing	)		Height 1.1m	Camera Angle	Photo# W:150ア-15のス	File location
	N ion (facing	)		Height	Camera Angle	Photo #	File location
III. ASSOCIATED SPECIES IN SAMPLING ARE	A If need	more	room, re			n page 3.	
Invasive? Species/Substrate	% Cover	Coll?	Coll. #	Invasive?	Species/Substrat		% Coll? Coll. ;
Artemisia californica	40				Deinandra	Fasciculater	1
Isocoma monziesij	5						
Phus integrifolia	3						
Armispon glaber Enogonum fassiculatur	ļ						
Malosma laurina	7				*******		
Calochortns splendens	1						
Calystigia warnstegia							
Mirabolis Javens	1						
Stipa pulchra	10						
V Souchrisasper							
V Brassica nigra V Brachypodium distochyon	10		\	Bare Gro	und: 5		
· Sisynnchium bellum	1			Litter:	0		· ·
Avena sp.	1			Rock:	5	-	
Total % Cover: _ 70% Herb Cover: _ 2	20	% Sh	rub Cov	er: <u>5</u> 0	% Tree Cover	:	

MSP - Rai	e Plant Habitat and Threats Assessr	nent Form Page 2	
Scientific Name: Dudleya v	ariegata MSP	Occurrence ID: DUVA_65ALU024	
Preserve: Black Mountain Open Spa	ace Occu	rrence Name: Santa Luz	
Date: 5/8/14	Time	Start: 2:40 Time Finish: 2:	:59
Surveyors & Affiliation/Agency: 1314,	KR, WR		
circle). Vegetation alliance/association c		thin <b>species-specific sampling area (typically 10-m rad</b> (AECOM 2012) in the office or field, using "Associated Spe ny notes on page 3.	
SANDAG 2012 Vegetation Alliance/Assoc	siation: Artemisia culifornia		
	Artemisia californ	ica Association	
Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to	and a set minade statement.	el en la	
	Thatch Cover: Thatch Depth: Av		
	No If Yes, Species/Cover Class: 1/1		m
Mammal Species Activity Categories (1-4	: Feral Pig Activity: Ground Squ	uirrel Activity:/ Gopher Activity:/	_
Sampling Area Representative of Maximu	m Extent? X Yes No	If No, Note Differences on Page 3.	
Argentine Ant Abundance at Bait Station ( Ant Sample Collected?: Xes		Start: 72F Time Finish: 2:56 Temp. Finish: 72 Ant Station Photo #: 1504	U.F.
Disturbances (rank each as 1-6):		Ant otation + holo #, • 0 (	-
Non-Native Forbs     3       Non-Native Grasses     4       Non-Native Woody Plants     1       Competitive Native Plants     1       Dumping/Trash     1       Encampments     1	Feral Pig Activity	Altered Hydrology <u>1</u> Erosion <u>1</u> Urban Runoff <u>1</u> Slope Movement <u>1</u> Soil Compaction <u>1</u>	
Fuel Modification Zone/Fire Break          Road Construction/Maintenance          Vegetation Clearing          ORV/Mountain Bike Activity          Evidence of Recent Fire          Trails          Type of Trail Use?	If Observed, List Type(s) of ORV/Bike Ac If Sign of Recent Fire: Year Burned? If Trails are Present, are They Authorized Equestrian Dog Motore	Unknown Burn Year: ? Yes / No / Unknown	

MSP - Management Needs and Notes Page 3 5/8/14 Occurrence ID: DUVA\_USALUO24 Species: DIVVA Date: **VI. MANAGEMENT RECOMMENDATIONS** -species not found at this site for several nears: consider treating non-native grasses and to its and vernoving match xpost Fire: Monitor recovery of CSS and treat weeds avasses as needed VII. MANAGEMENT ACTIONS IN LAST YEAR -none VIII. CNDDB SPECIES DETECTED & NOTES List any plant or animal species to add to the CNDDB: CAGN just south of photopoint - point taken Fire this \* Bernardo 10mplete bund SHA Wile cages @ translocation 511 nn Photopoint infact. Ve-taken ON 5/23 Im pilar dlov mapped Will need to the of essmonitor CITP rewiter, non-nati forther avasces manaal Ŷ nc

305

## *Dudleya variegata* (Variegated Dudleya) Santa Luz East, Pre-Fire



Panorama from Northeastern edge of population, facing Southeast, East, Northeast. Panorama location is 6289735.96 1940293.56 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.

## *Dudleya variegata* (Variegated Dudleya) Santa Luz East, Post-Fire



Panorama from Northeastern edge of population, facing Southeast, East, Northeast. Panorama location is 6289735.96 1940293.56 NAD83 State Plane California Zone 6 (feet) Photos merged using ArcSoft Panorama Maker 4.