

believe additional measures are needed to promote natural ecosystem processes that benefit listed fairy shrimp and these items will continue to be the focus of future discussions with the military. We recognize that designation of critical habitat has the potential to modify military training operations and the use or development of base facilities. We have determined that the benefits of excluding these facilities outweigh the benefits of including them.

Subsequently, Camp Roberts and Fort Hunter Liggett have been excluded from this final designation of critical habitat.

*Comment 8:* One commenter requests that the Indian Valley Cattle Company and Porter Ranch Estate properties be excluded from the Bradley-San Miguel critical habitat subunit in Monterey County. The commenter references a letter from a consulting firm which states that habitat mapping on one or both of the above-mentioned properties was done, and that suitable habitat for fairy shrimp does not appear to be present. The consultant's letter states that another company conducted fairy shrimp surveys on the Porter Ranch Estate, and these investigators did not find fairy shrimp.

*Our Response:* The Service's "Interim Survey Guidelines to Permittees under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods" is used to establish the presence or absence of listed fairy shrimp on a particular property. The guidelines recommend that two wet season surveys for adult fairy shrimp, or one wet season survey for adult and one dry season survey for fairy shrimp cysts, be done at a site to determine the presence or absence of fairy shrimp. Both surveys should demonstrate that fairy shrimp are absent before the Service will concur with a determination that fairy shrimp are absent from a site. We received a report from a consultant in 2001 that states ephemeral aquatic habitat may occur on the Porter Ranch Estate. We also received documents that indicate two wet season surveys were conducted on that property. The second wet season survey was done during a year when rainfall conditions were not conducive to detecting adult fairy shrimp, *i.e.*, aquatic habitat was not present during the second survey, and it would not therefore have been possible to determine the presence or absence of fairy shrimp. We do not have appropriate documentation at this time that allows us to conclude that fairy shrimp are absent from the Porter Ranch Estate.

While we do not have specific information that demonstrates that fairy

shrimp occur on the Indian Valley Cattle Company and Porter Ranch Estate properties, we know vernal pool fairy shrimp occur on the Camp Roberts military base 1 mi (1.6 km) west of Porter Ranch Estate and 0.5 mi (0.8 km) south of the Indian Valley Cattle Company property. We believe additional undocumented occurrences of listed fairy shrimp are likely to occur in suitable habitat on private property near Camp Roberts. We also believe several unmapped vernal pools are likely to occur on or near the two aforementioned properties because the presence of several hundred vernal pools on Camp Roberts suggests that these features are present within the local landscape. The Indian Valley Cattle Company and Porter Ranch Estate properties are up gradient and in close proximity to known and suspected vernal pool fairy shrimp occurrences, and it is likely that water that originates on these properties travels down gradient and contributes to the maintenance of the hydrology and water quality of vernal pools that are occupied by listed fairy shrimp on or near the Camp Roberts military base.

Following our evaluation of these lands, we still believe the Indian Valley Cattle Company and Porter Ranch Estate properties are within the localized watershed that contains essential vernal pool habitat, and they contribute to the maintenance of their hydrology. Consequently, it is our determination the land on these properties is essential to the conservation of vernal pool habitat and should not be excluded from designated critical habitat.

*Comment 9:* One individual asks that the Estrella Ranch area in San Luis Obispo County be removed from the Paso Robles critical habitat subunit. The landowner does not believe fairy shrimp or vernal pool habitat exist on that ranch, and they are concerned that critical habitat designation will affect their family's ranching activities.

*Our Response:* The Estrella Ranch occurs within a localized watershed that contains documented occurrences of listed fairy shrimp. Vernal pools complexes measuring at least 10 ac (4 ha) in size have been mapped within 1–2 mi (1.6–3.2 km) of Estrella Ranch. These complexes were identified during a habitat mapping contract (Holland 2003). The mapping contract did not attempt to map wetlands less than 10 ac (4 ha) in size, and it is likely that smaller, unmapped vernal pools or vernal pool complexes which provide the necessary conditions for vernal pool fairy shrimp to hatch, grow, and reproduce are present in the local area.

Estrella Ranch is up gradient of vernal pool complexes that have been mapped, and the topography of the ranch suggests water that originates on that property is likely to travel down gradient and contribute to the amount, duration, and frequency of water flow necessary to maintain vernal pools southwest of the ranch property boundary.

We believe Estrella Ranch occurs within a localized watershed that contains essential vernal pool habitat, and the ranch contributes to the maintenance of their hydrology. Consequently, it is our determination this property is essential to the conservation of documented vernal pool habitats, and should not be excluded from designated critical habitat.

Critical habitat designation will not affect the private landowner unless specific portions of their property possess the primary constituent elements associated with vernal pool fairy shrimp critical habitat, and the landowner proposes a project that would involve a Federal nexus. The landowner has told Service employees he has historically avoided projects that would create a Federal nexus. Consequently, we do not believe the designation of critical habitat on Estrella Ranch will significantly affect the landowner's ranching activities.

*Comment 10:* One individual associated with the Coastal Alliance on Planned Expansion asks that we evaluate the possibility that fairy shrimp are adversely affected by the operation of a power plant near the Morro Bay National Estuary in San Luis Obispo County. The commentator is concerned that use of ocean water to cool various hardware components at the power plant may affect fairy shrimp.

*Our Response:* Fairy shrimp are inland species and are not associated with marine environments. The intake of water to cool the power plant near Morro Bay does not have the potential to adversely affect vernal pool fairy shrimp or their habitat.

*Comment 11:* A number of commenters expressed concern over the appropriateness of the proposal of Unit 33A for vernal pool fairy shrimp. Riverside County Flood Control and Water Conservation District stated that the Unit boundary is based on their "approximate riverine flood plain" boundary and suggested that a more detailed analysis of local hydrologic sources and watersheds associated with vernal pools would be more accurate. Other concerns raised were: (1) The vernal pool fairy shrimp is not associated with riverine systems; (2) the Unit contains areas which do not