

VERNAL POOL CRITICAL HABITAT—OWNERSHIP FOR ALL UNITS COMBINED—Continued

	Proposed critical habitat		Final critical habitat		Amount of change	
	Hectares	(Acres)	Hectares	(Acres)	Hectares	(Acres)
Total Federal	100,203	(247,605)	61,216	(151,268)	– 38,986	(– 96,337)
State/County/City:						
City/County Park	2	(4)	0	(0)	– 2	(– 4)
CDFG	5,529	(13,662)	1,363	(3,369)	– 4,165	(– 10,293)
State	79	(194)	0	(0)	– 79	(– 194)
State Land Commission	260	(642)	318	(787)	59	*(145)
State Parks & Recreation	1,447	(3,575)	17	(41)	– 1,430	(– 3,534)
Total State/County/City	7,316	(18,077)	1,698	(4,197)	– 5,617	(– 13,880)
Private (Conservation):						
CDFG Administered	33,873	(83,701)	390	(963)	– 33,483	(– 82,738)
Other Conservancy	453	(1,120)	0	(0)	– 453	(– 1,120)
TNC** Owned	8,844	(21,853)	7,687	(18,995)	– 1,157	(– 2,858)
TNC Easement	17,383	(42,954)	16,676	(41,207)	– 707	(– 1,747)
WRP** Easement	688	(1,699)	617	(1,525)	– 70	(– 174)
Total Private (Conservation)	61,240	(151,327)	25,370	(62,690)	– 35,870	(– 88,637)
Private (All Other)	502,972	(1,242,866)	418,012	(1,032,489)	– 84,960	(– 209,851)
Grand Total	671,730	(1,659,875)	502,488	(1,241,145)	– 169,242	(– 418,027)

* Increase in acreage shown for these categories is due to use of updated ownership data for final critical habitat calculations. Updated data was received after proposed critical habitat calculations had been completed.

** TNC = The Nature Conservancy; WRP = Wetlands Reserve Program

Note: Table area estimates do not reflect the exclusion of National Wildlife Refuge lands, National fish hatchery lands, State lands within ecological reserves and wildlife management areas, and lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano from the final designation pursuant to section 4(b)(2) of the Act.

Description of Species Specific Criteria and Critical Habitat Units

As discussed in the "Exclusions Under Section 4(b)(2) of the Act" section of this final rule, we have excluded from the final designation National Wildlife Refuge lands, National fish hatchery lands, State wildlife areas and ecological reserves, as well as all critical habitat units in the following California counties: Butte, Madera, Merced, Sacramento, and Solano. The descriptions below are for the units entirely or partially included in the final critical habitat designation. The descriptions, including acreage of units, do not necessarily reflect all of the subsequent exclusions of areas pursuant to section 4(b)(2) of the Act in the final designation. Please refer to that section of the rule for additional discussion of areas excluded from the final designation.

Except where otherwise noted, all units contain known occurrences of the species in question, as well as both of the PCEs listed above, and at least one of the specific PCEs of the species (e.g., involving specific soil types, ponding depths). Each unit was chosen for its ability to advance at least one of the conservation criteria listed above.

Conservancy Fairy Shrimp

Most occurrences of Conservancy fairy shrimp are limited to large clay-

bottomed pools that are rare within the vernal pool landscapes within California (Vollmar 2002). Helm (1998) observed that most Conservancy fairy shrimp occurrences were on Anita, Pescadero, or Peters Clay soils. Conservancy fairy shrimp are typically found in turbid and large ((0.4 ha to 0.8 ha)(1 to 2 ac)) to very large ((35 ha (88 ac)) vernal pools (Helm and Vollmar 2002). However, the pools inhabited by conservancy fairy shrimp near the Montezuma Hills in Solano County and in Butte County are relatively small and have a low turbidity (Vollmar 2002). The species is found in large playa pools on Tuscan or Mehrten geologic formations and on Basin Rim landforms in Tehama, Merced, and Solano Counties (Helm 1998) on various soil types. The parent material of vernal pools greatly influences species composition and hydrologic functioning of the vernal pool (Hanes and Stromberg 1998; Smith and Verrill 1998). Soils beneath vernal pools are extremely variable and are not the same as soils mapped by soil surveys, but are usually undescribed hydric inclusions that vary by location (Holland and Dain 1990). The Vina Plains area in Tehama County supports occurrences of the species within numerous large pools throughout the area (Eriksen and Belk 1999; Helm 1998; Helm and Vollmar 2002). The pools in the Sacramento National

Wildlife Refuge area in Glenn and Colusa Counties as well as in parts of the San Luis National Refuge Complex in Merced County are associated with alkaline sink areas and tend to be higher in pH and salinity than in other pools where the species is found. The primary constituent elements of critical habitat for Conservancy fairy shrimp are the habitat components that provide:

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths that typically become inundated during winter rains and hold water for sufficient lengths of time necessary for Conservancy fairy shrimp incubation, reproduction, dispersal, feeding, and sheltering, including but not limited to large playa vernal pools often found on basin rim landforms and alkaline soils, but which are dry during the summer and do not necessarily fill with water every year; and

(ii) The geographic, topographic, and edaphic features that support aggregations or systems of hydrologically interconnected pools, swales, and other ephemeral wetlands and depressions within a matrix of surrounding uplands that together form hydrologically and ecologically functional units called vernal pool complexes.

These features contribute to the filling and drying of the vernal pool and