

Butte County: The County's unemployment rate is 7 percent, the designation affects 6.6 percent of the county's land, and the annual costs represent 0.157 percent of the total annual taxable sales in the county.

Madera County: The County's unemployment rate is 11.8 percent, the designation affects 8.2 percent of the county's land, and the annual cost represents 0.139 percent of the annual taxable sales in the county.

Merced County: The County's unemployment rate is 14.4 percent, the designation affects 27.4 percent of the county's land, and the annual cost represents 0.263 percent of the annual taxable sales in the county.

Sacramento County: The designation affects 17.12 percent of the county's land, and the annual cost represents 0.206 percent of the annual taxable sales in the county.

Solano County: The designation affects 18.1 percent of the county's land, and the annual cost represents 0.362 percent of the annual taxable sales in the county.

The combination of monetary costs as a percent of the actual economic activity in the area, existing unemployment rate, and area of land affected in the county represents a more specific picture of the potential economic damage that would flow from this particular designation.

(2) Benefits of Including

The benefits of including this areas within critical habitat are that these areas contribute to the conservation of the species. In developing our proposal of critical habitat for the 15 vernal pool species, we identified those areas that, based on the scientific and commercial data available, we determined contain essential occurrences of each of the species and/or are defined by the physical and biological features essential to their conservation. We used a number of criteria in defining critical habitat including, but not limited to, the known species occurrence and distribution data, habitat types, degree of habitat fragmentation, soil and landform relationships, connectivity and dispersal factors, and conservation biology principles.

Solano County contains essential habitat for six of the listed vernal pool species: Contra Costa goldfields, Solano grass, Colusa grass, Conservancy fairy shrimp, vernal pool tadpole shrimp, and vernal pool fairy shrimp. We believe that critical habitat provides conservation value for all of these species because it emphasizes the importance of the interrelationship of uplands and pools within vernal pool complexes. The uplands support physical and biological features that are essential to the conservation of all of these species. Exclusion of critical habitat in Solano County may be perceived as diminishing the added

value of highlighting the essential functions of uplands that is provided by critical habitat designation.

However, since the protections of Sections 7, with respect to the jeopardy standard and section 9 will still be in effect, and will result in actions that will protect the species, the loss in protection of the species will be minimal.

(3) The Benefits of Exclusion Outweigh the Benefits of Inclusion

Based on the above considerations, and in accordance with section 4(b)(2) of the Act, we have determined that the benefits of exclusion outweigh the benefits of inclusion. The economic analysis found unusually high economic costs. Given the fact that much of the existing protections for the species will continue, the benefits of exclusion outweigh the benefits of inclusion. We find that since the protections of Sections 7, with respect to the jeopardy standard and section 9 will still be in effect, and will result in actions that will protect the species, the loss in protection of the species will be minimal. Therefore we do not believe that these exclusions will result in the extinction of the species.

Relationship of Critical Habitat to Approved Habitat Conservation Plans

As described above, section 4(b)(2) of the Act requires us to consider other relevant impacts, in addition to economic impacts, of designating critical habitat. Section 10(a)(1)(B) of the Act authorizes us to issue permits for the take of listed wildlife species incidental to otherwise lawful activities. An incidental take permit application must be supported by an HCP that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the permitted incidental take. Although take of listed plants is not generally prohibited by the Act on private land, listed plant species may also be covered in an HCP for wildlife species.

Three proposed critical habitat units (Skunk Hollow Unit 35, a portion of San Joaquin Unit 18 for vernal pool fairy shrimp) warrant exclusion from the final designation of critical habitat under section 4(b)(2) of the Act based on the special management considerations and protections afforded the vernal pool habitat through several approved and legally operative HCPs or NCCP/HCPs. We believe that in most instances, the benefits of excluding legally operative HCPs from the critical habitat designations will outweigh the benefits of including them. The following

represents our rationale for excluding the Skunk Hollow critical habitat unit (Unit 35), a portion of the San Joaquin critical habitat unit (Unit 18 for vernal pool fairy shrimp, and Unit 14 for vernal pool tadpole shrimp) from the final designated critical habitat.

The Skunk Hollow vernal pool basin (Unit 35) consists of a single, large vernal pool and its essential associated watershed in western Riverside County. Several federally listed species have been documented from the Skunk Hollow vernal pool basin. These include the vernal pool fairy shrimp (Simovich, in litt. 2001), the Riverside fairy shrimp (Service 2001), *Navarretia fossalis*, and *Orcuttia californica* (Service 1998). The vernal pool complex and watershed is currently protected as part of a reserve established within an approved wetland mitigation bank in the Rancho Bella Vista HCP area, and as part of the conservation measures contained in the Assessment District 161 Subregional HCP (AD161 HCP).

The San Joaquin County Multi-Species Conservation Plan (SJMSCP) identifies the vernal pool fairy shrimp and the vernal pool tadpole shrimp as covered species. The SJMSCP has identified areas where growth and development are expected to occur (build-out areas). A portion of one of these build-out areas overlaps with the San Joaquin Unit 18 for vernal pool fairy shrimp.

(1) Benefits of Inclusion

The benefits of including HCPs or NCCP/HCPs in critical habitat are normally small. The principal benefit of any designated critical habitat is that federally funded or authorized activities in such habitat that may affect it require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid adverse modification of critical habitat. Where HCPs are in place, our experience indicates that this benefit is small or non-existent. Currently approved and permitted HCPs and NCCP/HCPs are already designed to ensure the long-term survival of covered species within the plan area. Where we have an approved HCPs or NCCP/HCPs, lands that we ordinarily would define as critical habitat for covered species will normally be protected in reserves and other conservation lands by the terms of the HCPs or NCCP/HCPs and their Implementing Agreements (IAs). These HCPs or NCCP/HCPs and IAs include management measures and protections for conservation lands designed to protect, restore, and enhance their value as habitat for covered species.