

threats. We will develop a proposal to designate critical habitat for the Sierra Nevada bighorn sheep as soon as feasible, considering our workload priorities.

Issue 3: Several commenters stated that we should require other Federal agencies to utilize their authorities to eliminate grazing permits on Federal land, and initiate formal consultation under section 7 of the Act.

Our Response: Upon emergency listing of the Sierra Nevada bighorn sheep, we notified all Federal agencies of this listing and their responsibilities under section 7 of the Act to consult with us on actions that may affect the Sierra Nevada bighorn sheep. During the emergency listing period, the FS consulted on their actions for permitting domestic sheep grazing, conducting prescribed burns to enhance bighorn sheep winter habitat, as well as removing wreckage from a crashed airplane in bighorn sheep habitat. With the final listing of this species, we will continue to expect Federal agencies to comply with section 7 of the Act and consult with us, and we will work with these Federal agencies, as well as State agencies, to reduce threats to the species.

Issue 4: One commenter requested that we clarify our policies and procedures on deterrence and removal of Sierra Nevada bighorn sheep predators, and that the final rule should include clear guidelines for how we will manage predators.

Our Response: In accordance with our Interagency Cooperative Policy on Recovery Plan Participation and Implementation Under the Endangered Species Act (July 1, 1994; 59 FR 34272), and our recovery guidelines, we will develop a recovery plan that is ecosystem-based, and clearly identify quantifiable recovery criteria and goals, and we will clearly identify those management actions necessary to achieve recovery of the species.

Issue 5: One commenter stated that we should conduct studies to examine biological effects of differential removal of mountain lions on the Sierra Nevada bighorn sheep.

Our Response: We agree that this should be an important goal of recovery efforts. In addition to specific management actions, specific research aimed at better understanding the species and ecosystem (*e.g.*, predator/prey relationships, population demography) will be identified in the recovery plan.

Issue 6: One commenter stated that Federal listing is no longer warranted because: 1) Assembly Bill (A. B.) 560 was recently signed into State law

providing the California Department of Fish and Game (CDFG) to remove or take mountain lions that are perceived to be a threat to the sheep; (2) CDFG was appropriated State funds for the recovery of the Sierra Nevada bighorn sheep; and (3) Federal agencies and the Los Angeles Department of Water and Power have demonstrated good faith efforts at reducing the likelihood of contact between domestic sheep and the Sierra Nevada bighorn sheep.

Our Response: We disagree. In evaluating the need for listing, we must look at a variety of factors affecting the species. This DPS of California bighorn sheep meets the definition of an endangered species based on several factors, only one of which is mountain lion predation. We agree that the passage and signing into law of A. B. 560 provides an additional ability to protect the Sierra Nevada bighorn sheep from mountain lions, as well as funds for recovery efforts. However, while this law will reduce the threat from mountain lion predation, it will not completely eliminate it. In addition, this legislation was enacted very recently, in September of 1999, and little time has passed to allow an evaluation of its effectiveness. We also agree that the CDFG was appropriated funds for the recovery of the species, however, these funds do not mean that all of the threats to the species have been removed such that listing is unnecessary. We also agree that the Federal agencies and Los Angeles Department of Water and Power have demonstrated good faith efforts at reducing the likelihood of contact between domestic and wild sheep. However, these efforts have come about due to the emergency listing and the subsequent requirement that Federal agencies must consult with us to ensure that their actions do not jeopardize the continued existence of the species.

Peer Review

In accordance with our July 1, 1994, Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities (59 FR 34270), we solicited the expert opinions of three independent specialists regarding pertinent scientific or commercial data and assumptions relating to bighorn sheep ecology, predator/prey relationships, and disease considered in the proposed rule (64 FR 19333). The purpose of such a review is to ensure that listing decisions are based on scientifically sound data, assumptions, and analyses, including input from appropriate experts. All three reviewers sent us a letter during the public comment period supporting the listing of the Sierra Nevada bighorn sheep. One

of the three provided additional documentation on disease threats to bighorn sheep from domestic sheep; another provided conservation and recovery recommendations. Information and suggestions provided by the reviewers were considered in developing this final rule, and incorporated where applicable.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, we have determined that the Sierra Nevada bighorn sheep DPS warrants classification as an endangered species. We followed procedures found at section 4 of the Act and regulations (50 CFR part 424) issued to implement the listing provisions of the Act. We determine a species to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors, and their application to the Sierra Nevada bighorn sheep DPS (*Ovis canadensis californiana*), are as follows:

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

Habitat throughout the historic range of Sierra Nevada bighorn sheep remains essentially intact; the habitat is neither fragmented nor degraded. However, by 1900, about half of the Sierra Nevada bighorn sheep populations were lost, most likely because of the introduction of diseases by domestic livestock, and illegal hunting (Advisory Group 1997). Beginning in 1979, animals from the Mount Baxter subpopulation were translocated to reestablish subpopulations in Lee Vining Canyon, Wheeler Crest, and Mount Langley in Mono and Inyo Counties in order to reestablish the species in historical habitat (Advisory Group 1997). Currently, Sierra Nevada bighorn sheep are limited to five subpopulations. Almost all of the historical and current habitat is administered by either the FS, BLM, or NPS, though there are some small parcels of inholdings within the species' range which are owned by the Los Angeles Department of Water and Power. Also, there are some patented mining claims in bighorn sheep habitat, but the total acreage is small.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

During the period of the California gold rush (starting about 1849), hunting to supply food for mining towns may have played a role in the decline of the population (Wehausen 1988). Besides