

(i) Vernal pools, swales, and other ephemeral wetlands and depressions of appropriate sizes and depths and the adjacent upland margins of these depressions that sustain *Orcuttia tenuis* germination, growth and reproduction, including but not limited to, Northern Volcanic Ashflow and Northern Volcanic Mudflow vernal pools (Sawyer and Keeler-Wolf 1995) with iron-silica and bedrock hardpan impervious layers, and that typically become inundated during winter rains, but are dry during the summer and do not necessarily fill with water every year; and

(ii) The associated watershed(s) and hydrologic features, including the pool basin, swales, and surrounding uplands (which may vary in extent depending on pool size and depth, soil type and depth, hardpan or claypan type and extent, topography, and climate) that contribute to the filling and drying of the vernal pool or ephemeral wetland, and that maintain suitable periods of pool inundation, water quality, and soil moisture for *Orcuttia tenuis* germination, growth and reproduction, and dispersal, but not necessarily every year.

(3) Critical habitat does not include existing manmade features and structures, such as buildings, roads, aqueducts, railroads, airport runways and buildings, other paved areas, lawns, and other urban landscaped areas not containing one or more of the primary constituent elements.

(4) Critical habitat does not include the following lands although they may fall within the legal descriptions below:

(i) Lands within the following California counties: Butte, Madera, Merced, Sacramento, and Solano;

(ii) Federally-owned lands within the boundaries of the Kern, Sacramento, San Francisco Bay, and San Luis National Wildlife Refuges and National Wildlife Refuge Complexes, and the Coleman National Fish Hatchery;

(iii) State-owned lands within the boundaries of the Allensworth, Boggs Lake, Butte Creek Canyon, Calhoun Cut, Carrizo Plains, Dales Lake, Fagan Marsh, Phoenix Field, San Joaquin River, Stone Corral, and Thomes Creek Ecological Reserves;

(iv) State-owned lands within the boundaries of the Battle Creek, Big Sandy, Grizzly Island, Hill Slough, North Grasslands, and Oroville Wildlife Areas.

(5) Subunit 1A: Modoc, Shasta, and Siskiyou Counties, California. From USGS 1:24,000 quadrangle maps Day and Timbered Crater, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 627500, 4561300; 626000, 4561600; 626000, 4562200; 626200, 4562900; 625800, 4563900; 626000, 4564100; 626100, 4564300; 626200, 4564400; 626300, 4564600; 626400, 4564700; 626400, 4564900; 626500, 4565100; 626700, 4565100; 626700, 4565400; 626800, 4565600; 627000, 4565700; 627000, 4566000; 627100, 4566100; 627300, 4566200; 627500, 4566200; 627700, 4566200; 627800, 4566100; 627900, 4566000; 628000, 4565900; 628200, 4565800; 628200, 4565600; 628300, 4565200; 628000, 4565000; 627900, 4564700; 628000, 4564400; 627900, 4564200; 627900, 4564000; 627900, 4563805; 628100, 4563700; 628200, 4563600; 628100, 4563300; 628200, 4563200; 628200, 4563000; 628300, 4562900; 628600, 4562800; 628600, 4562600; 628700, 4562500; 628900, 4562300; 628900, 4562000; 628700, 4561900; 628500, 4561800; 628400, 4561800; 628100, 4561700; 628000, 4561600; 627900, 4561500; 627800, 4561400; 627600, 4561400; returning to 627500, 4561300.

(ii) Start at 634900, 4557900; 634100, 4558300; 633900, 4559000; 633700, 4560000; 634000, 4560800; 634500, 4561300; 634600, 4560900; 635000, 4560700; 635100, 4561000; 635700, 4561000; 636000, 4561100; 637300, 4560000; 637400, 4559300; 637300, 4558900; 636900, 4558700; 636700, 4558300; 636100, 4558000; returning to 634900, 4557900.

(6) Subunit 1B. Shasta County, California. From USGS 1:24,000 quadrangle maps Burney Falls, and Dana, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 616900, 4549000; 616800, 4549000; 615900, 4549500; 615700, 4549800; 615600, 4549900; 615600, 4550000; 615500, 4550100; 615400, 4550200; 615300, 4550400; 615300, 4550600; 615600, 4550700; 615900, 4550700; 616200, 4550500; 616400, 4550300; 616700, 4550100; 616800, 4549800; 617000, 4549400; 617100, 4549100; returning to 616900, 4549000.

(7) Subunit 1C. Shasta County, California. From USGS 1:24,000 quadrangle map Burney, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 612800, 4536000; 612700, 4536000; 612600, 4536100; 612600, 4536200; 612500, 4536300; 612500, 4536500; 612300, 4536500; 612300, 4536700; 612300, 4537100; 612500, 4537400; 612500, 4537600; 612600, 4537700; 612700, 4537700; 612900, 4537800; 613000, 4537900; 613000, 4538100; 612900, 4538300; 612900, 4538500; 613000, 4538600; 613100, 4538800; 613400, 4538900; 613600, 4539000; 613700, 4539100; 613800, 4539100; 613900,

4539100; 614000, 4539000; 614100, 4538900; 614200, 4538800; 614400, 4538700; 614400, 4538600; 614300, 4538500; 614100, 4538400; 614000, 4538400; 613800, 4538300; 613600, 4538100; 613400, 4537900; 613400, 4537700; 613400, 4537500; 613200, 4537400; 613200, 4537100; 613100, 4536800; 613000, 4536500; 613000, 4536200; returning to 612800, 4536000.

(8) Subunit 1D: Shasta County, California. From USGS 1:24,000 quadrangle map Burney, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 611900, 4529900; 611700, 4529900; 611500, 4529900; 611000, 4529900; 610500, 4530200; 610400, 4530300; 610200, 4530400; 610200, 4530600; 610300, 4530900; 610600, 4531100; 610500, 4531400; 610200, 4531600; 610200, 4531800; 610100, 4532200; 610100, 4532600; 610000, 4532800; 610000, 4533000; 609900, 4533200; 609900, 4533500; 609700, 4533900; 609600, 4534100; 609600, 4534300; 609600, 4534600; 609600, 4534800; 609600, 4535200; 609500, 4535300; 609300, 4535400; 609100, 4535500; 608800, 4535600; 608600, 4535600; 608300, 4535700; 608200, 4535800; 608000, 4535800; 608100, 4536000; 609700, 4536000; 610300, 4535500; 610500, 4535000; 610600, 4534600; 610500, 4533700; 610800, 4532700; 611000, 4532500; 611000, 4532400; 611100, 4532100; 611300, 4531900; 611500, 4531600; 611500, 4531400; 611600, 4531200; 611800, 4531100; 612000, 4531000; 612200, 4530800; 612200, 4530500; 612100, 4530100; returning to 611900, 4529900.

(9) Subunit 1E: Shasta County, California. From USGS 1:24,000 quadrangle maps Murken Bench and Old Station, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N): 634800, 4510800; 634600, 4511200; 634400, 4511400; 634600, 4512400; 634200, 4512800; 634300, 4513000; 634400, 4512900; 634800, 4512900; 635100, 4513200; 635800, 4513200; 636000, 4513100; 636000, 4512800; 636000, 4512400; 635600, 4512100; 635500, 4511700; 635500, 4511400; 635400, 4511200; 635100, 4510900; returning to 634800, 4510800.

(10) Subunit 1F. Lassen, and Shasta Counties, California. From USGS 1:24,000 quadrangle maps Poison Lake, and Swains Hole, California, land bounded by the following UTM 10 NAD 83 coordinates (E, N):

(i) Start at 644800, 4500100; 644300, 4500300; 643500, 4500400; 642400, 4500800; 641500, 4501500; 641200, 4502700; 641300, 4502900; 641600, 4502900; 641700, 4503100; 642100,