

years. See the "Recovery Plan Criteria" section in this rule for additional information.

Comment 3: The peer reviewer disagreed with the use of number of plants and number of "sites" in the proposed delisting rule since a very small patch can contain a large number of plants, and the number of *Eriastrum hooveri* individuals in a specified area can vary by several orders of magnitude from one year to the next. "Sites" is an arbitrary term used to describe clusters of plants that does not indicate separate populations and does not have any relationship to the ecology or reproductive biology of the species.

Our Response: We agree and have based this delisting action on the amount of occupied and suitable habitat that has been protected for *Eriastrum hooveri*, along with its distribution, abundance, and resilience, rather than the number of plants and sites.

Comment 4: Protection for *Eriastrum hooveri* will result from efforts for other listed species. Nine of the core areas identified for recovery of multiple species support *E. hooveri*. Portions of each of the core areas are already conserved by Federal and State agencies and nongovernmental conservation organizations, and additional lands are likely to be protected through ongoing recovery efforts for other listed species.

Our Response: We agree that *Eriastrum hooveri* has benefited from conservation efforts for other listed species, and is likely to continue to do so. We have included specific information about collateral benefits in this final rule (see "Background" and "The inadequacy of existing regulatory mechanisms" under "Summary of Factors Affecting the Species").

Comment 5: Residual mulch restrictions cited in the proposed rule are incorrect.

Our Response: We have made these corrections (see "The inadequacy of existing regulatory mechanisms" under "Summary of Factors Affecting the Species"). The BLM grazing restrictions include requirements for residual mulch (dry plant material) of 568 kilograms (kg) per ha (500 pounds (lb) per ac), and 5 cm (2 in) of green growth, or 795 kg per ha (700 lb per ac). The proposed rule to delist *Eriastrum hooveri* incorrectly stated that the required amount of residual dry mulch was 50 kg per ha (49 lb per ac) and required green growth was 318 kg per ha (238 lb per ac).

In addition, we considered and incorporated, as appropriate, into this final rule all biological information provided by the peer reviewer.

Summary of Factors Affecting the Species

Section 4 of the Act and our regulations (50 CFR part 424) implementing the listing provisions of the Act set forth the procedures for listing, reclassifying, and delisting species. A species may be listed if one or more of the five factors described in section 4(a)(1) of the Act threatens the continued existence of the species. A species may be delisted, according to 50 CFR 424.11(d), if the best scientific and commercial data available substantiate that the species is neither endangered nor threatened because of (1) extinction, (2) recovery, and/or (3) error in the original data for classification of the species.

After a thorough review of all available information, it is evident that substantial recovery of *Eriastrum hooveri* has occurred. We have determined that none of the five factors addressed in section 4(a)(1) of the Act, and discussed below, is currently affecting the species to the extent that *E. hooveri* remains threatened with endangerment in the foreseeable future throughout all or a significant portion of its range. The five listing factors, their application to the recovery of *E. hooveri*, and the identification of which threats are considered to be residual and will be the subject of monitoring after delisting are discussed below.

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Oil and Gas Leasing

One of the predominant threats facing *Eriastrum hooveri* at the time it was listed as a threatened species was oil and gas development, especially in the Elk Hills area (55 FR 29361). Russ Lewis of the BLM has conducted several surveys for *E. hooveri* on public and private lands since the time of listing (BLM 1992, 1994). Of the approximately 1,000 new sites found by Lewis during 1992 and 1994, oil and gas development threats were present for only about 21 percent of the sites. Threats at many of these sites are no longer significant because several oil fields are at or near their peak of development, new drilling occurs on existing wellpads, or they have already been abandoned (R. Lewis, pers. comm. 2003). Additionally, there are other listed species in these areas; HCPs and section 7 consultations coordinated for the listed species will also protect *E. hooveri*. For these reasons and the reasons discussed below, we believe that the likelihood of additional habitat loss from new activity is low.

In the Elk Hills area, oil production areas are established on the upper elevation of the hills on the former NPR-1. Exploration activities generally have failed to establish oil production in the lower elevations (BLM 1994). The majority (73 percent) of the *Eriastrum hooveri* sites occur at lower elevations (EG&G 1995a); therefore, the majority of *E. hooveri* populations in NPR-1 are in areas not likely to be developed for petroleum production (B. Cypher, pers. comm. 1998).

Mobil Oil Corporation enacted measures to protect *Eriastrum hooveri* by placing protective exclosures around all known sites on a Lost Hills leased property (BLM 1994). Lewis also noted that above-surface pipeline corridors appear to be unintentionally restricting access of off-highway vehicles to remaining undisturbed habitat and, consequently, are protecting many other sites in the area (BLM 1994). The *Eriastrum hooveri* Field Inventory Report (BLM 1994) documents the presence of *E. hooveri* in large numbers throughout fully developed oilfields, such as Lost Hills, that have been in existence for several decades.

Because *Eriastrum hooveri* establishes on disturbed substrates such as well pads and pipeline rights-of-way after a period of non-use, the species likely will continue to exist both on federally and privately owned, fully developed oilfields (BLM 1994). EG&G Energy Measurements (under sponsorship by the Department of Energy and Chevron) monitored the reestablishment of *E. hooveri* following two disturbances that occurred on NPR-1 in 1990. At both study sites, *E. hooveri* occupied all disturbed plots after one growing season and the plants increased in density from the first to second growing season (Holmstead and Anderson 1998). Holmstead and Anderson also noted that *E. hooveri* populations were observed in fire breaks on NPR-1 that had been tilled the previous year. Further, a study on the effects of simulated oilfield disturbance and top soil salvage showed that, although surface disturbance negatively affected *E. hooveri* density for at least two years, *E. hooveri* recolonized disturbed plots within two growing seasons from seed naturally dispersed from adjacent habitat (Hinshaw *et al.* 1998).

Agricultural and Urban Development

Agricultural and urban development was also cited as a threat at the time of listing. Much of the San Joaquin Valley floor has been agriculturally developed, virtually to its fullest extent. Future agricultural development is uncertain and would require encroachment into