



Shaw Texas
Road ruts 8, 9, and 25 (near to far) looking northwest

3.2.2 Carmel Mountain

Thirty vernal pools were inventoried at Carmel Mountain (H 31-32, H 38), a 300-acre open space area owned by the City of San Diego. Prior to preservation, this site was impacted by off-road vehicles. Located south of Highway 56 near Ocean Air Drive, the basins cover 13,900 square feet and do not support populations of rare, threatened, or endangered plant species. Bauder (1986) reports *E. aristulatum* and *M. minimus* at H 31-33, but only one extant basin is near the area mapped in that report. Vernal pool indicator species and fairy shrimp observed at this site are listed in Table 9. Eight vernal pools contain *Branchinecta* spp., including two basins in which San Diego fairy shrimp were identified. Two amphibian species were observed on-site: *H. regilla* in 6 basins and *S. hammondi* in 10 basins. For a map of this site, please refer to 274-1701 in Appendix C.

Table 9		
Carmel Mountain		
Presence of Vernal Pool Indicator Species		
<i>Callitriche marginata</i>	•	<i>Myosurus minimus</i>
<i>Crassula aquatica</i>	•	<i>Navarretia fossalis</i>
<i>Deschampsia danthoniodes</i>		<i>Orcuttia californica</i>
<i>Downingia cuspidata</i>		<i>Phalaris lemmonii</i>
<i>Elatine californica</i>		<i>Phalaris</i> spp.
<i>Epilobium pygmaeum</i>		<i>Pilularia americana</i>
<i>Eryngium aristulatum</i>		<i>Pilularia</i> spp.
<i>Isoetes howellii</i>	•	<i>Plagiobothrys acanthocarpus</i>

Table 9, con't Carmel Mountain Presence of Vernal Pool Indicator Species			
<i>Isoetes orcuttii</i>		<i>Plantago elongata</i>	•
<i>Isoetes</i> spp.		<i>Plantago</i> spp.	
<i>Lilaea scilloides</i>	•	<i>Pogogyne abramsii</i>	
<i>Marsilea vestita</i>		<i>Pogogyne nudiuscula</i>	
<i>Malvella leprosa</i>		<i>Psilocarphus brevissimus</i>	•
<i>Branchinecta</i> spp.	•	<i>Branchinecta sandiegonensis</i>	•
<i>Branchinecta lindahli</i>		<i>Streptocephalus woottoni</i>	



Carmel Mountain
Vernal pool 12 looking east



Carmel Mountain
Road rut 26 looking north

3.2.3 Mira Mesa

Eleven sites occur on Mira Mesa, remnants of the extensive vernal pool complexes that historically covered the mesa: Mesa Norte, Tierra Alta, Lopez Ridge, Crescent Heights, Fieldstone, Winterwood, Mira Mesa Market Center, Maddox, Parkdale Carroll Canyon, Carroll Canyon Preserve and Arjons.

3.2.3.a Mesa Norte (B 11) is a mitigation site in northwestern Mira Mesa on Prairie Wood Drive. Forty-five vernal pools, totalling 25,298 square feet, were created or restored on this 5-acre site in 1998. Prior to restoration, this site was utilized as a BMX track; however, this privately owned site is now conserved and fenced. *E. aristulatum* covered approximately 186 square feet in 10 basins and *P. abramsii* covered approximately 296 square feet in 13 basins. *B. sandiegonensis* were observed in 25 vernal pools. *H. regilla* were observed in 14 vernal pools and unidentified tadpoles in 12 vernal pools. The Bauder report (1986) found *E. aristulatum*, *M. minimus*, and *P. abramsii* at B 11-13. Vernal pool indicator species and fairy shrimp observed at this site are listed in Table 10. Mesa Norte is located on map 274-1713 in Appendix C.

Table 10		
Mesa Norte		
Presence of Vernal Pool Indicator Species		
<i>Callitriche marginata</i>	• <i>Myosurus minimus</i>	
<i>Crassula aquatica</i>	• <i>Navarretia fossalis</i>	
<i>Deschampsia danthoniodes</i>	• <i>Orcuttia californica</i>	
<i>Downingia cuspidata</i>	• <i>Phalaris lemmonii</i>	•
<i>Elatine californica</i>	• <i>Phalaris</i> spp.	