



Arjons  
Vernal pool 13 looking southeast

### 3.2.4 Nobel Drive

The area along the eastern end of Nobel Drive includes five vernal pool sites: Pueblo Lands, Bob Baker, Bob Baker 2, Nobel Research Park, and Nobel Drive.

**3.2.4.a** The Pueblo Lands vernal pool site (I 12) is located on a 10.3-acre parcel owned by the City of San Diego that is not conserved at this time. Three road ruts totalling 737 square feet occur on the site, which is located east of I-805 along Eastgate Mall Road. No sensitive plant species were observed on-site; however, *B. sandiegonensis* were found in each of the three basins. This site was not discussed in Bauder's 1986 report. Vernal pool indicator species and fairy shrimp observed at this site are listed in Table 21. The area was not surveyed for amphibians. For a map of this site, please refer to 258-1701 in Appendix C.

<b>Table 21</b>		
<b>Pueblo Lands</b>		
<b>Presence of Vernal Pool Indicator Species</b>		
<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 21, con't			
Pueblo Lands			
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>	



Pueblo Lands  
Vernal pool 1 looking north

**3.2.4.b** Bob Baker (I 6 B) is a privately owned site that is not considered conserved; however, this site was the subject of a previous USFWS Section 7 consultation. Impacts due to trash were noted at this unfenced site. Eight vernal pools are found on a 0.5-acre plot that bisects two large, developed parcels. These vernal pools comprise 3,351 square feet of basin area immediately north of Miramar Road. *P. abramsii* was observed in seven basins and covered an area of 76 square feet. Bauder observed *P. abramsii* on-site in 1986. Vernal pool indicator species and fairy shrimp noted on-site are listed in Table 22. *Branchinecta* spp. were observed in three vernal pools, and *H. regilla* were noted in a single basin. For a map of this site, see 258-1713 in Appendix C.

Table 22 Bob Baker/Bob Baker 2 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> •
<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>



Bob Baker  
Vernal pool 2 looking west

**3.2.4.c** Bob Baker 2 (I 6 C) is located to the north of Miramar Road immediately west of Miramar Mall Road. Although the 0.95-acre site is fenced, impacts due to trash were noted. This privately owned site contains 15 vernal pools situated along the

southern edge of two, 2-acre parcels and is not conserved at this time; the basins cover a total of 10,404 square feet. *E. aristulatum* was observed in two vernal pools and covered 41 square feet, and *P. abramsii* was observed in 11 basins and covered 606 square feet. Both species were observed by Bauder in 1986. Vernal pool indicator species and fairy shrimp noted on-site are listed in Table 22. *Branchinecta* spp. were observed in six basins; the site was not surveyed for amphibians. Bob Baker 2 is located on map 258-1713 in Appendix C.



Bob Baker 2  
Vernal pool 5 looking north



Bob Baker 2  
Vernal pool 10 looking north

**3.2.4.d** Twenty-eight vernal pools make up the Nobel Research Park site (X 7), located north of Nobel Drive immediately west of I-805. The basins, covering a total of 4,250 square feet, are clustered along the eastern edge of a privately owned, fenced, 28-acre parcel and are conserved. No rare, threatened, or endangered plant species were observed on-site. This site is not discussed in Bauder's report (1986). Vernal pool indicator species and fairy shrimp noted at this site are listed in Table 23. *B. sandiegonensis* were identified in nine vernal pools, and *S. hammondii* were identified in two basins. For a map of this site, please refer to 250-1701 in Appendix C.

<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>	•
<i>Isoetes orcuttii</i>	<i>Plantago elongata</i>	•
<i>Isoetes</i> spp.	<i>Plantago</i> spp.	
<i>Lilaea scilloides</i>	• <i>Pogogyne abramsii</i>	

Table 23, con't		
Nobel Research Park		
Presence of Vernal Pool Indicator Species		
<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>



Nobel Research Park  
Vernal pool 24 looking north



Nobel Research Park  
Vernal pool 18 looking west



Nobel Research Park  
Vernal pool 25 looking south

**3.2.4.e** The Nobel Drive site (X 5) is located directly south of Nobel Research Park across Nobel Drive. Fifty-five acres (56%) of the 94-acre, City-owned site are conserved; the seven vernal pool basins (0.085 acres of total basin area) on-site occur completely within the conserved area and are individually fenced. *N. fossalis* was

present on-site and covered approximately 11 square feet in a single basin. No sensitive species were observed at this site during the Zedler, et al., survey (1979), and the site was not visited by Bauder (1986). Vernal pool indicator species and fairy shrimp observed at this site are listed in Table 24. *B. sandiegonensis* were noted in six basins and *S. hammondii* were noted in one basin. For a map of this site, refer to 250-1701 in Appendix C.

<b>Table 24</b> <b>Nobel Drive</b> <b>Presence of Vernal Pool Indicator Species</b>		
<i>Callitriche marginata</i>	•	<i>Myosurus minimus</i>
<i>Crassula aquatica</i>	•	<i>Navarretia fossalis</i>
<i>Deschampsia danthoniodes</i>	•	<b><i>Orcuttia californica</i></b>
<i>Downingia cuspidata</i>	•	<i>Phalaris lemmonii</i>
<i>Elatine californica</i>		<i>Phalaris</i> spp.
<i>Epilobium pygmaeum</i>		<i>Pilularia americana</i>
<b><i>Eryngium aristulatum</i></b>		<i>Pilularia</i> spp.
<i>Isoetes howellii</i>		<i>Plagiobothrys acanthocarpus</i>
<i>Isoetes orcuttii</i>		<i>Plantago elongata</i>
<i>Isoetes</i> spp.		<i>Plantago</i> spp.
<i>Lilaea scilloides</i>	•	<b><i>Pogogyne abramsii</i></b>
<i>Marsilea vestita</i>		<b><i>Pogogyne nudiuscula</i></b>
<i>Malvella leprosa</i>		<i>Psilocarphus brevissimus</i>
<i>Branchinecta</i> spp.	•	<b><i>Branchinecta sandiegonensis</i></b>
<i>Branchinecta lindahli</i>		<b><i>Streptocephalus woottoni</i></b>





Nobel Drive  
Vernal pool 4 looking west



Nobel Drive  
Vernal pool 5 looking north

### 3.2.5 Kearny Mesa

The Kearny Mesa area includes the following vernal pool sites: Cubic, Miramar, Sander, Magnatron, General Dynamics, Montgomery Field, and Serra Mesa Library.