

*Comment 8:* One commenter remarked that a large flaw in the management strategy was that little or no baseline data were gathered on the abundance of the lizard or the condition of its habitat at the time the conservation agreement was put in place.

*Our Response:* While there were no data leading to population estimates, there were data gathered on flat-tailed horned lizard abundance using transects between 1979 and 1997, as discussed previously. In addition, the U.S. Navy (signatory agency) funded aerial photography of the MAs, and Tierra Data Systems subsequently analyzed the photographs to establish baseline levels of surface disturbance within MAs. We have since analyzed aerial photos taken in 2002 in an attempt to document disturbance on MAs using a methodology similar to that used by Tierra Data Systems in 1997. We then compared the 1997 disturbance information to that of 2002 to assess the change in amount of disturbance during that time period. The results of this comparative analysis can be found under our discussion of Factor A in the Summary of Factors Affecting the Species.

*Comment 9:* Several commenters have expressed concern that Border Patrol is not a signatory to the Conservation Agreement associated with the Management Strategy, and that its activities pose one of the main threats to the flat-tailed horned lizard.

*Our Response:* The Border Patrol declined the opportunity to sign the CA, but has encouraged education of new agents and continues to coordinate with signatory agencies to identify ways to reduce the impacts of Border Patrol activities. ICC members held several flat-tailed horned lizard orientation sessions with Border Patrol agents in the Yuma and El Centro sectors to reduce impacts to flat-tailed horned lizard habitat along the international border. These briefings were designed to familiarize Border Patrol agents with flat-tailed horned lizard natural history, habitat requirements, and the importance of minimizing vehicular traffic off of designated patrol routes/roads, and were well received by Border Patrol personnel. However, the Border Patrol's OHV activities and their impacts on flat-tailed horned lizard conservation have not been monitored and assessed.

*Comment 10:* One commenter remarked that while the MAs may be large enough to ensure viability of the species, because only approximately 35 percent of the current range of the flat-tailed horned lizard is included in the

MAs, the species will at some point cease to be a part of the ecological community.

*Our Response:* Assessing a species' role in an ecosystem is often a complex task. We believe that the flat-tailed horned lizard will continue to be a self-sustaining, functioning component of their ecosystem into the foreseeable future. The roughly 65 percent of the current range of the flat-tailed horned lizard found outside of the MAs, if not developed, may continue to serve as habitat for flat-tailed horned lizard populations.

Much of the habitat outside the MAs is managed by Federal agencies such as the BLM, or the State. These agencies have the capacity to manage their lands to conserve flat-tailed horned lizard habitat into the future. The Management Strategy is applied to lands owned or managed by Federal signatories outside MAs as well, albeit to a lesser degree than is done for lands inside MAs. BLM lands outside of designated open areas are managed for limited use under the California Desert Conservation Area Plan. The flat-tailed horned lizard is also a sensitive species in the California Desert Conservation Area Plan, which states the goal for such designated species is to manage the species and their habitats so that the potential for Federal or State listing is minimized. In addition, the BLM must adhere to directives such as Executive Orders 11644 and 11989, which established policies and provided for procedures to control and direct, among other things, the use of OHVs on Federal lands in order to protect the resources of those lands.

Any habitat within the current range of the flat-tailed horned lizard that is in the Anza-Borrego Desert State Park is managed favorably for the conservation of the flat-tailed horned lizard, because of the emphasis placed on resource protection and regulations limiting OHV activity to designated trails. Some of the California state land outside the MAs is in the Ocotillo Wells SVRA. The mission of the Off-Highway Motor Vehicle Recreation Division (CSDPR 2002) includes insuring "that quality recreational opportunities remain available for future generations by providing for education, conservation, and enforcement efforts that balance OHV recreation impact with programs that conserve and protect cultural and natural resources." In addition, projects on State lands must adhere to the California Environmental Quality Act (CEQA). CEQA requires a full public disclosure of the potential environmental impact of proposed projects. Moreover, there is no evidence

of private lands in flat-tailed horned lizard habitat being developed at a rate that would pose a significant threat to the species or its habitat, except in the Coachella Valley.

In the Coachella Valley, Regional Habitat Conservation Plans in preparation by the Coachella Valley Association of Governments and the Agua Caliente Band of Cahuilla Indians would conserve a yet-to-be-determined amount of flat-tailed horned lizard habitat, leaving the rest subject to development. However, these Habitat Conservation Plans are in progress and are subject to approval in the future; therefore, their completion and implementation cannot be relied upon for conservation purposes.

*Comment 11:* One commenter responded that BLM studies have shown that flat-tailed horned lizard populations have remained at levels found in the 1970s, regardless of the increased use of the desert by Border Patrol, OHVs, and other development.

*Our Response:* The BLM population trend data from the 1970s until 2001 used scat counts, which have been acknowledged to be unreliable indicators of lizard abundance (Muth and Fisher 1992, Rorabaugh 1994, Beauchamp *et al.* 1998) that should not be used to analyze population trends. Other problems associated with these studies have been stressed in our response to comment 6. In 2002, the BLM started to use the CMR methodology (described previously) incorporating detection probability to estimate population sizes on the MAs. This is a much more reliable and promising methodology that BLM will continue using in the future to monitor population trends. The increased use of the desert by Border Patrol, OHVs, and other development and the resulting effects on flat-tailed horned lizard populations has been difficult to monitor. Intuitively, we know these impacts cannot keep increasing without resulting in negative impacts to habitat. However, based on the best available information, we have determined that such possible negative impacts do not currently, or in the foreseeable future, pose a threat to the species. Land use thresholds resulting in population declines can only be derived through sound research and monitoring. See also discussion in Factor A below.

*Comment 12:* Several commenters stated that we should take economic impacts into consideration when we decide whether to list the flat-tailed horned lizard, because the areas surrounding the lizard's habitat are in danger of suffering economic harm