#### **DEPARTMENT OF THE INTERIOR**

#### Fish and Wildlife Service

50 CFR Part 17 RIN 1018-AG29

# Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Mexican Spotted Owl

AGENCY: Fish and Wildlife Service,

Interior.

**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat under the Endangered Species Act of 1973, as amended (Act), for the Mexican spotted owl (Strix occidentalis lucida) (owl). The owl inhabits canyon and forest habitats across a range that extends from southern Utah and Colorado, through Arizona, New Mexico, and west Texas, to the mountains of central Mexico. We designate approximately 3.5 million hectares (ha) (8.6 million acres (ac)) of critical habitat in Arizona, Colorado, New Mexico, and Utah, on Federal lands. Section 7 of the Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to destroy or adversely modify designated critical habitat. As required by section 4 of the Act, we considered economic and other relevant impacts prior to making a final decision on what areas to designate as critical habitat.

**DATES:** This final rule is effective September 30, 2004.

ADDRESSES: The complete supporting record for this rule is on file at the New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, New Mexico 87113. You may view the complete file for this rule, by appointment, during normal business hours at the above address.

#### FOR FURTHER INFORMATION CONTACT:

Susan MacMullin, New Mexico Ecological Services Field Office, at the above address; telephone 505/346–2525, facsimile 505/346–2542.

#### SUPPLEMENTARY INFORMATION:

#### Designation of Critical Habitat Provides Little Additional Protection to Species

In 30 years of implementing the Act, the Service has found that the designation of statutory critical habitat provides little additional protection to most listed species, while consuming significant amounts of available conservation resources. Additionally, we have also found that comparable conservation can be achieved by

implementation of laws and regulations obviating the need for critical habitat. The Service's present system for designating critical habitat has evolved since its original statutory prescription into a process that provides little real conservation benefit, is driven by litigation and the courts rather than biology, limits our ability to fully evaluate the science involved, consumes enormous agency resources, and imposes huge social and economic costs. The Service believes that additional agency discretion would allow our focus to return to those actions that provide the greatest benefit to the species most in need of protection.

#### Role of Critical Habitat in Actual Practice of Administering and Implementing the Act

While attention to and protection of habitat is paramount to successful conservation actions, we have consistently found that, in most circumstances, the designation of critical habitat is of little additional value for most listed species, yet it consumes large amounts of conservation resources. Sidle (1987) stated, "Because the Act can protect species with and without critical habitat designation, critical habitat designation may be redundant to the other consultation requirements of section 7." Currently, only 36 percent (445 species) of the 1,244 listed species in the U.S. under the jurisdiction of the Service have designated critical habitat. We address the habitat needs of all 1,244 listed species through conservation mechanisms such as listing, section 7 consultations, the section 4 recovery planning process, the section 9 protective prohibitions of unauthorized take, section 6 funding to the States, and the section 10 incidental take permit process. The Service believes it is these measures that may make the difference between extinction and survival for many species.

We note, however, that a recent 9th Circuit judicial opinion, Gifford Pinchot Task Force v. United States Fish and Wildlife Service, has invalidated the Service's regulation defining destruction or adverse modification of critical habitat. We are currently reviewing the decision to determine what effect it may have on the outcome of consultations pursuant to Section 7 of the Act.

# Procedural and Resource Difficulties in Designating Critical Habitat

We have been overwhelmed with lawsuits regarding designation of critical habitat, and we face a growing number of lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected the Service to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves the Service with little ability to prioritize its activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result, listing petition responses, the Service's own proposals to list critically imperiled species and final listing determinations on existing proposals are

all significantly delayed.

The accelerated schedules of court ordered designations have left the Service with almost no ability to provide for adequate public participation or to ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals due to the risks associated with noncompliance with judiciallyimposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, is very expensive, and in the final analysis provides relatively little additional protection to listed species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the analysis of the economic effects and the cost of requesting and responding to public comment, and in some cases the costs of compliance with the National Environmental Policy Act (NEPA), all are part of the cost of critical habitat designation. None of these costs result in any benefit to the species that is not already afforded by the protections of the Act enumerated earlier, and they directly reduce the funds available for direct and tangible conservation actions.

#### **Background**

It is our intent to discuss only those topics directly relevant to the designation of critical habitat in this final rule. For more information on the owl, refer to the final listing rule of March 16, 1993 (58 FR 14248), the two previous final critical habitat rules of June 6, 1995 (60 FR 29913) and February 1, 2001 (66 FR 8530), and the

Recovery Plan for the Mexican Spotted Owl (Recovery Plan) (Service 1995). However, some of this information is discussed in our analyses below, such as the description of the primary constituent elements.

Two primary reasons were cited for listing the owl as threatened in 1993: (1) Historical alteration of its habitat as the result of timber management practices, specifically the use of even-aged silviculture, and the threat of these practices continuing; and (2) the danger of catastrophic wildfire. The Recovery Plan for the owl outlines management actions that guide land management agencies in efforts to remove recognized threats and recover the owl. This critical habitat designation is based on recovery needs and guidelines identified in the Recovery Plan.

The Recovery Plan provides for three levels of habitat management: protected areas, restricted areas, and other forest and woodland types. We define protected areas to include all known owl sites (Protected Activity Centers [PACs]), and all areas in mixed-conifer or pine-oak types with slopes greater than 40 percent where timber harvest has not occurred in 20 years, and all legally and administratively reserved lands, such as Wilderness Areas or Research Natural Areas. Protected areas can also include steep-walled canyon habitat. Owl PACs are delineated around known owl sites. PACs include a minimum of 600 acres (ac) (243 hectares [ha]) that includes the best nesting and roosting (i.e., resting) habitat in the area. A PAC contains the nest site, a roost grove commonly used during the breeding season in the absence of a verified nest site, or the best nesting/roosting habitat if both nesting and roosting information are lacking and the most proximal and highly used foraging areas (Service 1995). Areas outside of PACs, including restricted areas, provide additional habitat appropriate for foraging. Restricted areas include mixed-conifer forest, pine-oak forest, and riparian areas where potential nesting and roosting habitat exist. Canyons may also contain restricted areas. The Recovery Plan provides less specific management guidelines for these areas. The Recovery Plan does not provide owl-specific guidelines for "other forest and woodland habitat.'

The owl occupies a broad geographical area, but does not occur uniformly throughout its range (Service 1995). Instead, the owl occurs in disjunct localities that correspond to isolated mountain systems and canyons. The owl is frequently associated with mature mixed-conifer, pine-oak, and

riparian forests (Ganey et al. 1988, Skaggs and Raitt 1988, Ganey and Balda 1989, Gutierrez and Rinkevich 1991, Willey 1993, Fletcher and Hollis 1994, Ganey and Dick 1995, Gutierrez et al. 1995, Seamans and Gutierrez, 1995, and Ward et al. 1995). Mature mixed-conifer forests are mostly composed of Douglasfir (Psuedotsuga menziesii), white fir (Abies concolor), limber pine (Pinus flexilis) or blue spruce (Picea pungens). Pine-oak forests are mostly composed of ponderosa pine (*Pinus ponderosa*) and Gambel oak (Quercus gambellii). Riparian forests are dominated by various species of broadleaved deciduous trees and shrubs (Service 1995). These riparian forests can be important linkages between otherwise isolated subpopulations of owls (Service

Owls are also found in canyon habitat dominated by vertical-walled rocky cliffs within complex watersheds including tributary side canyons. Rock walls include caves, ledges, and other areas that provide protected nest and roost sites (Gutierrez and Rinkevich 1991). Canyon habitat may include small isolated patches or stringers of forested vegetation including stands of mixed-conifer, ponderosa pine, pineoak, pinyon-juniper, and/or riparian vegetation in which owls regularly roost and forage. Owls are usually found in areas with some type of water source (i.e., perennial stream, creeks, and springs, ephemeral water, small pools from runoff, reservoir emissions) (Gutierrez and Rinkevich 1991). Even small sources of water such as small pools or puddles create humid conditions (Geiger 1965 in Gutierrez and Rinkevich 1991).

Owls are highly selective for roosting and nesting habitat, but forage in a wider array of habitats (Service 1995, Ganey and Balda 1994, and Seamans and Gutierrez 1995). Roosting and nesting habitat exhibit certain identifiable features, including large trees (those with a trunk diameter of 12 inches (in) (30.5 centimeters (cm)) or more (i.e. high tree basal area)), unevenaged tree stands, multi-storied canopy, a tree canopy creating shade over 40 percent or more of the ground (i.e. moderate to high canopy closure), and decadence in the form of downed logs and snags (standing dead trees) (Ganey and Balda 1989; Ganey and Dick 1995; Grubb et al. 1997; Tarango et al. 1997; Peery et al. 1999; Ganey et al. 2000; and Geo-Marine 2004). Canopy closure is typically greater than 40 percent (Ganey and Balda 1989; Fletcher 1990; Zwank et al. 1994; Grubb et al. 1997; Tanrango et al. 1997; Ganey et al. 1998; Young et

al. 1998; Ganey et al. 2000; and Geo-Marine 2004).

All nests reported by Zwank et al. (1994), Seamans and Gutierrez (1995), and Geo-Marine (2004) were in either mixed-conifer or Douglas-fir habitat. Roost and nest trees were the oldest and largest within tree stands (Ganey and Balda 1989, 1994, and, Seamans and Gutierrez 1995). Owls use areas that contain a number of large trees of different types including mixed-conifer and pine-oak with smaller trees under the canopy of the larger trees. These types of areas provide vertical structure and high plant species richness that are important to owls. (FO) (Ganey and Dick 1995; Seamans and Gutierrez 1995; and Ganey et al. 2003). Tarango et al. (1994) and Ganey et al. (2000) recorded seven or more tree species at roost sites. Therefore, we believe that mixed-conifer dominated by Douglas-fir, pine-oak, and riparian forests with high tree diversity are important to the owl.

Juvenile owls disperse in September and October, into a variety of habitats ranging from high-elevation forests to pinyon-juniper woodlands and riparian areas surrounded by desert grasslands (Gutierrez et al. 1995; Arsenault et al. 1997; and Willey and C. van Riper 2000). Observations of long-distance dispersal by juveniles provide evidence that they use widely spaced islands of suitable habitat which are connected at lower elevations by pinyon-juniper and riparian forests. As a result of these movement patterns, isolated populations may have genetic significance to the owl's conservation (Keitt et al. 1995; Guteirrez and Harrison 1996: Seamans et al. 1999: and Willey and C van Riper 2000). Owls have been observed moving across open low desert landscapes between islands of suitable breeding habitat (Arsenault et al. 1997; Ganey et al. 1998; and Willey 1998). Owl movements were also observed between "sky island" mountain ranges in New Mexico (Gutierrez et al. 1996). Therefore, contiguous stands or islands of suitable mixed-conifer, pine-oak, and riparian forests are important to the owl.

Owl foraging habitat includes a wide variety of forest conditions, canyon bottoms, cliff faces, tops of canyon rims, and riparian areas (Gutierrez and Rinkevich 1991 and Willey 1993). Ganey and Balda (1994) reported that owls foraged more frequently in unlogged forests containing unevenaged stands of Douglas-fir and white fir, with a strong component of ponderosa pine, than in managed forests. The primary owl prey species are woodrats (Neotoma spp.), peromyscid mice (Peromyscus spp.), and microtine voles

(Microtus spp.) (Service 1995; Young et al. 1997; Delaney et al. 1999; Seamans and Gutierrez 1999). Mexican woodrats (N. mexicana) are typically found in areas with considerable shrub or understory tree cover and high log volumes, or rocky outcrops associated with pinyon-juniper woodlands (Sureda and Morrison 1998 and Ward 2001). Sureda and Morrison (1998) and Ward (2001) found deer mice (P. maniculatus) to be more abundant and widespread in the 60 to 100 year old stands of mixedconifer forests. Mexican voles (M. mexicanus) are associated with mountain meadows and high herbaceous cover, primarily grasses; whereas, long-tailed voles (Mlongicaudus) are found in dry forest habitats with dense herbaceous cover, primarily forbs, many shrubs, and limited tree cover (Ward 2001). High levels of owl reproductive success and production may be due to prey abundance (Delanev et al. 1999). Ward and Block (1995) documented an increase in owl production when moderate to high levels of woodrats, peromyscid mice, and voles, were consumed. A diverse prey base is dependant on availability and quality of diverse habitats. Owl prey species need adequate levels of residual plant cover, understory cover, and high log volume. Therefore, a wide variety of forest and vegetative conditions are important to the owl and its prey.

Historic population size estimates and range of the owl are not known; however, present population size and distribution are thought to be similar (Service 1995). Ninety-one percent of known owls existing in the United States between 1990 and 1993 occurred on land administered by the FS, the primary administrator of lands supporting owls (Service 1995). Most owls have been found within the 11 National Forests of Arizona and New Mexico. It is unknown why Colorado and Utah support fewer owls.

In 2002, FS reported 987 PACs in Arizona and New Mexico (FS 2002). Additional surveys are likely to document more owls on FS and other lands. For example, Geo-Marine (2004) reported an additional 26 activity centers not previously designated by the Gila National Forest. Current information suggests there are 15 PACs in Colorado, 105 PACs in Utah, and 43 PACs on National Park Service (NPS) lands in Arizona, therefore, 1,176 PACs have been identified. Based on this number of owl sites, we believe that the total known owl numbers on Federal lands in southwestern United States range from 1,176 or 2,352, depending on whether one bird or a pair occupies the PAC.

Seamans et al. (1999) reported evidence of 10 percent or greater population declines in central Arizona and west-central New Mexico. Both populations experienced lower survival rates in the late 1990s. Gutierrez et al. (2003) concluded that with four additional years of data on these same populations, the decline observed by Seamans et al. (1999) on the Arizona study area was temporary, whereas the decline in New Mexico appeared to be continuing. Wide population fluctuations may be common for populations of owls (Gutierrez et al. 2003).

The final listing rule for the owl stated that the Southwestern Region of the FS managed timber primarily under a shelterwood harvest regime. A shelterwood cut is an even-aged regeneration cutting in which new tree seedlings are established under the partial shade of remnant seed trees. Thus, this harvest method produces even-aged stands rather than the uneven-aged, multi-layered stands most often used by the owl for nesting and roosting. In addition, at the time of the listing, the shelterwood silviculture system called for even-aged conditions in perpetuity. In 1996, the Southwest Region of the FS incorporated the Mexican Spotted Owl Recovery Plan guidelines as management direction into their Forest Plans. Thus, the management plans for the Southwestern Region of the FS include biological goals consistent with the Recovery Plan for the owl, thereby eliminating one of the primary threats to the owl on FS lands identified in the final listing rule.

Another primary reason cited for listing the owl as threatened in 1993 was the danger of catastrophic wildfire. Bond et al. (2002) described short-term effects of wildfires on spotted owls throughout the species' range. The authors reported that relatively large wildfires that burned nest and roost areas appeared to have little short-term (1-year) effect on survival, site fidelity, mate fidelity, and reproductive success of spotted owls, as rates were similar to estimates independent of fire. However, Elliot (1995), MacCracken et al. (1996), and Gaines et al. (1997) reported in some cases, large stand replacing wildfires appeared to have a negative effect on owls. Jenness (2000) reported low- to moderate-severity fires did not adversely affect owls. Bond et al. (2002) hypothesized that spotted owls may withstand the immediate, short-term effects of fire occurring at primarily low to moderate severities within their territory. The USDA Forest Service (FS)

reported similar results following the 2002 Lakes Fire in the Jemez Mountains of north-central New Mexico. Thus, prescribed burning and other forest management activities could be an effective tool to reduce fire risk and restore forests to natural conditions with perhaps short-term impacts to owls. For example, prescribed fire may prove useful in the creation or maintenance of habitat for owls or their prey (Gutierrez et al. 2003). Bond et al. (2002) cautioned that programmatic prescribed burning in owl territories could not be justified solely on their observations. Manipulative experiments are needed to evaluate effects of fire (or other forest management activities) on owls (Bond et al. 2002).

#### **Previous Federal Actions**

We published a final rule listing the owl as a threatened species on March 16, 1993 (58 FR 14248). For more information on the previous critical habitat designations and other actions related to the owl, refer to the final rule published in the Federal Register on February 1, 2001 (66 FR 8530). The final rule excluded all National Forest Service (FS) lands in Arizona and New Mexico and certain Tribal lands and designated critical habitat on approximately 1.9 million ha (4.6 million ac). On August 27, 2001, the Center for Biological Diversity filed a complaint challenging our decision to exclude these lands from the final designation of critical habitat for the owl.

On January 13, 2003, the United States District Court for the District of Arizona, (Center for Biological Diversity v. Norton, Civ. No. 01–409 TUC DCB), ruled that our final designation of critical habitat for the owl violated the Act, as well as the Administrative Procedure Act (5 U.S.C. 551 et seq.). The Court ordered us to repropose critical habitat within 3 months and finalize within 6 months from the date of the order. The Court also stated that the current critical habitat designation for the owl (i.e., that promulgated by 66 FR 8530 and codified at 50 CFR 17.95) shall remain in effect and be enforced until such time as we publish a new final designation of critical habitat for the owl. In a subsequent order, on February 18, 2003, the original deadlines were extended to allow until October 13, 2003, to repropose critical habitat for the owl and until April 13, 2004, to publish a new final designation of critical habitat. On October 10, 2003, the Court ruled that it would permit a limited extension and ordered the parties to meet and confer within 15 days of the order to prepare a reasonable timeline for compliance with the January 13, 2003, order. The Court also indicated that a notice reopening the comment period on the July 2000 proposal is appropriate. On October 30, 2003, the parties submitted a Joint Proposed Timeline and Memorandum of Dispute to the Court. On November 12, 2003, the Court adopted our proposed timeline and required us to submit a notice to the Federal Register on November 7, 2003, reopening the comment period on the July 21, 2000, proposed designation of critical habitat for the owl. The parties agreed that this notice would solicit comment regarding all of the lands proposed for designation that were not included in the 2001 final designation. The Court's order also required us to submit the final critical habitat designation to the Federal Register on August 20, 2004.

On November 18, 2003 (68 FR 65020), we reopened the public comment period on our July 21, 2000, proposed rule to designate critical habitat for the owl (65 FR 45336). The proposal included approximately 5.5 million hectares (ha) (13.5 million acres (ac)) in Arizona, Colorado, New Mexico, and Utah, mostly on Federal lands. On November 12, 2003, the United States District Court for the District of Arizona (Center for Biological Diversity v. Norton, Civ. No. 01-409 TUC DCB) ordered the Service to submit a final rule for designation of critical habitat for the owl to the Federal Register by August 20, 2004. On March 26, 2004, we published a notice of availability of the final draft economic analysis and the final draft environmental assessment and opened a 30-day comment period (69 FR 15777). During this comment period, we held one informational meeting in Las Cruces, New Mexico, to provide an opportunity to the public to ask us questions. We have prepared this designation pursuant to the November 12, 2003, Court order.

We contacted appropriate State and Federal agencies, Tribes, county governments, scientific organizations, and other interested parties and invited them to comment. As noted in the previous designation, we published newspaper notices inviting public comment and announcing the public hearings in newspapers (66 FR 8530). We also held six public hearings on the proposed rule: Sante Fe (August 14, 2000) and Las Cruces (August 15, 2000), New Mexico; Tucson (August 16, 2000) and Flagstaff (August 17, 2000), Arizona; Colorado Springs, Colorado (August 21, 2000); and Cedar City, Utah (August 23, 2000), and an informational meeting in Las Cruces (April 21, 2004), New Mexico. Transcripts of the hearings are available for inspection (see **ADDRESSES** section).

## **Summary of Comments and Recommendations**

As noted above, on November 18, 2003, we reopened the public comment period on the July 21, 2000, proposed rule. In the following section, we categorize and respond to applicable, substantive comments received during all four of the public comment periods.

We solicited seven independent expert ornithologists who are familiar with this species to peer review the proposed critical habitat designation. However, only two of the peer reviewers submitted comments. Both responding peer reviewers supported the proposal. We also received a total of 27 oral and 859 written comments (the majority of written comments were in the form of printed postcards). Of those oral comments, 10 supported critical habitat designation, 14 were opposed to designation, and 3 provided additional information but did not support or oppose the proposal. Of the written comments, 764 supported critical habitat designation, 65 were opposed to designation, and 30 were neutral but provided information. We reviewed all comments received for substantive issues and new data regarding critical habitat and the owl. We address all comments received during the comment periods and public hearing testimony in the following summary of issues. Comments of a similar nature are grouped into issues.

#### Issue 1: Biological Concerns

(1) Comment: The wording of the attributes of the primary constituent elements is not consistent with the definitions of forest cover types as described in the Recovery Plan, and there is a high potential for confusion over exactly which areas are included in the proposed designation. Do all of the primary constituent elements have to be present for the area to be considered critical habitat, or just one? The constituent elements described are vague (violating 50 CFR Sec. 424.12(c)) and should include the required greater detail defining what constitutes critical habitat. The boundaries are impossible to identify.

Our Response: As stated in the critical habitat designation section, the critical habitat designation is consistent with the Recovery Plan and includes areas within the mapped boundaries that are protected or restricted habitat and include one or more of the primary constituent elements. Protected habitat is areas where owls are known to occur or are likely to occur. Protected habitat

includes: (1) 600 acres around known owl sites within mixed conifer forests or (2) pine-oak forests with slopes greater than 40 percent and where timber harvest has not occurred in the past 20 years. Restricted habitat includes areas outside of protected habitat which owls utilize for foraging and dispersing. Restricted habitat includes mixed conifer forest, pine-oak forest and riparian habitat types.

We also clarified the definitions and

use of the terms protected and restricted habitat for the purposes of identifying critical habitat and the primary constituent elements of critical habitat in this rule (see "Primary Constituent Elements" section below). During the comment periods, we requested, but did not receive, any information regarding refinements to the primary constituent elements. However, given the concern expressed by commenters that the primary constituent elements were vague, we reanalyzed existing information and refined the primary constituent elements. This final rule describes the specific areas and primary constituent elements essential to the conservation of the owl based on the best available information.

We did receive information from a variety of sources to allow further analysis on whether particular critical habitat units, or portions thereof, contained or lacked one or more primary constituent elements. This information allowed us to refine our maps (see "Changes to Proposed Rule" section below). Further, while we welcome and encourage additional studies on the biological requirements of the owl, we believe the best available information has been used in defining the areas and primary constituent elements necessary for the species' conservation. Nevertheless, we recognize that not all of the developed land areas within the boundaries of the designation will contain the habitat components essential to the conservation of the species. For this reason, some developed lands are excluded by definition (see the "Regulation Promulgation" section below).

Critical habitat units are defined by geographic information system coverages and associated Universal Transverse Mercator (UTM) coordinates. This information can be obtained from our Web site at <a href="http://ifw2es.fws.gov/mso/">http://ifw2es.fws.gov/mso/</a> or by contacting our New Mexico Ecological Services Field Office (see ADDRESSES).

(2) *Comment:* Some areas proposed as critical habitat units contain a considerable amount of land that is not suitable for or occupied by owls, and

therefore, the areas should be mapped more accurately. Some commenters also questioned whether 13.5 million acres are needed for owls. Including areas not essential to the owl in designated critical habitat limits management options and diverts scarce resources from meaningful tasks, including efforts which will benefit the recovery of the owl, such as fire abatement projects.

Our Response: All of the areas that are designated as critical habitat contain primary constituent elements and are considered essential for the conservation the species. We clarified the primary constituent element descriptions to assist landowners and managers in identifying areas containing these elements. However, a lack of precise habitat location data and the massive scope of the designation did not allow us to conduct the fine-scale mapping necessary to physically exclude all of the areas that do not contain primary constituent elements of critical habitat. Nevertheless, we worked with a variety of stakeholders to refine the critical habitat boundaries in many areas (see "Summary of Changes From Proposed Rule" section below). Changes in this final rule that decrease the boundaries of many units are based on additional information received during the public comment period. Critical habitat is defined as those areas within the mapped boundaries. However, as described in the "Section 7 Consultation" section below, consultation would occur when the action agency determines that activities they sponsor, fund, or authorize may affect areas defined as protected or restricted habitat that contain one or more of the primary constituent

(3) Comment: Lack of forest management has resulted in successional and structural changes to forests throughout the range of owl. Designation and management of critical habitat will place an additional burden on land management agencies, further inhibiting their ability to prevent or suppress catastrophic wildfire, one of the greatest threats to the forest types this species inhabits. The risk and intensity of wildfire will increase. Therefore, designating critical habitat seems contradictory to the owl's recovery. A prohibition on forest management activities will also reduce the amount of water runoff from the watershed.

Our Response: We concur with the commenter that loss of habitat from catastrophic wildfire is one of the main threats to the owl. Consequently, management actions taken to reduce the risk and potential size of high-severity

wildfires are recognzed as a vital component of owl recovery (Service 1995). The economic analysis concluded that some projects proposed within the wildland urban interface (WUI) may be delayed because of the Recovery Plan recommendation that fuel treatments occur during the nonbreeding season (September 1 to February 28). For this and other reasons, we are excluding from this final designation of critical habitat for the owl lands defined by the 157 WUI projects and the Penasco WUI project area identified by the FS as the highest priority for fuel treatments because they are "at imminent risk of catastrophic wildlife." These 157 WUI projects were evaluated by us in our programmatic biological opinion and the Penasco WUI project area was evaluated by us under a separate opinion (Service 2001 and Service 2002) (see "Exclusions under Section 4(b)(2) of Act" section). For the areas within the designation that may also be considered for fuel treatment projects, as described in the economic analysis and environmental assessment, critical habitat designation may delay some projects, but has not and is not anticipated to prevent actions that alleviate the risk of wildfire, nor will it have an effect on suppression activities because the Recovery Plan supports and provides guidance on fuel reduction activities. In addition, we also have developed alternative approaches to streamlining section 7 consultation for hazardous fuels treatment projects (Service 2002), including a consideration of the benefits of these activities to the owl and its habitat (Service 2002a).

The maintenance of mature forest attributes in mixed conifer and pine-oak habitat types over a portion of the landscape and in areas that support existing owl territories is important to the recovery of the owl; however, critical habitat designation does not emphasize the creation of these features where they do not currently exist. It also does not preclude the proactive treatments necessary to reduce the risk of catastrophic fire. Clearly, the loss of owl habitat by catastrophic fire is counter to the intended benefits of critical habitat designation.

Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Activities that may result in the destruction or adverse modification of critical habitat may also jeopardize the continued existence of the species. Due to the reliance on guidelines from the

Recovery Plan for section 7 consultation standards, it is anticipated that the designation of critical habitat likely will not require any additional restrictions as a result of section 7 consultations, including projects designed to reduce the risk of wildfire (see "Effects of Critical Habitat Designation" section below). Furthermore, we expect that some activities may be considered to be of benefit to owl habitat and, therefore, would not be expected to adversely modify critical habitat or place an additional burden on land management agencies. Examples of activities that could benefit critical habitat may include some protective measures such as fire suppression, prescribed burning, brush control, snag creation, and certain silvicultural activities such as thinning. We note that fires are a natural part of the fire-adapted ecosystem in which the owl has evolved. The owl Recovery Team and numerous others have recognized the importance of allowing fire to return to southwestern forests, and the policy of widespread fire suppression is well documented as a source of declining forest health.

We agree that many plant communities have undergone successional and structural changes as a result of past and current management practices. These practices include, to varying degrees, the combined effects of long-term and widespread fire suppression, reduction in surface fuels, rates of tree overstory removal and regeneration treatments on cycles shorter than those found in natural disturbance regimes, inadequate control of tree densities responding to fire suppression and tree harvest, and in xeric forest types, decreases in the proportion of the landscape in stands composed of more fire resistant largediameter trees. We also agree that vegetative structural and landscape changes may require proactive management to restore an appropriate distribution of age classes, control regeneration densities, and reintroduce some measure of natural disturbance processes such as fire events. This may include prescribed fire and thinning treatments, restoration of the frequency and spatial extent of such disturbances as regeneration treatments, and implementation of prescribed natural fire management plans where feasible. We consider use of such treatments to be compatible with the ecosystem management of habitat mosaics and the best way to reduce the threats of catastrophic wildfire. We will fully support land management agencies in addressing the management of fire to

protect and enhance natural resources under their stewardship.

(4) Comment: The designation of critical habitat for the owl will conflict with the management objectives of other animal and plant species and ecosystem management. The designation of critical habitat will surely have an impact on many other species of wildlife.

Our Response: Critical habitat management primarily focuses on the maintenance of habitat features in mixed conifer (forest stands with the overstory generally composed of white fir, Douglas fir, ponderosa pine, limber pine, blue spruce, white pine, and quaking aspen) and pine-oak habitat types (forest stands that generally exhibit a ponderosa pine or Chihuahua pine overstory and a Gamble's oak understory) that support owls, and the maintenance of good riparian forests (Service 1995). It does not require the creation of these features where they do not currently exist. The methods conserve the desired measure of diversity vary, but are designed to maintain existing mature/old forest characteristics while allowing some degree of timber harvest and management of other objectives such as tree density control and prescribed fire. Older forests provide favorable environments for diverse assemblages of plants and animals. The maintenance of the primary constituent elements of critical habitat will provide and enhance biological diversity. Therefore, critical habitat management does not preclude managing for other objectives or other species. In addition, critical habitat does not preclude adaptive management or the incorporation of new information on the interaction between natural disturbance events and forest ecology. We continue to support sound ecosystem management and the maintenance of biodiversity.

As outlined in our final environmental assessment, in areas that contain owl habitat, native fish, wildlife, and plants may directly or indirectly benefit as a result of ecosystem protections provided through the conservation of the owl and the associated requirements of section 7 of the Act

(5) *Comment:* How does the critical habitat designation correspond to the reasons why the owl is listed?

Our Response: The two primary reasons for listing the owl as threatened were historical alteration of its habitat as the result of timber management practices, and the threat of these practices continuing; and the risk of catastrophic wildfire (58 FR 14248). The Recovery Plan outlines management actions that land managers should

undertake to remove recognized threats and recover the owl. This critical habitat designation is consistent with the Recovery Plan's goals, and therefore contributes to the reduction in the threats that necessitated listing the owl.

(6) Comment: Your list of constituent elements and condemnation of evenaged silviculture suggests that the constituent elements must occur on every acre of the 13.5 million acres. There appears to be an attempt to idealize and maximize owl populations over a very large area. The owl is flexible, adaptable, and capable of doing well and surviving with less.

Our Response: The determination of primary constituent elements and designation of critical habitat is consistent with the purposes of critical habitat provisions in the Act and the Recovery Plan's goals. In the Recovery Plan, we outline steps necessary to remove the owl from the list of threatened species. The Recovery Plan recognizes that owls nest, roost, forage, and disperse in a diverse array of biotic communities. The Recovery Plan provides realistic goals for the recovery of the species (including a significant increase in owl population numbers), and these goals are flexible in that they provide local land managers discretion to make site-specific decisions, including silviculture management. Nevertheless, critical habitat does not create the requirement to create primary constituent elements outside of where they currently occur.

(7) Comment: Designation of critical habitat is not needed to conserve the owl, because there is information that shows the spotted owl is doing very well; a year ago you were in the process of delisting the spotted owl, because it was doing well. What happened to that activity?

Our Response: We never proposed nor began the process of delisting the owl. In fact, some populations of owl may be declining (Seamans et al. 1999). Guitierrez (2003) found that the owl population studied by Seamans et al. (1999) in Arizona may be stable, but the New Mexico population in the same study was likely declining. On September 23, 1993, and April 1, 1994, we announced separate 90-day findings on two petitions to remove the owl from the list of endangered and threatened wildlife (FR 58 49467 and FR 59 15361, respectively). We found that the petitions did not present substantial scientific or commercial information indicating that delisting the owl was warranted. However, should sufficient information become available to us that warrants a status review or a change in

status, we will undertake such efforts as appropriate.

(8) Comment: The designation of critical habitat will not provide any additional conservation benefit to the owl, which is already protected under section 7. Several commenters also questioned whether the designation of critical habitat will improve conservation of the owl because the current Recovery Plan is being

implemented.

*Our Response:* We agree that designation of critical habitat provides little to no additional regulatory benefit in areas already managed compatibly with owl recovery (see "Designation of Critical Habitat Provides Little Additional Protection to Species"). The Recovery Plan for the owl was finalized in December 1995 (Service 1995). This plan recommends recovery goals, strategies for varying levels of habitat protection, population and habitat monitoring, a research program to better understand the biology of the owl, and implementation procedures. In addition, we have continued working with the owl Recovery Team since the plan was finalized. We believe this critical habitat designation is consistent with the Recovery Plan and recommendations of those team members. Nevertheless, many land managers are currently following the Recovery Plan that provides guidance for conserving habitat of the owl. Thus, the designation may provide little regulatory benefit to the species.

(9) Comment: One commenter stated that not enough information is known about the total habitat requirements of the species to define critical habitat. Further study of population trends, habitat requirements, and comprehensive monitoring are necessary to promote long-term conservation and recovery. Other commenters suggested that the designation is based upon flawed and outdated information, and that we should have relied upon recent models

that predict owl habitat. Our Response: Section 4(b) of the Act states "The Secretary shall make determinations [of critical habitat] \* \* \* solely on the basis of the best scientific and commercial data available \* \* \*" We considered the best scientific information available to us at this time, as required by the Act. This designation is based upon a considerable body of information on the biology of the owl, as well as effects from land-use practices on their continued existence. Based upon newly available information, coordination with land managers and stakeholders, and input received during the public

comment period, we have made revisions to the areas designated as critical habitat, which are reflected in this final rule (see "Summary of Changes From the Proposed Rule" section). We are not aware of any reliable information that is currently available to us that was not considered in this designation process. This final determination constitutes our best assessment of areas needed for the conservation of the species. Much remains to be learned about this species; should credible, new information become available which contradicts this designation, we will reevaluate our analysis and, if appropriate, propose to modify this critical habitat designation, depending on available funding and staffing. We must make this determination on the basis of the information available at this time, and we may not delay our decision until more information about the species and its habitat are available (Southwest Center for Biological Diversity v. Babbitt, 215 F.3d 58 (D.C. Cir. 2000)). Finally, we are also in the process of revising the current Recovery Plan. The Recovery Team anticipates that the revised Recovery Plan will be available during late 2005 (S. Rinkevich, Service, pers. comm., 2004). The revision will likely include much of the same guidance as the current Recovery Plan, but will also include recent information to further assist land managers in reducing the threats to the owl.

(10) Comment: In Colorado, the owl has been found only in canyon habitats and on rocky outcrops. We suggest that narrow, steep-walled canvons (greater than 40 percent slopes) or prominent rocky outcrops less than 9,500 feet (2,896 meters) in elevation be considered constituent elements for critical habitat in Colorado. Much of the area currently proposed as critical habitat does not contain such habitats and does not contribute to the conservation of the species. Pinyonjuniper habitat in Colorado is used by owls for roosting, foraging, and wintering. The final designation should include these areas, especially on Fort Carson

Our Response: Designated critical habitat for the owl in Colorado already encompasses the commenter's suggestion. For example, protected habitat includes areas with slopes greater than 40 percent. Additionally, one of the primary constituent elements for canyon habitat includes canyon walls containing crevices, ledges, or caves. The critical habitat in Colorado is essential for the conservation of the species because it provides landscape

connectivity within and among critical habitat units.

The designation only includes lands within protected or restricted areas and includes mixed conifer, pine-oak, and riparian habitat types as they are defined in the Recovery Plan (Service 1995). As noted above, we could not enlarge the final designation to add pinyon-juniper habitat that was not included in the proposed rule. Pinyonjuniper habitat falls within other forest and woodland types in the Recovery Plan (Service 1995). It should be noted that the Recovery Plan does not provide specific management guidelines for other forest and woodland types. However, the lack of specific guidelines does not imply that we regard these types as unimportant for the recovery of the owl. These areas would continue to be subject to section 7 consultation requirements if they are used by owls and a project has the potential to affect the species or its habitat.

(11) Comment: The "Utah" owls are a sub-species with unique genetic variations that may require different habitat and other life requirements.

Our Response: The Service recognizes that owls use both canyon and forest habitats. This is why the primary constituent elements are provided for both forests and canyons. However, we are not aware of any information in the scientific literature or provided by biologists researching the owl to indicate that owls in Utah are genetically different from Strix occidentalis lucida.

(12) Comment: The Carson National Forest contains high-elevation areas within proposed critical habitat that are not occupied by the owl. These areas should be refined or excluded from the designation.

Our Response: Based upon the most recent PAC information, we have refined the final designation to exclude all of the proposed critical habitat units that are not essential to the conservation of the species. This included a large portion of the Carson National Forest where owl surveys have been conducted through 400,000 acres (161,874 hectares) since 1988 and have yet to find an owl outside of the Jicarilla Ranger District (FS 2004). We are designating two critical habitat units on the Jicarilla Ranger District based upon public comments and the best scientific and commercial information. Nevertheless, these two critical habitat units contain WUI project areas that are not included in the designation, because these project areas are specifically excluded due to human health and safety concerns from the imminent risk of catastrophic wildfire (see "Exclusions Under Section 4(b)(2)" and "Regulation Promulgation" sections).

This designation of critical habitat does not mean that habitat outside the designation is unimportant or may not be required for recovery. For example, we recognize that the Carson National Forest is part of the southern Rocky Mountains, New Mexico Recovery Unit (RU) and contains protected and restricted habitat. Although many hypotheses have been suggested as to why the majority of this National Forest is apparently unoccupied (e.g., high elevation, climatic conditions, etc.), we are unable to draw firm conclusions. A great deal of effort has been expended by owl biologists to survey potential habitat in this area and have only documented owls on the Jicarilla Ranger District. Other historic owl records have been difficult to verify, and are currently considered by the FS and others to be "questionable" (FS 2004). The most serious threat to the owl in this portion of its range is wildfire, which would be unaffected by a designation of critical habitat (Service 1995). Consequently, we cannot conclude that, outside of the two units we are designating as critical habitat, the remaining proposed critical habitat on the Carson is essential to the conservation of the owl because we have not found PACs in these areas.

Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action.

Issue 2: Procedural and Legal Compliance

(13) Comment: The designation of critical habitat will place an additional burden on land management agencies above and beyond what the listing of the species would require. The number of section 7 consultations will increase; large areas where no owls are known to occur will now be subject to section 7 consultation and will result in a waste of time and money by the affected agencies. Many Federal agencies have been making a "no effect" call within unoccupied suitable habitat. Now, with critical habitat there will be "may effect" determinations, and section 7 consultation will be required if any of the constituent elements are present.

Our Response: If a Federal agency funds, authorizes, or carries out an action that may affect either the owl or its critical habitat, the Act requires that the agency consult with us under section 7 of the Act. For a project to affect critical habitat, it must affect the primary constituent elements, which are defined in the regulation section in this final rule.

Our view is and has been that any Federal action that affects owl habitat as defined by the Recovery Plan should be considered a situation that "may affect" the owl and should undergo section 7 consultation (Service 1996). This is true whether or not critical habitat is designated, even when the particular project site within the larger geographical area occupied by the species is not known to be currently occupied by an individual owl (e.g., projects on the Carson National Forest). All areas designated as critical habitat are essential to the conservation of the species, so Federal actions affecting primary constituent elements of the owl should undergo consultation. As in the past, the Federal action agency will continue to make the determination as to whether their project may affect a species or designated critical habitat.

(14) Comment: Many commenters expressed concern that the Recovery Plan is not being implemented, and that federally funded or authorized activities (i.e., logging, grazing, dam construction, etc.) within owl habitat are not consistent with recovery for the species and/or are not undergoing section 7 consultation for potential impacts to the owl.

Our Response: We are not aware of instances where action agencies have not consulted with us on actions that may affect the species or its habitat. We have consulted with Federal agencies on numerous projects since we issued the Recovery Plan. The Recovery Plan recognizes, as do we, that agencies must make management decisions for multiple use objectives. Thus, agencies consult with us under section 7 when they propose actions that are both consistent and inconsistent with Recovery Plan recommendations (i.e., when they propose actions that may affect the species or critical habitat) (Service 1996). However, there have only been two consultations to date that have concluded that a proposed action is likely to jeopardize the continued existence of the owl (i.e., the November 25, 1996, biological opinion on the existing forest plans and the June 13, 1996, biological opinion on the releases of site specific information).

(15) Comment: One commenter believes that the designation of critical habitat for the owl conflicts with the Federal Land Policy and Management Act of 1976, the Mining and Minerals Policy Act of 1970, the National

Materials and Minerals Policy, Research, and Development Act of 1980, and other State and county policies and plans within the four States.

Our Response: We read through the comments and information provided concerning the various acts and policies; however, the commenter failed to adequately explain the rationale for why they believe critical habitat designation conflicts with the above Federal laws and policies or other State and County policies and plans. We are unaware of any conflicts with the cited laws, policies, and plans. However, we do recognize that significant conservation can be achieved by implementing these laws, which may obviate the need to designate critical habitat, especially when these laws are providing such conservation benefits.

(16) Comment: The FS and Bureau of Land Management (BLM) provided Geographic Information System (GIS) coverages and requested that we revise or exclude critical habitat units based upon lack of protected or restricted habitat and primary constituent elements. The suggested revisions are based upon digital elevation models, elevation, vegetation, owl surveys, and land management designations (i.e., wilderness study areas). There was an expressed concern that much of the area within the proposed critical habitat boundaries does not contain one or more primary constituent elements to meet the definition of critical habitat and should not be included.

Our Response: We considered the information provided by the commenters and designated only those lands that were determined to be essential for the conservation of the owl (see "Summary of Changes From the Proposed Rule" section).

Critical habitat is defined as the areas within the mapped boundaries. However, as described in the "Section 7 Consultation" section below, consultation would occur when the action agency determines that activities they sponsor, fund, or authorize may affect areas defined as protected or restricted habitat that contain one or more of the primary constituent elements.

(17) Comment: Some commenters expressed concern that there are areas containing owls, but these were not within the critical habitat boundaries. Additional areas not identified in the proposed rule should be designated critical habitat. The Service should designate additional sites in Colorado, specifically Mesa Verde National Park, Boulder Mountain Parks, Red Rocks, Glenwood Canyon, and other deep,

narrow canyon systems throughout the State.

Our Response: The critical habitat designation did not include some areas that are known to have widely scattered owl sites, low population densities, and/or unknown or marginal habitat quality, which are not considered to be essential to this species' conservation. Section 3(5) of the Act state that, "Except in those certain circumstances \* \* \* critical habitat shall not include the entire geographical area which can be ocupied by a species, rather only those areas essential for the conservation of the species. Additionally, section 4(b)(4) of the Act and the Administrative Procedure Act (5 U.S.C. 551 et seq.) requires that areas designated as critical habitat must first be proposed as such. Thus, we cannot make additions in this final rule to include areas that were not included in the proposed rule. Designation of such areas would require a new or revised proposal and subsequent final rule. (18) Comment: Why are areas

included in the designation that are not presently occupied by the owl?

Our Response: The areas designated are within the geographical area occupied by the species because the critical habitat designation is devised around the majority of known owl nesting sites. The designation includes both protected and restricted habitat, as defined in the Recovery Plan, and contains the primary constituent elements as identified herein. We consider protected areas to be occupied on a more permanent basis and restricted areas are considered to be temporally occupied. We have included these areas in the designation based on information contained within the Recovery Plan that finds them to be essential to the conservation of the species because they currently possess the essential habitat requirements for nesting, roosting, foraging, and dispersal.

In section 3(5)(A) of the Act, critical habitat is defined as "(i) the specific areas within the geographical area occupied by the species on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside of the geographical area occupied by the species \* \* \* [that] are essential to the conservation of the species". Pursuant to the Act and our implementing regulations, we must determine whether the designation of critical habitat for a given species is prudent and determinable. If it is both, then we

conduct a focused analysis to determine and delineate the specific areas, within the geographical area occupied by the species that contain the physical and biological features essential to the conservation of the species. Once these areas are defined, a determination is then made as to whether additional specific areas outside of the geographical area occupied by the species are required for the conservation of the species. In conducting our analyses, we use the best scientific and commercial data available. Our analyses take into consideration specific parameters including (1) space for individual and population growth and normal behavior; (2) food, water, air, light, minerals or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproductions, rearing of offspring, germination or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historical or ecological distribution of the species (50 CFR 424.12(b)). Consequently, we do take into consideration all available information concerning a species, its habitat, ecology, and threats and conduct an analysis to determine which specific areas are essential to its conservation. This final designation of critical habitat for the owl has been developed using the approach discussed above and constitutes our best assessment of the areas essential to its conservation.

(19) Comment: If land has dual ownership of private and Federal, is it critical habitat? The land in question is under private ownership and the mineral rights are owned by the BLM.

Our Response: The surface ownership is what would contain the primary constituent elements of critical habitat. Because the surface ownership is private and we are not including private land in this designation (see "Criteria for Identifying Critical Habitat Units" section below for further explaination), we would not consider the lands to be designated critical habitat. However, if a Federal agency (e.g., BLM) funds, authorizes, or carries out an action (e.g., mineral extraction) that may affect the owl or its habitat, the Act requires that the agency consult with us under section 7 of the Act. This is required whether or not critical habitat is designated for a listed species.

(20) Comment: Fort Carson, Colorado, provided information during the comment period that indicated the owl is not known to nest on the military installation and the species is a rare winter visitor. Protected or restricted habitat is also not known to exist on Fort Carson. In 2003, the Service

reviewed and approved Fort Carson's final Integrated Natural Resources Management Plan (INRMP) that includes specific guidelines and protection measures for the owl. The INRMP includes measures to provide year-round containment and suppression of wildland fire and the establishment of a protective buffer zone around each roost tree. Other comments indicated that owls frequently use Fort Carson in the winter and the installation is an important winter foraging and roosting area.

Our Response: Fort Carson completed their final INRMP on April 8, 2003, which includes specific guidelines for protection and management for the owl. Thus, we are excluding this area from the final designation of critical habiat for the owl pursuant to section 4(a)(3) of

(21) Comment: How will the exclusion of certain lands (e.g., State, private, Tribal) affect recovery and delisting of the owl?

Our Response: In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, we are required to base critical habitat designation on the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements) that are essential to conservation of the species and that may require special management considerations or protection. We designated critical habitat for those lands we determined are essential to conservation of the owl. We did not include certain lands (e.g., State, private, and Tribal) because we determined these areas are not essential to the conservation of the owl or because the benefits of excluding the specific areas pursuant to section 4(b)(2) of the Act outweigh the benefits of their inclusion. Because the majority of owls are known from Federal land, the exclusion of State, private, and Tribal lands in the designation of critical habitat for the owl will not affect the recovery and future delisting of the species. Whether or not a species has designated critical habitat, it is protected both from any actions resulting in an unlawful take and from Federal actions that could jeopardize the continued existence of the species. Moreover, our environmental assessment of this designation pursuant to NEPA found that our existing policy requires consultation on actions in suitable habitat outside of PACs regardless of critical habitat designation. In practice, critical habitat designation is unlikely to trigger section 7 consultations that would not occur in its absence. This is because Federal

agencies are following the Recovery Plan and consulting with us on impacts to both protected and restricted habitat.

(22) *Comment:* The areas proposed as critical habitat in Colorado make up 4.2 percent of the total proposed critical habitat. Much of the areas proposed in Colorado do not contain the primary constituent elements for critical habitat for the owl. It is difficult to understand how the small amount of habitat proposed in Colorado is essential for the survival and recovery of the owl. The current tree stocking levels, species composition, and stand structure of areas proposed as critical habitat in Colorado do not currently, nor are they likely to, meet the definition of restricted "threshold" habitat as defined in the Recovery Plan.

Our Response: We carefully reviewed and considered the information provided by the commenter concerning this issue. We agree that not all of the land within the critical habitat boundaries in Colorado or elsewhere supports protected or restricted habitat. To the extent possible, we attempted to exclude from final critical habitat those area that did not support the primary constituent elements for the owl or protected or restricted habtiat. However, we may not have been able to exclude all such areas from the final designation. Federal actions limited to these areas would not be reviewed under section 7, unless they affect the species and/or the primary constituent elements in adjacent critical habitat.

(23) Comment: The statement that continued grazing in upland habitat will not adversely affect or modify critical habitat is unsubstantiated and is counter to FS information that suggests grazing may affect owl prey and increase the susceptibility of owl habitat to fire.

Our Response: Although the effects of livestock and wild ungulate grazing on the habitat of owl prey species is a complex issue, there exists some knowledge regarding the effects of grazing and small mammals frequently consumed by owls and plant communities inhabited by the owl's prey (Ward and Block 1995; Ward 2001). The Recovery Plan summarizes the effects of grazing to owls in four broad categories: (1) Altered prev availability; (2) altered susceptibility to fire; (3) degradation of riparian plant communities; and (4) impaired ability of plant communities to develop into owl habitat. In general, predicting the magnitude of grazing effects on owls and their habitats requires a better understanding of the relationship between owl habitat and grazing (Service 1995a). Nevertheless, grazing in

upland habitat has the potential to adversely impact the owl.

It is also important to note that grazing usually does not occur within mixed conifer habitat because livestock generally remain within meadows or riparian areas. In this example, the primary constituent elements within mixed conifer habitat are not likely to be substantially or significantly affected by grazing. Thus, the impacts to nest/roost and other mixed conifer habitat within PACs will likely be insignificant and discountable.

When grazing activities involve Federal funding, a Federal permit, or other Federal action, consultation is required when such activities have the potential to adversely affect the owl or its critical habitat. The consultation will analyze and determine to what degree the species is impacted by the proposed action.

(24) Comment: What is being done by Federal agencies to minimize the impact from wild ungulates on owl habitat (e.g.,

elk grazing)?

Our Response: The Federal agencies use their discretion when selecting specific management strategies and activities. Consequently, a variety of techniques could be applied to manage range condition targets. The specifics are beyond the scope of this designation. In general, allowable forage use guidance for given range conditions and management strategies are typically developed through site specific NEPA analysis for individual allotments, and must be consistent with the applicable FS's Forest Plan Resource, BLM's Resource Management Plan, or other Agencies' management direction at the time they are issued (e.g., FS see 36 CFR 219.10). Moreover, it is our understanding that the Federal action agency must consider the effect from all grazing activities (i.e., livestock and wild ungulates) when they authorize grazing permits and manage and protect long-term range conditions consistent with their own range management regulations. Nevertheless, it is the responsibility of State game and fish agencies to manage elk. As noted throughout this final rule, when a Federal agency funds, authorizes, or carries out an action that may affect either the owl or its critical habitat, the Act requires that the agency consult with us under section 7.

(25) Comment: A premise for the proposed rule is that the Service was ordered by the court on March 13, 2000, to designate critical habitat by January 15, 2001. The court may not order critical habitat to be designated. Rather, the court may order the Service to make a decision on whether to designate

critical habitat. The designation of critical habitat is an action that is ultimately discretionary, and the Service must apply the criteria in the Act and its regulations to decide whether to designate critical habitat. Thus, the Service should seek correction of that Court order and reconsider whether and to what extent critical habitat should be designated.

Our Response: The March 2000 court decision ordered us to repropose critical habitat for the owl and then publish a new final designation. Because we had already previously proposed and finalized critical habitat for the owl (60 FR 29914, June 6, 1995), we already determined that critical habitat pursuant to the Act and implementing regulations was both prudent and determinable. Thus, the court would be within its jurisdiction to order us to repropose and publish a new final rule.

(26) Comment: Are lands within a National Park that are already protected, but proposed as wilderness areas, considered critical habitat?

Our Response: Yes, we consider lands that are within critical habitat boundaries as critical habitat, regardless of whether they are currently designated as wilderness.

(27) *Comment:* Military aircraft overflights and ballistic missile testing activities have no adverse effect on owl critical habitat.

Our Response: We believe that lowlevel military aircraft overflights could potentially affect the owl. However, the designation of critical habitat will not impede the ability of military aircraft to conduct overflights nor to conduct ballistic missile testing activities. Activities such as these will not require additional section 7 consultation beyond compliance related to the species. To clarify, proposed low-level military aircraft overflights that could potentially affect the owl will be reviewed during the consultation process for the species listing as they have in the past.

(28) Comment: Explain the rationale for excluding, by definition, State and private lands from the proposed designation; there are documented nesting sites for the owl in Colorado located on State-leased lands; State and private lands should be included; the majority of owl locations are from Federal lands because no one is doing surveys on private and State lands.

Our Response: Although we are aware of some owl locations on State and private lands, the majority of owl locations are from Federal and Tribal lands. Thus, we believe that owl conservation can best be achieved by management of Federal and Tribal

lands, and determined that State and private lands are not essential to the species' recovery. We have therefore, not included State and private lands in this designation of critical habitat for the owl.

(29) Comment: Several commenters asked whether projects that have obtained a biological opinion pursuant to section 7 of the Act would be required to reinitiate consultation to address the designation of critical habitat. Will the FS have to reinitiate consultation on their Forest Plans when critical habitat is designated?

Our Response: In the case of projects that have undergone section 7 consultation and where that consultation did not address potential destruction or adverse modification of critical habitat for the owl, reinitiation of section 7 consultation may be required. The only exception is the consultation covering the 157 WUI project areas and the Penasco WUI project area that are not included in the designation, because the lands covered by these projects are specifically excluded due to human health and safety concerns from the imminent risk of catastrophic wildfire (see Exclusions Under Section 4(b)(2) and Regulations sections). As described in the 4(b)(8) discussion below, we expect that projects that do not jeopardize the continued existence of the owl will not likely destroy or adversely modify its critical habitat and no additional modification to the project would be required because the projects will be evaluated under the guidelines set by the Recovery Plan for both jeopardy to the species and adverse modification of critical habitat. This has been the case for those projects where the FS has completed conferencing on critical habitat (see Effect of Critical Habitat Designation section below).

(30) Comment: The El Paso Natural Gas Company questioned whether the designation of critical habitat will require consultation for routine maintenance and operations. For example, if a linear pipeline project crosses State, private, and FS lands, will

consultation be required?

Our Response: Federal agencies are already required to consult with us on activities with a Federal nexus (i.e., when a Federal agency is funding, permitting, or in some way authorizing a project) when their activities may affect the species. As discussed in response to Comment 29 above, and elsewhere in this rule, we do not anticipate additional requirements beyond those required by listing the owl as threatened. For routine maintenance and operations of public utilities or if a

linear pipeline project crosses State, private, and FS lands and does not affect the species or critical habitat, consultation will not be required. If maintenance activities would affect primary constituent elements of critical habitat and there is a Federal nexus, then section 7 consultation will be necessary.

(31) Comment: Several commenters questioned what the phrase, "may require special management considerations" means, and asked what kind of management activities might be

implemented?

Our Response: Critical habitat is defined in section 3(5)(A) of the Act as "(i) the specific areas within the geographical area occupied by the species, at the time it is listed \* \* which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection\* \* \*" While the Act or our implementing regulations do not define the phrase "may require special management or protection," we believe that in this final rule we have identified in general terms the types of special management and protection that the physical or biological features (i.e., primary constituent elements) for the owl may require (refer to Special Management Considerations or Protections section). Additionally, the Recovery Plan includes guidelines that we believe also address special management considerations.

(32) Comment: Maps and descriptions provided are vague and violate the Act

and 50 CFR Sec. 424.12(c).

Our Response: The maps published in the **Federal Register** are for illustration purposes only, and the amount of detail that can be provided on the maps published in the Federal Register is limited. While the legal descriptions published with the maps are specific and detailed to the areas being designated, we recognize that these descriptions may not be the most userfriendly. However, more detailed maps and GIS digital files of areas designated as critical habitat for the owl are available from the New Mexico Ecological Services Field Office (see ADDRESSES section). If additional clarification is necessary, please contact the New Mexico Ecological Services Field Office (see ADDRESSES section).

(33) *Comment:* Additional public hearings were requested during the public comment period for the purpose of presenting information and receiving comments.

Our Response: Earlier in this rule we discuss the extent by which we have attempted to engage the public in this

rulemaking through public comment periods, public meetings, and news releases. More recently, on April 21, 2004, we held an informational meeting in Las Cruces, New Mexico. During this meeting, the Service and our contractors were present to answer participant's detailed questions. Due to the abbreviated timeframe to complete this final designation, we were not able to extend or reopen the public comment period or hold additional public hearings. However, due to our extensive efforts in attempting to involve the public in this rulemaking process, we believe that we have allowed for adequate opportunity for the public to provide information and comments to

(34) Comment: The Salt River Project. Arizona, questioned the current Service policy of excluding areas from the proposed designation prior to the areas being proposed, when the Act's implementing regulations require that the Secretary shall, after proposing designation, consider exclusion of areas for economic or other relevant impacts (50 CFR 424.19).

Our Response: The July 21, 2000 (65 FR 45336), proposed rule for the owl did not exclude any areas under section (4)(b)(2) of the Act. In our November 18, 2003 (68 FR 65020), notice reopening the comment period, we provided a preliminary 4(b)(2) analysis for tribal lands and indicated that we anticipated excluding tribal lands from the final designation based on our working relationship with the tribes and the fact that we had either received their owl management plans or would receive them shortly. However, this was only a preliminary analysis and no exclusions pursuant to section 4(b)(2) of the Act have been made until this final rule.

(35) Comment: The Service's conclusion that some unoccupied areas are essential to the conservation of the owl is questionable given that implementing regulations indicate the unoccupied habitat should only be designated when occupied areas are not adequate to ensure the conservation of the species (50 CFR 424.12(e)). The Service did not make a formal finding that occupied areas would be inadequate.

Our Response: Based on our analysis of the best available scientific and commercial data, we determined that all areas included in this designation are essential for the conservation of the species and within the geographical area occupied by the species (see response to comment 18 and "Criteria Used to Identify Critical Habitat" section below). Because the specific areas being designated are within the geographical

area occupied by the species, we (i.e., the Secretary of Interior) are not required to make a separate determination as to whether the lands included in the designation are essential to the conservation of the owl.

(36) Comment: The Service's definition of adverse modification of critical habitat in the proposed rule is inconsistent with the Sierra Club v. U.S. Fish and Wildlife Service (245 F.3d 434, U.S. Circuit Court of Appeals for the

Fifth Circuit).

Our Response: Recent appellate court decisions (i.e., Sierra Club v. U.S. Fish and Wildlife Service et al., 245 F.3d 434 (Fifth Circuit, March 15, 2001); Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service, 03-35279, 2004 U.S. App. Lexis 16215 (Ninth Circuit, August 6, 2004)), found our definition of adverse modification to be invalid. In response to these decisions, we are reviewing the regulatory definition of adverse modification in relation to the conservation of the species (See "Effects of Critical Habitat Designation" section). However, section 7 consultations for the owl and its critical habitat meet the standards articulated in these judicial decisions because guidelines for habitat management from the Recovery Plan for the owl are used to establish habitat management during section 7 consultations.

(37) Comment: How will the Service determine when the owl is recovered? Nowhere in the proposed rule does the Service articulate when protections under the Act will no longer be necessary.

Our Response: Critical habitat can assist in the recovery of a species, but does not achieve nor define what is needed for recovery. Recovery goals and criteria are defined by an operable plan. For example, the delisting criteria identified in the Recovery Plan (Service 1995) include: (1) The population in the three most populated Recovery Units (i.e., upper Gila Mountains, Basin and Range East and Basin and Range West) must be stable or increasing after 10 years of monitoring; (2) scientificallyvalid habitat monitoring protocols are designed and implemented to assess: (a) Gross changes in habitat quantity across the range of the species, and (b) habitat modifications and trajectories within treated stands; and (3) a long-term management plan is in place to ensure appropriate management for the species and its habitat. When these criteria are satisfied, we will evaluate the subspecies to determine if delisting may be warranted.

(38) Comment: The Service notes in the February 1, 2001, final rule that the 4.6 million acres (1.9 million hectares)

designated was likely over inclusive because the short deadline did not allow the fine-scale mapping necessary to physically exclude all of the areas that do not contain suitable habitat. Did the Service refine its mapping of critical habitat during the past three years since the proposed rule was published and shouldn't the Service be soliciting comments based on maps that more accurately depict the area the Service will treat as critical habitat?

Our Response: We refined our maps delineating the boundaries of critical habitat for the owl after considering public comments and information received from a variety of sources including the FS, BLM, and State agencies (See "Summary of Changes From the Proposed Rule" section). While we believe these maps to be much more refined, because of data limitations and time and resource constraints, we were not able to remove all specific areas that do not contain one or more of the primary constituent elements for the owl.

(39) *Comment:* The Service should readopt the February 2001 final rule to designate critical habitat for the owl.

Our Response: We have based this current final designation of critical habitat for the owl on our February 2001 final rule. We have, however, refined the previous designation based on the best available scientific and commercial data, public comments, and current policy. Please see the "Summary of Changes From the Proposed Rule" section below.

(40) Comment: The Service should also exclude areas that are covered by habitat conservation plans, safe harbor agreements, and other private lands covered by similar voluntary programs.

Our Response: As discussed throughout this final rule, we have determined that there are no private lands that have been determined to be essential to the conservation of the owl, and therefore included in this designation. The conservation programs that the commenter has raised are solely for private landowners. Since we have not included private lands in this designation, then exclusions of lands based on these conservation programs are not directly relevant.

(41) Comment: When you post a document on the internet, you limit the public's ability to comment because many people do not have a computer.

Our Response: In our proposed rule, and subsequent published notices and outreach materials concerning this rulemaking, we provided alternative procedures to obtain the documents, including mailing hard copies of documents when they are requested and

obtaining hard copies from the New Mexico Fish and Wildlife Office. We believe that we have made all appropriate documents and information adequately available to the public for review and comment.

(42) *Comment:* Failure to designate FS lands will miss an opportunity to educate the public on the owl.

Our Response: In Sierra Club v. Fish and Wildlife Service, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. We agree with these findings. The proposed and final rules identify all areas that are essential to the conservation of the owl, regardless of whether all of these areas are included in the regulatory designation. Consequently, we believe that the informational benefits are provided.

(43) Comment: The FS in Region 3 is currently failing to implement its guidelines to protect the owl, and thus reconsultation is required even without critical habitat. Critical habitat would provide for reconsultation in an efficient and consistent manner.

Our Response: The FS in Region 3 has submitted a biological assessment to the Service on April 8, 2004, and requested reinitiation of the programmatic consultation for the 1996 Regional Land and Resource Management Plan Amendment that incorporated Recovery Plan guidelines for managing habitat of the species.

(44) Comment: Land management agencies have the necessary tools to manage habitat for the owl without designating critical habitat. Local support for the conservation of the species is required or you will not achieve recovery.

Our Response: We agree that the support of the public is essential to achieve recovery of this species. In excluding some areas from the designation, we are recognizing and acknowledging that conservation can be achieved outside of a critical habitat designation (see "Exclusions Under Section 4(b)(2)" section).

(45) Comment: The FS amended their National Forest Plans in Arizona and New Mexico in 1996 to conform to the Recovery Plan. These plans are still valid and in use, indicating that designation of critical habitat on FS lands in these states is not necessary. The National Forests in Arizona have

amended their land and resource management plans to incorporate the Recovery Plan. Consistent with the Service's justification for not designating critical habitat on certain Tribal lands because habitat management plans are still valid and being implemented on these lands, the designation of critical habitat on FS lands may not be necessary because of existing land and resource management plans that are responsive to owl conservation.

Our Response: In our 2001 designation (66 FR 8530), we reached this conclusion and determined that FS lands in Arizona and New Mexico did not meet the definition of critical habitat because special management was already being provided through their land and resource management plans. Thus, we did not designate these lands, as well as the tribal lands of the Mescalero Apache and the Navajo Nation, as critical habitat because we felt that "additional" special management was not needed. However, on January 13, 2003, the United States District Court for the District of Arizona (Center for Biological Diversity v. Norton, Civ. No. 01-409 TUC DCB) rejected our conclusion and ruled that our final rule designating critical habitat for the owl violated the Act, as well as the APA. The Court did not agree with our interpretation of the definition of critical habitat (i.e. that essential areas may not be included in critical habitat because special management is already being provided) and, in addition, the Court ruled that even if we follow the Service's interpretation, the management provided by the FS was inadequate to justify excluding these lands. On November 12, 2003, the United States District Court for the District of Arizona, (Center for Biological Diversity v. Norton, Civ. No. 01-409 TUC DCB), ordered the Service to submit a new final rule for designation of critical habitat for the owl to the Federal Register by August 20, 2004. We have prepared this designation pursuant to that Court order.

(46) *Comment:* Private property and water rights will be taken as a result of the designation. The Service did not indicate or reveal that property rights were factored into any analyses.

Our Response: The mere promulgation of a regulation, like the enactment of a statute, does not take private property unless the regulation on its face denies the property owners all economically beneficial or productive use of their land (Agins v. City of Tiburon, 447 U.S. 255, 260–263 (1980); Hodel v. Virginia Surface Mining

and Reclamation Ass'n, 452 U.S. 264, 195 (1981); Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1014 (1992)). The Act does not automatically restrict all uses of critical habitat, but only imposes requirements under section 7(a)(2) on Federal agency actions that may result in destruction or adverse modification of designated critical habitat. This requirement does not apply to private actions that do not need Federal approvals, permits or funding. Furthermore, as discussed above, if a biological opinion concludes that a proposed action is likely to result in destruction or modification of critical habitat, we are required to suggest reasonable and prudent alternatives. In addition, State and private lands are not included in this designation by definition. In accordance with Executive Order 12630, we conclude that this designation does not have significant takings implications (see "Required Determinations" section below). As noted in our response to comment (88), we have also considered and reviewed information contained in our records, as well as in the economic and environmental analyses, as to whether holders of grazing permits may be impacted by the designation. At this time, we are unaware of any instances where grazing permit holders will be so substantially impacted as to constitute a "taking" of property under the 5th Amendment.

(47) Comment: The Service did not consider the indirect effect of critical habitat designation on adjacent lands that are not designated. For example, designation might affect fire suppression activities on nearby critical habitat, which could increase the risk of catastrophic wildfire on lands that are not within the designation.

Our Response: We have a special category of section 7 consultation, and corresponding regulations (50 CFR 402.05) called "Emergency Consultations." The consultation process does not affect the ability of an agency to respond to emergency events such as suppression of wildfire. During emergency events, our primary objective is to provide recommendations for minimizing adverse effects to listed species without impeding response efforts. Protecting human life and property comes first every time. Consequently, no constraints for protection of listed species or their critical habitat are ever recommended if they place human lives or structures (e.g., houses) in danger. We are currently working with many of our Federal partners to provide technical assistance, coordination, and, in some instances, section 7 consultation for

proactive projects to reduce the potential for emergency events (e.g., WUI fuels management).

Issue 3: National Environmental Policy Act (NEPA) Compliance and Economic Analysis

(48) Comment: Several commenters questioned the adequacy of the Environmental Assessment (EA) and other aspects of our compliance with NEPA. They believe the Service should prepare an Environmental Impact Statement (EIS) on this action.

Our Response: The commenters did not provide sufficient rationale to explain why they believed the EA was inadequate and an EIS necessary. One of the purposes of an environmental assessment is to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact (40 CFR 1508.9). An EIS is required only in instances where a proposed Federal action is expected to have a significant impact on the human environment. In order to determine whether designation of critical habitat would have such an effect, we prepared an EA of the effects of the proposed designation. We made the draft EA available for public comment on March 26, 2004, and published a notice of its availability in the **Federal Register** (69 FR 15777). Following consideration of public comments, we prepared a final EA which determined that the critical habitat designation for the owl does not constitute a major Federal action having a significant impact on the human environment. That determination is the basis for our Finding of No Significant Impact (FONSI). Both the final EA and FONSI are available for public review (see ADDRESSES section).

(49) Comment: Sierra, Lincoln, Otero, Counties, New Mexico, and the Coalition of Arizona/New Mexico Counties asked to be part of the NEPA process and were concerned that the Service would not have "important information" to complete the environmental assessment or economic analysis. These parties believe that they were not afforded the opportunity to participate in the NEPA process as required by the CEQ implementing regulations (40 CFR 1501.6; 1508.5) or the January 30, 2002, CEQ Memorandum for the Heads of Federal Agencies discussing cooperating agencies and procedural requirements of NEPA (CEQ Memorandum). We received several requests to hold public hearings to solicit comments on the draft environmental assessment and draft economic analysis. The Coalition

of Arizona and New Mexico counties requested that a hearing be held close to or in each affected member county.

Our Response: The CEQ regulations require that Federal agencies responsible for preparing NEPA analyses and documentation do so "in cooperation with State and local governments" and other agencies with jurisdiction by law or special expertise. As detailed below, we attempted to engage these parties in the NEPA process, to meet the spirit and intent of cooperating agency status. We believe that the NEPA process was conducted consistent with the CEQ implementing regulations and the CEQ Memorandum. For example, we held stakeholder meetings on November 6 and 7, 2003, in Albuquerque and Phoenix to solicit relevant information for our analyses. Moreover, on November 18, 2003, we reopened the comment period on the July 21, 2000, proposed rule to designate critical habitat for the owl (68 FR 65020). As such, we mailed a copy of the Federal Register notice and a letter describing our intent to conduct a new NEPA analysis to all interested parties, including the commenters. On January 27, 2004, we responded to requests from these parties by inviting them to participate in the NEPA process and providing contact information for our NEPA and economic analysis contractors, so that they could communicate directly with them. The Service and our contractors conducting the economic analysis also contacted Otero County, New Mexico, in February 2004, to request any socioeconomic or other information. None of the parties provided any data to the Service or our contractors.

On March 26, 2004, we mailed copies of the draft environmental assessment and the draft economic analysis to these parties requesting their expert review, and providing an invitation to work with each of the parties to address any concerns or issues. We also invited them to a public informational meeting in Las Cruces, New Mexico, on April 20, 2004. This meeting provided an opportunity for public input and allowed the Service to answer any questions concerning the proposed rule, the draft environmental assessment, or the draft economic analysis. The parties did not provide any information to us, did not attend the public informational meeting, and did not contact us to schedule any additional meetings or provide information.

(50) Comment: The draft economic analysis failed to adequately estimate the potential economic impacts to landowners regarding various forest management and other activities.

Our Response: In our economic analysis, we attempted to address potential economic impacts from the designation on landowners and activities, including forest management activities. The analysis was based upon the best data available to our contractors. We subsequently released our draft analysis for public review and comment to specifically seek input from affected landowners, agencies, jurisdictions, and governments. Our final analysis incorporates or addresses any new information and issues raised in the public comments. Please refer to our final economic analysis of the designation for a more detailed discussion of these issues.

(51) Comment: Several commenters voiced concern that they were not directly contacted for their opinions on the economic impacts of critical habitat designation.

Our Response: It was not feasible to contact every potential stakeholder in order for us to develop a draft economic analysis. We believe we were able to understand the issues of concern to the local communities based on public comments submitted on the proposed rule and draft economic analysis, on transcripts from public hearings, and from detailed discussions with Service representatives, and from data otherwise available to us and our contractors. To clarify issues, we solicited information and comments from representatives of Federal, State, Tribal, and local government agencies, as well as some private landowners, and requested comments from all interested parties, including landowners we were unable to contact directly.

(52) *Comment:* The opportunity for public comment on the draft Economic Analysis and draft Environmental Assessment was limited.

Our Response: We announced the availability of these documents in the Federal Register on March 26, 2004, and opened a 30-day public comment period for the draft Economic Analysis, draft Environmental Assessment, and proposed rule. On November 13, 2003, the United States District Court for the District of Arizona, (Center for Biological Diversity v. Norton, Civ. No. 01-409 TUC DCB), extended the original deadlines for designating critical habitat and ordered us deliver the final rule to the **Federal Register** on August 20, 2004. We believe that sufficient time was allowed for the public to review and provide comment on these documents given the time frame ordered by the court.

(53) Comment: Your draft Economic Analysis did not consider watersheds, water rights, State water rights, adjudication with Texas on water rights, or the effect on water rights of any of the people within those watersheds.

Our Response: While we appreciate the concerns raised by the commenter about water rights, we do not have any specific information that leads us to believe that the designation of critical habitat for the owl will have any impact on water rights of any kind. Further, it is our interpretation that the commenter did not adequately explain their rationale as to why they believed critical habitat for the owl will impact watersheds or water rights.

(54) Comment: The draft economic analysis and proposed rule do not comply with Executive Order 12866, which requires each Federal agency to assess the costs and benefits of proposed regulations.

Our Response: We determined that this rule will not have an annual economic effect of \$100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. Thus, a costbenefit analysis is not required for purposes of Executive Order 12866 (see "Required Determinations" section).

(55) Comment: The draft economic analysis, draft environmental assessment, and proposed rule failed to adequately estimate and address the potential economic and environmental consequences and how timber, fuel wood, land acquisition and disposal, oil and gas development, and mining would be impacted by the designation.

Our Response: In our proposed rule and subsequent notices reopening the comment period on the proposal and draft economic analysis, we solicited information and comments associated with the potential impacts of designating critical habitat for the owl. Further, our economic analysis contractor conducted a variety of interviews to understand and estimate the types of potential impacts and costs that were perceived to stem from owl conservation. We reviewed all comments received during the public comment periods and have concluded that further information was not provided on how the designation of critical habitat would result in economic or environmental consequences beyond those already addressed in the economic analysis, environmental assessment, or this final rule.

(56) Comment: One commenter questioned whether publishing the proposed rule prior to releasing the environmental assessment violated the intent of NEPA by being pre-decisional. The Service did not consider a

reasonable range of alternatives in the NEPA analysis.

Our Response: Alternative I in the environmental assessment was to finalize the designation of critical habitat as described in the proposed rule published in the **Federal Register** on July 21, 2000 (65 FR 45336). The draft EA also considered a no-action alternative and two other action alternatives. We believe the alternatives in our EA were sufficient, the document was consistent with the spirit and intent of NEPA, and it was not pre-decisional.

(57) Comment: The assumption applied in the economic analysis that the designation of critical habitat will cause no impacts above and beyond those caused by listing of the species is faulty, legally indefensible, and contrary to the Act. "Adverse modification" and "jeopardy" are different, will result in different impacts, and should be analyzed as such in the economic analysis.

Our Response: We have conducted a new analysis of the economic impacts of designating these areas, in a manner that is consistent with the ruling of the 10th Circuit Court of Appeals in New Mexico Cattle Growers Ass'n v. USFWS, 248 F.3d 1277 (10th Cir. 2001). As this economic analysis details, we included an analysis of "co-extensive" effects. As such, the economic analysis does not focus only on section 7 impacts.

(58) Comment: The proposed designation of critical habitat targets private property and will impose economic hardship on private landowners. There is an expressed concern that the proposed critical habitat designation would have serious financial implications for grazing and sources of revenue that depend upon Federal "multiple-use" lands. The designation will have harmful impacts on the quality of life, education, and economic stability of small towns. Anticipated effects on private property from habitat conservation plans under section 10 of the Act are not explained.

Our Response: As indicated in our proposal and this final rule, critical habitat for the owl is not being designated on private lands. Further, as stated in the economic analysis, the proposed rule to designate critical habitat for the owl is adding few, if any, new requirements to the current regulatory process. Since consultations for the adverse modification of the owl's critical habitat and jeopardy to the species are based upon determinations of consistency with the owl's Recovery Plan, the listing of the owl itself initiated the requirement for consultation. The critical habitat designation is unlikely to result in

additional requirements not already in place due to the species' listing.

(59) Comment: The Service did not engage in a good faith effort to develop and collect information regarding the full range of economic impacts consistent with recent case law (New Mexico Cattlegrowers Association v. United States Fish and Wildlife Service, 248 F.3d 1277 (10 Circuit 2001) and Home Builders Association of Northern California v. United States Fish and Wildlife Service, 268 F. Supp. 2d 1197 (E.D. Cal. 2003)).

Our Response: We believe the public was provided the opportunity to comment on all aspects of this designation and the associated documents (See response to comment 49 and "Previous Federal Action" section), and that this final rule and associated economic analysis and EA are consistent with current case law. The fact that this issue was raised during the public comment period reinforces our belief that we did provide

'a good faith effort."

(60) Comment: The final rule designating critical habitat must include an explanation of the cost/benefit analysis for both why an area was included and why an area was excluded. The economic analysis fails to acknowledge the benefits of protecting the owls (i.e., healthier watershed). One commenter also stated that economic benefits such as recreation and tourism dollars should be included.

Our Response: We did not have specific, scientifically credible data related to the benefits of designating critical habitat for the owl on the lands that are being designated. Because of this lack of data, we were not able to conduct an economic benefits analysis as the commenter suggested. However, if this data were available we would consider it in our analysis.

As we undertake the process of designating critical habitat for a species, we first evaluate lands defined by those physical and biological features essential to the conservation of the species within the geographical area occupied by the species for inclusion in the designation pursuant to section 3(5)(A) of the Act. Secondly, we evaluate lands defined by those features to assess whether they may require special management considerations or protection. Next we evaluate lands outside the geographical area occupied by the species to determine if any specific area is essential to the conservation of the species. The resulting lands in the designation are determined to be essential to the conservation of the species, for which justification for their inclusion and the

potential benefits to the species from the designation are discussed throughout our proposed rule and this final rule. Accordingly, we believe that the biological and conservation benefits afforded the species by the inclusion of lands determined to be essential to the conservation of the species have been thoroughly explained.

Pursuant to section 4(b)(2) of the Act, we are required to take into consideration the economic impact, National Security, and any other relevant impact of specifying any particular area as critical habitat. We also may exclude any area from critical habitat if we determine that the benefits of such exclusion outweighs the benefits of specifying such area as part of the critical habitat, providing that the failure to designate such area will not result in the extinction of the species. We use information from our economic analysis, or other sources such as public comments, management plans, etc., to conduct this analysis. For us to consider excluding an area from the designation, we are required to determine that the benefits of the exclusion outweighs the benefits (i.e., biological or conservation benefits) of including the specific area in the designation. This is not simply a cost/benefit analysis, however. This is a policy analysis, and can include consideration of the impacts of the designation, the benefits to the species of the designation as well as policy considerations such as National Security, Tribal relationships, impacts on conservation partnerships and other public policy concerns. This evaluation is done on a case-by-case basis for particular areas based on the best available scientific and commercial data. A discussion of this analysis and any resulting exclusions is in this final designation.

(61) Comment: The Service should exclude Federal and Tribal lands that are currently covered by management plans for the owl. Failure to exclude areas from critical habitat that are subject to voluntary protection measures for the owl will undercut the attractiveness and usefulness of the full range of conservation tools and make management/conservation far less effective.

Our Response: It has been our policy to recognize voluntary conservation efforts and support those programs and partnerships. As such we have excluded from the designation of critical habitat for the owl areas covered by conservation plans for that owl that have been determined to provide a conservation benefit to the owl and its habitat (See "Exclusions Under Section 4(b)(2)" section below).

(62) Comment: The Service's economic analysis is too large in scope to evaluate those effects attributed solely to critical habitat because it analyzed all cost associated with "owl conservation measures." It is not clear how the Service could attribute impacts either exclusively or coextensively to critical habitat under this framework.

Our Response: The inclusion of economic costs related to listing and provisions of the Act, other than the critical habitat designation, have been quantified in the final economic analysis. This analysis includes coextensive costs as well as costs related to the previous and current critical habitat designations.

(63) Comment: The economic analysis does not explain why a 10-year time period was selected. One commenter believes that the timeframe of ten years used in the analysis is too short and is inconsistent with other economic studies.

Our Response: To produce credible results, the economic analysis must consider impacts that are reasonably foreseeable. Based on available data, a ten-vear timeframe was most fitting for this analysis. Federal and Tribal land use management agencies affected by this designation generally do not have specific plans for projects beyond ten vears; thus, forecasting beyond ten years would increase the subjectivity of estimating potential impacts in this case. In addition, with respect to the timber industry in this region, detailed regional forecasts of activity in this industry beyond ten years are limited. The 10-year time horizon was also selected because the Recovery Plan is premised upon a similar time horizon.

(64) Comment: The economic analysis severely overinflates the costs attributable to grazing and other

potential impacts.

Our Response: The commenter did not provide any data for us to consider and did not explain why he or she believes our estimates to be inadequate. Still, the economic analysis used the best information available to estimate potential impacts, while indicating that some of our assumptions were likely to be conservative and overstate effects. We understand that the public wants to know more about the kinds of costs section 7 consultations impose and frequently believes that critical habitat designation could require additional project modifications. Because of the potential uncertainty about the economic costs resulting from critical habitat designations, we believe it is reasonable to estimate the upper bounds of the cost of project modifications on the basis of the economic costs of

project modifications that would be required by consultation. The final economic analysis provides a detailed study concerning the potential effects of the designation of critical habitat for the owl, and we believe it is in compliance with the Tenth Circuit's decision in *New Mexico Cattle Growers Ass'n* v. *U.S. Fish and Wildlife Service*, 248 F.3d 1277.

(65) Comment: One commenter notes that the "national perspective" example of efficiency effects discussed in the text box on page 1–4 could be used as an excuse not to analyze the economic impact of critical habitat designation on local areas. In addition, this commenter suggests that the report should include both regional economic and efficiency impacts for all economic sectors affected by the owl from a critical habitat designation. Another commenter suggested that regional economic impacts should have been calculated for impacts related to the oil and gas industry.

Our Řesponse: As noted in the referenced text box on page 1-4, there are several valid measures of economic impact. These include efficiency effects, which consider changes in national economic well-being, and distributional effects, including impacts to the economies of specific regions. Both efficiency effects and distributional effects are considered in the economic analysis. Specifically, impacts to the timber industry were measured as regional economic impacts (as discussed in the text box on page 3-2), while impacts to the grazing industry were measured as efficiency effects. In the economic analysis, regional economic impacts were not calculated for the grazing industry since the magnitude of expected impacts from owl-related restrictions on grazing was modest relative to the size of the grazing industry in the affected regions. Specifically, the forecast impact on grazing represents a loss of less than one-quarter of one percent of the grazing activity in New Mexico and Arizona. This is based on the loss of animal unit months (AUMs) calculated in the analysis compared to the total number of AUMs grazed in New Mexico and Arizona. However, in response to comments received and in order to provide additional information to interested parties, in the final economic analysis, the grazing section (Section 4) has been revised to include a discussion of regional economic impacts.

Similarly, the economic analysis did not calculate regional economic impacts related to the oil and gas industry because the magnitude of potential impacts was small in relation to the

regional oil and gas economic activity. However, the analysis has been revised to include further discussion of economic impacts resulting from delays of oil and gas activities for owl conservation. Further research suggests that before drilling can commence, two years of surveys must be completed, which may delay drilling activities. While operators may sometimes be able to plan ahead, often it is difficult to build two years into the planning process, so drilling may effectively be delayed, depending on when owl surveys are completed and drilling can commence. This postponement may result in regional economic impacts. Based on available information, past impacts due to drilling delays have been limited, and the extent to which delays will result in impacts in the future is subject to a variety of uncertainties. Future impacts will depend on the number of wells delayed by owl conservation efforts, the production and success rates of future wells, and future costs to develop wells, all of which are not known with certainty. Discussion of potential future regional economic impacts from delays to oil and gas activities has been added to Section 7.2 of the final economic analysis.

(66) Comment: Several commenters ask how the economic analysis could be used to determine areas that might be excluded, stating that the level of aggregation of results doesn't allow for decision-making and "distorts the analysis." In addition, commenters note that the analysis does not break down the impacts to the county level.

Our Response: Given the nature of the designation (including only Federal and Tribal lands) and the data available to estimate economic impacts, results were presented at the management unit level (for example, by National Forest for FS lands, see Exhibits ES-2, ES-3, 3-3, 3-10, 3-11, 3-13, 4-5, 4-6, 4-7, 4-8, 5-5, 5-6, 7-7, 7-8). This level of detail allows for direct comparison of economic impacts with biological benefits, and thus the information presented can be considered, along with other factors, in deciding whether to exclude an area from the designation. While results are not given for each county individually, in the summary of results (Exhibits ES-2 and ES-3), the counties in which each unit is located are listed. Therefore, the report does provide information for parties interested in impacts at the county

(67) Comment: Several commenters believe that the economic analysis focused on section 7 consultations and therefore failed to disclose true impacts. One of these commenters states that the

report fails to discuss "listing of the owl and attendant section 9 protections," Another commenter believes that the Service only addressed incremental economic costs to Federal Agencies involved in section 7 consultations and failed to analyze "impacts of critical habitat designation to current cultural or historical land management practices involving agriculture, silviculture or recreation." Another commenter states that it is misleading to discuss impacts from 1992 since primary economic impacts stem from the listing of the owl, not the designation of critical habitat.

Our Response: The commenters are incorrect in stating that the analysis focused on section 7 consultation and incremental impacts and failed to discuss impacts that stem from listing and other protections. The methodological approach and scope of the economic analysis is presented in Section 1 of the report. As this section details, the economic analysis complies with direction from New Mexico Cattle Growers Ass'n v. U.S. Fish and Wildlife Service, 248 F.3d 1277 that, when deciding which areas to designate as critical habitat, the economic analysis informing that decision should include "co-extensive" effects. As such, the economic analysis does not focus only on section 7 impacts. As stated on page ES-1, "This analysis considers the potential economic effects of owl conservation activities in the proposed critical habitat designation. Actions undertaken to meet the requirements of other Federal, State, and local laws and policies may afford protection to the owl and its habitat, and thus contribute to the efficacy of critical habitat-related conservation and recovery efforts. Thus, the impacts of these activities are relevant for understanding the full impact of the proposed critical habitat designation." The inclusion of impacts related to listing and provisions of the Act other than section 7 are discussed in Section 1.2, Scope of the Analysis. The past and ongoing, and future costs related to owl conservation activities that have been quantified in the final economic analysis include co-extensive costs as well as costs related to the previous and current designations. Past costs resulting from owl conservation efforts are included since they represent co-extensive effects of critical habitat designation that have occurred since the listing of the species.

In addition, the report addresses impacts to agriculture in Section 4, Economic Impacts to Livestock Grazing Activities. Silviculture is addressed in Section 3, Economic Impacts to the Timber Industry, and recreation is

addressed in Section 7.1, Impacts to Recreational Activities.

(68) Comment: One commenter states that the economic analysis consistently overstates costs to an extent considered arbitrary and capricious. Other commenters believe that the costs are understated because the analysis fails to consider impacts beyond section 7.

Our Response: The methodology and assumptions used to arrive at estimates of economic impacts are detailed in the report in Section 1, Exhibit ES-6, and Exhibit 3-14. Due to uncertainties regarding impacts, a range of estimates is presented, based on the best scientific and commercial information available at the time the analysis was being conducted. The data sources utilized in the report are discussed in Section 1.4 and specific citations are provided throughout the report and in the Reference list. In addition, the report has been reviewed by three independent technical advisors, all of whom found the approaches used to analyze impacts were appropriate.

(69) Comment: One commenter questions the method for determining 'co-extensive" costs. The commenter is unclear if costs defined as co-extensive would necessarily be required under critical habitat alone. The commenter raises two examples of types of costs that it did not feel should be considered co-extensive, including costs related to FS measures for implementing Recovery Plan and costs related to Tribe's management plans. In particular, the commenter believes that because the Tribes' management plans will remain in place whether or not critical habitat is designated on Tribal lands, these costs should not be considered coextensive with the designation.

Our Response: In order to comply with direction from the New Mexico Cattle Growers Ass'n v. U.S. Fish and Wildlife Service (248 F.3d 1277), the economic analysis addresses "coextensive" effects of this designation. The economic analysis considers all impacts that result from efforts to protect owl and its habitat (referred to as "owl conservation activities"). As stated on page ES-1, "Actions undertaken to meet the requirements of other Federal, State, and local laws and policies may afford protection to the owl and its habitat, and thus contribute to the efficacy of critical habitat-related conservation and recovery efforts. Thus, the impacts of these activities are relevant for understanding the full impact of the proposed critical habitat." The scope of the analysis is discussed in Section 1.2 of the report. Costs related to implementation of the Recovery Plan, such as impacts

resulting from owl-related standards and guidelines included in the Forest Service's Land and Resource Management Plans, are considered "coextensive" because they result directly from the listing of the species. These impacts are addressed in Sections 3 and 4 of the report. In addition, the Tribe's owl management plans were likely created as a result of the listing of the species and the previous designations, and therefore are considered coextensive effects of critical habitat for the purposes of this analysis. Impacts related to Tribe's owl management plans are addressed in Section 6 of the economic analysis.

(70) *Comment:* A commenter suggests that the phrase "owl conservation efforts" be defined in the Executive Summary.

Our Response: The phrase "owl conservation activities" is defined in Section 1 of the report as "efforts to protect owl and its habitat." The phrase "owl conservation efforts" is used interchangeably with 'owl conservation activities' in the report. Text has been added to the final economic analysis to clarify these phrases at the beginning of the Executive Summary.

(71) Comment: A commenter questions the appropriate baseline for the statement in the report that additional impacts due to critical habitat are unlikely. This commenter believes impacts from previous designation should not be included in the baseline. Another commenter thought that the economic analysis should consider the devastating impacts that have already occurred within the Lincoln National Forest as a result of "ongoing attempts at critical habitat designation that started in 1980s"; this commenter also provides estimates of present value revenue from forest products for south central New Mexico from the 1930s through the 1960s.

Our Response: This comment refers to the following statement on page ES–5 of the economic analysis: "For the most part, this analysis does not anticipate that designation of critical habitat for the owl will result in additional economic impacts above and beyond the current regulatory burden." This statement relates to impacts from this rulemaking specifically. The final economic analysis is not limited to quantifying the incremental, or 'additional'' impacts of critical habitat. Instead, in order to comply with direction from New Mexico Cattle Growers Ass'n v. U.S. Fish and Wildlife Service, 248 F.3d 1277, the results presented in the economic analysis include "co-extensive" effects of designation, as discussed in Response

#3 and in Section 1 of the report. Impacts on the timber industry related to past designations were included in the past and ongoing impacts addressed in Section 3 of the final economic analysis.

With regard to the figures on present value of revenues from forest products for south central New Mexico, these estimates are for time periods prior to the listing of the owl. As the commenter notes, the industry experienced marked declines in revenues during this period. The economic analysis provided a similar discussion of the historical context for the timber industry in the southwest in Section 2.5.

(72) Comment: One commenter raises a number of questions with regard to the structure and content of the final economic analysis, including the following: How many economic statistics were sampled? What was the sampling intensity? What was the level of replication? What is the statistical design? What hypotheses are being tested? What variables were statistically significant between costs and impacts?

Our Response: The models used to calculate economic impacts related to owl conservation activities are based on a reliable sample of economic data. For example, the final economic analysis utilizes a software package called IMPLAN to estimate the total economic effects of the reduction in economic activity in the timber, grazing, and oil and gas industries in the study area. IMPLAN is commonly used by State and Federal agencies for policy planning and evaluation purposes. The model draws upon data from several Federal and State agencies, including the Bureau of Economic Analysis and the Bureau of Labor Statistics. In addition, a wide range of statistical data were utilized in order to gain an understanding of the economic environment in the areas and industries affected by this designation. The data sources relied upon are detailed in the references at the end of the report, and discussed in Section 1.4 Information Sources. Factors that may introduce uncertainty and bias into the analysis (i.e., level of confidence in the results) are discussed throughout the report, and are summarized in Exhibit ES-6.

(73) Comment: One commenter raises a number of questions with regard to the structure and content of the final economic analysis, including the following: Were private stakeholders and communities solicited for input throughout the study period? How long was the study period?

Our Response: Private stakeholders have been solicited for input throughout the preparation of the economic

analysis, as evidenced by various communications and data sources relied upon in the report. The data sources relied upon are detailed in the references at the end of the report, and discussed in Section 1.4, Information Sources. The Service undertook various efforts to solicit public comment from the general public and stakeholders in particular. This included meetings held with Action agencies in Albuquerque and Phoenix, to provide information to the economic consultants. In addition, the economic consultants met with each of the Tribes whose lands were included in the proposed designation.

(74) Comment: One commenter raises a number of questions with regard to the structure and content of the final economic analysis, including the following: How were impacts determined? What economic and social parameters are being measured? What methods were used to analyze the economic and social data? What additional assumptions of critical habitat economic impacts beyond the assumed direct relationship of Federal agencies were used? What are the direct, induced and indirect economic cost impacts to affected communities from owl critical habitat designation? What were the results? How much variability was explained by the data?

Our Response: The final economic analysis discusses in detail how impacts were determined, the economic parameters measured, the analytical methods used, the assumptions underlying the analysis, and the results; please refer to the report for this information.

(75) *Comment:* One commenter questions what the peer review process is with regard to the final economic analysis.

Our Response: The report was reviewed by three independent technical advisors: Dr. Delworth Gardner, Resource & Agricultural Economics Specialist, Brigham Young University (Livestock Grazing), Dr. David Brookshire, Natural Resource and Environmental Economics Specialist, University of New Mexico (southwestern U.S. resource economics), and Dr. Roger Sedjo, Resources for the Future (Timber). These reviewers were each asked to read sections of the draft report, based on their expertise, and to provide feedback on the analytical methodology and the validity of the results. This feedback was then incorporated into the final draft report, as appropriate.

(76) Comment: Several commenters state that private property issues are not addressed in the economic analysis. In particular, one commenter states that

costs to the private sector related to section 7 or section 10 are not explained or analyzed. For example, one commenter states that non-Federal landowners who voluntarily implement owl recovery management plans and apply for an incidental take will now have a Federal nexus. In addition, this commenter states that several counties will have more than 90 percent of their private land with critical habitat management impositions. Another commenter believes that the report should address the impacts of development of private land around the designation if rancher forced to sell due to AUM restrictions on Federal lands. Also, one commenter commends the Service for including impacts on HCPs or other section 10 permit efforts.

Our Response: Private property is specifically excluded from the designation. However, the analysis does consider the impacts of private entities developing Habitat Conservation Plans (HCP) under section 10 of the Act. Based on available data, there are no HCPs in place for the owl; however, there is one HCP under development by a private party for gravel mining activities in Colorado. Impacts related to this HCP are discussed in Section 7.3.1 of the final economic analysis. In addition, to the extent that private parties involved in grazing or timber activities on Federal lands are affected by owl related conservation activities, these impacts have been captured in the regional impact analyses of the timber and grazing industries. These analyses are presented in Sections 3 and 4 of the final economic analysis, respectively. The report also analyzes direct ranch level income effects resulting from reductions in permitted or authorized AUMs on Federal lands. These effects are summarized in Section 4 of the economic analysis. As noted in Section 1.2.3 of the final economic analysis, because the designation excludes private property, significant changes to private property values associated with public attitudes about critical habitat designation (known as "stigma" impacts) are not expected.

(77) Comment: Two commenters question the validity of personal communications as a data source.

Our Response: A wide variety of data sources are utilized in the economic analysis. The report provides clear referencing of the data relied upon for the analysis. The data sources relied upon are detailed in the references at the end of the report, and discussed in Section 1.4, Information Sources. Wherever possible, information provided by informed parties was confirmed by published data sources.

Given the nature of the analysis, however, the use of published data sources is not always possible. The economic analysis has been based on the best scientific and commercial information, which includes discussions with informed parties and stakeholders, as well as published data sources. In addition, the report has been reviewed by three independent reviewers, including specialists in southwestern resource economics, timber issues, and livestock grazing issues

(78) *Comment:* Several commenters note the economic analysis should assess social impacts associated with the designation. Commenters are concerned that the analysis did not mention social impact to rural areas or discuss the social benefits of grazing.

Our Response: The economic analysis is focused on analyzing the costs associated with owl conservation activities and is not intended to provide an analysis of social or cultural impacts. However, the environmental assessment did address social impacts (please refer the environmental assessment).

(79) Comment: One commenter raises a number of questions with regard to the structure and content of the final economic analysis and environmental assessment including the following: What are the cumulative socioeconomic and cultural impact costs to affected communities from owl critical habitat designation? What disproportionate burdens on affected minorities were identified and analyzed?

Our Response: Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR § 1508.7).

Cumulative effects are disclosed in section 3.11, where it is stated that: "Effects of proposed critical habitat designation on most resource areas are generally similar under each of the action alternatives, and vary only in terms of potential area of effect. These effects consist primarily of the potential for minor changes to projects resulting from reinitiation of consultation and implementation of discretionary conservation recommendations. These potential impacts are not likely to result in any cumulative effects, when added to the effects of existing section 7 consultations for other species and existing land management plans and policies." The cumulative effects analysis was clarified that critical habitat designation is unlikely to result

in additional project modifications compared to the existing condition (*i.e.* project modification resulting from consultation on effects to the species). Cumulative effects from any of the critical habitat designation alternatives are therefore improbable.

The heading of section 3.10 was changed to *Environmental Justice and Social Conditions*. In fact, the U.S. Fish and Wildlife Service's checklist for social impacts was used in preparation of the EA (http://www.fws.gov/

NEPA%20Handbook%20TOC.pdf). The EA was edited to specifically list the concerns outlined in the checklist and briefly discuss those that were considered relevant. Impacts to minority and low income populations were disclosed in section 3.10 of the draft EA.

The economic analysis considered impacts resulting from all activities related to conservation of the owl. However, the EA found that these impacts would occur regardless of critical habitat designation because all suitable habitat outside of PACs (is already considered in consultations on effects to the species.

(80) Comment: One commenter is concerned that the socioeconomic statistics presented in the economic analysis do not include production agriculture. The commenter notes that the data used in the analysis were derived from County Business Patterns data that does not accurately portray the role of the agricultural production sector. The commenter suggests using data from the U.S. Department of Commerce, Bureau of Economic Analysis' Regional Economic Information System.

Our Response: The commenter is referring to data presented in Exhibits 2-4 and 2-5 of the report for the counties within the critical habitat designation. These data are presented to give the reader an overview of the economy in the region affected by the designation. These data were considered the best scientific and commercial data available for the purpose of providing a general overview. The Agriculture, Forestry, Hunting, and Fishing category in these tables is defined by the U.S. Census Bureau as consisting of establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats (NAICS Code 11). The commenter is correct that these figures do not include agricultural production. However, a more detailed overview of agriculture production in the region focusing on livestock grazing is presented in Section 2.3 of the report.

While the Regional Economic Information System provides earnings by industry data, this information is not reported consistently for the counties within the study area for the most recent time period. Many of the county industry earnings are not reported for 2001 to avoid disclosing confidential information, or because the data was not available. The County Business Pattern data was more consistently available for the counties within the study period for the most recent time period; thus, this data was presented in the report.

(81) Comment: One commenter requests further information regarding the citation in footnote 41, especially with regard to data on earnings and total

employment.

Our Response: This comment refers to a reference included in the discussion of the regional agriculture industry in Section 2.6 of the report. The reference is correct for data on earnings, based on livestock receipts as a share of total commodity receipts, which was obtained from the USDA National Agricultural Statistics Service for Arizona, Colorado, New Mexico, and Utah. However, as the commenter notes, the employment data referred to in the text is from a different data source. Statements about employment in the livestock industry are based on data from the U.S. Census Bureau's County Business Patterns. The footnote has been revised in the final report to more accurately cite the basis for the statements regarding earnings and employment.

(82) Comment: Several commenters question how timber impacts could be analyzed when there is no longer any timber industry in the region. Another commenter notes that many of the mills cited as being in operation are processing firewood and pellets, and operate on wood from WUI projects that have minimal if any impact on owls.

Our Response: As discussed in Section 2.5 of the economic analysis, the number of mills in operation and the amount of timber harvested from National Forests in the region have both declined significantly over the past 10 years. However, the analysis of impacts on the timber industry is based on a range of estimates of National Forest areas where timber harvest is restricted as a result of owl conservation efforts. For the upper-bound estimate, the analysis considers a scenario under which the industry would be capable of harvesting and processing timber from these lands. Thus, the impacts represent timber-related economic output and jobs that would have been available if owl conservation efforts did not occur. Results of the timber industry analysis

are presented in Section 3 of the economic analysis.

Data on mills operating in the region, some of which are producing fuelwood and pellets, was provided by FS Region 2 and is included in the analysis in Exhibit 2–9. The commenter correctly notes that WUI projects are providing a source of supply for operating mills in the region.

(83) Comment: One commenter discusses how the cessation of logging activities has impacted taxpayers and social structure in affected communities in New Mexico. The commenter believes that the study minimizes the local impacts by averaging the damage.

Our Response: Clearly the decline of the timber industry has had significant economic impacts on local communities in New Mexico and Arizona. The report is focused on the impacts of owl conservation activities, rather than the overall impacts of the decline of the timber industry. As a result, the economic analysis quantifies the regional economic impacts associated with restrictions on logging in National Forests due to owl conservation efforts. The results of the regional economic impact analysis of the timber industry is presented in Sections 3.2.2 and 3.3.2 of the report.

(84) Comment: One commenter states that Tribes outside designation could be affected by owl conservation efforts, and these impacts should be included in the analysis. For example, the commenter believes Tribes outside of the designation could be affected by increased wildfire risk and secondary impacts affecting the regional economy. Another commenter states that they did not see where economic impacts were evaluated for the Ute Tribe.

Our Response: Tribes located outside of the proposed designation were not expected to experience direct economic impacts related to the designation, and therefore these Tribes are not specifically addressed in the analysis. However, to the extent that there are regional economic impacts related to restrictions on timber and grazing activities, if impacts to Tribes are likely, these have been captured in the regional economic impact analyses of these industries. These analyses are presented in Sections 3 and 4 of the final economic analysis, respectively. In addition, Section 5 presents an analysis of impacts to fire management activities that may result from owl conservation activities, including a discussion of the potential for increased wildfire risk.

(85) *Comment:* One commenter states that the Navajo sawmill—Navajo Forest Products Industries (NFPI) was not shutdown in July of 1994 due to issues

related to the owl, but rather was shutdown due to financial mismanagement.

Our Response: Based on available information, the injunction on timber harvest on Navajo lands was one of the factors contributing to the demise of NFPI in 1994. However, there were likely other factors contributing to the shutdown of the mill operations. This final economic analysis was not altered in its assumption that the lack of availability of timber from Navajo lands was a factor in the shutdown of the mill based on this comment letter. However, in response to this comment, the economic analysis has been revised to attribute the NFPI shutdown to a variety of factors, including the cessation of timber harvest on Navajo lands.

(86) Comment: One commenter notes that the termination of logging activities and the subsequent fuel load build-up over time has produced the potential for wildfires that could devastate the entire Lincoln National Forest. This commenter provides supporting information including estimates of lost timber value, costs of fire management activities, data on average number of acres destroyed per fire from 1960-2002, and fire suppression costs.

Our Response: The issue of impacts to fire management activities is discussed in Section 5 of the economic analysis. The data provided by the commenter on the average number of acres destroyed per fire is consistent with the data presented in Exhibit 5-1 and discussed in Section 5.1.1, Wildfire in the Southwest. The data estimating costs of fire management activities and lost timber value have been noted. As discussed in Section 5.2.3, Project Modifications Associated with Fire Suppression Activities, if a wildfire occurs, consultation takes place after the fact; therefore, fire suppression activities are not affected by owl conservation, as indicated in Exhibit 5-4. The potential for increased wildfire risk resulting from owl conservation efforts is discussed in Section 5 of the economic analysis. However, models for quantifying the impacts of increased wildfire risk are not available at a scale that would allow us to address the impact of owl conservation efforts. Therefore, these impacts are not quantified in the report.

(87) Comment: One commenter notes that owl protections prevent effective forest and watershed treatment which results in unnecessary fire fighting costs and destruction of water delivery, water quality impacts and infrastructure destroyed or damaged. The commenter believes the loss of environmental

services should have been included in the analysis.

Our Response: The impacts of owl conservation activities on forest management and treatment are considered in Section 5 of the report. The resulting impacts are summarized in Exhibit 5-4. As illustrated in this exhibit, fire suppression activities are not expected to be modified as a result of owl conservation activities. As discussed in this section, the analysis found that restrictions on thinning and vegetation removal in PACs could have some economic impact.

(88) Comment: Several commenters state that regional economic impacts in areas where livestock grazing may be affected should be considered. Commenters note that there are indirect and induced effects on the regional economy that result from lost output in the range livestock or ranching sector. Commenters state that the economic analysis does not show actual economic burden to ranchers and county budgets. One commenter states that critical habitat will cause a reduction in cattle numbers and be detrimental to the New Mexico economy. This commenter provides information on reduced cattle numbers in Catron County, New Mexico, and the potential impacts of reductions in cattle in that County.

Our Response: As stated in Section 4 of the analysis, the estimated annual reduction in grazing anticipated to result from owl conservation measures represents approximately 0.14 percent of the annual AUMs grazed in affected states. This estimate includes impacts that are likely to result from numerous causes unrelated to the Act, but which could not be separated due to their temporal and spatial correlation with owl-related activities. To assume that a reduction in AUMs in owl critical habitat areas will result in an accompanying decrease in livestock production region-wide requires the assumption that no substitutions in forage will be made to adjust for the reductions in AUMs authorized in owl critical habitat areas. This is unlikely, given the well-documented behavior of ranchers wishing to maintain existing herds. For example, Rimbey et al. (2003) states that when faced with changes to public forage availability, ranchers "would do everything they could do to maintain their existing herd. Depending upon when the reductions occurred during the year, the ranchers identified alternatives for maintaining herd size and remaining in business: purchase (or not sell) additional hay (to replace forage in winter, early spring or late fall), and look for private pasture and rangeland leases (summer forage)

(Rimbey et al. 2003). The last alternative mentioned by ranchers was the reduction in the number of cattle they would run on their ranches" (Rowe et al. 2001; Torell et al. 2001). Thus, given observed rancher behavior, it is unlikely that a reduction in permitted or authorized AUMs of Federal allotments in owl critical habitat areas would necessarily lead to a reduction in herd size, as long as replacement forage is available.

However, given the localized nature of ranching and the increasing number of restrictions on ranching behavior overall, it is possible that additional reductions that may be associated with owl conservation could occur in areas where substitute forage areas are not available, or where supplemental forage is prohibitively expensive. The economic analysis captures the value of those losses to rancher wealth by assuming that ranchers lose the value of AUMs reduced on Federal lands (i.e., effectively assuming that no replacement forage is available). While assuming a region-wide reduction in AUMs equal to that estimated in the analysis is clearly conservative (i.e. more likely to overstate costs than understate costs), it may provide additional context for the reader who wishes to understand the potential impacts to the regional economy. As a result, a regional economic impact analysis using the IMPLAN model has been added to Section 4.3 and Section 4.5 of the analysis.

(89) Comment: One commenter states that permit value is not a widely used method to estimate impacts to the ranching industry. This commenter states that permit value is essentially a measure of rancher wealth based on the number of federally permitted AUMs he is allowed to graze, the value of the Federal grazing fee, and the private property and property rights owned by the permittee. This commenter also states that permit value is not recognized by the FS and only becomes a monetary transaction when the rancher sells or tries to sell his private property along with the associated grazing privileges.

Our Response: We agree with the commenter's definition of permit value as a measure of rancher wealth. Indeed, Section 4 of the economic analysis focuses on the estimation of potential lost rancher wealth that may be associated with a reduction in Federal AUMs grazed due to owl conservation efforts. This lost rancher wealth is measured in terms of lost permit value. Numerous published articles have focused on the derivation of permit value for Federal grazing permits. For

example, Torell et al. (2001) state that, 'permit value represents the only available direct valuation of public land forage, except for a few scattered instances where public land is competitively leased. Using an appropriate capitalization rate, annualized estimates of forage value can be determined from the observed permit value." In a summary of recommended forage valuation methods, the author states that, "permit values provide a direct and site-specific estimate of forage value. Theoretically, this estimate should provide a site-specific estimate of value while considering the inherent production characteristics, regulations, and economic potential of specific allotments" (Torell et al. 1994). Thus, as discussed in Section 4.3.2, the revised economic analysis relies on the results of nine recent studies that attempt to measure the permit value of Federal grazing (per AUM) in order to estimate an average permit value for grazing on FS and BLM lands.

It is true that a 1970 court decision supported the government's position that ranchers "are not given title to the grazing resource and as such do not own a property right or have a corresponding economic right to permit value" (Torell et al. 1994). Yet, numerous published studies have found that a rancher maintains a value for holding a permit whether or not he sells his property (Torell and Doll 1991; Rowan and Workman 1992; Sunderman and Spahr 1994; Spahr and Sunderman 1995; Torell and Kincaid 1996). Thus, this analysis assumes that value is lost if a rancher is forced to reduce his AUMs

(90) Comment: One commenter states that the analysis overestimates impacts on grazing activity from owl, and should take the following factors into account when calculating the "bottom line" results: the number of threatened and endangered species in the allotment, existing soil and vegetation conditions, actual forage available in owl PACs, the climatic changes reducing AUMs, competition with other ungulates, and reductions in protective utilization levels accepted by range science.

Our Response: Section 4.2 of the economic analysis discusses factors that affect the number of permitted and authorized AUMs approved by FS and BLM for a given grazing allotment containing owl habitat. These factors include the presence of endangered species, tree encroachment, fire suppression, forage availability, and forage by other ungulates. The analysis states that "on a particular allotment containing owl habitat, reductions to authorized or permitted AUMs made by

FS or BLM may be: (1) Directly related to owl conservation; (2) indirectly related to owl conservation; (3) not related to owl conservation at all; or (4) resulting from a combination of factors." The analysis then explains each scenario in detail, and suggests that in most cases, reductions in AUMs result from a combination of factors. The analysis also concludes that because of the spatial and temporal overlap of past reductions in AUMs with owl habitat, it is difficult to separate owl-related causes from other causes of changes that occur in owl habitat areas.

(91) *Comment:* One commenter stated that the differences in permit types such as continuous and seasonal grazing permits should be addressed.

Our Response: Continuous, or vearlong, permits for grazing on Federal lands are common in the affected study area. Ranchers with year-long permits are likely to have a greater fraction of their annual forage base on Federal lands than those holding shorter, seasonal permits. This would imply that permit holders with yearlong permits may have less access to substitute forage, and thus may be more disadvantaged by AUM reductions than holders of seasonal permits. What is also implied is that an AUM of grazing in a year-long permit has greater value than an AUM in a seasonal permit. Indeed, Torell et al. (1994) find some evidence that permit values are greater in New Mexico, where year-long permits are common, than other states with more seasonal use (Torell et al. 1994). However, research has also shown that forage values vary throughout a year, and that some seasons may be more critical than others to a ranch operation (Godfrey and Bagley 1994). Thus, a rancher with a seasonal permit who relies on a particular season may also be severely affected by reductions in AUMs. A discussion of the differential effect of permit type has been added to Section 4 of the analysis.

(92) Comment: BLM stated that consultations are not expected to result in AUM reductions on BLM lands in Arizona.

Our Response: This statement provides support for the final economic analysis, which does not forecast any future AUM reductions on BLM lands in Arizona.

(93) Comment: One commenter states that the analysis erroneously included private ranch economic figures that are not in critical habitat, not in owl habitat, and not representative of ranch operations in affected areas. One commenter notes that a value of production figure was erroneously

included in the permit value data. In addition, one commenter suggested that the permit values for Utah be removed from the analysis since this value has not been lost in Utah.

Our Response: Section 2.6 of the economic analysis presents economic information relevant to the livestock industry for each county affected by the proposed designation. Efforts were made to utilize site-specific data as much as possible throughout the sections of the analysis that discussed grazing. Estimates of AUM reductions were derived from consultations conducted in owl critical habitat areas. Authorized AUM estimates were derived from FS estimates in affected National Forests at the forest level. Permit value estimates were taken from recent, relevant studies in the field, primarily from areas where owl critical habitat was proposed. The two studies that provided permit value estimates for Utah were included because they were deemed relevant to this analysis. The value of production estimate has been removed from the permit value data.

(94) Comment: Öne commenter states that the costs associated with the proposed designation impacts on oil and gas activities are underestimated because the analysis did not consider owl-related restrictions on the time period available for exploration and development. The commenter believes that the owl stipulations limit the time period available for drilling to 2.5 months each year. In particular, the commenter states that owl seasonal restrictions on drilling are from March 31-August 31. The commenter notes that in Utah, BLM stipulations in designated critical habitat (and outside of critical habitat) restrict development on existing and future oil and gas leases, by preventing or limiting access to leases, which leads to less production.

Our Response: In the economic analysis, impacts to the oil and gas industry related to delays resulting from owl drilling restrictions were not analyzed in detail because these were not considered likely. In particular, based on consultation history and because the owl breeding-season restriction would not be the only limiting factor for when an operator can drill, these delays were not considered a major impact in the economic analysis. In addition, since owl critical habitat in Utah has been in place since 2001, it is likely that operators in that area are aware of owl survey requirements in order to get a permit to drill. The analysis found that, if no owl are recorded during surveys, then owl restrictions are not likely. BLM has been attaching lease notices for owl critical

habitat to oil and gas leases issued in the designation area since May 2002. These notices are part of the owl conservation activities undertaken by the BLM in order to raise awareness of owl issues at the leasing stage, and were considered in the economic analysis.

However, the analysis has been revised to include further discussion of economic impacts resulting from delays of oil and gas activities for owl conservation. Further research suggests that before drilling can commence, two years of surveys must be completed, which may delay drilling activities. While operators may sometimes be able to plan ahead, often it is difficult to build two years into the planning process, so drilling may effectively be delayed, depending on when owl surveys are completed and drilling can commence. This postponement may result in regional economic impacts. Given the relatively small role the designation plays in the total supply of oil and gas and the availability of substitute sources of supply, national efficiency effects are not predicted. Of the active wells in Utah and New Mexico, less than one-half of one percent is in the proposed designation. However, localized regional economic impacts are possible, especially if producers are unable to shift production to other locations within the region.

Based on available information, past impacts due to drilling delays have been limited; and the impact of delays in the future is subject to a variety of uncertainties. Future impacts will depend on the number of wells delayed by owl conservation efforts, the availability of substitute drilling locations within the region, the production and success rates of future wells, and future costs to develop wells, all of which are not known with certainty. Discussion of potential future regional economic impacts from delays to oil and gas activities has been added to Section 7.2 of the final economic analysis.

(95) Comment: One commenter states that delays related to owl restrictions will preclude oil and gas development. The commenter goes on to detail the economic impacts of not drilling wells. The commenter believes that the economic impacts of not drilling a well impact the operator, the community and the public. The commenter provides a net present value estimate of \$400,000 for an individual well in the Stone Cabin area that encompasses part of CP–15.

Our Response: The economic analysis does not estimate impacts related to the prohibition of drilling wells because this activity has not been prohibited in

the past and is not anticipated to be prohibited in the future as a result of owl conservation. While the timing of drilling activities may be impacted as a result of owl conservation efforts, operators who hold oil and gas leases in the designation are not expected to be prohibited from drilling. Reductions in the supply of oil and gas or increases in the price of these commodities is unlikely given the relatively small role the designation plays in the total supply of oil and gas and the availability of substitute sources of supply. Of the active wells in Utah and New Mexico, less than one-half of one percent is in the proposed designation. However, in response to public comments and as a result of additional information gathered since the final draft report was published, Section 7.2 of the economic analysis has been revised to include further discussion of future impacts related to project modifications and potential regional economic impacts of delays in oil and gas well drilling projects, as a result of owl conservation activities.

(96) Comment: One commenter believes that with respect to the oil and gas industry, the Service did not analyze 'hidden social costs of the Act'' such as the costs of reduced or terminated business activities and jobs, increased costs to provide services, and lower tax revenues from reduced or terminated business and personal income. The commenter further states that project delays or curtailment caused by the designation will have a ripple effect throughout local, state, regional and U.S. economies. In addition, the commenter provides estimates for local impacts based on analysis of drilling wells in Uintah and Duchesne counties in Utah.

Our Response: In the economic analysis, regional economic impacts were not considered likely to result from owl conservation activities in the case of the oil and gas industry because of the small portion of the industry affected by the designation. As the commenter notes, the amount of owl critical habitat within the existing and projected oil and gas fields of Utah is negligible at best. Of the active wells in Utah and New Mexico, less than onehalf of one percent are in the proposed designation. While there is some potential for project delays due to owl conservation activities, it is possible that employees are able to find other work in the region, as the critical habitat represents a small amount of the local oil and gas industry. Given the current high price of natural gas (which is expected to continue), the resources (e.g., equipment and labor) needed to

develop this commodity are in high demand. Thus, even if development of certain wells in the designation is delayed, resources would likely be employed elsewhere, or would only remain unused for a short period of time.

However, based on public comment and additional research, the final economic analysis includes a regional economic impact analysis for impacts on the oil and gas industry in Utah. The commenter notes that in Uintah County, it spends approximately \$3.4 million to drill a deep well and \$1.6 million to drill a shallow well. In order to estimate regional economic impacts, the analysis assumes that operators are unable to find suitable substitute drilling locations within Carbon, Emery and Uintah counties in Utah; thus, the associated economic contribution is lost to the region in that year. The direct effect of delaying the drilling of a well is estimated based on the level of spending that would be forgone in the region in that year. The regional impact analysis estimates the number of jobs and level of output that would be result from this potential loss of oil and gas activity in the region. The results of this analysis are included in Section 7.2 of the final economic analysis.

(97) Comment: A commenter states that the use of past costs to estimate future costs is a faulty assumption because gas development is expanding in the region. The commenter provides supporting information to illustrate the rate of expansion of oil & gas development in Utah.

Our Response: Section 7.2 of the economic analysis used estimates of past owl consultation efforts as the basis for forecasting the level of section 7 consultation efforts and surveying efforts related to oil and gas activities. The commenter is correct that gas development is expected to increase in Utah in the future, and specifically in the area where unit CP-15 lies. The commenter notes that natural gas production in Carbon County, Utah, has increased an average of 49 percent per year for the 1993 to 2002 period. Based on the BLM's August 2002 Minerals Potential Report for the Price Utah area, Coal Bed Methane development in this region is expected to increase significantly over the next ten years. Given this expected development, and based on discussions with BLM and the Service, the analysis has been revised to forecast a 300 percent increase in consultations and owl surveying efforts related to oil and gas activities in this area in the future.

(98) *Comment:* One commenter notes that, should critical habitat reduce or

delay the development of natural gas wells, the supply of natural gas would decline and thus the price paid by consumers for this commodity would increase. The commenter provides citations to several studies documenting the current supply and demand conditions of the natural gas market, as well as reference to a model that considers the price implications of changes in supply and demand on the price consumers pay for natural gas.

Our Response: While the specific number of wells that could be drilled in designated critical habitat in the future is unknown, wells affected by owl conservation represent only a small portion of expected development in the region. Of the active wells in Utah and New Mexico, less than one-half of one percent are in the proposed designation. Given the current high price of natural gas (which is expected to continue), the resources (e.g., equipment and labor) needed to develop this commodity are in high demand. Thus, even if development of certain wells is delayed, resources would likely be employed elsewhere, or would only remain unused for a short period of time.

Additional primary research would be required to estimate the impact on consumers of a small change in natural gas supply, and significant uncertainty would remain regarding the impact of owl conservation on the pace of well development, the impact of reduced development on gas supplies, etc. In addition, the impact measure provided by the commenter (\$8 million in savings to consumers as a result of development of one well), does not account for possible losses to existing producers as the price falls (i.e., changes in producer surplus). Thus, the net change in social welfare resulting from a change in supply of natural gas could be considerably smaller than that cited by the commenter.

The final economic analysis has been modified to include qualitative discussion of the potential impact of the designation on consumers of natural gas.

(99) Comment: The Service fails to consider substantial key data regarding the oil and gas industry in the region including employment data, production and revenues data and project modification data.

Our Response: The economic analysis did consider these types of statistics for the oil and gas industry in the region, as demonstrated by the data included in Exhibit 7–2. This exhibit presents employment data for oil and gas extraction as well as other sectors of the economy for the four states included in the designation. Data on oil and gas

production in the region is also included in the analysis and presented in Exhibit 7–1. Revenue data for oil and gas operators was not available as many of the operators in the area are private operators and this information is confidential. In addition, many of the operators in the area operate in areas more expansive than the local region. Thus, revenue data were not included in the report. In the economic analysis, project modifications were considered unlikely for oil and gas projects; therefore these data were not included. However, in response to comments and based on further research, Section 7.2 of the report has been revised to include additional discussion of potential project modifications to oil and gas activities that could result from owl conservation activities.

(100) Comment: One commenter believes that the analysis of small business entities in the oil and gas industry is flawed because it compares the costs that local operators must incur to comply with owl restrictions in critical habitat to costs of operations for the entire U.S. oil and gas industry. The commenter further states that although some oil and gas companies that operate within the proposed critical habitat areas are headquartered outside those areas, much of their domestic oil and gas production potential is in the Rocky Mountain Region.

Our Response: As discussed in the Section 8.3 of the economic analysis, based on a review of operators in Carbon County, Utah, the majority of operators in the oil and gas industry are headquartered outside of the region. Oil and gas companies operating in Carbon County, Utah, are located in a variety of states, including Texas, Oklahoma and Alabama, among others. To determine whether a substantial number of operators are likely to be affected, it is important to compare the affected operators to the potentially affected population of oil and gas operators. Since most of the operators in the region appear to be in a wide variety of locations across the United States, it was determined that the relevant area for purposes of this analysis is the United States.

(101) *Comment:* One commenter states that AUM reductions are not typically evenly distributed, thus there is the possibility for significant regional economic impacts if all ranches affected are in the same region.

Our Response: As discussed in the final economic analysis, Section 8.2 Livestock Grazing Small Business Impacts, information is not available to determine the specific permittees most likely to experience a reduction in

authorized AUMs. The analysis estimates an annual reduction of 3,100 to 15,600 AUMs for a variety of reasons, including actions unrelated to owl conservation. Since a typical permittee grazes approximately 1,070 AUMs, this reduction would likely affect more than one permittee. In order to estimate the number of permittees potentially affected, the analysis uses two approaches. First, the analysis estimates the number of permittees that could possibly experience a complete reduction in their authorized AUMs. Second, the analysis estimates the impact on each permittee in the proposed designation, if the impacts were evenly distributed. While it may not be likely that impacts are evenly distributed, this approach provides useful information to understand the potential range of impacts on ranchers, in the absence of more specific information.

(102) *Comment:* The environmental assessment only discusses cultural impacts to Tribes. The Southwest has a diverse mix of cultures that have already been significantly impacted by owl protections.

Our Response: The commenter did not provide sufficient rationale to explain why he or she believes that cultures have been significantly impacted by owl protections. Section 3.10 was added to the environmental assessment to address environmental justice and social conditions.

(103) Comment: The purpose of a NEPA document is to disclose impacts not to say that additional consultations are a result of designation of critical habitat when added to, "the effects of existing section 7 consultations for other species and existing land management plans and policies." While this discloses there will be cumulative effects it does not say what those effects will be or have been.

Our Response: The cumulative effects analysis (section 3.11) was edited to clarify that critical habitat designation is unlikely to result in additional project modifications compared to the existing condition (i.e. project modification resulting from consultation on effects to the species). Cumulative effects from any of the critical habitat designation alternatives are therefore improbable.

(104) *Comment:* The prior economic analysis did not consider all relevant costs.

Our Response: A new economic analysis was completed to address this final designation. The previous economic analysis is not reflective of this designation or our current approach for analyzing economic impacts.

(105) Comment: Current owl stipulations attached to Federal oil and gas leases and other permitted activities prohibit activities between March 31 and August 31 each year. The proposed critical habitat designation is part of the growing list of barriers to Federal land access for the energy industry and will effectively prohibit oil and gas reserves from being recovered. Proposed critical habitat in Utah should be excluded from the final designation because of the "other relevant impact" to our Nation's domestic energy production, and the resulting effects to our economy and National Security.

Our Response: As detailed in our economic analysis, since the listing of the owl, there have been 2 formal and 34 informal consultations with five Federal agencies. Based upon these and other data analyzed in our economic analysis and environmental assessment, we conclude that this rule is not expected to significantly affect energy supplies, distribution, or use (see also "Executive Order 13211" section

We have a very good consultation history for the owl; thus, we can describe the kinds of actions that have undergone consultations. Within the proposed critical habitat designation in New Mexico, there was only one informal consultation (the Department of Energy) in 1994 and no formal consultation; within Utah, there were 34 informal and 2 formal consultations. Since the owl was federally listed, none of the projects related to oil and gas production have been stopped, delayed, or altered in a significant way resulting from section 7 consultation. Using the economic analysis and our consultation history, we find that impacts to our "Nation's domestic energy production" resulting from the designation of critical habitat will not be significant and should have no effect on National Security

(106) Comment: The Coalition of Arizona and New Mexico Counties suggests that all FS lands suitable for timber harvest and all Federal lands identified as having high risk for catastrophic wildfire be excluded from designated critical habitat.

Our Response: We recognize the risk of catastrophic wildfire to areas within the WUI and have excluded 157 project areas that were included in a programmatic consultation completed by the Region 3 of the FS and the Penasco WUI project area that we evaluated under a separate opinion (see "Exclusions Under Section 4(b)(2)" section below). Projects covered by the programmatic consultation and the separate opinion for the Penasco project

area were determined by the FS as areas "at imminent risk of catastrophic wildfire" (Service 2001 and Service 2002). We are designating protected and restricted habitat based upon information in the Recovery Plan (Service 1995), which would include "lands suitable for timber harvest" because these areas are essential to the conservation of the owl.

In 1996, the 11 National Forest Plans in the Southwestern Region of the FS were amended to add specific standards and guidelines for the owl, grazing, and other management prescriptions (Forest Plan Amendments) (FS 1995, 1996b). Standards and guidelines are the bounds and constraints within which all FS management activities are to be carried out in achieving Forest Plan objectives (FS 1996b, p. 87). The language and intent of the Forest Plan Amendments were to incorporate the recommendations of the Recovery Plan (Service 1995) to provide primary direction for site-specific project design (FS 1995) (i.e., the Forest Plan Amendments are applied through project level environmental analysis and decisions). It is important to note that the FS indicated the designation of critical habitat within protected or restricted habitat is not likely to result in a regulatory burden substantially above that already in place because they are already managing for the habitat by following their Forest Plan Amendments (K. Menasco, USDA FS, pers. comm., 2003).

#### Issue 4: Tribal Issues

(107) *Comment:* Why are Tribal lands included in the proposed designation?

Our Response: In our proposal to designate critical habitat, we found that lands of the Mescalero Apache, San Carlos Apache, and Navajo Nation likely met the definition of critical habitat with respect to the owl, and portions of those lands were proposed as critical habitat. However, we worked with the tribes in developing measures adequate to conserve owls on Tribal lands. The Mescalero Apache Tribe, San Carlos Apache Tribe, and Navajo Nation completed management plans for the owl that are generally consistent with the Recovery Plan. We have excluded all Tribal lands from final critical habtiat for the owl because the benefits of their exclusion outweigh the benefits of including these lands within the designation (see "Exclusions Under Section 4(b)(2)" section).

(108) Comment: The Mescalero Apache Tribe believes the Service did not adequately consider how the designation of critical habitat on Tribal lands will benefit the owl or how the designation will impact the Mescalero Apache Reservation.

Our Response: We did not include the Mescalero Apache or other Tribal lands in the final designation of critical habitat for the owl.

(109) Comment: The San Carlos Apache Tribe owl management plan is not an adequate basis for the Service to exclude their lands from designated critical habitat.

Our Response: We have determined that the conservation measures and benefits provided the owl and it habitat by the San Carlos Apache Tribe's managment plan, along with the cooperative partnership between the Tribe and the Service provide sufficient justification for excluding the Tribal lands from the final designation of critical habitat for the owl (See Exclusions Under Section 4(b)(2) section below).

(110) Comment: The Service's exclusion of the White Mountain Apache, Jicarilla Apache, and portions of the San Carlos Apache (Malay Gap) Tribal lands is not legally sound, given that Center for Biological Diversity v. Norton dismissed the Service's conclusions that additional special management is not required if adequate management or protection is currently in place.

Our Response: The White Mountain Apache, Jicarilla Apache, and portions of the San Carlos Apache (Malay Gap) lands are not included within the current designation because they were not proposed as critical habitat for the owl (65 FR 45336). We find these lands are not essential to the conservation of the species.

(111) Comment: The Service's section 4(b)(2) analysis considers the potential adverse impact of designating critical habitat on working relationships; however, such impacts should not take precedence over all other considerations (i.e., the benefits of including areas within the designation). Where an area is essential to the conservation of the species, adverse impacts should be considered, but should not be the sole reason for excluding the area.

Our Response: We agree. That is why we are required to balance the benefits of including an area in a critical habitat designation against the benefits of excluding an area from that designation (see "Exclusions Under Section 4(b)(2)" section).

(112) Comment: Did the Service: (1)
Receive an unredacted version of the
San Carlos Apache owl plan; (2) has the
Tribal council or the Service approved
the plan; and (3) for what time period
is the plan effective?

Our Response: We received a redacted version of the San Carlos Apache managment plan for the owl. The Tribal Council has approved the plan, and there is no expiration date for the plan.

(113) Comment: It is not clear what law or regulation occasioned the Tribes to prepare and implement their owl management plans, or whether they are legally required to continue implementing these plans with or without critical habitat.

Our Response: The plans were voluntarily prepared with technical assistance from the Service. It is our understanding that the Tribes will continue implementing the plans and revise them as appropriate.

(114) Comment: The Categorical exclusion of Tribes from the designation is inconsistent with the requirements of section 4 of the Act.

Our Response: We have carefully examined the merits of excluding Tribal lands from this designation on a caseby-case basis. Please see "Exclusions Under Section 4(b)(2)" section for our detailed analysis and rationale for exclusions of tribal lands from this designation.

(115) Comment: The Southern Ute Indian Tribe believes that the establishment and maintenance of strong working relationships with all Tribes warrants the exclusion of all Tribal lands from the designation. The Hualapai Tribe indicated that it is inappropriate for the Service to designate critical habitat on Indian lands, where Tribes have the expertise, capacity, and regulations to protect endangered species on their lands. The BIA Southwest Region commented that the existing owl management plan for the Mescalero Apache has protected and effectively conserved the species on Tribal lands; including this area as critical habitat would undermine the Tribe's status as a sovereign nation, increase workloads for the Tribe and BIA, preclude commercial use of the forest, and contribute to the increase risk of catastrophic wildfire. The BIA also indicated that designating critical habitat on Tribal lands would adversely affect the Service's working relationship with all Tribal governments.

Our Response: After conducting an analysis under section 4(b)(2) of the Act, we concluded that the benefits of excluding the San Carlos Apache, Mescalero Apache, and Navajo Nation lands from the final designation of critical habitat for the owl outweigh the benefits to the owl and its habitat from their inclusion. Accordingly, we have excluded all Tribal lands from this final designation of critical habitat for the owl.

(116) Comment: The Navajo Nation Forest Management Plan and owl plan provide no documented benefit to the species because neither plan complies with the Recovery Plan.

Our Response: Please see our discussion of the Navajo Nation Forest Management Plan in the "Exclusions Under Section 4(b)(2)" section below.

(117) Comment: Contrary to statements in the draft environmental assessment, there are no known owl nest or roost sites, no known populations, and no known occupied areas of any sort on the Jicarilla Apache Nation's lands.

Our Response: The data concerning owl occurrences on the lands of the Jicarilla Apache Nation that is currently within Service files and the supporting record for this indicate that there are only two known records for the owl on the Jicarilla Apache Nation's lands. Both records are from the 1980s. Since then, extensive surveys have been conducted, but did not locate any additional owls. These lands are not considered essential to the conservation of the owl. The description of alternatives in the environmental assessment was edited to correct this error.

#### Issue 5: Other Relevant Issues

(118) Comment: The designation of critical habitat would constitute a "government land grab." The owl is merely the vehicle by which environmental groups plan to stop harvest of "old growth" forests.

harvest of "old growth" forests.

Our Response: The designation of critical habitat has no effect on non-Federal actions taken on private or State lands, even if the land is within the mapped boundary of designated critical habitat, because these lands were specifically excluded from the designation. We believe that the designation of critical habitat for the owl does not impose any additional restrictions on land managers/owners within those areas designated as critical habitat, beyond those imposed due to the listing of the owl. All landowners are responsible to ensure that their actions do not result in the unauthorized take of a listed species, and all Federal agencies are responsible to ensure that the actions they fund, permit, or carry out do not result in jeopardizing the continued existence of a listed species, regardless of where the activity takes place.

We also note that this designation is consistent with the Recovery Plan. While the Recovery Plan does not explicitly protect "old-growth" forests, it does recommend that large trees and other forest attributes that may be found in "old-growth" forests be retained to

the extent practicable within certain forest types. Large trees are important ecosystem components, have been much reduced in the Southwest, and take many decades to replace once they are lost.

As detailed below, the 11 National Forest Plans in the Southwestern Region of the FS were amended in 1996 to add specific standards and guidelines for the owl, grazing, and old-growth (Forest Plan Amendments) (FS 1995, 1996b). The FS has previously indicated that the Forest Plan Amendments are nondiscretionary actions that must be implemented by each of the 11 National Forests in the Southwestern Region (Service 2004). We also note that sitespecific decisions must be consistent with the applicable Forest Plan at the time they are issued, and fall under the authority of the National Forest

Management Act of 1976 (36 CFR 219). (119) Comment: The owl by its very name is not exclusive to the United States. Typical of most Mexican fauna entering the United States, it appears rarer than it really is. Therefore, it is Mexica's duty to protect it.

Mexico's duty to protect it.

Our Response: The Mexican spotted owl was determined to be threatened throughout its range in the United States and Mexico, and we are obligated by statue (the Act) to provide regulatory protection for the species, if warranted, regardless of the protection measures afforded the species in Mexico. Furthermore, according to CFR 402.12(h) "Critical habitat shall not be designated within foreign countries or in other areas outside of the United States jurisdiction", and shall only be designated for a listed species in the boundaries of the United States to the maximum extent prudent and determinable.

(120) *Comment:* Why were the public hearings in Utah held in the southwestern part of the State when most of the critical habitat is in the southeastern portion?

Our Response: The Act requires that at least one public hearing be held if requested. We held six public hearings throughout the four state region. We selected Cedar City, Utah, for a hearing location because of its proximity to four of the five proposed critical habitat units in the State.

(121) *Comment:* The designation of critical habitat abrogates the Treaty of Guadalupe Hidalgo. You do not have constitutional authority to do so.

Our Response: The Treaty of Guadalupe Hidalgo resulted in grants of land made by the Mexican government in territories previously appertaining to Mexico, and remaining for the future within the limits of the United States. These grants of land were respected as valid, to the same extent that the same grants would have been valid within the territories if the grants of land had remained within the limits of Mexico. The designation of critical habitat has no effect on non-Federal actions taken on private land (e.g., land grants), even if the private land is within the mapped boundary of designated critical habitat because we have not included State and private lands in this designation of critical habitat for the owl by definition. Critical habitat has possible effects on activities conducted by non-Federal entities only if they are conducting activities on Federal lands or that involves Federal funding, a Federal permit, or other Federal action (e.g., grazing permits). If such a Federal nexus exists, we will work with the applicant and the appropriate Federal agency to ensure that the project can be completed without jeopardizing the species or adversely modifying critical habitat. Therefore we do not believe that designation of critical habitat for the owl abrogates any treaty of the United States.

(122) Comment: Many commenters were concerned that the designation of critical habitat would prohibit recreational and commercial activities from taking place.

Our Response: As stated in the economic analysis and this final rule, we do not believe the designation of critical habitat will have significant adverse economic effects on any landowner above and beyond the effects of listing of the species. It is correct that projects funded, authorized, or carried out by Federal agencies, and that may affect critical habitat, must undergo consultation under section 7 of the Act. This provision includes commercial activities. However, as stated elsewhere in this final rule, we do not expect the result of those consultations to result in any restrictions that would not be required as a result of listing the owl as a threatened species.

Designation of critical habitat does not preclude commercial projects or activities such as riparian restoration, fire prevention/management, or grazing if they do not cause an adverse modification of critical habitat. We will work with Federal agencies that are required to consult with us under section 7 of the Act to ensure that land management will not adversely modify critical habitat.

(123) Comment: The Federal Highway Administration (FHA) requested that we exclude roadways and adjacent rightsof-way from the final designation because of economic impacts and delays. These areas typically provide poor or marginal habitat for the owl.

Our Response: We did not exclude adjacent rights-of-way from the final designation, but note that existing roads, other paved areas, and areas that do not contain one or more primary constituent elements are not considered critical habitat. If adjacent lands meet the definition of protected or restricted habitat and contain primary constituent elements, then they would still be considered critical habitat. The additional administrative costs for consultation are included in the economic analysis. We do not anticipate delays associated with the FHA projects and the designation of critical habitat. Compliance with section 7 could range from simple concurrence, which is usually completed within 30 days, to formal consultation, which could take up to 135 days. Formal consultation would only be necessary if the action would have an adverse effect on the critical habitat. Designation of critical habitat in areas essential to the conservation of the owl is not likely to result in a regulatory burden substantially above that already in place due to the presence of the species. To streamline the regulatory process, the FHA may request section 7 consultation at a programmatic level for activities that would result in adverse effects to critical habitat.

Adjacent rights-of-way contain habitat essential to the conservation of the owl if they contain one or more primary constituent elements. Therefore, we cannot justify excluding these particular areas from the designation.

(124) Comment: Impacts to international migratory waterfowl treaties are not addressed by the Service in the economic analysis or environmental assessment.

Our Response: We do not believe that the designation of critical habitat for the owl impacts internaltional migratory waterfowl treaties and consequently did not take these treaties into consideration when conducting our economic or environmental analyses. Further, the commenter did not provide any data for us to consider and did not adequately explain the rationale why international migratory waterfowl treaties would be affected by the critical habitat designation.

# **Summary of Changes From the Proposed Rule**

Based upon our review of the public comments, the economic analysis, environmental assessment, issues addressed at the informational meeting and any new relevent information that may have become available since the

- publication of the proposal, we reevaluated our critical habitat proposal and made changes as appropriate. Other than minor clarifications and incorporation of additional information on the species' biology, this final rule differs from the proposal as follows:
- (1) We attempted to clarify the definitions and use of protected and restricted habitat and the attributes of primary constituent elements of critical habitat in this rule.
- (2) In the proposed rule we stated that all administratively reserved lands (i.e., lands that have been administratively withdrawn from commercial activities, such as wilderness or research natural areas) would be considered critical habitat and included "designated" wilderness areas.
- (3) We modified some of our critical habitat units based upon information submitted during the public comment period. Some critical habitat units have been removed from the designation because we determined, based on the best available information, that they did not contain areas essential to the conservation of the owl. The majority of refinements were conducted to remove, to the extent possible, those areas that did not contain protected or restricted habitat and primary constituent elements.
- (4) The boundary of Unit BR–W–7 in Arizona was discovered to be mapped incorrectly. We have changed the boundary for this unit and have verified the boundaries for all units to ensure that they are correct;
- (5) We excluded 157 WUI project areas and the Penasco WUI project area on FS lands in Arizona and New Mexico because the benefits of excluding these lands outweigh the benefits of their inclusion.
- (6) No Tribal lands are designated, including Canyon de Chelly and Navajo National Monument administered by the NPS, because the benefits of excluding the lands from the designation outweigh the benefits of their inclusion pursuant to section 4(b)(2) of the Act;
- (7) Fort Carson, Colorado, Fort Huachuca, Arizona, and the U.S. Naval Observatory Flagstaff Station, Arizona, are excluded because they have final INRMPs and are consistent with the 2004 National Defense Authorization Act (Pub. L. 108–136, November 2003), Section 318, Military Readiness and Conservation of Protected Species which amended section 4(a)(3) of the Act.
- (8) Fort Wingate Army Depot, New Mexico, is excluded from the designation because it does not contain

areas that are essential to the conservation of the species; and

#### Critical Habitat

Critical habitat is defined in section 3(5)(A) of the Act as—(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection and; (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. The term "conservation," as defined in section 3(3) of the Act, means "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary" (i.e., the species is recovered and removed from the list of endangered and threatened species).

Section 4(b)(2) of the Act requires that we base critical habitat designation on the best scientific and commercial data available, taking into consideration the economic impact, impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude areas from critical habitat designation if we determine that the benefits of exclusion outweigh the benefits of including the areas as critical habitat, provided the exclusion will not result in the extinction of the species.

In order to be included in a critical habitat designation, the habitat must first be "essential to the conservation of the species." Critical habitat designations identify, to the extent known using the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Section 4 requires that we designate critical habitat at the time of listing and based on what we know at the time of the designation. When we designate critical habitat at the time of listing or under court-ordered deadlines, we will often not have sufficient information to identify all areas of critical habitat. We are required, nevertheless, to make a decision and thus must base our designations on what, at the time of designation, we know to be critical habitat.

Within the geographical area occupied by the species, we will

designate only areas currently known to be essential. We will not speculate about what areas might be found to be essential if better information became available, or what areas may become essential over time. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation.

Our regulations state that, "The Secretary shall designate as critical habitat areas outside the geographic area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species" (50 CFR 424.12(e)). Accordingly, when the best available scientific and commercial data do not demonstrate that the conservation needs of the species require designation of critical habitat outside of occupied areas, we will not designate critical habitat in areas outside the geographic area occupied by the species.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal** Register on July 1, 1994 (59 FR 34271), and Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (P.L. 106-554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. They require Service biologists to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, and biological assessments or other unpublished materials (i.e. gray literature).

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, all should understand that critical habitat designations do *not* signal that habitat

outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under Section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the Section 9 take prohibition, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

#### Primary Constituent Elements

In accordance with sections 3(5)(A) and 4(b) of the Act and regulations at 50 CFR 424.12, we are required to base critical habitat designation on the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements) that are essential to conservation of the species and that may require special management considerations or protection. Such general requirements include, but are not limited to—space for individual and population growth, and for normal behavior; food, water, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The primary constituent elements essential to the conservation of the owl include those physical and biological features that support nesting, roosting, and foraging. These elements were determined from studies of owl behavior and habitat use throughout the range of the owl (see "Background" section above). Although the vegetative communities and structural attributes used by the owl vary across the range of the subspecies, they consist primarily of mixed conifer forests or canyons. The mixed-conifer, pine-oak communities and canyon habitat appear to be the most frequently used community throughout most portions of the subspecies' range (Skaggs and Raitt 1988; Ganey and Balda 1989, 1994;

Gutierrez and Rinkevich 1991, Service 1995). Although the structural characteristics of owl habitat vary depending on uses of the habitat (e.g., nesting, roosting, foraging) and variations in the plant communities over the range of the subspecies, some general attributes are common to the subspecies' life-history requirements throughout its range.

Protected areas include all known owl sites (PACs), all areas in mixed-conifer and pine-oak types with greater than 40 percent slopes where timber harvest has not occurred in the past 20 years and administratively reserved lands, such as Wilderness Areas or Research Natural Areas. Restricted habitat includes mixed-conifer forest, pine-oak forest, and riparian areas adjacent to or outside of protected areas. These habitat areas are used by resident (i.e., territorial) owls for foraging, since the 600 acres recommended for PACs include on average 75 percent of nighttime foraging locations of radioed birds. The restricted areas also provide habitat for nonterritorial birds (often referred to as "floaters"), to support dispersing juveniles, and to provide replacement nest/roost habitat on the landscape through time. For example, restricted habitat can succeed to protected habitat by replacing protected habitat that has been lost by fire or decay, thereby providing additional protected habitat that will assist in the conservation of the owl. These areas are essential to the conservation of the species because they encompass habitat that is required by the owl to complete its life cycle and are needed for recovery. Other forest and woodland types (ponderosa pine, spruce-fir, pinyon-juniper, and aspen) are not expected to provide nesting or roosting habitat for the owl (except when associated with rock canyons). Thus, activities in areas defined as other forest and woodland types would not require section 7 consultation unless specifically delineated within PACs.

The minimum mapping unit for this designation does not exclude all developed areas, such as buildings, roads, bridges, parking lots, railroad tracks, other paved areas, the lands that support these features, and other lands unlikely to contain the primary constituent elements. Federal actions limited to these areas would not trigger a section 7 consultation, unless they affect protected or restricted habitat and one or more of the primary constituent elements in adjacent critical habitat.

Canyon habitats used for nesting and roosting are typically characterized by cooler conditions found in steep, narrow canyons, often containing crevices, ledges, and/or caves. These

canyons frequently contain small clumps or stringers of ponderosa pine, Douglas-fir, white fir, and/or pinyonjuniper. Deciduous riparian and upland tree species may also be present. Adjacent uplands are usually vegetated by a variety of plant associations including pinyon-juniper woodland, desert scrub vegetation, ponderosa pine-Gamble oak, ponderosa pine, or mixedconifer. Owl habitat may also exhibit a combination of attributes between the forested and canyon types. Section 7 consultation may be required in adjacent vegetated uplands when there are one or more primary constituent elements present within these areas that meet the definition of protected or restricted habitat. The primary constituent elements for these adjacent vegetated uplands are identified below under forest habitats. We anticipate that Federal agencies will use their expertise and discretion in determining whether adjacent vegetated lands (i.e., rims or mesa tops) contain one or more of the primary constituent elements.

Space for Individual and Population Growth and Normal Behavior

Owls have been recorded in the Arizona, Colorado, New Mexico, and Utah, particularly mature mixed-conifer forests, pine-oak forests, and canyon habitat (Skaggs and Raitt 1988; Ganey et al. 1988; Ganey and Balda 1989a; Gutierrez and Rinkevich 1991; Willey 1993; Fletcher and Hollis 1994; Seamans and Gutierrez 1995; Gutierrez et al. 1995; Ward et al. 1995; Geo-Marine 2004), primarily above 6,000 ft and below 9,350 ft elevation (Zwank et al. 1994; Seamans and Gutierrez 1995; Tarango et al. 1997; Young et al. 1998; Geo-Marine, Inc. 2003, 2004). These vegetative communities appear to be especially important (Ganey and Balda 1989; 1994; Fletcher 1990; Zwank et al. 1994; Seamans and Gutierrez 1995; Grubb et al. 1997; Tarango et al. 1997; Young et al. 1998; Geo-Marine, Inc. 2003, 2004). Slope angles range from 0 to 67 degrees (Tarango et al. 1997, Geo-Marine, Inc. 2003). Mature mixedconifer forests, pine-oak forests, and canyon habitat are characterized by the presence of a variety of large trees, down and dead woody material, and a diversity of plant species and vegetation layers. These communities include, but are not limited to, Douglas-fir, white fir, limber pine, or blue spruce forest. Owls are also found in pine-oak, and in riparian forests dominated by various species of broadleaved deciduous trees and shrubs (Service 1995).

Steep narrow canyons sometimes associated with riparian forests or scattered trees are utilized by owls in

southern Utah, northern Arizona, and northern New Mexico (Service 1995, Gutierrez and Rinkevich 1991). Canyon habitat is also found in southeastern New Mexico and southwest Texas. Owls have been documented using riparian drainages for nesting, roosting, and dispersal (Gutierrez and Rinkevich 1991; Willey 1998). Drainages throughout these areas concentrate available moisture, influencing the diversity and structure of the vegetation. Even small sources of water such as tiny pools or puddles create humid conditions that may influence the use of an area by owls (Geiger 1965 in Gutierrez and Rinkevich 1991). In canyon habitats, riparian sites are characterized by various species of broadleaved deciduous trees and shrubs that typically grow bigger and occur in higher densities within the drainages.

Most owls are considered nonmigratory throughout their range. Research and monitoring (Zwank et al. 1994) have documented year-round occupancy of known home ranges (the area used by owls throughout the year). However, researchers have documented seasonal movements by owls. Some individuals occupied the same area year-round, some remained in the same general area but exhibited shifts in habitat use patterns, and some migrate considerable distances 12–31 miles (mi) (20-50 kilometers [km]) during the winter, generally migrating to more open habitat at lower elevations (Ganey and Balda 1989b; Willey 1993; Ganey et al. 1998). Bond et al. (2002) reported high site fidelity within eleven spotted owl territories in California, Arizona, and New Mexico following wildfires. Therefore, it is important that owls have home ranges of adequate size to provide for their life history requirements throughout the entire year.

Owl dispersal patterns have been documented. The onset of juvenile dispersal is sudden and in various directions (Arsenault et al. 1997; Willey and C. van Riper 2000). Juvenile dispersal takes place in September and October, with 85 percent leaving in September (Gutierrez et al. 1995; Arsenault et al. 1997; Willey and C. van Riper 2000). Ganey et al. (1998) found dispersing juveniles in a variety of habitats ranging from high-elevation forests to pinyon-juniper woodlands and riparian areas surrounded by desert grasslands. In Arizona, New Mexico, and Utah, owls were observed moving across open low desert landscapes between islands of suitable breeding habitat (Ganey et al. 1998; Arsenault et al. 1997; Willey 1998). Trees of appropriate size and spacing appear to be necessary for successful dispersal,

but specific data describing this habitat structure are not available. Forsman et al. (1984) and Geo-Marine (2004) have reported high site fidelity by owls. Once dispersing male owls settle in a territory (the area defended by an owl), they rarely make additional movements outside of their home range. However, Arsenault et al. (1997) reported that three sub-adult females paired temporarily with adult males in their first summer, but left in the fall, suggesting that dispersal can continue through an owl's second year.

Sufficient habitat must occur within owl home ranges to provide vegetation of appropriate size and cover for roosting, sheltering, rearing, and foraging. The area must be adequate to provide for the needs of the owl on a year-round basis. Population growth can only occur if there is adequate habitat in an appropriate configuration to allow for the dispersal of owls across the landscape.

#### Food

Owls typically hunt from perches in trees with dense foliage using a perchand-wait strategy; therefore, cover must be present within their home range for them to successfully hunt and survive (Service 1995). Their diverse diet includes small mammals, birds, lizards, and insects. The primary owl prey species are woodrats (Neotoma spp.), peromyscid mice (Peromyscus spp.), and microtine voles (Microtus spp.) (Service 1995; Young et al. 1997; Delaney et al. 1999; Seamans and Gutierrez 1999). Research indicates that woodrats are the most important prey species based on relative biomass (Young et al. 1997; Delaney et al. 1999; Grubb et al. 1999; Seamans and Gutierrez 1999). However, owls also utilize different groups of prey species on a seasonal basis. The density of annual plants and grasses, as well as shrubs, may be important to enhancing the owl's prey base (Ward and Block 1995; Delanev et al. 1999; Ward 2001). Vegetation communities which provide a diversity of structural layers and plant species likely contribute to the availability of prey for owls (Willey 1993: Gutierrez and Rinkevich 1991). Therefore, conservation of the owl should include consideration of the habitat needs of prey species, including structural and species diversity. Owl habitat must provide sufficient prev base and cover from which to hunt in an appropriate configuration and proximity to nest and roost sites.

#### Water

Owls are typically found in close proximity to water (Ganey and Balda

1989; Zwank et al. 1994; Ganey et al. 1998; Young et al. 1998; Geo-Marine 2004). Even small sources of water such as tiny pools or puddles create humid microsites that may influence an owl's use of an area (Geiger 1965 in Gutierrez and Rinkevich 1991). Gutierrez and Rinkevich (1991) reported that owls in Zion National Park were always in areas with some type of water source (i.e., perennial stream, creeks, and springs, ephemeral water, small pools from runoff, reservoir emissions). Over 80 percent of the nests located by Forsman (1976) were within 984 ft (300 m) of permanent water. Barrows (1981) reported spotted owls roosting close to surface water in xeric sites in the San Bernardino National Forest. Geo-Marine (2004) reported finding most owls within 531 ft (162 m) from the nearest stream and all owls within 0.25 mi (0.4 km) of a stream. Tarango et al. (1997) reported cliff-roost site ranges of 33 ft (10 m) to 722 ft (220 m) from the nearest spring. Tree-roost sites ranged from 50 to 991 ft (15 to 302 m) to the nearest spring (Tarango et al. 1997). Owls have not been reported to drink water, so it is likely that owls meet much of their biological water requirements through the prey they consume. However, the presence of water does provide related benefits to owls as the availability of water may contribute to improved vegetation diversity and structure which improves cover and possibly prey availability.

Reproduction and Rearing of Offspring

Male and female owls began roosting together in February and began nesting in March (Zwank et al. 1994; Service 1995). Territories in mature mixedconifer forests and pine-oak forests normally contain several potential nest and roost trees (Ganev and Balda 1989b; Ganey et al. 1999; Geo-Marine 2003 2004). Canyon habitat normally contains several potential nesting cavities, crevices, and ledges. Hence, mature coniferous trees, riparian vegetation, and cavities, crevices, and rock ledges may be important criteria for habitat selection. Recent information throughout the owl's range indicate nests were predominately located in mature coniferous trees (mostly Douglas-fir) (Ganey 1988; Fletcher and Hollis 1994; Zwank et al. 1994; Seamans and Gutierrez 1995; Young et al. 1998; Peery et al. 1999; Ganey et al. 2000; Geo-Marine, Inc. 2003, 2004) and cavities, crevices and ledges in canyon habitat (Gutierrez and Rinkevich 1991).

Owls exhibit a high degree of site fidelity once territories (the area defended) and home ranges (the area used throughout the year) have been established (Forsman *et al.* 1984, Bond *et al.* 2002; Geo-Marine 2003, 2004). Therefore, it is important that habitat characteristics within territories and home ranges be maintained over time in order for them to remain suitable. This is important for established owl PACs, as well as new sites established by dispersing owls.

Large trees also provide protection against predators, cover for foraging, and thermal cover (Gutierrez 1985; Carey et al. 1992; Service 1995; Ganey and Dick 1995; Ganey et al. 1997; Delaney et al. 1999; Geo-Marine 2003, 2004). Predators include great horned owls (Bubo virginianus) and northern goshawk (Gutierrez et al. 1995). Owls may be particularly vulnerable to predation and other threats during and shortly after fledging (Geo-Marine 2003, 2004). Therefore, cover near nest sites may be important for young to fledge successfully. Conditions which promote the proliferation of great horned owls (reducing overstory and canopy cover) may contribute to this mortality factor. Habitat that provides for successful reproduction and rearing of young provides large trees, high basal area of large diameter trees (e.g., in mixedconifer about 140 sq ft basal area per ac, with 20 or more trees per ac that are 18 in dbh or greater), high canopy cover (e.g., 40 or greater), uneven aged trees (e.g., 3 or more age classes), multistory layers and high volume of down and dead woody material of adequate size to provide nesting structures in proximity to foraging, roosting, sheltering and dispersal habitats, in addition to adequate cover for protection from climatic elements and predators in an appropriate configuration in relation to the nest site.

We determined the primary constituent elements for the owl from studies of their habitat requirements (see "Background" section above) and the information provided in the Recovery Plan and references therein (e.g., Skaggs and Raitt 1988; Ganey et al. 1988; Ganey and Balda 1989a; Gutierrez and Rinkevich 1991; Willey 1993; Fletcher and Hollis 1994; Seamans and Gutierrez 1995; Service 1995; Gutierrez et al. 1995; Recovery Plan; Ward et al. 1995; Willey 1998; Geo-Marine 2004). Since owl habitat can include both canyon and forested areas, we identified primary constituent elements in both

We have made some changes to the description of the primary constitute elements listed in the proposed rule in order to make them easier to understand; however, we did not alter their meaning. The primary constituent elements which occur for the owl

within mixed conifer, pine-oak, and riparian forest types that provide for one or more of owl's habitat needs for nesting, roosting, foraging, and dispersing are in areas defined by:

A. Primary constituent elements related to forest structure:

(1) a range of tree species, including mixed conifer, pine-oak, and riparian forest types, composed of different tree sizes reflecting different ages of trees, 30 percent to 45 percent of which are large trees with a trunk diameter of 12 inches (0.3 meters) or more when measured at 4.5 feet (1.4 meters) from the ground;

(2) a shade canopy created by the tree branches covering 40 percent or more of

the ground; and

(3) large dead trees (snags) with a trunk diameter of at least 12 inches (0.3 meters) when measured at 4.5 feet (1.4 meters) from the ground.

B. Primary constituent elements related to maintenance of adequate prey species:

(1) High volumes of fallen trees and other woody debris;

(2) A wide range of tree and plant species, including hardwoods; and

(3) Adequate levels of residual plant cover to maintain fruits, seeds, and

allow plant regeneration.

The forest habitat attributes listed above usually are present with increasing forest age, but their occurrence may vary by location, past forest management practices or natural disturbance events, forest type, productivity, and plant succession. These characteristics may also be observed in younger stands, especially when the stands contain remnant large trees or patches of large trees from earlier stands. Certain forest management practices may also enhance tree growth and mature stand characteristics where the older, larger trees are allowed to persist.

Steep-walled rocky canyonlands are typically within the Colorado Plateau RU, but also occur in other RUs. Canyon habitat is used by owls for nesting, roosting, and foraging and includes landscapes dominated by verticalwalled rocky cliffs within complex watersheds, including many tributary side canyons. These areas typically include parallel-walled canyons up to 1.2 mi (2 kilometers (km)) in width (from rim to rim), with canyon reaches often 1.2 mi (2 km) or greater, and cool north-facing aspects. Rock walls must include caves, ledges, and fracture zones that provide protected nest and roost sites. Breeding sites are located below canyon rims; however, it is known that owls use areas outside of the canyons (i.e., rims and mesa tops). Owls nest and roost primarily on cliff faces

using protected caves and ledges, and forage in canyon bottoms, on cliff faces and benches, and along canyon rims and adjacent lands. Although it is difficult to rely upon vegetation alone to identify canyon habitat, these areas frequently contain small clumps or stringers of mixed-conifer, ponderosa pine, pine-oak, pinyon-juniper, and/or riparian vegetation.

C. Primary constituent elements related to canyon habitat include one or

more of the following:

(1) presence of water (often providing cooler and often higher humidity than the surrounding areas);

(2) clumps or stringers of mixedconifer, pine-oak, pinyon-juniper, and/ or riparian vegetation;

(3) canyon wall containing crevices,

ledges, or caves; and

(4) high percent of ground litter and

woody debris.

The primary constituent elements identified above provide a qualitative description of those physical and biological features necessary to ensure the conservation of the owl. The range of quantitative estimates (e.g., basal area, canopy closure, etc.) is not provided by the primary constituent elements because these vary greatly over the range of the owl. We acknowledge that if the range of these estimates were provided as part of a critical habitat designation, they could be revised if new data became available (50 CFR 424.12(g)); however, the process of new rulemaking can take years (see 50 CFR 424.17), as opposed to reinitiating and completing a consultation, which takes less than a few months (see 50 CFR 402.14). We note that the Recovery Plan and forthcoming revision provide up-todate information for agencies to consider when determining whether a proposed project "may affect" designated critical habitat. Our existing consultation policy likewise uses the Recovery Plan to evaluate the effects of proposed projects on the owl. Additionally, formal consultation provides an up-to-date biological status of the species or critical habitat (i.e., environmental baseline) which is used to evaluate a proposed action. Consequently, we believe it is more prudent to pursue the establishment of quantitative estimates (e.g., basal area, canopy closure, etc.) through consultation. When requested, the Service will provide technical assistance in these matters.

Criteria for Identifying Critical Habitat Units

In designating critical habitat for the owl, we reviewed the overall approach to the conservation of the species

undertaken by local, State, Tribal, and Federal agencies and private individuals and organizations since the species' listing in 1993. We also considered the features and overall approach identified as necessary for recovery, as outlined in the species' Recovery Plan and information in our supporting record (e.g., Recovery Plan revision in prep). We reviewed the two previous final critical habitat rules (June 6, 1995, 60 FR 29914; February 1, 2001, 66 FR 8530) for the owl, habitat requirements and definitions described in the Recovery Plan, and habitat and other information provided during the comment periods, as well as utilizing our own expertise and other owl researchers. We also reviewed data in our files that were submitted during section 7 consultations and reports submitted in relation to section 10(a)(1)(A) recovery permits, peer-reviewed articles, agency reports and data provided by FS and BLM, and regional and statewide GIS coverages of PACs or other owl occurrence records.

We considered currently suitable habitat, large contiguous blocks of habitat, occupied habitat, rangewide distribution, the need for special management or protection, and adequacy of existing regulatory mechanisms when identifying critical habitat units. For the current designation, we relied primarily on the Recovery Plan to provide guidance. We are including specific protected and restricted areas, (as defined in the Recovery Plan and the "Primary Constituent Elements" section above), because they contain one or more primary constituent elements. Some lands containing these characteristics were excluded if they were not essential to the conservation of the owl or if the benefits of their exclusion from critical habtiat for the owl outweighed the benefits of their inclusion (see discussion below).

Although some State and private lands likely support mid- and higherelevation forests that support owls and owl nesting and roosting habitat, the overwhelming majority of owl records and, therefore its range in the United States, are from Federal and Tribal lands. Therefore we do not consider State and private lands essential to the conservation of the species. As such, we are not designating these areas as critical habitat. Where feasible, we mapped critical habitat boundaries so as to exclude State and private lands. Where this was not possible, State and private areas are not included by definition in this designation. The overwhelming majority of owl records are from Federal and Tribal lands,

indicating that those lands are essential to the species' recovery.

#### Critical Habitat Designation

The designated critical habitat constitutes our best assessment of areas that are essential to the conservation of the owl and that may require special management or protection. The areas designated are within the geographical area occupied by the species because the critical habitat designation is devised around the majority of known owl nesting sites. The designation includes both protected and restricted habitat, as defined the Recovery Plan, and contains the primary constituent elements as identified herein. We have included these areas in the designation based on information contained within the Recovery Plan that finds them to be essential to the conservation of the species because they currently possess the necessary habitat requirements for nesting, roosting, foraging, and dispersal. Critical habitat units are designated in portions of McKinley, Rio Arriba, Sandoval, and Socorro counties in New Mexico; Apache, Cochise, Coconino, Graham, and Pima counties in Arizona; Carbon, Emery, Garfield, Grand, Iron, Kane, San Juan, Washington, and Wayne counties in Utah; and Custer, Douglas, El Paso, Fremont, Huerfano, Jefferson, Pueblo, and Teller counties in Colorado. Detailed digital files of each unit can be obtained by contacting the New Mexico Ecological Services Field Office (see ADDRESSES section).

We did not designate some areas that are known to have widely scattered owl sites, low owl population densities, and/or marginal habitat quality, which are not considered to be essential to this species' conservation. These areas include Dinosaur National Park in northwest Colorado: Mesa Verde National Park, Ute Mountain Ute Reservation, Southern Ute Reservation, other FS and Bureau of Land Management (BLM) land in southwest Colorado and central Utah; and the Guadalupe and Davis Mountains in southwest Texas. We also did not include isolated mountains in northwestern Arizona, such as Mount Trumbull, due to their small size, isolation, and lack of information about owls in the area.

Fort Wingate Army Depot, New Mexico, was proposed as critical habitat

for the owl. However, during the development of this final designation we found that the Depot has been closed since 1988 and part of the lands have been transferred to the Navajo and Zuni Tribes (Ferguson 2000; Department of Defense 2004). Our understanding is that the first transfer of lands from the Army to the Tribes occurred in 2000, and the rest of the lands will be transferred following remediation of contaminants (J. Jojola, BIA, pers. comm. 2004). More importantly, these lands are within critical habitat unit CP-2 that was adjusted following comments by the Cibola National Forest that the western part of the unit contains habitat that is not suitable (i.e., pinyon-juniper and ponderosa pine without oak). Accordingly, we do not believe these lands contain protected or restricted habitat. For these reasons, we conclude that Fort Wingate is not essential to the conservation of the species, and these lands are not designated as critical habitat.

As reported in the proposed rule (65 FR 45336), the Southern Ute Reservation has not supported owls historically, and our assessment revealed that the Southern Ute Reservation does not support habitat essential to the species' conservation. Thus, we are not designating these lands as critical habitat because they are not essential to the conservation of the owl.

We are not designating lands of the Ute Mountain Ute Tribe as critical habitat. Due to the low owl population density and isolation from other occupied areas in Colorado, New Mexico, and Utah, the owl habitat on Tribal lands in southwestern Colorado is not believed to be essential for the conservation of the species. Thus, we are not designating these lands as critical habitat because they are not essential to the conservation of the owl. Owls in these areas will retain the other protections of the Act, such as the prohibitions of section 9 and the prohibition of jeopardy under section 7.

In addition, other Tribal lands including Picuris, Taos, and Santa Clara Pueblos in New Mexico and the Havasupai Reservation in Arizona may have potential owl habitat. However, the available information, although limited, on the habitat quality and current or past owl occupancy in these areas does not indicate that these areas are essential to the conservation of the owl.

We also conclude that the Jicarilla Apache lands in New Mexico are not essential to the conservation of the owl because there are only two historic records of owls from their lands and no owls were documented during recent survey efforts (please refer to our response to Comment 117). Therefore, we are not designating these lands as critical habitat because they are not essential to the conservation of the owl.

Based upon comments and other information received, we revised the boundaries of proposed critical habitat for the owl to exclude those Federal lands that do not contain protected or restricted habitat. Further, because we have determined that lands under State and private ownership are not essential to the conservation of the owl, these lands are not being designated as critical habitat for the owl. Nonetheless, the short amount of time allowed by the court to complete this designation and available resources did not allow us to conduct the fine-scale mapping necessary to physically exclude all of the smaller and widely scattered State and private parcels. Thus, some State and private lands remain within the mapped boundaries, but by definition, these lands are not included in the designation.

This critical habitat designation does not include Tribal lands; lands under State and private ownership; 157 WUI project areas on FS lands within Arizona and New Mexico that are at high risk of catastrophic wildfire and included in the 2001 programmatic WUI biological opinion and the Penasco WUI project area that we evaluated under a separate biological opinion on FS lands in New Mexico; Fort Wingate, New Mexico; Fort Carson, Colorado; Fort Huachuca, Arizona; the U.S. Naval Observatory Flagstaff Station, Arizona; and low-density areas and other areas determined to not be essential to the conservation of the species (see Exclusions Under Section 4(b)(2)" and "Summary of Changes to Proposed Rule" sections). Except for these WUI project areas, this critical habitat designation includes FS lands in New Mexico, Arizona, Utah, and Colorado, and some other Federal lands used by owls. The approximate Federal ownership within the boundaries of owl critical habitat is shown in Table 1 below.

TABLE 1.—CRITICAL HABITAT BY LAND OWNERSHIP AND STATE IN ACRES (HECTARES)

	Arizona	New Mexico	Colorado	Utah	Total
Forest Service	3,228,145	2,056,536	263,026	156,732	5,704,438
	(1,306,341)	(832,223)	(106,439)	(63,425)	(2,308,429)

	Arizona	New Mexico	Colorado	Utah	Total
Bureau of Land Management	1,541	2,171	59,299	362,135	425,145
	(623)	(879)	(23,997)	(146,546)	(172,045)
National Park Service	751,261	30,817	Ó	1,720,727	2,502,805
	(304,015)	(12,471)	(0)	(696,331)	(1,012,816)
Department of Defense	2,041	Ó	Ò	Ó	2,041
·	(826)	(0)	(0)	(0)	(826)
Bureau of Reclamation	Ó	) Ó	) Ó	) Ó	Ó
	(0)	(0)	(0)	(0)	(0)
Other Federal <sup>a</sup>	55	) Ó	`ó	13,264	13,3Ì9
	(22)	(0)	(0)	(5,367)	(5,390)
Total	3,983,042	2,089,523	322,326	2,252,857	8,647,749
	(1,611,827)	(845,573)	(130,437)	(911,669)	(3,499,505)
Total critical habitat units	25	20	3	5	<sup>b</sup> 52

TABLE 1.—CRITICAL HABITAT BY LAND OWNERSHIP AND STATE IN ACRES (HECTARES)—Continued

#### **Critical Habitat Unit Descriptions**

Table 2 summarizes the 52 units designated as critical habitat for the owl. These areas described below are essential for the conservation of the owl. We present brief descriptions of all units below:

TABLE 2.—APPROXIMATE AREA (ACRES AND HECTARES) OF CRITICAL HABITAT BY UNIT

Critical habitat unit	Acres	Hectares
BR-E-1a	54,185	21,927
BR-E-1b	212,882	86,148
BR-E-3	44,216	17,893
BR-E-4	13,753	5,566
BR-E-5	25,642	10,377
BR-E-7	3,048	1,233
BR-W-10	10,485	4,243
BR-W-11	233,228	94,381
BR-W-12	54,220	21,941
BR-W-13	54,735	22,150
BR-W-14	52,158	21,107
BR-W-15	50,844	20,575
BR-W-16	20,999	8,498
BR-W-18	179,439	72,614
BR-W-2	55,210	22,342
BR-W-3	15,580	6,305
BR-W-4	158,624	64,191
BR-W-5	118,940	48,132
BR-W-6	51,782	20,955
BR-W-7	17,791	7,200
BR-W-8	107,838	43,639
BR-W-9	63,259	25,599
CP-1	32,469	13,139
CP-10	918,847	371,832
CP-11	260,105	105,257
CP-12	402,895	163,040
CP-13	627,267	253,838
CP-14	941,068	380,824
CP-15	21,522	8,710
CP-2	161,557	65,378
SRM-C-1a SRM-C-1b	108,545	43,925
SHM-C-1b	110,045	44,532
SRM-C-2	103,735	41,979
SRM-NM-1	85,758	34,704
SRM-NM-11	12,459	5,042
SRM-NM-12	10,495	4,247

TABLE 2.—APPROXIMATE AREA (ACRES AND HECTARES) OF CRITICAL HABITAT BY UNIT—Continued

Critical habitat unit	Acres	Hectares	
SRM-NM-4	57,297	23,187	
SRM-NM-5a	14,100	5,706	
SRM-NM-5b	70,728	28.622	
UGM-10	562,988	227,826	
UGM-11	144,790	58,593	
UGM–12	17,359	7,025	
UGM–13	238,092	96,349	
UGM–14	55,533	22,473	
UGM-15	22,286	9,019	
UGM-17	10,914	4,416	
UGM-2	33,794	13,675	
UGM-3	135,287	54,747	
UGM-5a	666,481	269.707	
UGM-5a UGM-5b UGM-6	295,680 63,451	119,654 25,677	
UGM-7	863,344	349,371	
Total	8,647,749	3,499,505	

Unit SRM–C–1a. Pike's Peak Area, El Paso, Teller, and Fremont Counties, Colorado

This unit is located west of Colorado Springs on the flanks of Pike's Peak. It contains FS (Pike Ranger District, Pike/San Isabel National Forests) and BLM (Royal Gorge Field Office) lands in size. Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with mixed-coniferous forests are included in this unit. State, private, and military lands (Cheyenne Mountain Operations Center) are not designated as critical habitat.

Unit SRM-C-1b. Wet Mountain Area, Fremont, Custer, Pueblo and Huerfano Counties. Colorado

This unit is located in the Wet Mountains, west of the City of Pueblo. It contains primarily FS lands (San Carlos District, Pike/San Isabel National Forests). Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests are included in this unit. State and private lands are not designated as critical habitat.

Unit SRM-C-2. Devil's Head Area, Douglas and Jefferson Counties, Colorado

This unit is located near Deckers within the South Platte Ranger District of the Pike/San Isabel National Forests in Colorado. It contains primarily FS lands. Areas with steep slopes (greater than 40 percent slope), canyons, rocky outcroppings with dense (greater than 70 percent canopy), and mixed-coniferous forests are included in this unit. State and private lands are not designated as critical habitat.

Unit SRM-NM-1. Cebollita Mesa, Jemez Mountains, Sandoval County, New Mexico

This unit is located in the Jemez Mountains, in north-central New Mexico. It contains primarily FS (Jemez Ranger District, Santa Fe National Forests) lands. This unit contains mixed-conifer on steep slopes and canyons incised into volcanic rock. WUI project areas, State, and private lands are not designated as critical habitat.

Unit SRM–NM–4. Peralta, Jemez Mountains, Sandoval County, New Mexico

This unit is located in the Jemez Mountains, south of Los Alamos, in north-central New Mexico. It contains primarily FS (Jemez Ranger District, Santa Fe National Forests) lands. Areas with steep slopes (greater than 40 percent slope), canyons incised into volcanic rock, rocky outcroppings with dense, and mixed-coniferous forests are

a Includes land identified in the current Utah land ownership file as Forest Service or BLM; Federal land ownership is unclear.

<sup>&</sup>lt;sup>b</sup> Critical habitat unit UGM-7 is shared by Arizona and New Mexico.

included in this unit. WUI project areas, State and private lands are not designated as critical habitat.

Unit SRM–NM–5a. Santa Fe National Forest, Santa Fe County, New Mexico

This unit is located approximately 9 mi (14.5 km) east of Santa Fe, New Mexico, in the Sangre de Cristo Mountains, in north-central New Mexico. It contains primarily FS lands. Areas contain attributes of owl habitat with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit SRM–NM–5b. Santa Fe National Forest, San Miguel, Mora Counties, New Mexico

This unit is located approximately 18 mi (29 km) west of Las Vegas, New Mexico, in the Sangre de Cristo Mountains, in north-central New Mexico. It contains primarily FS (Pecos/Las Vegas Ranger Districts, Santa Fe National Forests) lands. Areas contain attributes of owl habitat with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests. State and private lands are not designated as critical habitat.

Unit SRM-NM-11. Jicarilla Division, Carson National Forest, New Mexico

This unit is located approximately 40 mi (64 km) east and 12 mi (19 km) south of Bloomfield, in northwestern New Mexico. It contains primarily FS (Jicarilla Division, Carson National Forest) lands. Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests are included in this unit. This unit contains mixed-conifer on steep slopes and canyons incised into volcanic rock. WUI project areas, State and private lands are not designated as critical habitat.

Unit SRM-NM-12. Jicarilla Division, Carson National Forest, New Mexico

This unit is located approximately 40 mi (64 km) east and 6 mi (9.6 km) north of Bloomfield, New Mexico, in northwestern New Mexico. It contains primarily FS (Jicarilla Division, Carson National Forest) lands. Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests are included in this unit. This unit contains mixed-conifer on steep slopes and canyons incised into volcanic rock. WUI project areas, State, private, and Tribal

lands are not designated as critical habitat.

Unit CP-1. Mount Taylor, Cibola, and McKinley Counties, New Mexico

This unit is located approximately 12 mi (19 km) northeast of Grants, in westcentral New Mexico. It contains primarily FS (Mount Taylor Ranger District, Cibola National Forests) lands. Habitat is naturally fragmented into disjunct canyon systems or isolated mountain ranges. Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests are included in this unit. This unit contains mixed-conifer and canyons habitat that contain attributes of owl habitat. State and private lands are not designated as critical habitat.

Unit CP–2. Zuni Mountains, Cibola, and McKinley Counties, New Mexico

This unit is located approximately 30 mi (48 km) southeast of Gallup, in westcentral New Mexico. It contains primarily FS (Mount Taylor Ranger District, Cibola National Forests) lands. Habitat is naturally fragmented into disjunct canyon systems or isolated mountain ranges. Areas with steep slopes (greater than 40 percent slope), canyons, and rocky outcroppings with dense, mixed-coniferous forests are included in this unit. This unit contains mixed-conifer and canyons habitat that contain attributes of owl habitat. State, private, and military lands are not designated as critical habitat.

Unit CP–10. Arizona Strip, and Kaibab National Forest, Coconino County, Arizona

This unit is located in northwestern Arizona, and is predominantly within the boundaries of Kaibab National Forest and Grand Canyon National Park. The majority of this unit contains steepwalled canyon habitat, but the unit also contains forested habitat within the North Kaibab Ranger District and Grand Canyon National Park. State, and private lands are not designated as critical habitat.

Unit CP–11. Iron, Washington, and Kane Counties, Utah

This unit is located in Iron, Washington, and Kane Counties in southwest Utah, approximately 22 mi (35 km) northeast of St. George. Canyons and steep-sloped mixed conifer habitats are included. Foraging and dispersal habitat are also present. State and private lands are not designated as critical habitat Unit CP-12. Kaiparowits Plateau, Kane, and Garfield Counties, Utah

This Unit is in the vicinity of the Kaiparowits Plateau and the Cockscomb, in Kane and Garfield Counties. Canyons and steep-sloped mixed conifer habitats are included. Foraging and dispersal habitat are also present. State and private lands are not designated as critical habitat.

Unit CP–13. Glen Canyon Reef, Kane, Garfield, and Wayne Counties, Utah

This unit occurs in Wayne, Garfield, Kane, and San Juan Counties, Utah. It is primarily in the Waterpocket Fold landform extending to Lake Powell. Canyons and steep-sloped mixed conifer habitats are included. Foraging and dispersal habitat are also present. State, private, and Triballands are not designated as critical habitat.

Unit CP-14. Dark Canyon Primitive and Wilderness, San Juan, Wayne, and Grand Counties, Utah

This Unit lies in Wayne, Garfield, San Juan, and Grand Counties, Utah. It includes the Dark Canyon Primitive and Wilderness areas of the BLM and FS, respectively. Canyons and steep-sloped mixed conifer habitats are included. Foraging and dispersal habitat are also present. State and privatelands are not designated as critical habitat.

Unit CP-15. West Tavaputs Plateau

This unit is located approximately 30 mi (48 km) east of Price, in Carbon and Emery Counties. Situated in the West Tavaputs Plateau, it is located largely along the Desolation Canyon area of the Green River. Canyons and steep-sloped mixed conifer habitats are included in this Unit. Foraging and dispersal habitat are also present. State and privatelands are not designated as critical habitat.

Unit BR–E–1a. White Mountain, Lincoln/Cloudcroft in Lincoln Counties, New Mexico

This unit is located in the Sacramento Mountains, New Mexico. It contains primarily Lincoln National Forests lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchy distributed throughout the higher mountain ranges. State and private lands are not designated as critical habitat. WUI project areas, State, private, and Tribal lands are not designated as critical habitat.

Unit BR–E–1b. Lincoln/Cloudcroft in Otero County, New Mexico

This unit is located in the Sacramento Mountains, New Mexico. It contains primarily FS (Sacramento Ranger District, Lincoln National Forests) lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchy distributed throughout the higher mountain ranges. WUI project areas, Penasco BO project area, State, private, and Tribal lands are not designated as critical habitat.

Unit BR-E-3. Capitan Mountains

This unit is located in the Capitan Mountains, north of Capitan, New Mexico. It contains primarily FS (Smokey Bear Ranger District, Lincoln National Forest) lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchily distributed. State and private lands are not designated as critical habitat.

Unit BR–E–4. Carrizo in Lincoln County, New Mexico

This unit is located in the Carrizo Mountains, 7 mi (11 km) east of Carrizozo, New Mexico. It contains primarily FS (Smokey Bear Ranger District, Lincoln National Forest) lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchy distributed. State and private lands are not designated as critical habitat.

Unit BR–E–5. Manzano Mountains, Torrance County, New Mexico

This unit is located in the Manzano Mountains, approximately 24 mi (38.6 km) east of Belen, New Mexico. It contains primarily Cibola National Forest lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchily distributed. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR–E–7. Sandia Mountain, New Mexico

This unit is located in the Sandia Mountains, 12 mi (19 km) east of Albuquerque, New Mexico. It contains primarily Cibola National Forest lands. Habitat includes ponderosa pine, mixed-conifer, and spruce fir forests and is patchy distributed. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR–W–2. Prescott National Forest, Yavapai County, Arizona

This unit is located south of Prescott, Arizona, on the Prescott National Forest. The northwestern arm of the unit encompasses the area south of Iron Springs and runs south to near Mount Francis. The area located due south of Prescott, Arizona, encompasses Maverick and Lookout Mountains to the west, and stretches east, just beyond the Gila-Salt Meridian. The southernmost

portion of this unit includes part of Crooks Canyon. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR–W–3. Prescott National Forest, Yavapai County, Arizona

This unit is located in the Bradshaw Mountains on the Prescott National Forest, and is approximately centered on Crown King, Arizona. The unit runs north to the south slope of Tuscumbia Mountain and runs southeast to the north slope of Lane Mountain. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR-W-4. Tonto National Forest, Yavapai, Gila, and Maricopa Counties, Arizona

This unit is located within the Mazatzal Wilderness on the Tonto National Forest, Arizona. The unit begins in the north at North Peak and runs south encompassing the Mazatzal Mountains south to Buckhorn Mountain. State and private lands are not designated as critical habitat.

Unit BR-W-5. Tonto National Forest, Gila County, Arizona

This unit is located on the Tonto National Forest, Arizona, and runs southeast from Pine Mountain, towards Greenback Peak, south to Round Mountain. The area includes the northern half of the Salome Wilderness and the Sierra Ancha Wilderness. State and private lands are not designated as critical habitat.

Unit BR–W–6. Pinal Mountains Area, Gila County, Arizona

This unit is located south of Miami and Globe, Arizona. It is south of U.S. Highway 60 and west of State Highway 77. It is centered on the Pinal Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Globe Ranger District of the Tonto National Forest. It also contains a small portion of BLM lands. WUI project areas, State, private, and BLM lands are not designated as critical habitat.

Unit BR-W-7. Santa Teresa Mountains Area, Graham County, Arizona

This unit is located south of the San Carlos Indian Reservation and north of Klondyke, Arizona. It is centered on the Santa Teresa Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Safford Ranger District of the Coronado National Forest. State, private, BLM, and Tribal lands are not designated as critical habitat.

Unit BR–W–8. Pinaleno Mountains Area, Graham County, Arizona

This unit is located southwest Safford, Arizona. It is centered on the Pinaleno Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Safford Ranger District of the Coronado National Forest. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR-W-9. Galiuro Mountains Area, Graham County, Arizona

This unit is located south of Klondyke, Arizona. It is centered on the Galiuro Mountains and contains much of the owl habitat within that mountain range. It is on the Safford Ranger District of the Coronado National Forest. State, private and BLM lands are not designated as critical habitat.

Unit BR-W-10. Winchester Mountains Area, Cochise County, Arizona

This unit is located northwest of Willcox, Arizona. It is centered on the Winchester Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Safford Ranger District of the Coronado National Forest. State, private, and BLM lands are not designated as critical habitat.

Unit BR-W-11. Santa Catalina and Rincon Mountains Area, Pima and Pinal Counties, Arizona

This unit is located north and east of Tucson, Arizona. It is centered on the Santa Catalina and Rincon Mountains and contains much of the owl habitat within those mountain ranges. It is primarily on the Santa Catalina Ranger District of the Coronado National Forest. WUI project areas, State and privatelands are not designated as critical habitat.

Unit BR–W–12. Santa Rita Mountains Area, Santa Cruz ,and Pima Counties, Arizona

This unit is located west of Sonoita, Arizona. It is centered on the Santa Rita Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Nogales Ranger District of the Coronado National Forest. State and private lands are not designated as critical habitat.

Unit BR–W–13. Atascosa and Pajarito Mountains Area, Santa Cruz County, Arizona

This unit is located west of Nogales, Arizona. It is centered on the Atascosa and Pajarito Mountains and contains much of the owl habitat within those mountain ranges. It is primarily on the Nogales Ranger District of the Coronado National Forest. State and private lands are not designated as critical habitat.

Unit BR–W–14. Patagonia Mountains Area, Santa Cruz County, Arizona

This unit is located south of Patagonia, Arizona. It is centered on the Patagonia Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Sierra Vista Ranger District of the Coronado National Forest. WUI project areas, State and private lands are not designated as critical habitat.

Unit BR–W–15. Huachuca Mountains Area, Cochise County, Arizona

This unit is located west and south of Sierra Vista, Arizona. It is centered on the Huachuca Mountains and contains much of the owl habitat within that mountain range. It is on the Sierra Vista Ranger District of the Coronado National Forest. WUI project areas, State, private, and military lands are not designated as critical habitat.

Unit BR–W–16. Whetstone Mountains Area, Cochise County, Arizona

This unit is located southwest of Benson, Arizona. It is centered on the Whetstone Mountains and contains much of the owl habitat within that mountain range. It is primarily on the Sierra Vista Ranger District of the Coronado National Forest. State and private lands are not designated as critical habitat.

Unit BR–W–18. Chiricahua Mountains Area, Cochise County, Arizona

This unit is located northeast of Douglas, Arizona. It is centered on the Chiricahua Mountains and contains much of the owl habitat within that mountain range. It is on the Douglas Ranger District of the Coronado National Forest. WUI project areas, State and privatelands are not designated as critical habitat.

Unit UGM-2. Magdalena Mountains, Socorro County, New Mexico

This unit is located in the Magdalena Mountains, 6 mi (9.6 km) south of Magdalena, New Mexico. It contains primarily FS (Magdalena Ranger District, Cibola National Forests) lands. This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-3. San Mateo Mountains, Socorro County, New Mexico

This unit is located in the San Mateo Mountains, 36 mi (58 km) southwest of Magdalena, New Mexico. It contains primarily FS (Magdalena Ranger District, Cibola National Forests) lands. This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM–5a. Gila National Forest, Catron, and Grant Counties, New Mexico

This unit is located in the Gila Mountains, north of Silver City, New Mexico. It contains primarily Gila National Forests lands. This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM–5b. Gila National Forest, Sierra, Catron, and Grant Counties, New Mexico

This unit is located in the Gila Mountains, approximately 30 mi (48 km) west of Truth or Consequences, New Mexico. It contains primarily Gila National Forests lands. This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-6. Gila Mountains, Catron County, New Mexico

This unit is located in the Gila Mountains, North of Silver City, New Mexico. It contains primarily FS (Reserve Ranger District, Gila National Forests) lands. This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-7. Apache-Sitgreaves and Gila National Forests, Catron County, New Mexico, Graham and Greenlee Counties, Arizona

This unit is located in the Mogollon Rim in Arizona and New Mexico. It contains primarily FS lands . This unit contains ponderosa pine, mixed-conifer, spruce fir, stringers of deciduous riparian forests. WUI project areas, State, private, and Tribal lands are not designated as critical habitat.

Unit UGM–10. Coconino National Forest, Apache-Sitgreaves National Forest, and Tonto National Forests, Coconino, Gila, and Yavapai Counties, Arizona

This unit is located north, northwest, east, and southeast of Payson, Arizona.

The western boundary of this unit runs parallel to the Yavapai County-Coconino County line, south to the Mogollon Rim. The southwest boundary runs along the Mogollon Rim. To the north, the unit encompasses the Coconino County portion of West Clear Creek and runs east along Jacks Canyon on the Coconino National Forest. The unit includes portions of West Chevelon, Chevelon, and Wildcat Canyons on the Apache-Sitgreaves National Forest and extends from Heber, Arizona, through the Apache-Sitgreaves National Forest, south along the Tonto National Forest boundary to Gentry Mountain. State and private lands are not designated as critical habitat.

Unit UGM-11. Coconino National Forest, Coconino and Yavapai Counties, Arizona

This unit is located south of Mountainaire, Arizona and runs south-southeast, encompassing Howard, Mormon, and Hutch Mountains. To the west, the unit parallels Interstate 17, skirting Stoneman Lake. The southern boundary runs from east of Apache Maid Mountain to Happy Jack, Arizona, south to Willow Valley Dam. The unit does not include Mormon Lake and the area due south to Double Cabin Park. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-12. Coconino National Forest, Coconino County, Arizona

This unit is located east of Flagstaff, Arizona. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-13. Coconino National Forest, Kaibab National Forest, Prescott National Forest, and Camp Navajo Army Depot; Coconino and Yavapai Counties, Arizona

This unit is located approximately between Williams and Flagstaff, Arizona, to the north, and runs south to the Mogollon Rim. The western portion of the unit encompasses the area south of Williams, Arizona, south to the Mogollon Rim. This area includes Bill Williams Mountain, Sycamore Canyon Wilderness, and Volunteer Canyon. WUI project areas, State, private, and the Naval Observatory Flagstaff Station are not designated as critical habitat.

Unit UGM-14. Coconino National Forest, Coconino County, Arizona

This unit is located due north of Flagstaff, Arizona, and encompasses the San Francisco Peaks. The unit also includes the Hochderffer Hills, O'Leary Peak, the Dry Lake Hills, and Elden Mountain. WUI project areas, State and private lands are not designated as critical habitat.

Unit UGM-15. Kaibab National Forest, Coconino County, Arizona

This unit is located northwest of Flagstaff, Arizona. The unit is located west of U.S. Highway 180 and encompasses the area from Kendrick Peak northwest to Wild Horse Canyon. State and private lands are not designated as critical habitat.

Unit UGM-17. Kaibab National Forest, Coconino County, Arizona

This unit is located north of Parks, Arizona, and includes Sitgreaves Mountain, RS Hill, and Government Hill. State and private lands are not designated as critical habitat.

### **Special Management Considerations or Protection**

As we undertake the process of designating critical habitat for a species, we first evaluate lands defined by those physical and biological features essential to the conservation of the species for inclusion in the designation pursuant to section 3(5)(A) of the Act. We then evaluate lands defined by those features to assess whether they may require special management considerations or protection. As discussed elsewhere in this final rule, the two primary reasons that are cited for listing the owl as threatened in 1993 include: (1) historical alteration of its habitat as the result of timber management practices, specifically the use of even-aged silviculture, and the threat of these practices continuing; and (2) the danger of catastrophic wildfire. As discussed in the background section above, the Forest Service in Arizona and New Mexico have amended their Forest Plans to address the threat of even-aged silviculture, however, the risk of catastrophic wildfire remains a significant threat to the owl.

The Recovery Plan for the owl outlines management actions that guide land management agencies in efforts to remove recognized threats and recover the owl. The Service has an existing policy for both owls and critical habitat that identifies using the Recovery Plan for section 7 consultations. Our policy indicates that an action in critical habitat that affects primary constituent elements may affect critical habitat and, therefore, must be consulted upon. In general, if a proposed action is in compliance with the Recovery Plan, we consider the effects to be insignificant and discountable and not likely to adversely affect the species or its critical habitat (i.e., an informal consultation).

Conversely, those activities not in compliance with the Recovery Plan are likely to adversely affect the species or its critical habitat (i.e., formal consultation). Actions on Federal lands that we reviewed in past consultations on effects to the owl include land management plans; land acquisition and disposal; road construction, maintenance, and repair; timber harvest; livestock grazing and management; fire/ ecosystem management projects (including prescribed natural and management ignited fire); powerline construction and repair; campground and other recreational developments; and access easements. We expect that the same types of activities will be reviewed in section 7 consultations for designated critical habitat. Thus, we believe the areas being designated as critical habitat will require some level of management and/or protection to address the current and future threats to the owl and maintain the primary constituent elements essential to its conservation in order to ensure the overall conservation of the species.

### Exclusions Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act requires that we designate critical habitat on the basis of the best scientific information available, and that we consider the economic impact, National Security, and any other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat if the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. For the reasons discussed below, our analysis of the following: (1) Mescalero Apache, San Carlos Apache, and Navajo Nation lands; and (2) 157 WUI project areas, including the Rio Penasco II vegetation management project on the Sacramento Ranger District, Lincoln National Forest (discussed below), on FS lands that are categorized as being "at imminent risk of catastrophic wildfire", concludes that the benefits of excluding these areas from the designation of critical habitat for the owl outweigh the benefits of including them. Therefore, we are not including these lands within the critical habitat designation for the owl.

We have also completed an analysis of the economic impacts of designating these areas as critical habitat. The economic analysis was conducted in a manner that is consistent with the ruling of the 10th Circuit Court of Appeals in *N.M. Cattle Growers Ass'n* v. *USFWS*, 248 F.3d 1277 (2001). It was available for public review and

comment during the comment periods for the proposed rule. The final economic analysis is available from our Web site at <a href="http://ifw2es.fws.gov/mso/">http://ifw2es.fws.gov/mso/</a> or by contacting our New Mexico Ecological Services Field Office (see ADDRESSES section).

As detailed below, we have excluded 157 WUI project areas and the Penasco WUI project area, all Tribal lands, and the majority of military lands. As such we anticipate no impact to National Security, Tribal lands, partnerships, or habitat conservation plans from this critical habitat designation.

### Wildland Urban Interface (WUI) on Forest Service (FS) Lands

During the comment period we received requests to exclude lands that are included within WUI areas of National Forests. Pursuant to section 4(b)(2) of the Act, this request prompted us to take into consideration the health and human safety risk of State, private, and Tribal lands adjacent to FS lands that are at imminent risk of catastrophic wildfire (FS 2001; Service 2001; 66 FR 43384). We consider the human health and safety risk of these lands as an "other relevant impact."

The WUI projects that we evaluated are those that were identified in the February 21, 2001, programmatic biological assessment and evaluation for WUI fuel treatment (programmatic BA) (FS 2001; http://www.fs.fed.us/r3/wui/). The programmatic BA analyzed effects to 32 threatened, endangered, and proposed species, including effects to the owl and its habitat from 157 WUI projects. The resulting April 10, 2001, programmatic biological opinion (programmatic BO) found that the WUI projects would be individually implemented by the FS during sitespecific (i.e., project-level) review of the amount of material (i.e., fuels) that are within a project and the potential of a fire starting, as documented in their NEPA analyses. Only those projects that the FS documents as "at imminent risk of catastrophic wildfire" are covered by the programmatic BO (Service 2001). The FS proposed treatments to keep fires on the ground, where suppression efforts can be more effective. These activities were proposed to occur at two intensity levels within owl habitat. Treatments within 0.5 mi (0.8 km) of private lands may be intensive (e.g., reducing basal area in mixed conifer habitat to between 40 to 60 ft<sup>2</sup> [3.7 to 5.6 m<sup>2</sup>]), whereas treatments outside the 0.5 mi (0.8 km) buffer around private lands must comply with the Recovery Plan (Service 1995, 2001). Our analysis of the database for the projects (http:// www.fs.fed.us/r3/wui/) indicates that 26

of the projects resulted in a "may affect, not likely to adversely affect" determination, whereas 132 projects resulted in a "may affect, likely to adversely affect" determination for the owl. Although one project, the Rio Penasco II vegetation management project on the Sacramento Ranger District, Lincoln National Forest, was analyzed in the programmatic BO (Penasco BO), the FS reinitiated this individual consultation because the project included additional actions that were not covered by the programmatic BO. The Penasco BO analyzed the effect of take of the owl from implementing an experimental management approach and rigorous monitoring program that will provide information useful for guiding future forest thinning projects and assessing potential impacts to owl habitat and prev. This project was recommended by the Recovery Plan and endorsed by the Recovery Team leader and other other Recovery Team members (Service 1995, 2002). We are also excluding the area covered by the Penasco BO.

## (1) Benefits of Inclusion

The benefits of including the lands covered by these 157 project areas and the Penasco WUI project area in Arizona and New Mexico in critical habitat for the owl would result from the requirement under section 7 of the Act that Federal agencies consult with us to ensure that any proposed actions do not destroy or adversely modify critical habitat. As noted above, the programmatic BO and Penasco BO for these projects was finalized in 2001 and 2002, respectively, at which time we concluded that the proposed actions are not likely to jeopardize the continued existence of the owl. The programmatic BO and Penasco BO analyzed effects to owl habitat from the proposed activities to reduce the risk of catastrophic wildfire. One of the main sources of information in these consultations was the Recovery Plan, which is also one of the primary sources of information for this designation. Because we have an existing policy for both owls and critical habitat that identifies using the Recovery Plan for section 7 consultations, including these 157 WUI project areas and the Penasco WUI project area within the designation likely will not affect our resulting analyses. As fully described in the environmental assessment, our policy indicates that an action in critical habitat that affects primary constituent elements may affect critical habitat and, therefore, must be consulted upon. In general, if a proposed action is in compliance with the Recovery Plan, we

consider the effects to be insignificant and discountable and not likely to adversely affect the species or its critical habitat (i.e., an informal consultation). Conversely, those activities not in compliance with the Recovery Plan are likely to adversely affect the species or its critical habitat (i.e., formal consultation). In this case, we have already completed formal consultation for these 157 WUI projects and the Penasco WUI project area using the definitions of owl habitat as identified in the Recovery Plan. If the 157 WUI project areas and the Penasco WUI project area were included within the designation, the FS would be required to reinitiate consultation, where we would analyze the potential impacts of the proposed projects on protected or restricted areas. Because a reinitiation of this consultation would use the same definitions of owl habitat (i.e., protected or restricted habitat), it is unlikely that this process would result in additional protections for the owl. Thus, we believe that a duplicative analysis would only result in potential delays for the implementation of these projects. It is important to note that if any of the 157 WUI projects are not consistent with programmatic BO or if the Penasco WUI project is not consistent with the BO covering this project area, due to a change in the proposed action, the FS would reiniate the consultation based on the listing of the owl.

Critical habitat designation of these WUI project areas could potentially provide some benefit to the species. For example, the environmental assessment found that consultations may be more standardized with respect to analysis of impacts to primary constituent elements because the habitat-based guidelines of the Recovery Plan would be applied formally to key features of habitat. The environmental assessment also found that designation would add a monitoring component to the consultation process for cumulative impacts to habitat (i.e., similar to the section 7 rangewide take monitoring that currently occurs for the species). Nevertheless, we do not believe that these 157 WUI project areas and the Penasco WUI project area would receive these additional benefits from being included within the designation of critical habitat for the owl because standardized impacts to owl habitat have already been programmatically analyzed by comparing the proposed action to the habitat-based guidelines of the Recovery Plan. Further, the FS is currently required to have an annual monitoring and review of the individual and combined impact of each year's

projects, including those implemented under the Penasco BO.

We find sufficient regulatory and protective conservation measures in place from the current programmatic BO and Penaco BO. For these reasons, we find that little additional benefit through section 7 consultation would occur as a result of the overlap between current policy and existing information.

In Sierra Club v. Fish and Wildlife Service, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that heightened public awareness of the plight of listed species and their habitats may facilitate conservation efforts. We agree with these findings; however, we believe that there would be little additional informational benefit gained from including these 157 WUI project areas or the Penasco WUI project area within the designation because they were included in the proposed rule and discussed in this final rule. Consequently, we believe that the informational benefits are already provided even though these projects are not designated as critical habitat.

### (2) Benefits of Exclusion

As discussed in the "Background" section of this rule, the two primary reasons for listing the owl as threatened in 1993: (1) Historical alteration of its habitat as the result of timber management practices, specifically the use of even-aged silviculture, and the threat of these practices continuing; and (2) the danger of catastrophic wildfire. The Recovery Plan for the owl outlines management actions to remove recognized threats and recover the owl.

We recognize that wildfires on National Forest lands in the southwestern region have increased in size and intensity over the last 15 years (FS 2004). According to the FS, an overwhelming majority of the areas identified in the programmatic BA occur in fire condition class 2 or 3, indicating moderate-to-high fire severity with severe consequences to the ecosystem and human life and property (FS 2001). Without treatment, the loss of endangered species habitat from catastrophic wildfire will likely be much greater and have more adverse affects. For example, the FS reported that approximately 45 owl PACs were significantly modified on FS lands by wildfire between 1996 and 2001 (FS 2001). We note that within the Upper Gila Mountains RU, high-to-moderateintensity stand-replacing fires affected 84 PACs from 1995 to 2002 (Service 2004). One fire in particular, the 2002 Rodeo-Chediski, burned 55 PACs (Service 2002). The 157 WUI projects and the Penasco WUI project involve reducing fuel loads to protect human life, property, and natural resources (FS 2001). These project areas include critical communications sites, municipal watersheds, high voltage transmission lines, observatories, church camps, scout camps, research facilities, and other structures. The areas also include residential communities at imminent risk from wildfire (FS 2001). As noted below, by excluding these project areas from the designation of critical habitat, the programmatic BO and the Penasco BO will not have to be reinitiated and will not require any additional compliance with section 7 consultation. Thus, this exclusion will allow the FS to proceed without any delays associated with the FS having to reinitate consultation on the programmatic BO and Penasco BO. We believe it is extremely important to allow these project to proceed due to the fact that these areas have been identified as areas at risk of moderate-to-high fire severity with severe consequences to the ecosystem and human life and property (FS 2001).

Loss of habitat from catastrophic wildfire is also one of the two main threats to the owl. Consequently, management actions taken to reduce risk and potential size of high-severity wildfires are recognized as a vital component of owl recovery (Service 1995). For example, the Recovery Plan includes guidelines for both mechanical thinning and prescribed fire in protected and restricted habitat (Service 1995). The Recovery Team has also refined guidelines to assist land managers implementing fuel management activities to reduce the risk of stand-replacing wildfires (Service 2001). We also have developed alternative approaches to streamlining section 7 consultation for hazardous fuels treatment projects (Service 2002), including a consideration of the benefits of these activities to the owl and its habitat (Service 2002a). We believe the exclusion of these 157 WUI project areas and the Penasco WUI project area from critical habitat for the owl is consistent with these recovery guidelines. Following these guidelines, we balanced the anticipated effects of the projects against the effects that will result if no action is taken. For example, we analyzed these projects in the programmatic BO and Penaco BO because we anticipated short-term

adverse effects to the owl, but believe that the proposed actions will result in long-term benefits by reducing the risk of wildfire on these and adjacent lands.

The economic analysis concluded that impacts on fire management activities are likely to be greatest in areas where WUI lands overlap with owl critical habitat. Our economic analysis found that there may be a decrease in effectiveness of actions taken to reduce the risk of catastrophic wildfire in WUI areas due to: (1) Possible delays of fuel reduction treatments in PACs (i.e., breeding season restrictions); (2) avoiding the 100-ac (40.5-ha) core area of PACs; and (3) reduced thinning in PACs. Breeding season restrictions, avoidance of the 100-ac (40.5-ha) core area, and reduced thinning in PACs are recommendations made under the jeopardy standard when a project is proposed in a PAC; however, because consideration was given collectively to all "owl conservation activities" in the economic analysis these costs were also analyzed. Using the programmatic BO, this overlap was estimated to be about 4 percent (134,000 ac [54,228 ha]). By excluding these project areas from the designation of critical habitat, the programmatic BO and Penasco BO will not have to be reinitiated and will not require any additional compliance with section 7 consultation. Thus, exclusion of these areas from the designation will avoid any delays associated with the FS having to reinitate consultation on the programmatic BO and Penasco BO or having to reiniate consulation on a project by project basis on these completed section 7 consulations.

Critical habitat is often viewed negatively by the public since it is not well understood and there are many misconceptions about how it affects private landowners (Patlis 2001). During the public comment period, one of the most common issues was that designation of critical habitat could impede efforts to reduce the risk of wildfire on National Forest lands and surrounding communities. The development of the forest restoration projects often involves a variety of stakeholders, including private landowners. Throughout the stakeholder-based planning process, Federal land managers must build trust among diverse and competing interests by encouraging open dialogue regarding various forest management issues. If these 157 WUI project areas and the Penasco WUI project area were included in the critical habitat designation, we conclude that the introduction of additional Federal (e.g., a new regulation from the Service) influence could jeopardize the trust and spirit of

cooperation that has been established over the last several years. The designation of critical habitat would be expected to adversely impact our, and possibly other Federal land managers", working relationship with private landowners, and we believe that additional Federal regulation of these high-fire risk areas through critical habitat designation would be viewed as an unwarranted and unwanted intrusion.

We believe it is important for recovery of this species that the public understand that the conservation-related activities for the owl that are proposed by Federal agencies are complementary with forest restoration activities to reduce threats to public and private lands (e.g., see Carson Forest Watch 2004). Additionally, the support of the public will also be required as Federal land managers propose fuels reduction activities that will alter the current structure of forests while reducing the threats from stand-replacing wildfires. For example, in many places throughout the southwest, people are often opposed to forest restoration activities if it alters their aesthetic views of forested lands. To this end, as Federal land managers develop treatments to reduce this risk (i.e., prescribed fire, mechanical thinning, etc.), it is critical that the public understand and support such activities. We find that the exclusion of these WUI project areas from the designation will improve public support for overall forest restoration activities, which will provide benefits to the owl. For these reasons, we find that significant benefits result from excluding these 157 WUI project areas and the Penasco WUI project area from designation of critical habitat.

In summary, we believe that the benefits of excluding the 157 WUI project areas and the Penasco WUI project area from critical habitat for the owl outweigh the benefits of their inclusion in critical habitat. Including these areas may result in some benefit through additional consultations with FS, whose activities may affect critical habitat. However, overall this benefit is minimal because evaluation of affects to the critical habitat would result in the same conservation recommendations as the programmatic BO and Penasco BO which have already been completed. On the other hand, an exclusion will greatly benefit the overall recovery of the owl by reducing the risk of catastrophic wildfire, one of the greatest threats to the species. An exclusion would also assist Recovery efforts by garnering greater public acceptance of owl conservation activities. Thus, we believe that an exclusion of these 157 WUI

project areas and the Penasco WUI project area outweighs any benefits that could be realized through them being designated as critical habitat for the owl. Consequently, we have not included these 157 project areas or the Penasco WUI project area within this critical habitat designation pursuant to section 4(b)(2) of the Act on the basis of human health and saftey concerns and for the purpose of future fuel reduction consultations. We also find that the exclusion of these lands will not lead to the extinction of the species, nor hinder its recovery because these projects have already been evaluated under the guidelines set by the Recovery Plan for the owl for both jeopardy to the species and adverse modification of critical hahtiat

## American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act

We describe here authorities and policies that the Service follows when consulting with Tribes on issues related to endangered and threatened species. We believe that we fullfilled our responsibilities to the Tribes as further discussed in our exclusion analysis below. In accordance with the Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on Tribal lands are better managed under Tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Based on this philosophy, we believe that, in many cases, designation of Tribal lands as critical habitat provides very little additional benefit to threatened and endangered species.

Tribal governments protect and manage their resources in the manner that is most beneficial to them. Each of the three affected Tribes exercises legislative, administrative, and judicial control over activities within the boundaries of their respective lands. Additionally, they all have natural resource programs and staff, and have enacted Mexican spotted owl management plans. In addition, as trustee for land held in trust by the United States for Indian Tribes, the BIA provides technical assistance to the Tribes on forest management planning

and oversees a variety of programs on Tribal lands. Owl conservation activities have been ongoing on Tribal lands included in the proposed critical habitat designation and will continue with or without critical habitat designation.

#### **Tribal Conservation/Management Plans**

In this section, we first provide the specifics of the owl Management/
Conservation Plans that were developed by the San Carlos Apache Tribe, Navajo Nation, and Mescalero Apache Tribe (Mescalero Apache 2000, San Carlos Apache 2003, Navajo Nation 2000). These plans were all admitted to the supporting record during the November 2003 open comment period for the proposed rule (68 FR 65020). After this introduction, we analyze the benefits of including the Tribes' lands within the critical habitat designation and the benefits of excluding these areas.

(1) Mexican Spotted Owl Conservation Plan for the San Carlos Apache (SCA) Indian Reservation (Conservation Plan): The SCA staff developed a tribal owl conservation plan, and their Tribal Council has subsequently approved it. In November 2003, we received a redacted version of the SCA Conservation Plan (San Carlos Apache Tribe 2003). We reviewed the SCA Conservation Plan and agree with the Tribe and BIA, that the application of owl conservation management principles provided by the Recovery Plan should be beneficial for the owl and its habitat on SCA lands (San Carlos Apache Tribe 2003, BIA 2003).

SCA conducts owl surveys to evaluate and design projects that minimize or avoid impacts to the owl and its habitat. The Tribe also conducts periodic surveys within PACs to determine occupancy. Owls are found across the northern third of the SCA Indian Reservation; however, most suitable nesting and foraging habitat is in remote, inaccessible areas. Although these areas have very little overlap with commercial forest operations, owl habitat has generally been deferred from timber harvests since the listing of the owl. Nevertheless, this continual monitoring of habitat and species occupancy provides current GIS and other information to manage the overall forest resources.

The SCA's primary timber management practice is uneven-aged silviculture systems, using single-tree selection methods. The key factor considered in the SCA Conservation Plan is that there is very little overlap between forested lands currently considered practical for commercial harvesting operations and forested lands considered to be owl habitat. Thus, the

majority of the high-potential breeding habitat (steep slopes, mixed-conifer) receives little or no timber management.

The SCA Conservation Plan addresses identified threats to owl habitat by maintaining sufficient suitable habitat across the landscape and by using sitespecific retention of complex forest structure following timber harvest in those few areas where owl habitat and timber management overlap. Nest/roost habitats, primarily in mixed-conifer and steep slope areas, are not managed for timber extraction and will remain as suitable nest/roost habitat. Foraging habitat will be managed almost entirely by uneven-aged timber harvest methods. Timber sales, thinning, and fuelwood projects are conducted within some owl habitat to extract resources, improve or maintain current habitat conditions, and increase forest health (e.g. controlling dwarf mistletoe and bark beetles). Like the Recovery Plan, the SCA Conservation Plan adopts site-specific management to address protected, restricted, and reserved habitat and limits disturbance within owl PACs. PACs are at least 600 ac (243 ha) in size and established around known nest/ roost sites. For example, prescribed fires and thinning are deferred from PACs during the breeding season (San Carlos Apache Tribe 2003). We find that the SCA Conservation Plan generally follows the Recovery Plan guidelines for owl habitat protection.

Wildfire is considered to be the greatest threat to owl habitat on the SCA Reservation. Steep slopes and canvons occupied by the owl are especially at risk. The SCA Indian Reservation Wildland Fire Management Plan Programmatic Environmental Assessment (Fire Management Plan) identifies fire reintroduction to fireadapted and fire-dependent ecosystems. Natural and prescribed fire and mechanical treatments are used to manage forest resources. The Fire Management Plan objectives include: (1) Limiting the risk of harm to threatened and endangered species or their habitat; (2) reducing fuel accumulation to acceptable levels; (3) maintaining an ecologically proper amount of leaf litter, duff, organic matter, and woody material in each biotic community; (4) thinning dense vegetation; and (5) using fire in fire-adapted and fire-dependent ecosystems.

The Tribe indicated that projects will continue to go through NEPA, including the development of a biological assessment for any actions that may affect the owl. Suitable nesting and roosting habitat, as well as foraging habitat, on the reservation has been mapped and PACs have been

established for all known owl pairs. Thus, any impacts from management activities to either PACs or owl habitat will trigger section 7 consultation due to the Federal involvement of the BIA, regardless of critical habitat designation, since the areas are presently occupied by the owl.

The SCA Tribe participates on the Upper Gila RU workgroup, which ensures the timely sharing of management information. The Tribe also developed a Statement of Relationship with us that was approved by the Tribal Council and formally identifies and fosters our working relationship through government-to-government consultations and activities. The formal signing ceremony between the Service and the Tribe is being planned.

During our discussions with the Tribe for the economic analysis, the Tribe advised us that their lands are actively managed for commercial timber harvest to provide materials for their sawmill. Any delays or reductions in timber harvest stemming from a designation of critical habitat could result in fewer jobs and revenue for the SCA.

The designation of critical habitat would be expected to adversely impact our working relationship with the SCA Tribe. The Tribe believes that additional Federal regulation through critical habitat designation is unwarranted and an unwanted intrusion into their tribal natural resource programs. Our working relationship with the SCA Tribe has been extremely beneficial in implementing natural resource programs of mutual interest, including programs on other Tribal lands (e.g., Jicarilla Apache, White Mountain Apache, Southern Ute). Because the SCA Tribe is committed to implementing these activities, we find that the SCA Conservation Plan provides significant conservation benefits to the owl.

(2) The Navajo Nation Management Plan for the Mexican Spotted Owl (Navajo MSO Management Plan): The Navajo Nation stated in their November 9, 2000, letter to the Service conveying the Navajo MSO Management Plan for the owl, that it was developed to meet the Service's desire to "support tribal measures that preclude the need for federal conservation regulations." The Navajo MSO Management Plan was approved by the Navajo Nation Council, which has oversight of the Division of Natural Resources and is empowered to establish Navajo Nation policy with respect to natural resources. The Navajo MSO Management Plan describes the Navajo Nation's management scheme that has been in effect since the listing

of the owl: the known and potential habitat for the owl on the Navajo Nation; threats to the species; and future management practices. Except for the few exceptions detailed below, the Navajo MSO Management Plan follows the recommendations of the Recovery Plan.

We have received a redacted version of the Navajo MSO Management Plan (Navajo Nation 2000). We reviewed the document in early 2001 and again for this final rule and find that it provides a conservation benefit to the owl and its habitat. The Navajo MSO Management Plan is designed to effectively manage the owl on the Navajo Nation using accepted conservation techniques, especially those recommended in the Recovery Plan. The following practices are used to protect and manage the owl on the Navajo Nation: (1) Mandatory pre-action owl protocol surveys; (2) Federal agency section 7 consultations for proposed projects; (3) establishment of 600-ac (243-ha) PACs around all recent and historic owl sites; and (4) the Tribal project approval process, including requiring that all non-Federal activities avoid taking owls (Navajo Nation 2000). To date, very few projects have altered owl habitat on the Navajo Nation and none have occurred without section 7 consultation.

The Navajo MSO Management Plan also lists the following threats to the owl and possible management responses to minimize the majority of these impacts: (1) Abandoned mine reclamation; (2) commercial timber harvest; (3) fire management; (4) fuelwood harvest; (5) grazing; (6) homesite development; (7) coal mining; (8) recreation; (9) road building and reconstruction; and (10) other developments and activities.

We initiated formal consultation on the Navajo MSO Management Plan in 2003, and provided a draft biological opinion to the BIA and the Navajo Nation. The Navajo MSO Management Plan follows nearly all of the recommendations of the Recovery Plan, except for those detailed below. The economic analysis also found that the BIA expects to undergo several largescale consultations with the Service in the near future for various related management plans, including continuing consultation on the Navajo Forest Management Plan (which is a programmatic plan for timber harvesting) and the Navajo Nation Fire Management Plan. The Navajo Forest Management Plan is still undergoing review by the BIA. The Service will also be completing formal consultation on the plans.

The Recovery Plan recommendations that will not be followed include those

that address: (1) Grazing within other forest and woodland types; (2) uncontrolled grazing within riparian communities of restricted areas; and (3) small amounts of uncontrolled recreation. In addition, there is no pineoak forest habitat, as defined in the Recovery Plan, on lands of the Navajo Nation; therefore, there is no need for it to be addressed in the Navajo Nation's MSO Management Plan. We acknowledge that those activities enumerated above do not follow the recommendations of the Recovery Plan, but still find that compliance with the other aspects of the Recovery Plan provides conservation benefits to the owl. We reached this conclusion because we anticipate that when the BIA issues grazing permits and determines that the activities "may affect" the owl, they will consult with us. We do not consult with the Navajo Nation on uncontrolled grazing or recreation because there is no Federal nexus or discretion that would require section 7 consultation. Thus, critical habitat would not affect the outcome of these activities.

The recommendations of the Recovery Plan will be followed by the Tribe for nearly all actions that occur within PACs (except unregulated grazing and recreation). Other examples of measures to minimize or avoid impacts include deferred treatments of areas during the owl's breeding season (March 1 through August 31), a 0.25 mi (0.4 km) buffer of nesting or roosting habitat, and the development of a 100-ac (40.5-ha) no habitat alteration core area around known nest or roost sites during March 1 through August 31. Moreover, the Navajo MSO Management Plan minimizes impacts associated with human activities, and controlled burns would be planned to follow the Recovery Plan recommendations for protected and restricted habitat and other forest and woodland types.

The Navajo Nation currently participates on the Colorado Plateau Recovery Unit Working Team. This relationship allows ideas, information, and concerns to be incorporated into management actions for the recovery of the owl. Participation in this working team also facilitates dialogue between other land management agencies, the Service, and the Navajo Nation.

Similar to other Tribes (see discussion above), the Navajo Nation officials have indicated that the designation of critical habitat on their lands would be expected to adversely impact the working relationship with the Service, which has been extremely beneficial in implementing natural resource programs of mutual interest.

(3) The Mexican Spotted Owl Management Plan for the Mescalero Apache Reservation (Mescalero MSO Management Plan): The Mescalero MSO Management Plan and accompanying Biological Assessment was adopted and approved by the Mescalero Apache Tribal Council in August 2000 (Mescalero Apache 2000).

The Mescalero MSO Management Plan provides for maintenance and/or improvement of essential habitat features and manages for the long-term conservation of the species on their lands. Specific guidelines are provided concerning forest management, livestock grazing, and recreation that are designed to maintain current owl populations while allowing levels of resource outputs that meet Tribal desires and provide for a healthy ecosystem. In addition, a number of Tribal forest management practices and methods provide protection to the owl and promote forest biodiversity. These include, but are not limited to, retention of the hardwood component in all areas that are harvested; retention of all snags that are not hazardous to human life; protection of habitat on steep slopes; emphasis on uneven-aged silvicultural techniques; and provisions for special management areas such as riparian and reserve/wilderness areas.

The following are used to protect and manage the owl on the Mescalero Tribal lands: (1) Surveys to determine occupancy; (2) Federal agency section 7 consultations for proposed projects; (3) establishment of 400-ac (162-ha) PACs around owl sites; (4) three levels of habitat management: Protected areas, unoccupied project areas (which we consider restricted areas), and other forest and woodland types; (5) the establishment of 100-ac (40.5-ha) core areas around nest trees or roost groves where no trees are harvested; (6) no trees are harvested within a 250-ac (101ha) area within PACs during the breeding season (March 1 through August 31); and (7) additional management guidelines are also incorporated, for example, addressing steep slopes, road building, and unevenaged silvicultural methods. We formally consulted with the BIA on the implementation of the Mescalero MSO Management Plan and concluded the project would not jeopardize the continued existence of the owl (Service 2001). The Mescalero MSO Management Plan is designed to manage the owl on the Mescalero Nation generally following the tenets recommended in the Recovery Plan. We reviewed the document in early 2001 and again for this final rule and find that it provides a conservation benefit to the owl. In

addition, our economic analysis found that the Mescalero Apache Tribe expects that the designation could affect its timber industry, potentially impacting \$5 million in sawmill revenues and 160 jobs.

The BIA indicated and we also found in our discussions with the Mescalero Apache Tribe, which occurred during the development of the economic analysis, that the designation of critical habitat could be expected to adversely impact our working relationship with the Mescalero Apache Tribe. The BIA and Mescalero Apache Tribe also indicated and we agree that Federal regulation through critical habitat designation would be viewed as an unwarranted and unwanted intrusion into tribal natural resource programs. Our working relationship with the Mescalero Apache Tribe has been extremely beneficial in implementing natural resource programs of mutual interest. Similar to Navajo Nation and San Carlos Apache, the Mescalero Apache also participate on a RU working group, the Basin and Range East. This relationship allows ideas, information, and concerns to be incorporated into management actions for the recovery of the owl. Participation in this working team also facilitates dialogue between other land management agencies, the Service, and the Mescalero Nation. This relationship provides a benefit to all parties involved in the conservation of the owl.

# The Benefits of Exclusion Outweigh the Benefits of Inclusion

We provide the following analysis related to these tribal lands; as required by 16 U.S.C. § 1533(b)(2) [hereafter ("4(b)(2)"]:

## (1) Benefits of Inclusion

Few additional benefits would be derived from including Tribal lands of the Mescalero Apache, San Carlos Apache, and the Navajo Nation in a critical habitat designation of the owl beyond what will be achieved through the implementation of their management plans. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat. However, we conclude that few regulatory benefits to the owl would be gained from a designation of critical habitat on San Carlos Apache and Navajo Tribal lands because the existing section 7 jeopardy analyses review projects for their consistency with the

Recovery Plan and adverse modification analyses use the same approach. These Tribes have already agreed under the terms of the owl management plan to evaluate the potential impacts of any proposed projects on protected and restricted areas within these Tribal lands following the criteria in the Recovery Plan for the owl and would use the same definitions of owl habitat (i.e., protected or restricted habitat) for adverse modification analyses. Accordingly, we find the consultation process for a designation of critical habitat is unlikely to result in additional protections for the owl on San Carlos Apache and Navajo Tribal lands.

As discussed above, we formally consulted with the BIA on the implementation of the Mescalero MSO Management Plan and concluded in a programmatic biological opinion that the project would not jeopardize the continued existence of the owl (Service 2001). Thus, the Mescalero Tribe is not required to consult under the jeopardy standard on individual projects that fall within the guidelines of the Tribes MSO Management Plan, as they are covered under our programmatic biological opinion. As discussed above, our programmatic consultation evaluated potential impacts to protected and restricted habitat based on the guidelines in the Recovery Plan for the owl. Thus, we believe that a designation of critical habitat in this case is unlikely to result in additional protections for the owl on Mescalero Tribal lands, even if consultation on critical habitat were to occur in the future.

Another possible benefit is that the designation of critical habitat can help to educate the public regarding potential conservation value of an area, and may focus efforts by clearly delineating areas of high conservation value for the owl. Any information about the owl and its habitat that reaches a wide audience, including other parties engaged in conservation activities, would be considered valuable. These Tribes are currently working with the Service to address habitat and conservation needs for the owl. Additionally, we anticipate that these Tribes will continue to actively participate in RU working groups, providing for the timely exchange of management information. The educational benefits important for the long-term survival and conservation of the owl are being realized. Educational benefits will continue on these lands if they are excluded from the designation, because the management/conservation plans already recognize the importance of those habitat areas to the owl.

For these reasons, then, we believe that designation of critical habitat would have few additional benefits beyond those that will result from continued consultation under the jeopardy standard.

#### (1) Benefits of Exclusion

The benefits of excluding tribal lands of the Mescalero Apache Tribe, San Carlos Apache Tribe, and the Navajo Nation from designated critical habitat are more significant. They include: (1) The advancement of our Federal Indian Trust obligations and our deference to tribes to develop and implement tribal conservation and natural resource management plans for their lands and resources, which includes the owl; (2) the maintenance of effective working relationships to promote the conservation of the owl and its habitat; (3) the allowance for continued meaningful collaboration and cooperation in RU working groups; (4) the provision of conservation benefits to forest and canyon ecosystems and the owl and its habitat that might not otherwise occur; and (5) the reduction or elimination of administrative and/or project modification costs as analyzed in the economic analysis.

Through the years since the owl was listed as threatened, we have met with Tribes to discuss how each might be affected by the designation of critical habitat. As such, we established effective working relationships with the Mescalero Apache Tribe, San Carlos Apache Tribe, and the Navajo Nation. As part of our relationship, we provided technical assistance to each of these Tribes to develop measures to conserve the owl and its habitat on their lands. These measures are contained within the tribal management/conservation plans that we have in our supporting record for this decision (see discussion above). These proactive actions were conducted in accordance with Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (June 5, 1997); the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2). We believe that these Tribes should be the governmental entities to manage and promote the conservation of the owl on their lands. During our meetings with each of these Tribes, we recognized and endorsed their fundamental right to provide for tribal resource management

activities, including those relating to forest and canyon ecosystems.

The designation of critical habitat would be expected to adversely impact our working relationship with the Mescalero Apache, San Carlos Apache, and Navajo Nation. In fact, during our discussions with each of the Tribes, we were informed that critical habitat would be viewed as an intrusion on their sovereign abilities to manage natural resources in accordance with their own policies, customs, and laws. To this end, we found that each Tribe would prefer to work with us on a Government-to-Government basis. For these reasons, we believe that our working relationships with the Mescalero Apache, San Carlos Apache, and Navajo Nation would be better maintained if these tribes are excluded from the designation of critical for the owl. We view this as a substantial benefit.

We indicated in the proposed rule (July 21, 2000; 65 FR 45336) that the Mescalero Apache, San Carlos Apache, and Navajo Nation were working on owl management plans. Similarly, in the reopening of the comment period on this rule (November 18, 2003; 68 FR 65020), we asked for information and comments concerning our preliminary conclusions regarding the exclusion of Tribal lands under section 4(b)(2) of the Act. During the comment period, we received input from these three Tribes, and the Southern Ute Tribe, White Mountain Apache Tribe, Hualapai Tribe, BIA's Southwestern Regional Office, BIA's Western Regional Office, and Jicarilla Apache Tribe. All of these commenters expressed the view that designating critical habitat for the owl on the Mescalero Apache, San Carlos Apache, and Navajo Nation lands would adversely affect the Service's working relationship with all Tribes. Many noted the beneficial cooperative working relationships between the Service and Tribes have assisted in the conservation and recovery of listed species and other natural resources. For example, the Service's relationship with Mescalero Apache resulted in the successful prosecution of an owl take case under section 9 of the Act, related to an arsonist in 2002 (Service 2002). They indicated that critical habitat designation on the Mescalero Apache, San Carlos Apache, and Navajo Nation would amount to additional Federal regulation of sovereign Nations' lands, and would be viewed as an unwarranted and unwanted intrusion into Tribal natural resource programs. We conclude that our working relationships with these Tribes on a government-togovernment basis have been extremely

beneficial in implementing natural resource programs of mutual interest, and that these productive relationships would be compromised by critical habitat designation of these Tribal lands.

In addition to management/ conservation actions described above for the conservation of the owl, we anticipate future management/ conservation plans to include conservation efforts for other listed species and their habitat (e.g., southwestern willow flycatcher). We believe that many Tribes and Pueblos are willing to work cooperatively with us to benefit other listed species, but only if they view the relationship as mutually beneficial. Consequently, the development of future voluntarily management actions for other listed species will likely be contingent upon whether these Tribal lands are designated as critical habitat for the owl. Thus, a benefit of excluding these lands would be future conservation efforts that would benefit other listed species.

The economic analysis found that the BIA has conducted 13 informal and 5 formal consultations for the owl on Tribal lands since 1993 and estimates that same number for the next 10 years. The economic analysis also estimated 3 informal consultations would occur with the NPS for Navajo National Monument and none would occur with Canyon de Chelly. Potentially affected activities include administrative efforts, timber harvest, fire management, grazing, coal mining and recreation. Total estimated administrative and project modification costs of these consultations ranged from \$110,000 to \$1.1 million (BIA) and \$12,000 to \$248,000 (NPS). These consultations would occur regardless of whether critical habitat is designated, because the species occupies these lands and section 7 consultations under the jeopardy standards will still be required for activities affecting the owl. The economic analysis estimated that total administrative and project modification costs over the next ten years for the BIA ranged from \$113,000 to \$1,111,000. The costs attributed to critical range from slightly higher to substantially higher. The BIA indicated that critical habitat designation could place "a significant financial burden" upon Tribes. For example, they found that the Mescalero Apache Tribe could be burdened with more governmental constraints and a lack of funds to comply with section 7. As discussed above, we already evaluate the potential impacts of any proposed projects on protected or restricted areas; however, any additional costs that may be

incurred as a result of a designation of critical habitat are avoided if we exclude the Tribe from the designation of critical habitat. We find this to be a significant financial benefit for these Tribes, the Service, and the BIA.

The economic analysis found that designation of critical habitat and continued efforts to protect the owl may impact timber harvest, which could affect all three Tribes in the future. For example, the Mescalero Agency, BIA, indicated that additional section 7 consultation efforts and the potential delay of projects resulting from section 7 consultation of critical habtiat could affect timber harvest on Mescalero Apache lands. In particular, for the Mescalero and the San Carlos, both of which are actively managing their lands for commercial timber harvest and have interests in operating sawmills, any reduction in timber harvest could result in fewer jobs and revenues for the Tribes. The Mescalero Apache Tribe indicated that the designation could affect its timber industry, potentially impacting \$5 million in sawmill revenues and 160 jobs. Commercial timber harvests on Navajo Nation lands were enjoined by the Arizona District Court in Silver v. Thomas, CIV 94-337-PHX-RGS (D.AZ 1994) until a new forest management plan is completed. This process is still ongoing, so that the Navajo are not currently able to undertake commercial timber operations. However, the Tribe has indicated its intention to continue these types of efforts once the current injunction is lifted. The exclusion of Tribal lands from this designation will avoid any potential future economic impacts related to the designation of critical habitat.

In summary, the benefits of including the Mescalero Apache, San Carlos Apache, and Navajo Nation in the critical habitat designation are limited to a potential benefit gained through the requirement to consult under section 7 and consideration of the need to avoid adverse modification of critical habitat and potential educational benefits. However, as discussed in detail above, we believe these benefits are provided for through other mechanisms. The benefits of excluding these areas from being designated as critical habitat for the owl are more significant, and include encouraging the continued development and implementation of the tribal management/conservation measures such as monitoring, survey, and fire-risk reduction activities that are planned for the future or are currently being implemented. These programs will allow the Tribes to manage their natural resources to benefit forest and

canyon ecosystems for the owl, without the perception of Federal Government intrusion. This philosophy is also consistent with our published policies on Native American natural resource management. The exclusion of these areas will likely also provide additional benefits to the owl and other listed species that would not otherwise be available due to the Service's ability to encourage and maintain cooperative working relationships with other Tribes and Pueblos. We find that the benefits of excluding these areas from critical habitat designation outweigh the benefits of including these areas.

As noted above, the Service may exclude areas from the critical habitat designation only if it is determined, "based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned." Here, we have determined that exclusion of the Mescalero Apache, San Carlos Apache, and Navajo Nation from the critical habitat designation will not result in the extinction of the owl. First, activities on these areas that may affect the owl will still require consultation under section 7 of the Act. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. Therefore, even without critical habitat designation on these lands, activities that occur on these lands cannot jeopardize the continued existence of the owl. Second, each of the Tribes have committed to protecting and managing according to their management/ conservation plans and natural resource management objectives. In short, the Tribes have committed to greater conservation measures on these areas than would be available through the designation of critical habitat. With these natural resource measures, we have concluded that this exclusion from critical habitat will not result in the extinction of the owl, chiefly because the management/conservation plans are generally based on the habitatmanagement tenets of the Recovery Plan. Accordingly, we have determined that the Mescalero Apache, San Carlos Apache, and Navajo Nation should be excluded under subsection 4(b)(2) of the Act because the benefits of excluding these lands from critical habitat for the owl outweigh the benefits of their inclusion and the exclusion of these lands from the designation will not result in the extinction of the species.

#### Lands Owned by Navajo Nation and Managed by National Park Service (NPS)

During our review of the Navajo Management Plan for the owl, we found that there is a unique land ownership of Navajo National Monument and Canyon de Chelly wherein the land is owned by the Navajo Nation, but under the management authority and administration of the NPS. We found that this unique situation was envisioned by the Navajo Management Plan: "\* \* \* lands administered by the NPS are subject to the same laws as elsewhere on the Navajo Nation, and are then subject to this [Management] Plan." After our previous designation, we found that the designation on these lands created confusion. In fact, we were unable to accurately map the units within and outside of Navajo National Monument and Canyon de Chelly to depict the distinction of management authority. We also found in our reanalysis of the Navajo Management Plan that the Navajo Fish and Wildlife Department will assist NPS managers, as requested, with developing or maintaining consistent land-use policies that incorporate these owl management tenets. We consider these lands to be within the existing Navajo Management Plan and therefore excluded from the designation. Nevertheless, the NPS would still be required to consult under section 7 jeopardy provisions on any projects conducted within these areas that would affect the owl.

## Relationship to Section 4(a)(3) of the Act

The Sikes Act Improvements Act of 1997 (Sikes Act) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the installation, including needs to provide for the conservation of listed species; a statement of goals and priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species and critical habitat.

The 2004 National Defense Authorization Act (Pub. L. 108-136, November 2003), in Section 318, Military Readiness and Conservation of Protected Species (Defense Authorization Act) makes the following amendment to section 4(a)(3) of the Act: the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. Therefore, lands essential to the conservation of a species that are owned or managed by DOD and covered by INRMPs are excluded from critical habitat designations if they meet that criteria.

The Camp Navajo Army Depot, Arizona, was proposed as critical habitat. We have been providing technical assistance to Camp Navajo Army Depot for the last 3 years regarding the development of their INRMP and natural resources on the installation. The INRMP was finalized in late 2001. However, the INRMP was finalized without seeking signatures from our Region 2 Regional Director and the State Director of the Arizona Game and Fish Department (AGFD) (Service 2001). Per the Sikes Act and the Army's regulations, the INRMP is only final when the Service and AGFD (concurring agencies) have signed off on the INRMP. Because the INRMP was completed without signatures from concurring agencies, and when we reviewed early drafts we found that it did not provide a conservation benefit to the owl, we find Camp Navajo Army Depot's INRMP does not conform to the Defense Authorization Act. Moreover, we did not receive any comments from Camp Navajo Army Depot regarding the proposed designation. Because the base currently contains protected and restricted habitat and primary constituent elements, we find these lands to be essential to the conservation of the owl. For these reasons, these lands are designated as critical habitat.

U.S. Naval Observatory Flagstaff Station, Arizona, was proposed as critical habitat. We reviewed their final INRMP in 2001 and concluded that it provides a benefit to the species. The INRMP provides management direction for the owl on this installation. Thus, we are not including this area in the final designation critical habitat for the owl pursuant to section 4(a)(3) of the Act.

Fort Carson, Colorado, was proposed as critical habitat for the owl. Fort Carson completed their final INRMP on April 8, 2003, which includes specific guidelines for protection and management for the owl. We have reviewed their final INRMP relative to whether the plan provides a benefit to the subject species. It is our determination that the final INRMP for Fort Carson provides a benefit to the owl. Thus, we are not including Fort Carson in the final designation of critical habitat for the owl pursuant to section 4(a)(3) of the Act.

Fort Huachuca was proposed as critical habitat, but completed an INRMP in 2001. The plan helps guide natural resources management on Fort Huachuca, while supporting the military's mission. In 2002, we completed a biological opinion for Fort Huachuca on all installation activities, including its INRMP (Service 2002a). Fort Huachuca conducts owl monitoring and surveys and its projects are designed to be consistent with and complement the Recovery Plan (Service 2002a). We found that the proposed action was not likely to jeopardize the continued existence of the owl or adversely modify designated critical habitat. Because the INRMP provides a benefit to the owl, Fort Huachuca is not included in the designation of critical habitat for the owl pursuant to section 4(a)(3) of the Act.

#### **Effect of Critical Habitat Designation**

Section 7 Consultation

The regulatory effects of a critical habitat designation under the Act are triggered through the provisions of section 7, which applies only to activities conducted, authorized, or funded by a Federal agency (Federal actions). Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR 402. We are currently reviewing the regulatory definition of adverse modification in relation to the conservation of the species. Individuals, organizations, States, local governments, and other non-Federal entities are not affected by the designation of critical habitat unless their actions occur on Federal lands require Federal authorization, or involve Federal funding. Please refer to the proposed rule to designate critical habitat for the owl for a detailed discussion of section 7 of the Act in relation to the designation of critical habitat (65 FR 45336; July 21, 2000). Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally

funded, authorized, or permitted do not require section 7 consultation.

Activities on Federal lands that may affect the owl or its critical habitat will require section 7 consultation. Activities on State or private lands requiring a permit from a Federal agency, such as a permit from the FS, or some other Federal action, including funding (e.g., Federal Highway Administration, Federal Aviation Administration, or Federal Emergency Management Agency) will continue to be subject to the section 7 consultation process only for actions that may affect the owl, but not for critical habitat because areas under State or private ownership are not included in the critical habitat designation by definition. Similarly, Tribal lands that we did not designate as critical habitat will also continue to be subject to the section 7 consultation process only for actions that may affect the owl. The FS WUI project areas that we excluded from this designation have already been analyzed through the consultation process and biological opinions. Other projects within these areas will continue to be consulted upon for potential effects to the owl and critical habitat. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded or regulated do not require section 7 consultation.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory.

We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain a biological opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as a biological opinion if the critical habitat is designated and if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

Regulations at 50 CFR 402.16 also require Federal agencies to reinitiate consultation in instances where we have already reviewed an action for its effects on a listed species if critical habitat is subsequently designated. Consequently, some Federal agencies may request reinitiation of consultation or

conferencing with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy critical habitat.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat, or that may be affected by such designation. Activities that may result in the destruction or adverse modification of critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for the conservation of the owl is appreciably reduced. We note that such activities may also jeopardize the continued existence of the species.

A number of Federal agencies or departments fund, authorize, or carry out actions that may affect the owl and its critical habitat. Among these agencies are the FS, BIA, BLM, Department of Defense, Department of Energy, NPS, and Federal Highway Administration. We have reviewed and continue to review numerous activities proposed within the range of the owl that are currently the subject of formal or informal section 7 consultations. Actions on Federal lands that we reviewed in past consultations on effects to the owl include land management plans; land acquisition and disposal; road construction, maintenance, and repair; timber harvest; livestock grazing and management; fire/ ecosystem management projects (including prescribed natural and management ignited fire); powerline construction and repair; campground and other recreational developments; and access easements. We expect that the same types of activities will be reviewed in section 7 consultations for designated critical habitat.

Actions that would be expected to both jeopardize the continued existence of the owl and destroy or adversely modify its critical habitat would include those that significantly and detrimentally alter the species' habitat over an area large enough that the likelihood of the owls' persistence and recovery, either range-wide or within a RU, is significantly reduced. Thus, the likelihood of an adverse modification or jeopardy determination would depend on the baseline condition of the RU and the baseline condition of the species as a whole. Some RUs, such as the Southern Rocky Mountains-New Mexico and Southern Rocky Mountains-Colorado, support fewer owls and owl habitat than other RUs and, therefore, may be less able to withstand habitataltering activities than RUs with large contiguous areas of habitat supporting higher densities of owls.

Actions not likely to destroy or adversely modify critical habitat include activities that are implemented in compliance with the Recovery Plan, such as thinning trees less than 9 inches (23 centimeters) in diameter in PACs; fuels reduction to abate the risk of catastrophic wildfire; "personal use" commodity collection such as fuelwood, latillas and vigas, and Christmas tree cutting; livestock grazing that maintains good to excellent range conditions; and most recreational activities including hiking, camping, fishing, hunting, crosscountry skiing, off-road vehicle use, and various activities associated with nature appreciation. We do not expect any restrictions to those activities as a result of this critical habitat designation. In addition, some activities may be considered to be of benefit to owl habitat and, therefore, would not be expected to adversely modify critical habitat. Examples of activities that could benefit critical habitat may include some protective measures such as fire suppression, prescribed burning, brush control, snag creation, and certain silvicultural activities such as thinning. In 2001, the Recovery Team noted that there is currently not enough information to provide specific targets or quantities for the retention of key habitat components during fuels reduction activities in restricted habitat (Service 2001). However, current research is increasing our knowledge (e.g., see Ganey et al. 2003; May and Gutierrez 2002). Consequently, managers should use their discretion and site-specific information to balance fuels management prescriptions with the conservation of the owl. Nevertheless, we are aware that some activities, such as prescribed burns, have been conducted and data indicate that primary constituent elements have been retained (e.g., see Service 2002; Grand Canyon National Park Prescribed

If you have questions regarding whether specific activities will likely constitute destruction or adverse modification of critical habitat, contact the State Supervisor, New Mexico Ecological Services Field Office (see ADDRESSES section). If you would like copies of the regulations on listed wildlife or have questions about prohibitions and permits, contact the U.S. Fish and Wildlife Service, Division of Endangered Species, P.O. Box 1306, Albuquerque, New Mexico 87103 (telephone 505–248–6920; facsimile 505–248–6788).

Effects on Tribal Trust Resources From Critical Habitat Designation on Non-Tribal Lands

In complying with our Tribal trust responsibilities, we communicated with all tribes potentially affected by the designation of critical habitat for the owl. We solicited and received information from the tribes (see discussion above) and arranged meetings with the tribes to discuss potential effects to them or their resources that may result from critical habitat designation. Please refer to the economic analysis and environmental assessment where the potential impacts are reviewed.

### **Economic Analysis**

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial data available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We based this designation on the best available scientific information, and believe it is consistent with the Recovery Plan and recommendations of those team members. We utilized the economic analysis, and took into consideration comments and information submitted during the public hearing and comment periods to make this final critical habitat designation. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

The economic effects already in place due to the listing of the owl as threatened is the baseline upon which we analyzed the economic effects of the designation of critical habitat. The critical habitat economic analysis examined the potential economic effects of efforts to protect the owl and its critical habitat. The economic effects of a designation were evaluated by measuring changes in national, regional, or local indicators. A draft analysis of the economic effects of the proposed owl critical habitat designation was prepared and made available for public review (65 FR 63047; March 26, 2004). Because of the regulatory history, additional consultations resulting from this rulemaking are expected to be minimal. The Recovery Plan, providing extensive guidance on owl conservation, was published in 1995. Thus, as discussed in our economic analysis, action agencies have been aware of the owl and are already consulting on a

wide range of activities within the designation. Therefore, we concluded in the final analysis, which reviewed and incorporated public comments, that no significant economic impacts (i.e, will not have annual effect on the economy of \$100 million or more or affect the economy in a material way as defined by Office of Management and Budget and discussed further in the "Required Determinations" section below) are expected from critical habitat designation above and beyond that already imposed by listing the owl. A copy of the economic analysis is included in our supporting record and may be obtained by contacting the New Mexico Ecological Services Field Office (see ADDRESSES section) of from our Web site http://ifw2es.fws.gov/mso/.

Impacts associated solely with this rulemaking are expected to result in additional administrative costs to Action agencies due to additional consultation and documentation requirements. These additional administrative costs are expected to be on the order of \$72,000 to \$238,000 annually. Based on a review of consultation records, there has not been a measurable increase in the number of consultations occurring annually in those areas where owl critical habitat was finalized in 2001. Some additional administrative costs are expected for discussing adverse modification in the consultation documentation and for reinitiating consultations. Based on discussions with land management agency personnel, these costs will be small, as the amount of additional work associated with these efforts is not expected to be significant. In particular, our economic analysis found that FS Region 3 personnel are already managing owl habitat in compliance with Recovery Plan guidance, indicating this rulemaking will not result in additional impacts, with the exception of a slight increase in administrative efforts. Moreover, FS personnel Regions 2 and 4 believe that for activities within the designation, the cost of having to address the owl in their required environmental documentation is only a minor cost because little activity is occurring or planned within the designation. Additionally, the BLM in Colorado and Arizona indicated that critical habitat has been designated since 2001 and has not resulted in any significant increase in workload. Finally, the BLM in Utah indicated that only limited impacts on oil and gas activities related to this rulemaking are expected in the future because owlrelated delays in drilling activities

would be expected even in the absence of this designation.

The amount of additional administrative costs attributable to this rulemaking (i.e., that would not occur absent the designation), is likely to be only a portion of the total forecast administrative costs. The future administrative costs attributable solely to this rulemaking are expected to be on the order of 25 percent of total forecast administrative costs of \$72,000 to \$238,000 annually. Based on a review of consultations that have occurred in the areas where critical habitat was designated in 2001 and on discussions with land management personnel and affected entities, additional future project modification costs are unlikely to occur under this current designation. Therefore, the incremental costs associated with this rulemaking are expected to be minimal.

## **Required Determinations**

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but it is not anticipated to have an annual effect on the economy of \$100 million or more or affect the economy in a material way. Due to the tight timeline for publication in the Federal Register, the Office of Management and Budget (OMB) has not formally reviewed this rule. We prepared an economic analysis of this action to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat. The draft economic analysis was made available for public comment and we considered those comments during the preparation of this final rule. The economic analysis indicates that this rule will not have an annual economic effect of \$100 million or more or adversely affect any economic sector, productivity, competition, jobs, the environment, or other units of government.

Under the Act, critical habitat may not be destroyed or adversely modified by a Federal agency action; the Act does not impose any restrictions related to critical habitat on non-Federal persons unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency. Because of the potential for impacts on other Federal agencies' activities, we reviewed this action for any inconsistencies with other Federal agency actions. Based on our economic analysis and information related to implementing the listing of the species

such as conducting section 7 consultations, we believe that this designation will not create inconsistencies with other agencies' actions or otherwise interfere with an action taken or planned by another agency, nor will it materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*)

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA also amended the RFA to require a certification statement. We are hereby certifying that this rule will not have a significant effect on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses defined at 13 CFR 121.201. Small businesses that are potentially impacted by the critical habitat designation for the owl, as identified in the final economic analysis, include the timber industry (i.e., timber tract operations, logging, support activities for forestry, wood producer manufacturing, and pulpmills); livestock grazing industry (i.e., beef cattle ranching and farming); oil and gas industry (i.e., oil and gas extraction); and rock quarry industry (i.e., stone mining and quarrying).

SBREFA does not explicitly define either "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in the area. Similarly, this analysis considers the relative cost of compliance on the revenues/profit margins of small entities in determining whether or not entities incur a "significant economic impact." Only small entities that are expected to be directly affected by the designation are considered in this portion of the analysis. This approach is consistent with several judicial opinions related to the scope of the RFA (Mid-Tex Electric Co-op Inc. v. F.E.R.C., 773 F.2d 327 (D.C. Cir. 1985) and American Trucking Associations, Inc. v. U.S. E.P.A., 175 F.3d 1027, (D.C. Cir. 1999)).

To determine if the rule would affect a substantial number of small entities, we considered the number of small entities affected within particular types of economic activities (e.g., grazing, oil and gas production, timber harvesting, etc.). We applied the "substantial number" test individually to each industry to determine if certification is appropriate. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement; some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. Designation of critical habitat only affects activities conducted, funded, or permitted by Federal agencies; non-Federal activities are not affected by the designation. Federal agencies are already required to consult with us under section 7 of the Act on activities that they fund, permit, or implement that may affect the owl.

The primary projects and activities by private entities that might be directly affected by the designation include the timber industry, livestock grazing industry, oil and gas industry, and rock quarry industry. Based on the final economic analysis we address the potential impacts to small businesses in each of these industries below.

Timber Industry Small Business Impacts

Limited data are available on the number of timber-related small businesses in the region or the average revenues of small businesses in this industry. Available data suggest that approximately 84 percent of timber-related businesses in the affected region are small businesses. The timber industry in the southwest has declined over the past 10 years due to a variety of factors, including owl related conservation activities. These factors include changes in the FS forest timber sales program at the national level,

injunctions that halted timber sales in the region, and changes in regional FS forest management objectives. Since 1992, at least 15 mills have closed in the region, leaving approximately 15 sawmills currently operating in Arizona and New Mexico with an annual capacity of 61 MMBF. Timber harvest within FS Region 3 forests has declined over the past 15 years from an annual harvest of 148 MMBF per year, to the current level of 20 MMBF harvested in 2002. Lumber production in the region has seen similar declines. Current lumber production in the four corners region was 187 MMBF in 2002.

Without owl-related conservation efforts, up to an additional 60 MMBF per year in timber harvest could have been available to the timber industry from FS Region 3 forests. This forecast high-end impact translates into approximately 78 MMBF in lost lumber production per year. As these are ongoing annual impacts related to past conservation actions, the timber industry has likely already adjusted to the reduced level of timber harvest from the national forests. Thus, future impacts to existing timber-related businesses in the region, all of whom are likely to be small businesses, are unlikely. These impacts would only occur if owl conservation efforts resulted in additional reductions in timber supply, above the forecast upper bound estimates. Given the current level of timber sales from FS Region 3 national forests, it is worth noting that sawmills operating in the region are likely dependent on either Tribal or private timber sources for their supply.

Livestock Grazing Small Business Impacts

Approximately 1,500 permittees grazed cattle on FS Region 3 forests during the past three years (2000 to 2002) and most of these operations are small businesses. Of these. approximately 850 permittees graze in the area proposed as critical habitat in FS Region 3 national forests. For purposes of this analysis, these are all assumed to be small entities. A number of these ranchers will be impacted by ongoing owl conservation activities, which, along with other factors including drought, result in limitations on the number of authorized animal unit months (AUMs) permitted on FS Region 3 lands. The expected reduction in AUMs is based on an examination of historical grazing levels and section 7 consultations. The number of AUMs grazing in proposed owl critical habitat is assumed to be proportional by acreage to the total number of AUMs grazed in a particular NF. The economic analysis

finds that reductions in AUMs as a result of owl conservation measures, elk, and other threatened and endangered species may range from 10 percent to 50 percent for allotments that cross owl protected activity centers. In addition, future impacts are limited to those allotments that have yet to undergo NEPA analysis and associated section 7 consultation. Based on these assumptions, the estimated annual reduction is approximately 3,100 to 15,600 AUMs on FS Region 3 lands.

Because information is not available on the specific permittees most likely to experience a reduction in authorized AŪMs, the analysis uses two approaches to estimate impacts on small businesses related to reductions in AUMs. First, this analysis estimates the number of permittees that could possibly experience a complete reduction in their authorized AUMs. Second, the analysis estimates the impact on each permittee in the critical habitat designation, if the impacts were evenly distributed. Based on information on authorized AUMs and number of permittees on FS Region 3 lands, the typical permittee grazes approximately 1,070 AUMs. Given this, a forecast annual reduction in AUMs of 3,100 to 15,600 is equivalent to the total AUMs grazed by 3 to 15 permittees. Thus, if the total impacts were to affect the smallest number of permittees, less than two percent of grazing permittees in critical habitat would be affected. If the impacts of a reduction in AUMs were evenly distributed across all 850 permittees in critical habitat. This would result in an annual reduction of 4 to 19 AUMs per permittee. Given that permittees typically graze approximately 1,070 AUMs, this represents a reduction of less than two percent of AUMs per permittee.

Oil and Gas Industry Small Business Impacts

Impacts to oil and gas extraction from owl conservation activities have the potential to impact some small businesses operating in the New Mexico and Utah region. Based on historical consultation records, impacts on oil and gas operations in the past as a result of owl conservation efforts have been limited. However, given expected growth of oil and gas operations and exploration in the proposed critical habitat designation in Utah, there is some potential for small businesses to experience greater impacts in the future. Expected future impacts on the oil and gas industry include administrative costs, project modification costs, and regional impacts resulting from delays to drilling activities.

Estimated impacts related to administrative efforts and project modifications are likely to be minimal on a per-business basis. Project modifications specific to oil and gas activities are forecast to range from \$1,000 to \$25,000 per company. However, some small businesses in this industry will likely experience localized impacts related to the owl and the critical habitat designation. For example, as discussed in its comments, Bill Barrett Corporation (BBC) spent approximately \$94,000 to conduct surveys for owl in a project area within previously finalized owl critical habitat in Utah. This corporation estimates that owl surveys cost them from \$3 to \$6 an

There is also some potential for future project modifications to include directional drilling, which could mean greater impacts to small businesses in the New Mexico and Utah area. However, the extent to which directional drilling may be required in order to protect the owl and its habitat is currently unknown; this drilling method has not been required in the past, and is not widely used in the region.

Estimated impacts related to delays caused by owl surveying efforts or breeding season restrictions could affect operators in the CP-15 critical habitat unit in Utah, on BLM lands. While regional economic impacts resulting from owl-related delays are estimated, the analysis expects that producers will likely shift production to other locations, if not in the region than elsewhere; thus, producer surplus losses are not expected. However, if oil and gas producers are unable to shift production elsewhere, up to five companies could be impacted per year, assuming each delayed well belonged to an individual company. The impact of the loss of one well would depend on the finances of the company. Currently, the majority of the leases in the area are held by BBC, a small business, based in Denver, Colorado. BBC estimates that a typical well in the area has a net present value of \$400,000. If five wells are delayed each year, this could be considered the equivalent of precluding drilling of five wells if substitute drilling locations are unavailable. If all five wells belonged to BBC, this could result in an annual impact of \$2.0 million. In comparison, BBC estimates that its revenues from production in one area (the Southern Uintah Basin) are in excess of \$65 million per year.

Based on a review of operators in Carbon County, Utah, the majority of operators in this industry are headquartered outside of Utah. Oil and gas companies operating in Carbon County, Utah, likely to be directly impacted by owl related conservation efforts are located in a variety of States, including Texas, Oklahoma and Alabama, among others. Therefore, the relevant area for purposes of this analysis is the U.S.

There are approximately 7,680 small businesses in the oil and gas extraction sector in the U.S. The total number of oil and gas businesses operating in the critical habitat designation in New Mexico and Utah is likely in the range of 150 operators. Given the large number of oil and gas businesses nationwide, the number of potentially affected small businesses is only a small portion of small oil and gas businesses nationwide.

Stone Mining and Quarrying Industry Small Business Impacts

Impacts to small businesses in this industry resulting from owl conservation efforts are likely to be limited to one rock quarry operator. The quarry project area falls within critical habitat, but is not included in the designation by definition since it is private property, and is permitted through the State. While there is no Federal nexus, the quarry operator has been in negotiation with the Service for an Incidental Take Permit under section 10 of the Act. This activity is voluntary, and while it is related to the owl, it would likely occur with or without the critical habitat designation. The private operator of this quarry expects to incur various costs resulting from owl conservation activities, including \$60,000 to \$450,000 in one time costs and \$10,000 per year in ongoing monitoring costs. Because this party is a small business with limited revenues, these expenditures represent a considerable impact to this business. Available information indicates that this operator is one of 11 businesses (of which nine are small businesses) in this industry in the affected Colorado counties.

Based on the experience of this operator, there is some likelihood that other quarries adjacent to owl habitat may experience impacts related to owl conservation activities. However, a review of consultation records and communication with Service staff indicate other quarry operations are not occurring in the critical habitat designation or adjacent to owl habitat. Therefore, additional small businesses in the stone mining industry are not expected to experience impacts resulting from owl conservation efforts.

In summary, potential impacts from restrictions on grazing on Federal lands

are likely to affect some small businesses. Small business impact estimates are based on information provided by affected parties as well as information on small businesses in the region. While small business impacts on existing timber-related small businesses are unlikely, small ranchers in the region may experience some impacts. If the total impacts were to affect the least number of ranchers, no more than 15 ranchers (less than two percent of grazing permittees) would be affected. However, if the impacts were evenly distributed, owl conservation could result in a reduction of up to 19 AUMs per rancher (a reduction of less than two percent of AUMs per permittee). Impacts to small businesses in the natural gas industry from owl-related delays are not expected as long as substitute drilling locations are available. However, if gas producers are unable to shift production elsewhere, up to five companies could be impacted per year, assuming each delayed well belonged to an individual company. The impact of the loss of one well would depend on the finances of the company. Also, one small entity operating a rock quarry may experience impacts related to preparation of a habitat conservation plan for owl, but we believe these costs are associated to the listing of the owl and not the critical habitat designation, since private land is not included by definition in this critical habitat designation.

Federal agencies must also consult with us if their activities may affect designated critical habitat. However, we believe this will result in minimal additional regulatory burden on Federal agencies or their applicants because Federal agencies are already consulting on both protected and restricted habitat pursuant to existing management agreements, and consultations use the standards from the owl recovery plan which addresses habitat management issues. Thus, as stated in the Executive Summary of our Economic Analysis, no additional economic impacts, with the exception of some additional administrative costs related to addressing critical habitat in future consultation efforts, are anticipated from the designation of critical habitat for the owl.

Designation of critical habitat could result in an additional economic burden on small entities due to the requirement to reinitiate consultation for ongoing Federal activities. However, since the owl was listed in 1993, we have conducted a variety of informal and formal consultations involving this species. Most of these consultations involved Federal projects or permits to

businesses that do not meet the definition of a small entity (e.g., federally sponsored projects).

In summary, we have considered whether this rule would result in a significant economic effect on a substantial number of small entities. We have concluded that this final designation of critical habitat for the owl would not affect a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for the owl will not have a significant economic impact on a substantial number of small entities, and a final regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 802(2))

Under the Small Business Regulatory Enforcement Fairness Act (5 U.S.C 801 et seq.), this designation of critical habitat for the owl is not considered to be a major rule. Our detailed assessment of the economic effects of this designation is described in the economic analysis. Based on the effects identified in our economic analysis, we believe that this rule will not have an effect on the economy of \$100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises, nor will the rule have a significant economic impact on a substantial number of small entities. Refer to the final economic analysis for additional discussion of the effects of this determination.

## Executive Order 13211

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. The purpose of this requirement is to ensure that all Federal agencies "appropriately weigh and consider the effects of the Federal Government's regulations on the supply, distribution, and use of energy The OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute "a significant adverse effect" when compared without the regulatory action under consideration. One of these criteria is relevant to this analysisincreases in the cost of energy distribution in excess of one percent. Based on our economic analysis of this designation of critical habitat for the

owl, we conclude that the impact to energy distribution is not anticipated to exceed the one percent threshold. Please refer to the economic analysis where the potential impacts are reviewed. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501), the Service makes the following

findings:

(a) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, Tribal governments, or the private sector and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)-(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or Tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding" and the State, local, or Tribal governments "lack authority" to adjust accordingly. (At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants: Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement.) "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program.'

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-

Federal entities who receive Federal funding, assistance, permits or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments. This determination is based on information from the economic analysis conducted for this designation of critical habitat for the owl and the fact that critical habitat is only being designated on Federal lands. As such, a Small Government Agency

Plan is not required.

## **Takings**

In accordance with Executive Order 12630 ("Government Actions and Interference with Constitutionally Protected Private Property Rights"), we have analyzed the potential takings implications of designating critical habitat for the owl in a takings implications assessment. The takings implications assessment concludes that this final designation of critical habitat for the owl does not pose significant takings implications.

## Federalism

In accordance with Executive Order 13132, this rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, the Service requested information from, and coordinated development of this critical habitat designation with appropriate State resource agencies in New Mexico, Arizona, Colorado, and Utah. The impact of the designation on State and local governments and their activities was fully considered in the economic analysis. As discussed above, the designation of critical habitat for the owl would have little incremental impact on State and local governments and their activities.

#### Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act, as amended. This rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs that are essential for the conservation of the owl.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*)

This rule does not contain new or revised information collection for which Office of Management and Budget approval is required under the Paperwork Reduction Act. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### National Environmental Policy Act

Our position is that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the NEPA in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the Federal Register on October 25, 1983 (48 FR 49244). This assertion was upheld in the courts of the Ninth Circuit (Douglas County v. Babbitt, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996). However, when the range of the species includes States within the Tenth Circuit, such as that of the owl, pursuant to the Tenth Circuit ruling in Catron County Board of Commissioners v. U.S. Fish and Wildlife Service, 75 F.3d 1429 (10th Cir. 1996), we undertake a NEPA analysis for critical habitat designation. We completed an environmental assessment and finding of no significant impact on the designation of critical habitat for the owl.

## Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. The critical habitat for owl does not contain

any Tribal lands or lands that we have identified as impacting Tribal trust resources.

#### References Cited

A complete list of all references cited in this proposed rule is available upon request from the New Mexico Ecological Services Field Office (see ADDRESSES section).

#### Authors

The primary authors of this notice are the New Mexico Ecological Services Field Office staff (see **ADDRESSES** section).

## List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

#### **Regulation Promulgation**

■ Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

#### PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

■ 2. Amend § 17.95(b) by revising critical habitat for the Mexican spotted owl (*Strix occidentalis lucida*) in the same alphabetical order as this species occurs in § 17.11(h).

### § 17.95 Critical habitat—fish and wildlife.

\* \* \* \* (b) *Birds.* \* \* \*

Mexican Spotted Owl (Strix occidentalis lucida)

(1) Critical habitat units for the States of Arizona, Colorado, New Mexico, and Utah are depicted on the maps below. Larger maps and digital files for all four States and maps of critical habitat units in the State of New Mexico are available at the New Mexico Ecological Services Field Office, 2105 Osuna N.E., Albuquerque, New Mexico 87113, telephone (505) 346-2525. For the States of Arizona, Colorado, and Utah, maps of the critical habitat units specific to each State are available at the following Service offices—Arizona Ecological Services Field Office, 2321 West Royal Palm Road, Suite 103, Phoenix, Arizona 85021, telephone (602) 640-2720; Colorado State Sub-Office, 764 Horizon Drive South, Annex A, Grand Junction, Colorado 81506, telephone (970) 243-2778; and Utah

Ecological Services Field Office, Lincoln Plaza, 145 East 1300 South, Suite 404, Salt Lake City, Utah 84115, telephone (801) 524–5001.

(2) Critical habitat units are designated in portions of McKinley, Rio Arriba, Sandoval, and Socorro Counties in New Mexico; Apache, Cochise, Coconino, Graham, and Pima Counties in Arizona; Carbon, Emery, Garfield, Grand, Iron, Kane, Washington, and Wayne Counties in Utah; and Custer, Douglas, El Paso, Fremont, Huerfano, Jefferson, Pueblo, and Teller Counties in Colorado.

(3)(i) The primary constituent elements essential to the conservation of the owl include those physical and biological features that support nesting, roosting, and foraging. These elements were determined from studies of owl behavior and habitat use throughout the range of the owl. Although the vegetative communities and structural attributes used by the owl vary across the range of the subspecies, they consist primarily of mixed conifer forests or canyons. The mixed-conifer, pine-oak communities and canyon habitat appear to be the most frequently used community throughout most portions of the subspecies' range (Skaggs and Raitt 1988; Ganey and Balda 1989, 1994; Gutierrez and Rinkevich 1991, Service 1995). Although the structural characteristics of owl habitat vary depending on uses of the habitat (e.g., nesting, roosting, foraging) and variations in the plant communities over the range of the subspecies, some general attributes are common to the subspecies' life-history requirements throughout its range.

(ii) Protected and restricted habitat are two of the three types of owl habitat discussed in the Recovery Plan and are used as the basis for defining critical habitat. Protected areas include known owl sites (PACs), areas in mixed-conifer and pine-oak types with greater than 40 percent slopes where timber harvest has not occurred in the past 20 years and administratively reserved lands, such as Wilderness Areas or Research Natural Areas. Restricted habitat includes mixed-conifer forest, pine-oak forest, and riparian areas outside of protected areas. This final rule does not include all areas that meet the definition of protected and restricted habitat.

(iii) Canyon habitats used for nesting and roosting are typically characterized by cooler conditions found in steep, narrow canyons, often containing crevices, ledges, and/or caves. These canyons frequently contain small clumps or stringers of ponderosa pine, Douglas-fir, white fir, and/or pinyon-juniper. Deciduous riparian and upland

tree species may also be present. Adjacent uplands are usually vegetated by a variety of plant associations including pinyon-juniper woodland, desert scrub vegetation, ponderosa pine-Gamble oak, ponderosa pine, or mixed-conifer. Owl habitat may also exhibit a combination of attributes between the forested and canyon types.

(iv) The primary constituent elements for the Mexican spotted owl are:

(A) Primary constituent elements related to forest structure:

(1) A range of tree species, including mixed conifer, pine-oak, and riparian forest types, composed of different tree sizes reflecting different ages of trees, 30 percent to 45 percent of which are large trees with a trunk diameter of 12 inches (0.3 meters) or more when measured at 4.5 feet (1.4 meters) from the ground;

(2) A shade canopy created by the tree branches covering 40 percent or more of

the ground: and

(3) Large dead trees (snags) with a trunk diameter of at least 12 inches (0.3 meters) when measured at 4.5 feet (1.4 meters) from the ground.

(B) Primary constituent elements related to maintenance of adequate prey species:

(1) High volumes of fallen trees and other woody debris;

(2) A wide range of tree and plant species, including hardwoods; and

(3) Adequate levels of residual plant cover to maintain fruits, seeds, and allow plant regeneration.

(C) Primary constituent elements related to canyon habitat include one or more of the following:

(1) Presence of water (often providing cooler and often higher humidity than the surrounding areas);

(2) Clumps or stringers of mixedconifer, pine-oak, pinyon-juniper, and/ or riparian vegetation;

(3) Canyon wall containing crevices, ledges, or caves; and

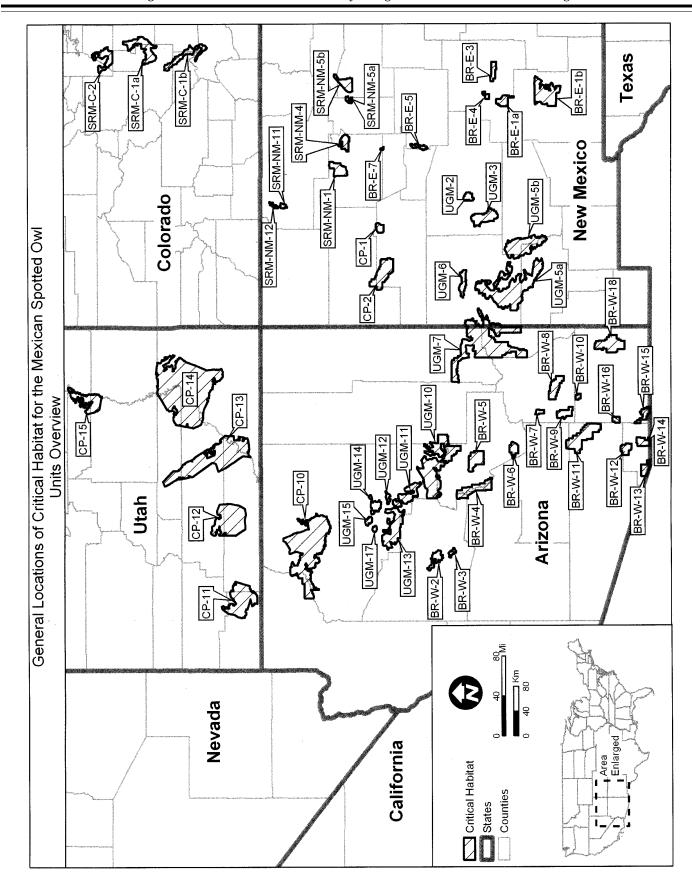
(4) High percent of ground litter and woody debris.

(4) Lands located within the mapped boundaries of the critical habitat designation that are not included in this designation, and are therefore excluded by definition, include: State and private lands, 157 wildland urban interface projects and the Penasco WUI project area that contain owls or habitat on Forest Service lands that are identified in the Wildland Urban Interface database located at http://www.fs.fed.us/ r3/wui/ and addressed in the April 10, 2001, final biological opinion on the Forest Service's proposed wildland urban interface fuel treatments in New Mexico and Arizona and the September 27, 2002, final biological opinion on the Rio Penasco II Non-Programmatic

Vegetation Management Project and Forest Plan Amendment. The final biological opinions are available from the New Mexico Ecological Services Field Office, 2105 Osuna Road NE, Albuquerque, NM 87113.

- (5) Critical habitat is defined as those areas within the mapped boundaries. Federal actions within the mapped boundaries would not trigger a section 7 consultation unless they may affect the owl or affect protected or restricted habitat, which includes canyon habitat, and one or more of the primary constituent elements.
- (6) The minimum mapping unit for this designation does not exclude all developed areas, such as buildings, roads, bridges, parking lots, railroad tracks, other paved areas, the lands that support these features, and other lands unlikely to contain the primary constituent elements. Federal actions limited to these areas would not trigger a section 7 consultation, unless they affect protected or restricted habitat and one or more of the primary constituent elements in adjacent critical habitat.
- (7) Overview map of general locations of critical habitat for the Mexican spotted owl follows:

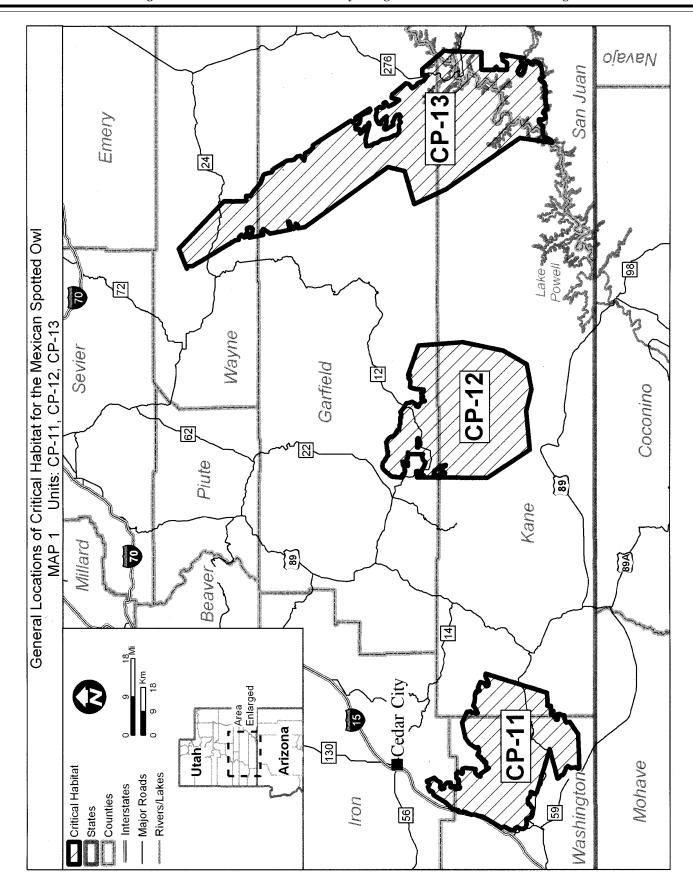
BILLING CODE 4310-55-P



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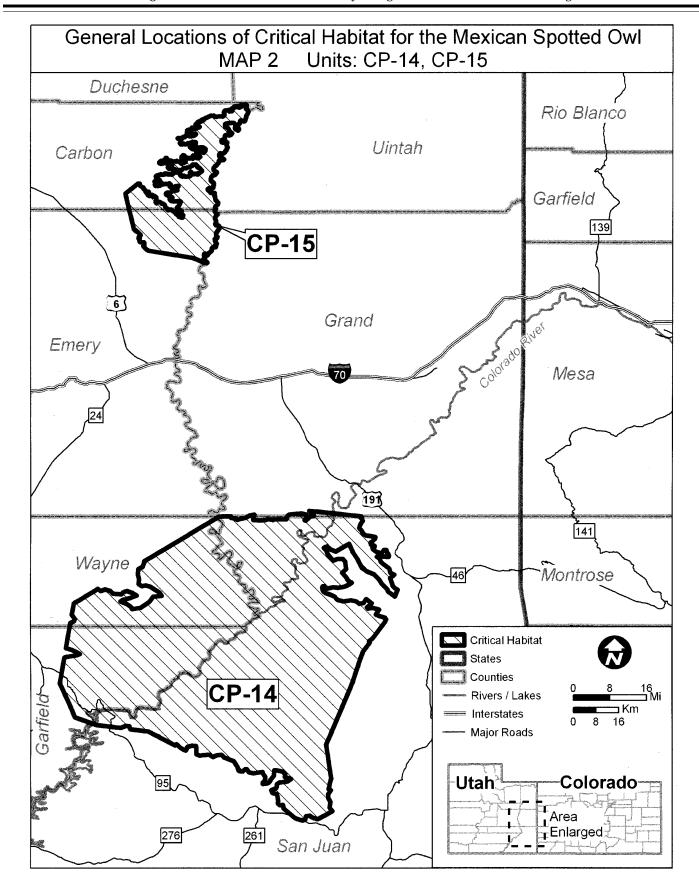
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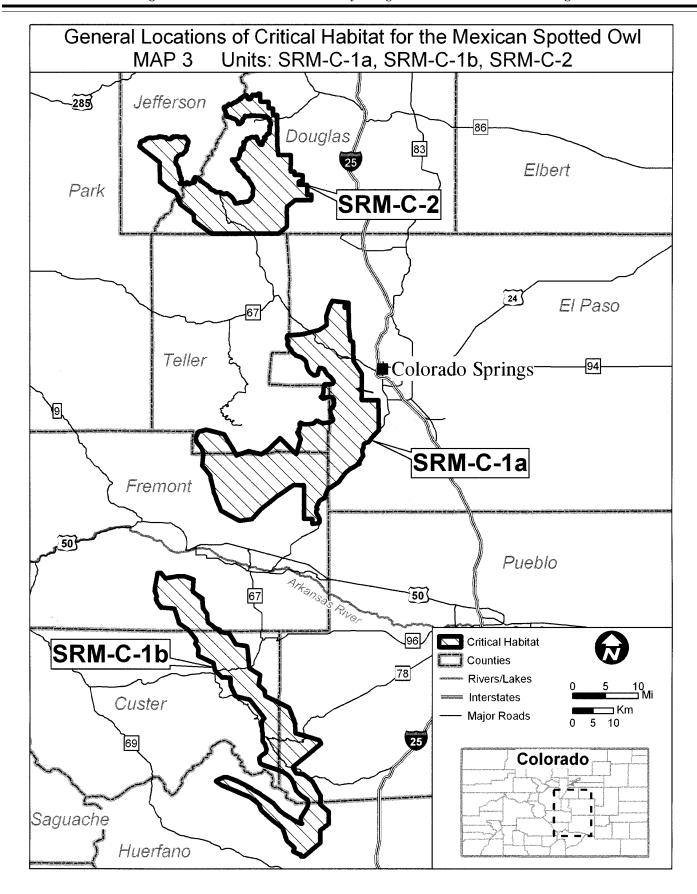
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Fremont, Huerfano and Pueblo
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Counties, Colorado. Land bounded by
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(19) Unit CP-10: Coconino and
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Mohave Counties, Arizona. Land
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bounded by the following UTM Zone 12
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NAD 83 coordinates (meters E, meters
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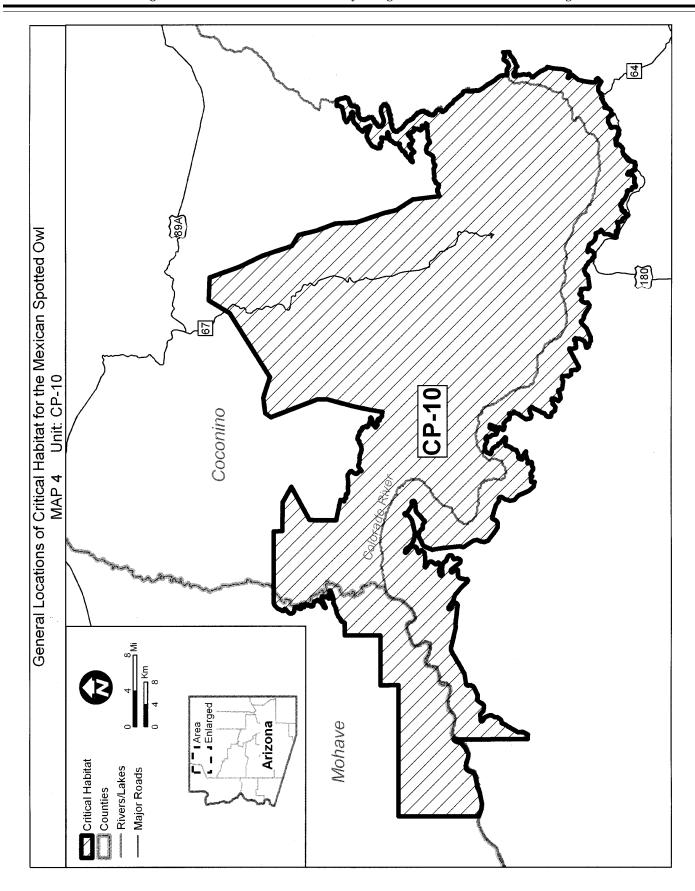
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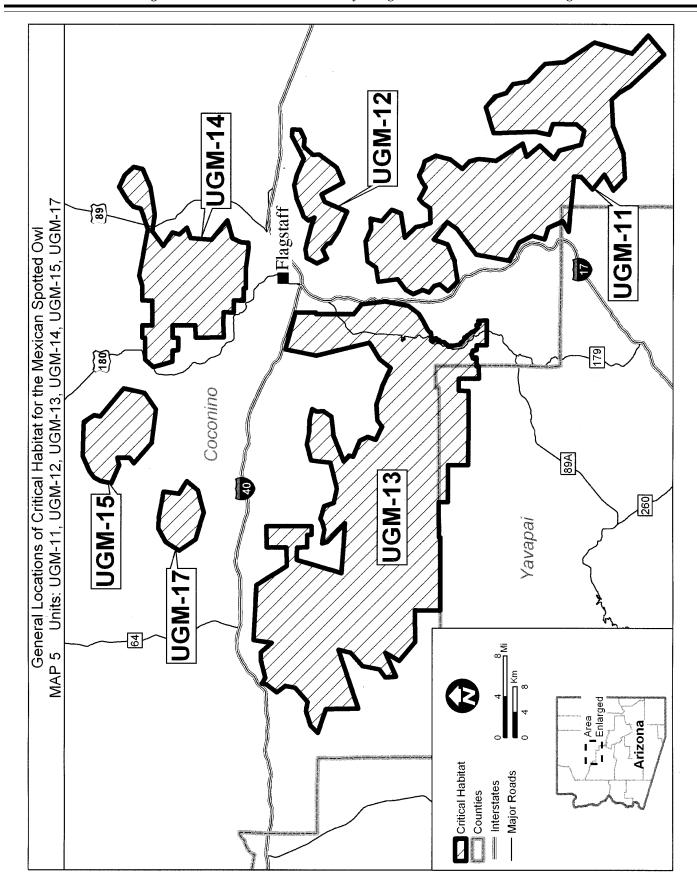
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                                        351156, 4015996; 351214, 4015902;
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355724, 4018122; 355935, 4018118;
                                        351227, 4015848; 351218, 4015754;
                                                                                333512, 4007671; 333502, 4007519;
356056, 4018146; 356106, 4018128;
                                        351195, 4015654; 351159, 4015557;
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357467, 4017308; 357548, 4017293;
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357611, 4015982; 357603, 4015957;
                                        342611, 4015515; 340831, 4014333;
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                                        339521, 4014135; 339495, 4014100;
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                                        339461, 4014095; 339327, 4014061;
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357560, 4014869; 357411, 4014761;
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357103, 4014831; 356055, 4016520;
                                        339171, 4013877; 339166, 4013860;
                                                                                331978, 4003440; 331974, 4003427;
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                                        339169, 4013768; 339153, 4013690;
                                                                                331965, 4003414; 331961, 4003399;
355858, 4016559; 355824, 4016559;
                                        339167, 4013613; 339176, 4013560;
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355678, 4016409; 355676, 4016371;
                                        339164, 4013197; 339156, 4013159;
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                                        339163, 4013159; 339170, 4013159;
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                                        339149, 4013100; 339149, 4013094;
                                                                                331861, 4003165; 331854, 4003156;
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                                        337313, 4012052; 337025, 4012148;
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                                        337015, 4012130; 337013, 4012130;
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356114, 4015592; 356113, 4015478;
                                        336995, 4012123; 336962, 4012088;
                                                                                331333, 4016457.
                                        336918, 4012066; 336774, 4011828;
356102, 4015415; 356040, 4015300;
                                                                                   (20) Map 4 of Unit CP-10 follows:
356017, 4015274; 356009, 4015270;
                                        336651, 4011627; 336601, 4011519;
355275, 4015271; 355231, 4015250;
                                        336563, 4011397; 336506, 4011292;
                                                                                BILLING CODE 4310-55-P
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(21) Unit UGM-11: Coconino County,
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                                                                                424558, 3880367; 426531, 3879587;
Arizona. Land bounded by the following
                                        452474, 3893393; 453906, 3892926;
                                                                                428775, 3878290; 429895, 3880009;
UTM Zone 12 NAD 83 coordinates
                                        455892, 3891860; 458836, 3893683;
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                                        459692, 3893612; 459654, 3892389;
                                                                                431398, 3885172; 431091, 3886773;
439565, 3870499; 439363, 3871373;
                                        458455, 3891708; 457493, 3891839;
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438544, 3872187; 438845, 3873221;
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445205, 3882160; 446732, 3881296;
                                        445027, 3887676; 444909, 3888198;
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447812, 3881355; 448153, 3881373;
                                        444171, 3888915; 443013, 3888267;
                                                                                435828, 3890053; 435825, 3889208;
448119, 3881199; 447806, 3879608;
                                        442923, 3888496; 442843, 3888698;
                                                                                435821, 3888441; 435814, 3886859;
448137, 3879253; 448319, 3879058;
                                        442834, 3888722; 442807, 3888790.
                                                                                435807, 3885230; 435802, 3884097;
449269, 3878038; 448792, 3876581;
                                          (23) Unit UGM-13: Coconino and
                                                                                437068, 3882819; 437069, 3882808;
445643, 3876000; 447030, 3874198;
                                        Yavapai Counties, Arizona. Land
                                                                                437387, 3879131; 436810, 3875461;
447181, 3873122; 447546, 3871929;
                                                                                435792, 3873850; 434777, 3873121;
                                        bounded by the following UTM Zone 12
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                                        384809, 3892001; 385557, 3891792;
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                                        392053, 3899144; 392707, 3898213;
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455463, 3865769; 455567, 3865258;
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455691, 3864650; 455773, 3864243;
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457532, 3848172; 459307, 3847641;
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460172, 3848881; 460246, 3852620;
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458835, 3853156; 459224, 3855351;
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459118, 3860201; 459101, 3860997;
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467996, 3853856; 468252, 3850765;
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                                        408742, 3889210; 409298, 3889524;
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456285, 3841449; 453138, 3841254;
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445308, 3853962; 445775, 3855869;
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444732, 3869246; 442601, 3868145;
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441302, 3867932; 440596, 3867793;
                                        419698, 3887206; 418965, 3886865;
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440555, 3867784.
                                        418029, 3886430; 416677, 3885801;
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 (22) Unit UGM-12: Coconino County,
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                                                                                434335, 3864616; 434326, 3864488;
Arizona. Land bounded by the following
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                                                                                434345, 3864354; 434382, 3864239;
UTM Zone 12 NAD 83 coordinates
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444209, 3891655; 447067, 3890772;
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448491, 3891922; 448816, 3892075;
                                        421950, 3880429; 422886, 3880499;
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                                        448011, 3903940; 445696, 3903140;
                                                                                  (26) Unit UGM-17: Coconino County,
406657, 3870664; 406584, 3870665;
                                        445166, 3901714; 445128, 3900680;
                                                                                Arizona, Land bounded by the following
397178, 3870757; 397222, 3873617;
                                        444392, 3900616; 441808, 3901050;
                                                                                UTM Zone 12 NAD 83 coordinates
397235, 3874212; 397246, 3874743;
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393075, 3874809; 390725, 3877271;
                                        436154, 3902989; 436174, 3904591;
                                                                                412753, 3911806; 413822, 3910980;
391788, 3879487; 388671, 3877810;
                                        434542, 3904640; 434081, 3904620;
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                                        432927, 3911756; 432866, 3911758;
                                                                                409269, 3915025; 409707, 3915070;
  (24) Unit UGM-14: Coconino County,
                                        431655, 3911796; 431454, 3911803;
                                                                                412399, 3914408.
Arizona. Land bounded by the following
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UTM Zone 12 NAD 83 coordinates
                                                                                  (27) Map 5 of Units UGM-11, UGM-
                                        431304, 3912677; 431250, 3912678.
                                                                                12, UGM-13, UGM-14, UGM-15, UGM-
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                                          (25) Unit UGM-15: Coconino County,
429840, 3912707; 429178, 3915731;
                                        Arizona. Land bounded by the following
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                                        UTM Zone 12 NAD 83 coordinates
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BILLING CODE 4310-55-P

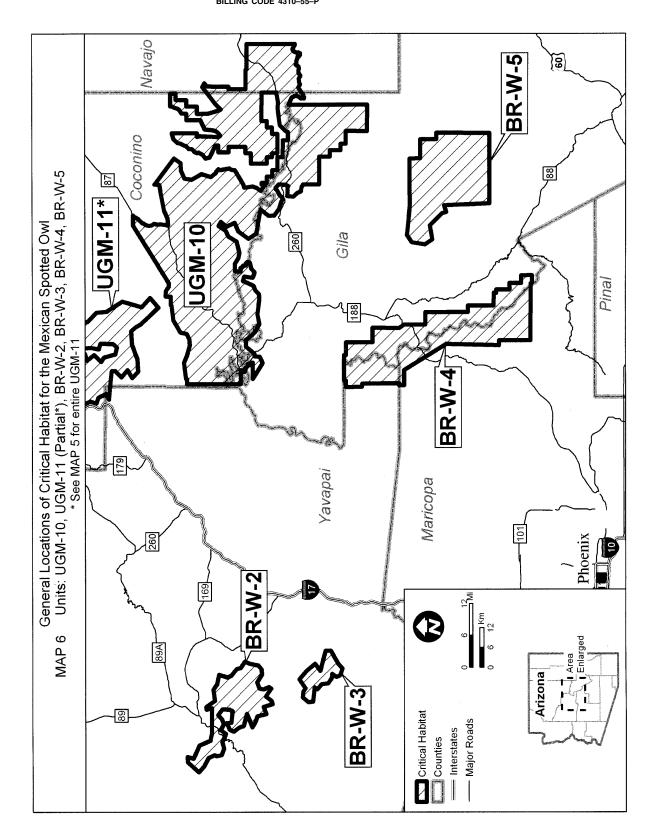


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(28) Unit BR-W-2: Yavapai County,
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                                                                                476170, 3832527; 479151, 3834759;
Arizona. Land bounded by the following
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                                                                                479879, 3835305; 489681, 3842646;
UTM Zone 12 NAD 83 coordinates
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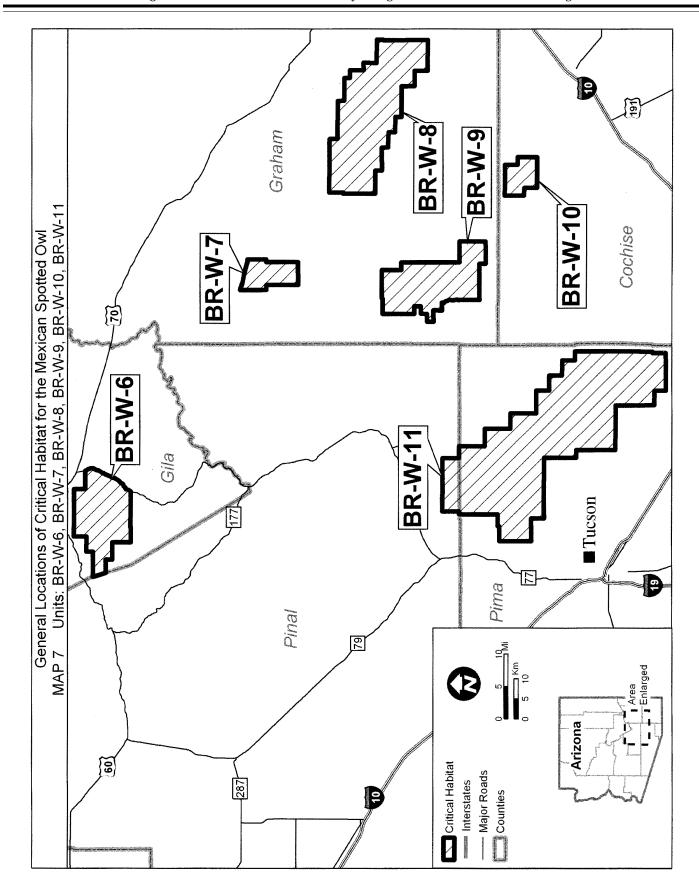
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(33) Map 6 of Units UGM–10, UGM–11, BR–W–2, BR–W–3, BR–W–4, BR–W–5 follows: BILLING CODE 4310–55–P



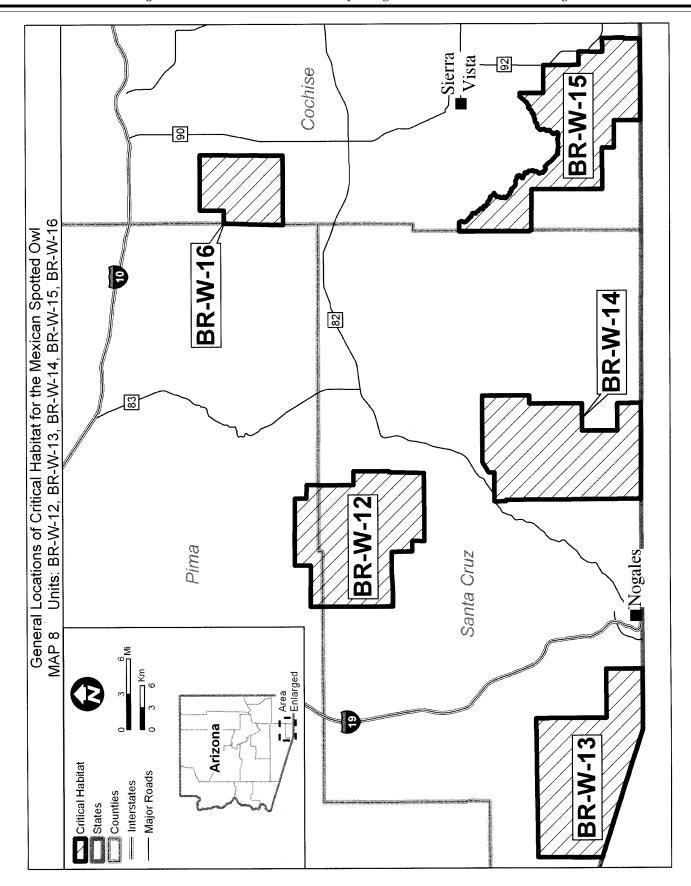
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UTM Zone 12 NAD 83 coordinates
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 (36) Unit BR-W-8: Graham County,
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UTM Zone 12 NAD 83 coordinates
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                                                                                  (40) Map 7 of Units BR-W-6, BR-W-
                                        591156, 3583371; 591197, 3583371;
583392, 3628258; 583378, 3629880;
                                                                                &, BR-W-8, BR-W-9, BR-W-10, BR-
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Cruz Counties, Arizona. Land bounded
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by the following UTM Zone 12 NAD 83
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572030, 3475246; 572143, 3475246;
                                        551126, 3485164; 551122, 3486084;
                                                                                  (46) Map 8 of Units BR-W-12, BR-
572117, 3472269; 572114, 3472004;
                                        551121, 3486139; 551116, 3487040.
                                                                                W-13, BR-W-14, BR-W-15, BR-W-16
572598, 3472016; 573734, 3472043;
                                                                                follows:
573757, 3469074; 573735, 3469075;
                                          (45) Unit BR-W-16: Cochise County,
573687, 3469077; 573691, 3468772;
                                        Arizona. Land bounded by the following
                                                                                BILLING CODE 4310-55-P
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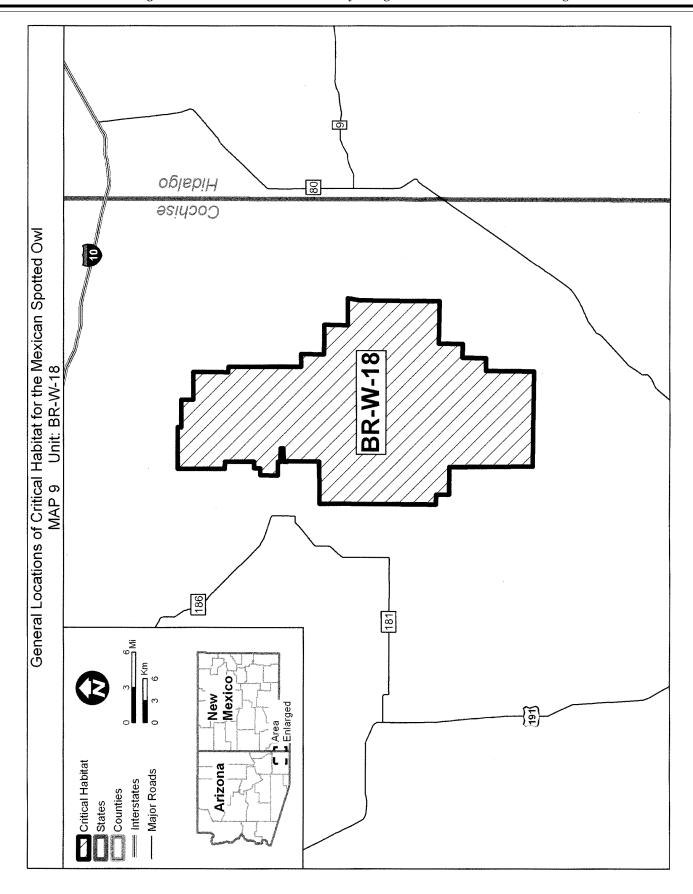


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(48) Map 9 of Unit BR–W–18 follows: BILLING CODE 4310–55–P



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(49) Unit UGM-2: Socorro County,
                                        275773, 3751561; 277517, 3751535;
                                                                                719389, 3732797; 719354, 3733212;
New Mexico. Land bounded by the
                                        277487, 3748604; 277310, 3745113;
                                                                                719630, 3733627; 719872, 3734111;
following UTM Zone 13 NAD 83
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coordinates (meters E, meters N):
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295301, 3753423; 295317, 3754527;
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                                                                                726026, 3740956; 726061, 3741129;
302774, 3766407; 303954, 3766391;
                                          (51) Unit UGM-5a: Catron and Grant
                                                                                725680, 3741336; 725577, 3741716;
303954, 3764744; 305592, 3764761;
                                        Counties, New Mexico. Land bounded
                                                                                725542, 3741889; 725507, 3742339;
305608, 3764003; 306308, 3764012;
                                        by the following UTM Zone 12 NAD 83
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306275, 3762727; 306226, 3761270;
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                                        708119, 3713403; 708983, 3713403;
                                                                                730347, 3748008; 730278, 3748354;
 (50) Unit UGM-3: Socorro County,
                                        709571, 3713507; 710366, 3714129;
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New Mexico. Land bounded by the
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                                                                                227618, 3655183; 227981, 3655240;
 (52) Unit UGM-5b: Catron, Grant and
                                        243467, 3653551; 243482, 3653515;
                                                                                228107, 3655259; 228615, 3655680;
Sierra Counties, New Mexico. Land
                                        243458, 3653481; 243219, 3653149;
                                                                                228907, 3655941; 229138, 3656343;
bounded by the following UTM Zone 13
NAD 83 coordinates (meters E, meters
                                        243226, 3652664; 243196, 3652590;
                                                                                229625, 3656384; 229099, 3656864;
                                        243107, 3652367; 243023, 3652157;
                                                                                228747, 3657369; 228091, 3657407;
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                                        242683, 3651657; 242330, 3651539;
                                                                                227646, 3657501; 227238, 3657629;
228993, 3703821; 229722, 3703848;
                                        241993, 3651696; 241771, 3651432;
                                                                                227012, 3657919; 226635, 3657975;
229844, 3703564; 230189, 3703544;
                                        242104, 3651205; 242092, 3650998;
                                                                                226445, 3658297; 226440, 3658817;
230384, 3703325; 230711, 3703583;
230928, 3703155; 230965, 3702599;
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                                                                                226767, 3659075; 227331, 3659251;
231542, 3702392; 231589, 3702009;
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234539, 3701527; 234934, 3701781;
                                        243052, 3648417; 242393, 3648385;
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                                        242109, 3648263; 241986, 3647924;
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235670, 3700734; 235987, 3700231;
                                        242620, 3647507; 242690, 3646914;
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241169, 3688023; 241626, 3687547;
                                        242332, 3636377; 241441, 3636531;
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242626, 3680050; 242569, 3677949;
                                        237355, 3638945; 237032, 3638755;
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                                        235894, 3641867; 235576, 3642369;
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                                        235200, 3643049; 234666, 3642802;
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                                        234717, 3643076; 234193, 3643002;
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216880, 3698530; 217444, 3698705;
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218574, 3699090; 218903, 3698794;
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219183, 3698847; 219587, 3699239;
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219255, 3700090; 219277, 3700285;
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                                                                                640578, 3775525; 640651, 3773957;
226992, 3704158; 227076, 3704208;
                                        748129, 3766312; 747852, 3766346;
                                                                                640732, 3773186; 640732, 3773185;
227926, 3704039; 228042, 3704232;
                                        747680, 3766346; 747334, 3766415;
                                                                                640739, 3773185; 641467, 3773146;
                                        747196, 3766485; 746159, 3766554;
  (53) Unit UGM-6: Catron County,
                                                                                641527, 3773143; 641633, 3772350;
                                        745329, 3766519; 745018, 3766588;
New Mexico. Land bounded by the
                                                                                641633, 3772349; 642446, 3772304;
                                        744810, 3766692; 744292, 3766623;
                                                                                643374, 3772345; 643433, 3772348;
following UTM Zone 12 NAD 83
                                        743877, 3766415; 743255, 3765862;
coordinates (meters E, meters N):
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723768, 3768650; 723723, 3768559;
723377, 3768386; 722927, 3768559;
                                        742416, 3765261; 741803, 3765246;
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                                        741803, 3765517; 741699, 3765793;
722443, 3769216; 722132, 3769803;
                                                                                645351, 3771900; 645351, 3772322;
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722063, 3769976; 721752, 3770149;
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721303, 3770045; 720853, 3769976;
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                                        739694, 3766070; 739314, 3765931;
720508, 3770011; 720335, 3770218;
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720127, 3770460; 719816, 3770357;
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                                        737793, 3765828; 736963, 3765586;
719505, 3770011; 719159, 3769803;
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719021, 3770080; 718952, 3770391;
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719663, 3771025; 720190, 3771186;
                                                                                663343, 3769318; 663363, 3767560;
                                        734543, 3767038; 734094, 3767038;
720276, 3771487; 720308, 3771896;
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720222, 3772896; 720201, 3773175;
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720437, 3773197; 720652, 3773283;
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                                        731708, 3767107; 731432, 3767314;
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721674, 3774003; 721923, 3774352;
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722029, 3774194; 722720, 3774194;
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722651, 3773745; 723031, 3773675;
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723481, 3773675; 723965, 3773745;
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724310, 3773883; 724829, 3774228;
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                                        727836, 3769146; 727456, 3769146;
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733108, 3776527; 733585, 3776513;
                                                                                666521, 3760919; 666788, 3761297;
733679, 3776510; 733770, 3776147;
                                          (54) Unit UGM-7: Apacha and
                                                                                666858, 3761395; 666921, 3761485;
733783, 3776095; 734508, 3776095;
                                        Greenlee Counties, Arizona and Catron
                                                                                667240, 3761932; 667309, 3762135;
734992, 3775819; 735857, 3775542;
                                        County, New Mexico. Land bounded by
                                                                                667311, 3762293; 667304, 3763042;
736410, 3775162; 737205, 3774713;
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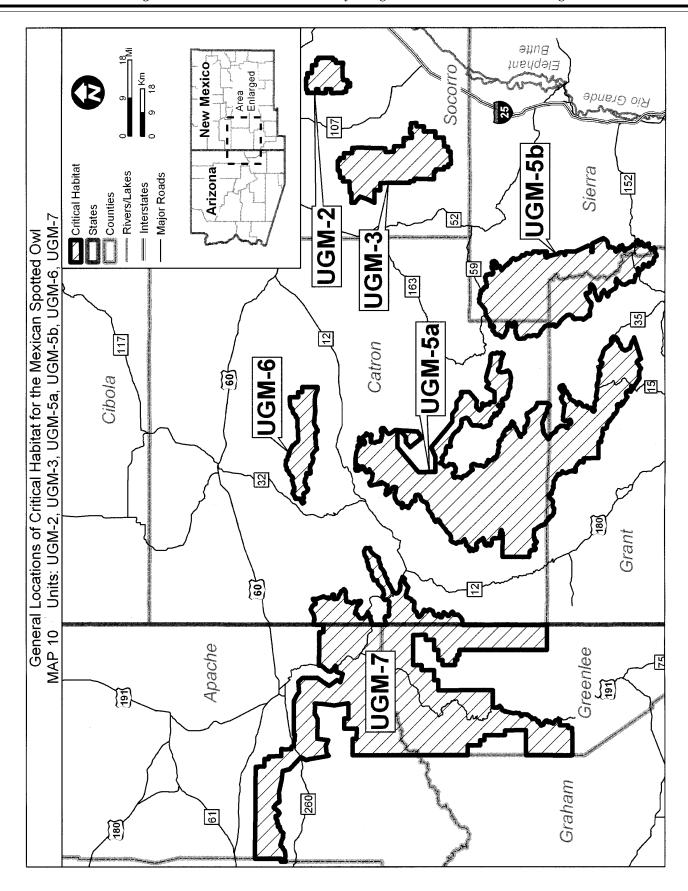
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(55) Map 10 of Units UGM–2, UGM–3, UGM–5a, UGM–5b, UGM–6, UGM–7 follows:

BILLING CODE 4310-55-P



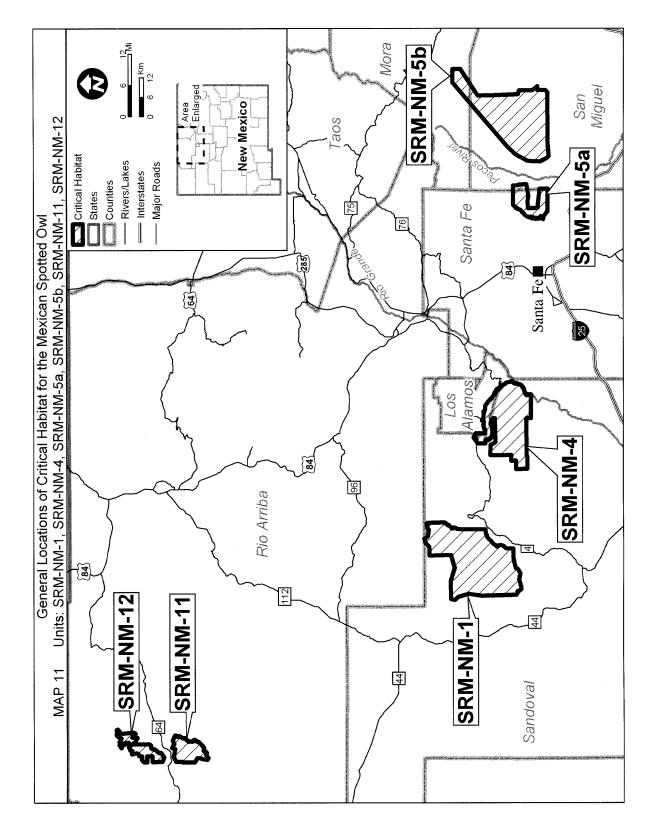
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County, New Mexico. Land bounded by
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the following UTM Zone 13 NAD 83
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                                                                                372159, 3964158; 372153, 3964176;
coordinates (meters E, meters N):
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 (57) Unit SRM-NM-4: Los Alamos
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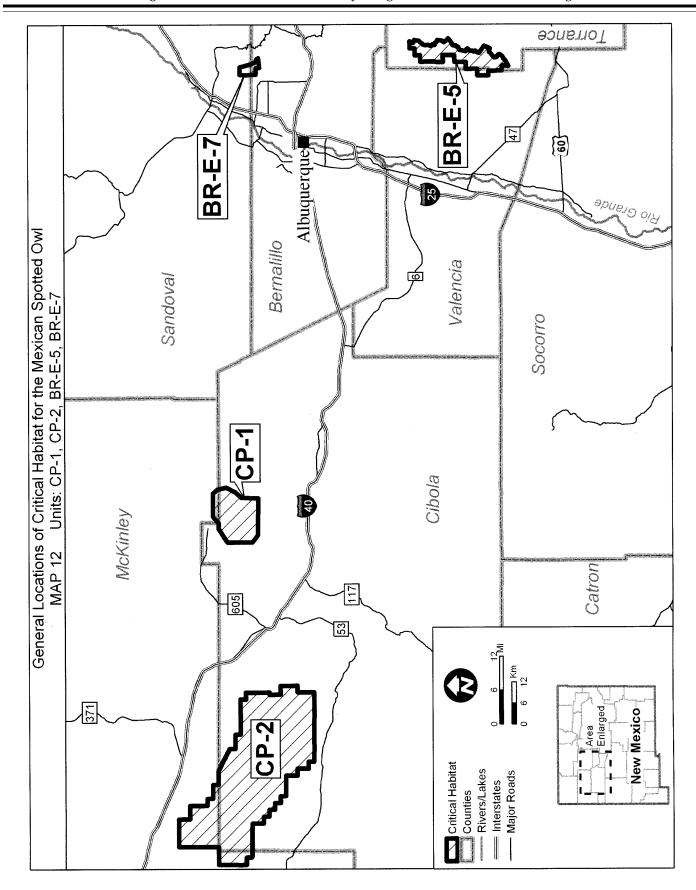
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Miguel Counties, New Mexico. Land
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bounded by the following UTM Zone 13
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(62) Map 11 of Units SRM-NM-1, SRM-NM-4, SRM-NM-5a, SRM-NM-5b, SRM-NM-11; SRM-NM-12 follows:

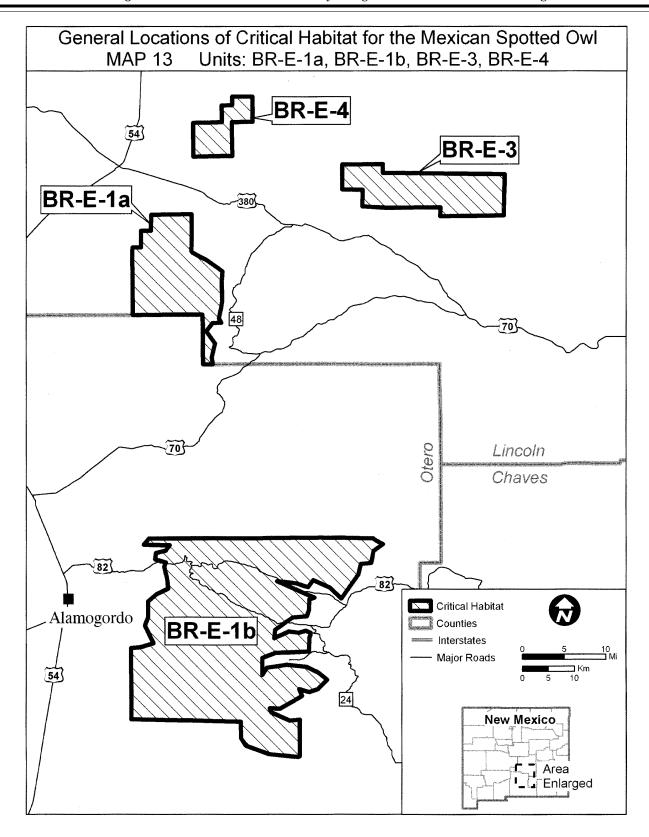


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Valencia Counties, New Mexico. Land
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                                                                                Counties, New Mexico. Land bounded
bounded by the following UTM Zone 13
                                        370156, 3830243; 370136, 3830255;
                                                                                by the following UTM Zone 12 NAD 83
NAD 83 coordinates (meters E, meters
                                        370107, 3830263; 370066, 3830291;
                                                                                coordinates (meters E, meters N):
N): 365092, 3826902; 365104, 3830621;
                                                                                726998, 3906694; 726911, 3909898;
                                        370034, 3830311; 370005, 3830323;
364040, 3830655; 364108, 3833842;
                                        369944, 3830359; 369903, 3830371;
                                                                                731063, 3910002; 730973, 3913262;
365648, 3833814; 365637, 3837038;
                                        369870, 3830379; 369818, 3830395;
                                                                                730751, 3921334; 731342, 3921350;
367301, 3837063; 367288, 3838668;
                                        369789, 3830403; 369724, 3830411;
                                                                                732751, 3921388; 737145, 3921506;
367329, 3840270; 368968, 3840327;
                                        369667, 3830411; 369577, 3830403;
                                                                                737148, 3921441; 737225, 3919846;
                                        369550, 3830397; 369523, 3830382;
368945, 3841760; 368943, 3841895;
                                                                                737226, 3919838; 737259, 3918276;
368982, 3843548; 367367, 3843526;
                                        369555, 3830274; 369430, 3830151;
                                                                                740333, 3918370; 740399, 3918372;
367414, 3845206; 367506, 3846267;
                                        369203, 3829930; 368507, 3829251;
                                                                                740458, 3915088; 740460, 3914972;
367555, 3846882; 367569, 3847970;
                                        368227, 3828832; 368357, 3828186;
                                                                                740570, 3913460; 742172, 3913474;
367535, 3849980; 369061, 3850005;
                                        368868, 3827901; 368968, 3827361;
                                                                                742230, 3911903; 745430, 3911976;
369077, 3851589; 370691, 3851544;
                                        368570, 3826724; 367979, 3826368;
                                                                                745460, 3910404; 747652, 3910490;
                                                                                748576, 3910523; 748678, 3910526;
370719, 3852985; 371641, 3852995;
                                        367611, 3825959; 366127, 3824968;
372280, 3853055; 372309, 3852956;
                                        366290, 3826824; 366208, 3826826;
                                                                                748764, 3910476; 749504, 3910041;
372141, 3852490; 372032, 3852348;
                                        365092, 3826850; 365092, 3826902.
                                                                                750809, 3909273; 753720, 3907560;
371962, 3852208; 371940, 3852105;
                                          (64) Unit BR-E-7: Bernalillo and
                                                                                753922, 3907458; 753982, 3905829;
371940, 3852013; 371961, 3851950;
                                        Sandoval Counties, New Mexico. Land
                                                                                755219, 3905810; 757296, 3905891;
                                        bounded by the following UTM Zone 13
                                                                                757392, 3904339; 758950, 3904452;
372049, 3851887; 372640, 3851614;
372501, 3851317; 372485, 3850823;
                                        NAD 83 coordinates (meters E, meters
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372397, 3850303; 372070, 3849846;
                                        N): 366204, 3901372; 366800, 3901352;
                                                                                767113, 3903172; 767270, 3898131;
                                        367154, 3901340; 367154, 3901335;
                                                                                767363, 3896432; 766841, 3896396;
371902, 3849624; 371462, 3849003;
371412, 3848438; 371416, 3848206;
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                                                                                766959, 3893255; 768974, 3893386;
371426, 3847687; 371152, 3846958;
                                        367834, 3897988; 367956, 3897794;
                                                                                769027, 3891476; 769049, 3890953;
371244, 3846656; 371542, 3846388;
                                        368053, 3897539; 368004, 3897405;
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371341, 3845808; 371881, 3845730;
                                        368114, 3897247; 368284, 3896968;
                                                                                769145, 3888489; 769146, 3888483;
372047, 3845257; 372146, 3845217;
                                        368478, 3896762; 368575, 3896616;
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372518, 3845068; 372508, 3844973;
                                        368648, 3896543; 368806, 3896604;
                                                                                767632, 3886846; 767730, 3883642;
372464, 3844540; 372392, 3843807;
                                        368952, 3896555; 369170, 3896106;
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371986, 3843199; 372188, 3842757;
                                        366899, 3895790; 366912, 3896798;
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372506, 3842356; 372570, 3842178;
                                        365296, 3896798; 365255, 3899876;
                                                                                756446, 3883371; 754895, 3883283;
372867, 3842008; 372589, 3841698;
                                        365333, 3901401; 366204, 3901372.
                                                                                754756, 3883283; 753199, 3883280;
372346, 3841455; 371902, 3841112;
                                          (65) Unit CP-1: Cibola and McKinley
                                                                                751598, 3883246; 751530, 3884885;
371563, 3840877; 371232, 3840613;
                                        Counties, New Mexico. Land bounded
                                                                                749909, 3884844; 749866, 3886412;
                                                                                749866, 3886421; 749840, 3888024;
371307, 3840592; 371324, 3840538;
                                        by the following UTM Zone 13 NAD 83
371290, 3840378; 371215, 3840248;
                                        coordinates (meters E, meters N):
                                                                                749766, 3888022; 748236, 3887984;
371156, 3840202; 371144, 3840102;
                                        257710, 3908619; 258624, 3909297;
                                                                                748173, 3889268; 748100, 3891183;
371181, 3840001; 371226, 3839896;
                                        259586, 3910011; 260940, 3909954;
                                                                                748099, 3891206; 743346, 3891104;
371223, 3839812; 371118, 3839716;
                                        261659, 3910684; 262023, 3911055;
                                                                                743293, 3892693; 741724, 3892613;
371039, 3839678; 371035, 3839620;
                                        262494, 3911533; 264135, 3911471;
                                                                                741681, 3894270; 740090, 3894245;
                                                                                740046, 3895835; 739889, 3895830;
370930, 3839574; 370903, 3839522;
                                        265781, 3911397; 266891, 3911379;
                                        267926, 3911379; 268775, 3910140;
                                                                                738485, 3895779; 738407, 3897391;
370859, 3839465; 370859, 3839419;
370913, 3839360; 370859, 3839238;
                                        269201, 3907724; 269215, 3907640;
                                                                                736802, 3897356; 736718, 3900565;
370775, 3839129; 370140, 3838801;
                                        268906, 3906837; 268238, 3905400;
                                                                                736645, 3900564; 735093, 3900547;
369786, 3837009; 370314, 3836745;
                                        268032, 3904988; 267780, 3904660;
                                                                                729089, 3900399; 728833, 3900607;
370389, 3836527; 370234, 3836175;
                                        266721, 3903316; 266628, 3901980;
                                                                                728803, 3901969; 727157, 3901993;
369819, 3835701; 369878, 3835165;
                                        266536, 3900123; 266484, 3898564;
                                                                                727116, 3902592; 727068, 3903457;
369710, 3834729; 369843, 3834252;
                                        266382, 3898567; 264206, 3898622;
                                                                                727040, 3905130; 726998, 3906694.
                                                                                   (67) Map 12 of Units CP-1, CP-2, BR-
369504, 3833744; 369371, 3833220;
                                        261112, 3898761; 257848, 3898823;
                                                                                E-5, BR-E-7 follows:
370955, 3831822; 370374, 3830153;
                                        257218, 3899426; 256165, 3900480;
370346, 3830136; 370323, 3830139;
                                        256327, 3907593; 257710, 3908619.
                                                                                BILLING CODE 4310-55-P
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(68) Unit BR-E-1a: Lincoln County,
                                        420347, 3624678; 420351, 3625457;
                                                                                439575, 3651968; 439960, 3651967;
New Mexico. Land bounded by the
                                        420358, 3627047; 420377, 3631118;
                                                                                439990, 3651967; 440344, 3651966;
UTM Zone 13 NAD 83 coordinates
                                        421849, 3631278; 424004, 3631996;
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(meters E, meters N): 421217, 3707734;
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421218, 3707742; 421502, 3707741;
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422589, 3707738; 422632, 3710940;
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424217, 3710932; 424285, 3713961;
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430651, 3714016; 430746, 3714017;
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431935, 3705982; 432170, 3705831;
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432318, 3705736; 433047, 3705268;
                                        426125, 3649675; 426319, 3649996;
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                                        426549, 3650374; 426754, 3650712;
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435618, 3703080; 435519, 3701625;
                                                                                445365, 3651987; 445399, 3651987;
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435491, 3701223; 435491, 3701221;
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                                        423415, 3652001; 423517, 3651999;
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435313, 3696042; 435246, 3695644;
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435240, 3693258; 433943, 3693235;
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434155, 3688506; 433774, 3686592;
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432367, 3686112; 432368, 3686130;
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432369, 3686530; 432369, 3686892;
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                                        428359, 3651982; 428556, 3651984;
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432379, 3689339; 432377, 3689665;
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                                        430713, 3652002; 430773, 3652004;
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432384, 3692399; 432384, 3692547;
                                        432067, 3652029; 432464, 3652026;
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432383, 3692776; 432383, 3692788;
                                        432748, 3652023; 432817, 3652023;
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432382, 3692948; 432381, 3693153;
                                        433195, 3652019; 433573, 3652015;
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432381, 3693165; 432374, 3693350;
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432367, 3693561; 432352, 3693970;
                                        434362, 3652007; 434394, 3652007;
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432345, 3694153; 432338, 3694379;
                                        434465, 3652003; 434773, 3651988;
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                                        435002, 3651977; 435155, 3651969;
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431457, 3694853; 430668, 3694864;
                                        435596, 3651961; 435905, 3651959;
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                                                                                459188, 3651844; 459287, 3651844;
429935, 3694867; 427535, 3694867;
                                        436630, 3651955; 436749, 3651955;
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                                        436760, 3651955; 436797, 3651956;
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421180, 3701181; 421180, 3701211;
                                        437030, 3651963; 437197, 3651968;
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421205, 3707058; 421217, 3707734.
                                        437572, 3651978; 437581, 3651978;
                                                                                460169, 3651318; 460535, 3651089;
  (69) Unit BR-E-1b: Otero County,
                                        437599, 3651978; 437853, 3651976;
                                                                                460557, 3651075; 460740, 3650960;
New Mexico. Land bounded by the
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                                                                                461119, 3650723; 461119, 3650723;
following UTM Zone 13 NAD 83
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                                                                                459609, 3649441; 459240, 3647154;
coordinates (meters E, meters N):
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449861, 3643871; 449023, 3642558;
                                        451328, 3625551; 452005, 3624873;
                                                                                480756, 3717201; 480689, 3713990;
449022, 3642557; 449019, 3642558;
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448782, 3642648; 448583, 3642724;
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447170, 3643264; 444792, 3643613;
                                        450010, 3622927; 449098, 3622570;
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443987, 3643731; 443969, 3643734;
                                        447449, 3623123; 447940, 3621820;
                                                                                470598, 3715104; 461964, 3715113;
443987, 3643724; 448799, 3641188;
                                        447766, 3621702; 447077, 3621234;
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450021, 3640545; 449207, 3640242;
                                        446957, 3621153; 446675, 3620961;
                                                                                458082, 3715738.
449146, 3638218; 448756, 3636982;
                                        445801, 3620369; 445477, 3620149;
                                                                                  (71) Unit BR–E–4: Lincoln County,
446471, 3636778; 445354, 3635851;
                                        445226, 3619979; 445073, 3619875;
                                                                                New Mexico. Land bounded by the
444826, 3635412; 444298, 3634973;
                                        444391, 3619412; 442673, 3619494;
                                                                                following UTM Zone 13 NAD 83
443636, 3634423; 443607, 3634142;
                                        442920, 3618708; 445907, 3617142;
                                                                                coordinates (meters E, meters N):
443480, 3632913; 443473, 3632842;
                                        447532, 3617318; 447524, 3610340;
                                                                                433180, 3731474; 435703, 3731516;
443613, 3632916; 444301, 3633278;
                                        447189, 3610190; 442506, 3610745;
                                                                                435695, 3732608; 435680, 3734744;
444446, 3633354; 445499, 3633908;
                                        438770, 3612398; 438442, 3613037;
                                                                                437360, 3734761; 437365, 3736365;
445846, 3634090; 447466, 3633862;
                                        438333, 3613248; 438022, 3613853;
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448600, 3634218; 449420, 3633791;
                                        438007, 3616991; 436406, 3617042;
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449345, 3633498; 449173, 3632825;
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449148, 3632725; 449121, 3630673;
                                        426527, 3617359; 423407, 3617458;
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449116, 3630280; 449108, 3630279;
                                        420313, 3617557; 420347, 3624678.
                                                                                440570, 3731560; 440504, 3731559;
445489, 3630118; 445102, 3630100;
                                          (70) Unit BR–E–3: Lincoln County,
                                                                                438867, 3731542; 438050, 3731533;
                                        New Mexico. Land bounded by the
444696, 3630082; 444291, 3630064;
                                                                                437280, 3731525; 437285, 3730251;
                                        following UTM Zone 13 NAD 83
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442268, 3629411; 441527, 3629091;
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441511, 3625841; 441750, 3626293;
                                        458143, 3718162; 458153, 3718548;
                                                                                431083, 3725065.
441833, 3626449; 442232, 3627202;
                                        454858, 3718599; 454879, 3723379;
443060, 3627342; 444688, 3627618;
                                        461397, 3723404; 461368, 3721736;
                                                                                  (72) Map 13 of Units BR-E-1a, BR-E-
445460, 3627749; 447103, 3627559;
                                        463332, 3721704; 463734, 3721698;
                                                                                1b, BR-E-3, BR-E-4 follows:
447506, 3627512; 448685, 3627376;
                                        464539, 3721685; 465343, 3721673;
                                                                                BILLING CODE 4310-55-P
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BILLING CODE 4310-55-C

Dated: August 20, 2004.

## Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 04–19501 Filed 8–30–04; 8:45 am]

BILLING CODE 4310-55-P