



## F. Threatened and Endangered Species Tables

The following tables are a general guide to help community members understand the federally threatened and endangered species designated under the Endangered Species Act that are likely to be found in the CWPP Planning Area. They describe habitat associations that must be considered in planning fire prevention and suppression actions.

In planning fuel treatments, it is important to consult local experts familiar with the area’s flora and fauna (e.g. resource professionals, or national or state park staff).

This list is not complete. It does not include any species listed as threatened, endangered, rare, or species of concern under California law, nor federal species of concern. Those species are equally important to conserve. A complete list including species of concern, sensitive, and rare species can be found in the National Park Service’s “Final Environmental Impact Statement for a Fire Management Plan” for the SMMNRA (2005).<sup>1</sup>

### FEDERALLY THREATENED, ENDANGERED, AND SENSITIVE SPECIES OF THE SMMNRA

SPECIES AND STATUS	SPECIFIC HABITAT REQUIREMENTS <sup>2,3</sup>
<p><b>Plants</b></p> <p><i>Astragalus brauntonii</i> Braunton’s milk-vetch E<sup>4</sup></p> 	<p>Short-lived perennial herb found in chaparral, coastal scrub, and grassland vegetation from sea level up. Often associated with recent burns or disturbed areas. Found in calcium- and magnesium-rich soils, shallowly deposited over marine-derived sandstone or limestone formations.<sup>5</sup> Blooms January–August. Threatened by development, vegetation/fuel management activities, and alteration of local fire regimes. Populations of <i>A. brauntonii</i> occur in Palo Comado Canyon, and Zuma Canyon.</p> <p>Photo: Anthony Valois, National Parks Service<sup>6</sup></p>
<p><i>Astragalus tener titi</i> Coastal Dunes milk-vetch E<sup>7</sup></p> 	<p>Found in coastal dunes historically, in San Diego, Los Angeles, and Monterey counties. It is currently known from one highly fragmented population located on a coastal terrace grassland on the Monterey Peninsula.</p> <p>Photo: © 2006 Bob Huettmann (CalPhotos)<sup>8</sup></p>

<sup>1</sup> [www.researchlearningcenter.org/samo/planning/FireEIS/](http://www.researchlearningcenter.org/samo/planning/FireEIS/), pp. 3-80 to 3-83.

<sup>2</sup> California Department of Fish and Game, *Life History Accounts and Range Maps—California Wildlife Habitat Relationships System*. [www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx](http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx).

<sup>3</sup> California Native Plant Society. *Inventory of Rare and Endangered Plants*. <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>.

<sup>4</sup> Federally “Endangered” as per the Endangered Species Act.





<sup>5</sup> Landis, Betsey. *Surveys and Observations of Braunton’s Milkvetch (Astragalus brauntonii)*. 2007 USFWS, Ventura, CA.

<sup>6</sup> Valois, Anthony. National Park Service. May 2005. Photos. Wildflowers of the Santa Monica Mountains National Recreation Area. Brauton’s Rattle-weed, *Astragalus brauntonii* [www.researchlearningcenter.com/bloom/species/Astragalus\\_brauntonii.htm](http://www.researchlearningcenter.com/bloom/species/Astragalus_brauntonii.htm).

<sup>7</sup> <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=Q07J>

<sup>8</sup> [www.calflora.org/cgi-bin/species\\_query.cgi?where-calrecnum=941](http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=941)

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SPECIES AND STATUS	SPECIFIC HABITAT REQUIREMENTS <sup>2,3</sup>
<p><i>Cordylanthus maritimus</i>  <i>Subspecies (ssp.) maritimus</i>                      Salt marsh bird's-beak                      E</p> 	<p>Found in marshes and swamps, or occasionally in coastal dunes in elevations below 100 feet. Blooms May–October. Threatened by vehicles, road construction, foot traffic, non-native plants, and loss of salt marsh habitat.</p> <p>Photo: Anthony Valois, National Parks Service<sup>9</sup></p>
<p><i>Dudleya abramsii ssp. parva</i>                      Conejo dudleya                      T</p> 	<p>Found in coastal scrub and grassland vegetation on shallow gravelly, clay, or volcanic soils above 200 feet elevation. Blooms May–June. Threatened by horticultural collecting, recreation, vehicles, and urbanization. Endemic to the Santa Monica Mountains.</p> <p>Photo: Anthony Valois, National Parks Service May, 2007<sup>10</sup></p>
<p><i>Dudleya cymosa ssp. Agourensis</i>                      Agoura Hills dudleya                      T<sup>11</sup></p> 	<p>Perennial herb that is native to California, specifically in the western Santa Monica Mountains.</p> <p>Photo: National Park Service<sup>12</sup></p>
<p><i>Dudleya cymosa ssp. marcescens</i>                      Marcescent dudleya                      T<sup>13</sup></p> 	<p>Found in chaparral or on the lower reaches of sheer volcanic rock surfaces and canyon walls adjacent to perennial streams in coast live oak woodlands. Blooms April–July. Known from fewer than 10 occurrences in the Santa Monica Mountains, where it is endemic. Threatened by development and foot traffic.</p> <p>Photo: Anthony Valois, National Parks Service<sup>14</sup></p>

<sup>9</sup> Valois, Anthony. National Park Service. June 7<sup>th</sup>, 2004. Photos. Wildflowers of the Santa Monica Mountains National Recreation Area. Bird's Beak, *Cordylanthus rigidus*. Accessed April 3<sup>rd</sup>, 2010. [www.researchlearningcenter.com/bloom/species/Cordylanthus\\_rigidus.htm](http://www.researchlearningcenter.com/bloom/species/Cordylanthus_rigidus.htm).




<sup>10</sup> Valois, Anthony. National Park Service. May 2007. Photos. Wildflowers of the Santa Monica Mountains National Recreation Area. Cnejo Dudleya, *Dudleya abramsii ssp. parva*. Accessed April 3<sup>rd</sup>, 2010. [www.researchlearningcenter.com/bloom/species/Dudleya\\_abramsii\\_parva.htm](http://www.researchlearningcenter.com/bloom/species/Dudleya_abramsii_parva.htm)

<sup>11</sup> [www.cnps.org](http://www.cnps.org)

<sup>12</sup> [www.researchlearningcenter.org/bloom/bloom.htm](http://www.researchlearningcenter.org/bloom/bloom.htm)

<sup>13</sup> Federally “Threatened” as per the Endangered Species Act.

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SPECIES AND STATUS	SPECIFIC HABITAT REQUIREMENTS <sup>2,3</sup>
<p><i>Dudleya cymosa ssp. ovatifolia</i> Santa Monica Mountains dudleya T</p> 	<p>Found in chaparral and coastal scrub vegetation, on rock outcroppings along shaded deep canyon bottoms, or on exposed north facing slopes. Blooms March–June. Threatened by development and recreational activities. Endemic to the Santa Monica and Santa Ana Mountains.</p> <p style="text-align: right;">Photo: Tarja Segar © 2005 Santa Monica Mountains Recreation Area<sup>15</sup></p>
<p><i>Dudleya verity</i> Verity’s dudleya T</p> 	<p>Found in chaparral, montane woodland, and coastal scrub on volcanic and rocky soils 200-400 feet in elevation. Most common on north facing rock outcrops in coastal sage scrub. Blooms May–June. Threatened by mining, flood control activities, and development. Endemic to the Santa Monica Mountains.</p> <p style="text-align: right;">Photo: Anthony Valois, National Parks Service May, 2007<sup>16</sup></p>
<p><i>Pentachaeta lyonii</i> Lyon’s Pentachaeta E</p> 	<p>Found only in the Santa Monica Mountains and Simi Hills (in the area of Westlake reservoir and Lake Sherwood), generally in openings or along eroded trails in chaparral, coastal scrub, valley, and foothill grasslands. It is being exterminated by fuel clearance practices.<sup>17</sup></p> <p style="text-align: right;">Photo: © 2003 Michael Charters<sup>18</sup></p>




<sup>14</sup> Valois, Anthony. National Park Service. April 30<sup>th</sup>, 2004. Photos. Wildflowers of the Santa Monica Mountains National Recreation Area. Marcescent Dudleya, *Dudleya cymosa ssp. Marcescens*. Accessed April 3<sup>rd</sup>, 2010. [www.researchlearningcenter.com/bloom/species/Dudleya\\_cymosa\\_marcescens.htm](http://www.researchlearningcenter.com/bloom/species/Dudleya_cymosa_marcescens.htm).

<sup>15</sup> Sagar, Tarja. Photo. © 2005 Santa Monica Mountains Recreation Area. Cal Photos, Photo Database. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=&seq\\_num=178481&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=&seq_num=178481&one=T).

<sup>16</sup> Valois, Anthony. National Park Service. May 2007. Photos. Wildflowers of the Santa Monica Mountains National Recreation Area. Verity’s Dudleya, *Dudleya verityi*. Accessed April 3<sup>rd</sup>, 2010. [www.researchlearningcenter.com/bloom/species/Dudleya\\_verityi.htm](http://www.researchlearningcenter.com/bloom/species/Dudleya_verityi.htm).

<sup>17</sup> Betsey Landis, personal communication, June 19, 2010.

<sup>18</sup> [http://calphotos.berkeley.edu/cgi/img\\_query?enlarge=0000+0000+0503+0219](http://calphotos.berkeley.edu/cgi/img_query?enlarge=0000+0000+0503+0219)

Birds	
<p><i>Brachyramphus marmoratus</i> Marbled Murrelet T</p> 	<p><b>FEEDING:</b> In summer, forages close to shore (within 500 m; 1640 ft) in shallow water, usually less than 30 m (95 ft) deep. In nonbreeding season, often forages farther from shore. Forages by diving and pursuing small fish, the main food. Invertebrates, including <i>decapods</i> and <i>cephalopods</i>, comprise a minor part of the diet. Parents feed nestlings small fish. <b>REPRODUCTION:</b> Generally nests in dense, mature forests. <b>HABITAT:</b> Only an occasional visitor to the SMM. When not feeding, probably spends day on surface of shallow coastal waters close to shore. In addition to requiring shallow coastal waters for feeding, may need a stream near the nest to float fledging young down to the coast.</p> <p>Photo: Thomas Hamer, Hamer Environmental L.P. 2009<sup>19</sup></p>
<p><i>Charadrius alexandrinus nivosus</i> Western Snowy Plover T</p> 	<p><b>FEEDING:</b> Eats insects, small crustaceans, and other minute invertebrates. Picks food items from substrate, probes in sand or mud or near shallow water; sometimes uses foot to stir up prey in shallow water. <b>REPRODUCTION:</b> Nests on the ground on broad open beaches or salt or dry mud flats, where vegetation is sparse or absent (small clumps of vegetation are used for cover by chicks); nests beside or under object or in open. <b>HABITAT:</b> Beaches, dry mud or salt flats, sandy shores of rivers, lakes, and ponds.<sup>20</sup></p> <p>Photo: Dr. Lloyd Glenn Ingles © 1999 California Academy of Sciences<sup>21</sup></p>
<p><i>Empidonax traillii extimus</i> Southwestern Willow Flycatcher E</p> 	<p><b>FEEDING:</b> Eats mainly insects caught in flight, sometimes gleans insects from foliage; occasionally eats berries. In breeding range, forages within and occasionally above dense riparian vegetation. <b>REPRODUCTION:</b> Nests primarily in swampy thickets or other areas where vegetation is 4-7 m or more in height. Nests in fork or on horizontal limb of small tree, shrub, or vine, at height of 0.6-6.4 m (mean usually about 2-3 m), with dense vegetation above and around the nest. <b>HABITAT:</b> Thickets, scrubby and brushy areas, open second growth, swamps, and open woodland. Habitat patches as small as 0.5 ha can support one or two nesting pairs.<sup>22</sup> If fire destroys the habitat where this species resides it can have negative effects.</p> <p>Photo: © Bob Steele<sup>23</sup></p>

<sup>19</sup> Hamer, Thomas. Hamer Environmental L.P. 2009. Photo. US Fish & Wildlife Service. Marbled Murrelet Photo Gallery. Accessed April 4<sup>th</sup>, 2005. [www.fws.gov/arcata/es/birds/MM/gallery/mamu\\_gallery.html](http://www.fws.gov/arcata/es/birds/MM/gallery/mamu_gallery.html).



<sup>20</sup> NatureServe. *Explorer*. [www.natureserve.org/explorer/](http://www.natureserve.org/explorer/)

<sup>21</sup> Ingles, Dr. Lloyd, Glenn. © 1999 California Academy of Sciences. Photo. CalPhotos, Photo Database. *Charadrius alexandrinus nivosus*, Western Snowy Plover. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Bird&seq\\_num=423&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Bird&seq_num=423&one=T).

<sup>22</sup> NatureServe.

<sup>23</sup> Steele, Bob. Photo. © Bob Steele Photography, Birds and Other Nature Images. Image ID: wifl\_sw\_T4176. [www.bobsteelephoto.com/Species/wifl\\_sw.html](http://www.bobsteelephoto.com/Species/wifl_sw.html).

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<p><i>Gymnogyps californianus</i> California Condor E</p> 	<p><b>FEEDING:</b> Strictly a scavenger, eating carrion such as cattle, sheep, deer, and ground squirrel carcasses. Dead cattle have provided the most important food source in recent decades. Searches for food while soaring and gliding. Food must be in open areas to enable landing and take-off. May fly 56 km (35 mi), or more, from roost to feeding sites. <b>REPRODUCTION:</b> Nests in caves, crevices, behind rock slabs, or on large ledges on high sandstone cliffs. Nest often surrounded by dense <i>brush</i>. A nest is not constructed; egg laid on bare surface. Nesting occurs within the Coast and Transverse Ranges of Ventura and Santa Barbara. <b>HABITAT:</b> Traditional roosting sites are ledges or cavities on cliffs. Uses water for drinking and bathing. Requires vast expanses of open savannah, grasslands, and foothill chaparral, with cliffs, large trees, and snags for roosting and nesting. This species is historically seen in the Santa Monica Mountains but has had no recent sightings.</p> <p>Photo: © 2006 Joseph Dougherty/ecology.org<sup>24</sup></p>
<p><i>Haliaeetus leucocephalus</i> Bald Eagle R</p> 	<p><b>FEEDING:</b> Requires large bodies of water, or free-flowing rivers with abundant fish, and adjacent snags or other perches. Swoops from hunting perches, or soaring flight, to pluck fish from water. Groups may feed gregariously, especially on spawning fish. Scavenges dead fish, water birds, and mammals. Open, easily approached hunting perches and feeding areas used most frequently. <b>REPRODUCTION:</b> Nests in large, old-growth, or dominant live tree with open branchwork, especially ponderosa pine. Often chooses largest tree in a stand on which to build stick platform nest. Nest located usually located near a permanent water source. <b>HABITAT:</b> Perches high in large, stoutly limbed trees, on snags or broken-topped trees, or on rocks near water. Roosts communally in winter in dense, sheltered, remote conifer stands. This species is historically seen in the Santa Monica Mountains but has had no recent sightings.</p> <p>Photo: Gerald and Buff Corsi © 2004 California Academy of Sciences<sup>25</sup></p>

<sup>24</sup> Dougherty, Joseph. Photo. © 2006 Joseph Dougherty/ecology.org. CalPhotos Photo Database. *Gymnogyps californianus* California Condor. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_com-Bird&seq\\_num=181842&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_com-Bird&seq_num=181842&one=T).

<sup>25</sup> Corsi, Gerald and Buff. Photo. © 2004 California Academy of Sciences. CalPhoto, Photo Data Base. *Haliaeetus leucocephalus*. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_com-Bird&seq\\_num=150905&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_com-Bird&seq_num=150905&one=T).



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<p><i>Pelecanus occidentalis californicus</i> Brown Pelican E</p> 	<p><b>FEEDING:</b> Forages mainly in early morning or late afternoon, or when tide is rising. Feeds almost entirely on fish, caught by diving. May completely, or only partially, submerge and water may be shallow or deep. Occasionally feeds on crustaceans, carrion, and young of its own species.</p> <p><b>REPRODUCTION:</b> The nest is a small mound of sticks or debris on rocky, or low, brushy slopes of undisturbed islands; usually on the ground, but less often in bushes. <b>HABITAT:</b> Usually rests on water or inaccessible rocks (either offshore or on mainland), but also uses mud flats, sandy beaches, wharfs, and jetties. Evidently does not roost overnight on water, but concentrates at a few traditional roosts on mainland or islands. Needs undisturbed islands adjacent to good marine fishing areas. Abundant in the Santa Monica Mountains.</p> <p>Photo: Gerald and Buff Corsi © 1999 California Academy of Sciences<sup>26</sup></p>
<p><i>Poliophtila californica</i> California Gnatcatcher T</p> 	<p><b>FEEDING:</b> Gleans insects and spiders from foliage of shrubs, especially California buckwheat and coastal sage. Also eats a few seeds.</p> <p><b>REPRODUCTION:</b> Weaves a small, deep cup from hemp-like fibers, leaves, plant down, spider silk, in a shrub 0.6–0.9 m (2–3 ft) above ground.</p> <p><b>HABITAT:</b> Shrubs provide roosting, nesting, and other cover. Is most numerous in low, dense, coastal scrub habitat in arid washes, on mesas, and on slopes of coastal hills. California buckwheat, coastal sage, and patches of prickly pear are particularly favored. Negatively impacted by fire. Records of this species in the Santa Monica Mountains are non-existent but if its habitat of coastal sage scrub is affected by fire it could have adverse affects on this species population.</p> <p>Photo: Peter Knapp<sup>27</sup></p>
<p><i>Rallus longirostris levipes</i> Light-footed Clapper Rail E</p> 	<p><b>FEEDING:</b> Eats mainly crabs; also other crustaceans, small fishes, tadpoles, snails, insects, and some plant material. Probably probes in mud or sand in or near shallow water, or picks items from substrate. <b>REPRODUCTION:</b> Nests under clump of pickleweed, on ground, or in cordgrass slightly above ground level. <b>HABITAT:</b> Cordgrass-pickleweed saltmarsh. Size of breeding populations is closely associated with above-ground biomass of <i>Spartina foliosa</i>; keeping the salt marsh open to the sea is critically important.<sup>28</sup></p> <p>Photo: © 2009 Steve Scholl<sup>29</sup></p>



<sup>26</sup> Corsi, Gerald and Buff. Photo. © 1999 California Academy of Sciences. CalPhoto, Photo Data Base. *Pelecanus occidentalis*. Brown Pelican. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_com-Bird&seq\\_num=456&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_com-Bird&seq_num=456&one=T).

<sup>27</sup> Knapp, Peter. Photo. California Patners in Flight Coastal Scrub and Chaparral Bird Conservation Plan. *Poliophtila californica* California Gnatcatcher. Accessed April 3<sup>rd</sup>, 2010. [www.prbo.org/calpif/htmldocs/species/scrub/california\\_gnatcatcher.html#top](http://www.prbo.org/calpif/htmldocs/species/scrub/california_gnatcatcher.html#top).

<sup>28</sup> NatureServe.

<sup>29</sup> Scholl, Steve. Photo. © 2009 Steve Scholl. CalPhotos Photo Database. *Rallus longirostris levipes* Light-footed Clapper Rail. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_com-Bird&seq\\_num=278012&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_com-Bird&seq_num=278012&one=T).



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<p><i>Sterna antillarum browni</i> California Least Tern E</p> 	<p><b>FEEDING:</b> Feeds primarily in shallow estuaries or lagoons where small fish are abundant. Hovers, and then plunges for fish near the surface, without submerging completely. Considerable feeding also takes place near shore in the open ocean, especially where lagoons are nearby, or at mouths of bays.</p> <p><b>REPRODUCTION:</b> Nests in loose colonies in areas relatively free of human or predatory disturbance. Abandons nesting areas readily if disturbed. Courtship may take place away from nest colony, typically on a beach or exposed tidal flat. Nests on barren to sparsely vegetated site near water, usually on sandy or gravelly substrate. On hard soil, may use artificially created depressions such as a dried boot impression.</p> <p><b>HABITAT:</b> Adult roosts primarily on the ground. Young chicks, 3 days old and older, are brooded less often by parents and require wind blocks and shade. Requires unpolluted feeding areas in lagoons and estuaries all year. Prefers undisturbed nest sites on open, sandy, or gravelly shores near shallow-water feeding areas in estuaries.</p> <p>Photo: © 2009 Benjamin Smith<sup>30</sup></p>
<p><i>Vireo bellii pusillus</i> Least Bell's Vireo E</p> 	<p><b>FEEDING:</b> Eats almost exclusively insects, also spiders, snails, fruits; forages in dense brush, occasionally in tree tops. Gleans prey from leaf and bark substrates, also obtains some prey by hovering and occasionally by hawking.</p> <p><b>REPRODUCTION:</b> Nests in shrub or low tree, usually averaging about 1 m above ground, usually in horizontal or downsloping twig fork, typically near edge of thicket. Usually returns to same nesting territory in successive years.</p> <p><b>HABITAT:</b> Dense brush, mesquite, willow-cottonwood forest, streamside thickets, and scrub oak, in arid regions but often near water, moist woodland, bottomlands, woodland edge, scattered cover and hedgerows in cultivated areas. Willow-dominated riparian woodlands, open woodland, brush in winter.<sup>31</sup> If fire destroys the riparian habitat where this species resides it can have negative effects on the population.</p> <p>Photo: James Gallagher, Sea and Sage Audubon<sup>32</sup></p>

<sup>30</sup> Smith, Benjamin. Photo. © 2009 Benjamin Smith. CalPhotos Photo Database. *Strenula antillarum browni* California Least Tern. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Bird&seq\\_num=283725&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Bird&seq_num=283725&one=T).

<sup>31</sup> NatureServe.

<sup>32</sup> Gallagher, James. Sea and Sage Audubon. California Patners in Flight Coastal Scrub and Chaparral Bird Conservation Plan. *Vireo bellii pusilius* Least Bell's Vireo. Accessed April 3<sup>rd</sup>, 2010. [www.prbo.org/calpif/htmldocs/species/riparian/least\\_bell\\_vireo.htm](http://www.prbo.org/calpif/htmldocs/species/riparian/least_bell_vireo.htm).

Amphibians	
<p><i>Bufo californicus</i> Arroyo Toad E<sup>33</sup></p> 	<p><b>FEEDING:</b> Adults of this species feed on snails, Jerusalem crickets, beetles, ants, caterpillars, moths, and occasionally they cannibalize newly metamorphosed individuals. Southwestern toads usually feed during the night but may occasionally feed during the day. Individuals walk instead of hop when foraging for food. <b>REPRODUCTION:</b> Eggs are laid on the bottom of quiet parts of clear streams or shallow ponds, among leaves, gravel, or sticks. Clear standing water is required for egg deposition. <b>HABITAT:</b> Often found near rivers with sandy banks, willows, cottonwoods, and sycamores in valley-foothill and desert riparian habitats. Found in loose gravelly areas of streams in drier portions of its range.</p> <p>Photo: © 2006 William Flaxington<sup>34</sup></p>
<p><i>Rana draytoni</i><sup>35</sup> California Red-legged Frog T</p> 	<p>Red-legged frogs have been largely extirpated from the Santa Monica Mountains. A small population was recently discovered in the eastern end of the Simi Hills and is in danger of extinction from urban encroachment. Deep pools are a necessary habitat component for this species.</p> <p>Photo: © 2003 Pierre Fidenci<sup>36</sup></p>




<sup>33</sup> <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=D020>

<sup>34</sup> Flaxington, William. Photo. © 2006 William Flaxington. CalPhotos Photo Database. *Bufo californicus* Arroyo Toad. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Amphibian&seq\\_num=195677&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Amphibian&seq_num=195677&one=T).

<sup>35</sup> Description from: NPS (2005), Final EIR for a Fire Management Plan, SMMNRA.

<sup>36</sup> Fidenci, Pierre. Photo. © 2003 Pierre Fidenci. CalPhotos Photo Database. *Rana aurora draytonii* Red-legged Frog. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Amphibian&seq\\_num=130344&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Amphibian&seq_num=130344&one=T).



Fish	
<p><b><i>Eucyclogobius newberryi</i></b> Tidewater Goby E</p> 	<p><b>FEEDING:</b> Benthic feeder on small crustaceans (mysids, ostracods, amphipods), insects (chironomid larvae, diptera larvae), and mollusks. <b>REPRODUCTION:</b> Spawns on substrate of coarse sand, in burrow dug by male usually in water 25–50 cm deep. Larvae are found midwater around vegetation until they become benthic. Spawns throughout much of the year. <b>HABITAT:</b> Benthic. A strictly estuarine species found in Malibu and Topanga lagoons, possibly also in the lower reaches of streams and uppermost portions of large bays. Most abundant in the upper ends of lagoons created by small coastal streams. In lower sections of coastal streams, occurs in fresh to brackish water. Occurs in vegetated pools of slow (but not stagnant) areas of streams. Generally occurs in water 25–100 cm deep. Able to complete life cycle in fresh or brackish water. Prefers mud substrates. Does not have a marine life history phase; hence, frequency of genetic exchange among different coastal lagoon populations is severely restricted, as is the potential for recolonization of a locality following extirpation.<sup>37</sup></p> <p>Photo: © 2007 Bradford Norman<sup>38</sup></p>
<p><b><i>Oncorhynchus mykiss</i></b> Southern California Steelhead Trout E</p> 	<p><b>REPRODUCTION:</b> Steelhead typically spend two years in fresh water, migrate to marine waters where they spend 2–3 years, then return to natal stream to spawn. Known spawning streams include Malibu, Topanga and Arroyo Sequit. <b>HABITAT:</b> Spawning streams are relatively warm, and sand berms across the mouths of stream may be long-lasting.<sup>39</sup></p> <p>Photo: © 1999 Aaron Nadig<sup>40</sup></p>
Invertebrates	
<p><b><i>Euphydryas editha quino</i></b> Wright's Checkerspot Butterfly E</p> 	<p>Believed to be locally extirpated. The Quino Checkerspot was once widespread throughout the coastal sage scrub areas of Southern California and Northern Baja California, it has been in rapid decline and is now limited to a few populations in Riverside and San Diego Counties.<sup>41</sup></p> <p>Photo: Guy Bruyca<sup>42</sup></p>

<sup>37</sup> NatureServe.

<sup>38</sup> Norman, Bradford. Photo. © 2007 Bradford Norman. CalPhotos Photo Database. *Eucyclogobius newberryi* Tidewater Goby. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Fish&seq\\_num=208799&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Fish&seq_num=208799&one=T).

<sup>39</sup> NatureServe.

<sup>40</sup> Nadig, Aaron. Photo. © 1999 Aaron Nadig. CalPhoto Photo Database. *Oncorhynchus mykiss* Steelhead Trout. Accessed April 3<sup>rd</sup>, 2010. [http://calphotos.berkeley.edu/cgi/img\\_query?query\\_src=photos\\_fauna\\_sci-Fish&seq\\_num=2090&one=T](http://calphotos.berkeley.edu/cgi/img_query?query_src=photos_fauna_sci-Fish&seq_num=2090&one=T).

<sup>41</sup> [www.sdnhm.org/fieldguide/inverts/euph-edl.html](http://www.sdnhm.org/fieldguide/inverts/euph-edl.html)

<sup>42</sup> [www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/Quino2010MonRef/Quino\\_2010\\_Ref\\_Info.htm](http://www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/Quino2010MonRef/Quino_2010_Ref_Info.htm)

**PUBLIC DRAFT**

***Streptocephalus wootoni***

Riverside Fairy Shrimp

E<sup>43</sup>



The Riverside fairy shrimp is a small aquatic crustacean that inhabits vernal pools, pool-like ephemeral ponds, water sheds, hydrologic regimes, and human-modified depressions from coastal southern California to northwestern Baja California, Mexico.<sup>44</sup>

Photo: Center for Biological Diversity<sup>45</sup>

<sup>43</sup> [www.fws.gov/ecos/ajax/speciesProfile/profile/speciesProfile.action?spcode=K03F](http://www.fws.gov/ecos/ajax/speciesProfile/profile/speciesProfile.action?spcode=K03F)

<sup>44</sup> [www.epa.gov/fedrgstr/EPA-IMPACT/2000/September/Day-21/i24198.htm](http://www.epa.gov/fedrgstr/EPA-IMPACT/2000/September/Day-21/i24198.htm)

<sup>45</sup> [www.biologicaldiversity.org/species/invertebrates/Riverside\\_fairy\\_shrimp/](http://www.biologicaldiversity.org/species/invertebrates/Riverside_fairy_shrimp/)