

## **APPENDIX E: SUMMARY OF PUBLIC COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED REVISION TO THE NONESSENTIAL EXPERIMENTAL POPULATION OF THE MEXICAN WOLF (*CANIS LUPUS BAILEYI*)**

We received over 36,000 substantive comments during the 2014 public comment period addressing a wide range of topics on our draft EIS. We categorized comments according to the major components of the EIS so that we could efficiently group, condense, and respond to comments. For this reason, and due to the large number of comments we received, we do not identify the commenter in the following appendix. We also do not include responses to many editorial comments that we accepted by correcting our text; these include punctuation, citation omissions, formatting issues, and similar comments. Chapter 6 provides additional information summarizing our public process for the development of the EIS, including a description of our scoping process, public information sessions, public hearings, and public comment periods.

### **General or Editorial**

**Comment:** The document is not consistent in the use of the terms Apache Forest and the Apache-Sitgreaves National Forest.

**Our response:** The Apache and the Sitgreaves National Forest are managed by the Forest Service as one unit however only the Apache National Forest is part of the BRWRA established under the 1998 Final Rule. Some data is available only for the entire Apache-Sitgreaves National Forest.

**Resolution:** We have reviewed the draft EIS and resolved inconsistencies in usage and data where possible.

### **Management Plan**

**Comment:** The Mexican Wolf Management Plan for portions of Arizona, New Mexico, and Texas outside of the MWEPA is an integral part of the 2013 proposed revision to the nonessential experimental population of the Mexican wolf. However, the management plan was withdrawn from review by the Service and hasn't been rereleased to the public for review and comment.

**Our response:** The development of a management plan for Mexican wolves for portions of Arizona, New Mexico and Texas outside of the MWEPA was considered as part of an alternative that was not brought forward for further consideration in the draft EIS. We address the reasons that we did not bring it forward in subsection 2.2.2.2 of the EIS.

**Resolution:** No further action.

### **Suitable Habitat**

**Comment:** Commenter questioned how the Service used Oakleaf et al. 2006 to generate the suitable habitat map considering that Oakleaf et al. 2006 analyzed habitat in Idaho, Montana, and Wyoming.

**Our response:** We identified potential wolf habitat in Arizona and New Mexico by combining three methods that have been used to assess wolf habitat in the current scientific literature: (1) Carroll et al. (2006), areas with a wolf occupancy level >25% under current landscape conditions; (2) Carroll et al. (2013), areas with a wolf habitat score greater than 700 (based on a scaled metric for habitat suitability that ranged from 1 to 1000 based on a multiplication of land cover, greenness, slope, and habitat effectiveness; the level of  $\geq 700$  was suggested by authors as an effective point to consider as potential wolf habitat in this analysis); and (3) Oakleaf et al. (2006), areas in Arizona and New Mexico that were primarily forested. Oakleaf et al. (2006) utilized a more complex model that included forest cover, human density, elk density, and domestic sheep density. However, for identifying potential wolf habitat, we only utilized the readily available forest cover for this analysis. Percent forest cover was the first parameter retained in all of the competing models analyzed by Oakleaf et al. (2006). We generated a

grid that indicated where all 3 models agreed, where 2 out of 3 models agreed, and where only 1 out of 3 models suggested that the area was wolf habitat. We consider the areas where at least 2 models spatially concur with each other as potential wolf habitat for the purposes of the EIS.

**Resolution:** No further action.

**Comment:** Commenter stated that Carroll et al. 2006 described wolf habitat as having adequate prey and connectivity, and that the Service failed to follow those caveats, particularly for connectivity. How are isolated patches of habitat such as the sky islands, which likely have low prey, considered suitable habitat?

**Our response:** See previous response. In addition, we further describe our methodology for identifying suitable habitat in Section 3.2.

**Resolution:** No further action.

### **EIS Purpose/Need or Alternatives**

**Comment:** One of the implicit tenets of the Service's proposal is that liberalizing the circumstances for legal take creates a net benefit for the subspecies. Indeed in both a statutory and logical sense, the only reason to allow increased take is because it furthers conservation (Section 10(j)(2)(A)), i.e., recovery (16 U.S.C. 1532 (3)) of the species. However, the connection between wolf killing and tolerance is increasingly unsupported by science. Recent research shows that take of wolves, either by management agencies or via hunting, lowers tolerance for wolf occupancy (for a recent review of the literature see Treves and Bruskotter, 2014; see also Hogberg *et al.*, 2013). The Service may be acting under the assumption that increased legal take will lead to tolerance and therefore to decreased illegal take. Unless the Service is explicit about the assumptions underpinning the decision to choose Alternative 1, which allows more take and leads to a lower population growth rate than Alternative 3, and can support these assumptions with credible scientific findings, the Service is at risk of making an arbitrary decision.

**Our response:** The Hogberg et al. 2013 survey was undertaken to "understand change in attitudes towards wolves among people living inside and outside of wolf range in Wisconsin, since the first legal wolf harvest in Wisconsin." We do not consider this survey applicable to an understanding of the effectiveness or ineffectiveness of agency wolf management actions toward improving the tolerance of the affected communities for the reintroduction of wolves. As stated in Treves and Bruskotter, 2014: "The terms tolerance and intolerance are widely used to capture both individual level judgments of predators (such as attitudes and perceptions), as well as individual behaviors (such as poaching) that directly or indirectly influence outcomes for predators." While "the factors that affect people's tolerance of wildlife are not well understood" (Treves and Bruskotter, 2014) the Service's experience in the Mexican wolf reintroduction and the successful wolf reintroductions in the northern Rocky Mountains and upper Great Lakes supports our cited statement in Section 1.2.4.3 of the DEIS that "Minimizing wolf-human conflicts through active management is an essential ingredient to establish and maintain public tolerance of wolves, particularly from those communities living close to wolf populations (Jimenez 2013, Bangs et al. 2005, Fritts et al. 2003, Bangs et al. 1998, Mech 1995, Bangs et al. 1995, Fritts and Carbyn 1995). In a recent study by Olson et al. 2014, the authors state, "To our knowledge, this research provides the first demonstrated link between illegal wildlife killing and management authority under the ESA. This suggests that consistent and responsible depredation management programs may reduce illegal killing (p. 10)."

**Resolution:** No further action.

**Comment:** "Agencies shall not commit resources prejudicing selection of alternatives before making a final decision (sec. 1506.1)"(CEQ 40 CFR 1502.2 (f)). The proposed action will unavoidably commit resources prejudicing selection of alternatives before making a final decision in the revision of the Recovery Plan.

**Our response:** No commitment of resources necessary to implement the proposed action (i.e., budget requests, funding allocations, staffing changes or the hiring of additional personnel) have been, or will be, made until after the filing of the record of decision.

**Resolution:** No further action.

**Comment:** Commenters stated that the Service is piecemealing its actions for the Mexican wolf to avoid findings of significance, from starting with a population objective of 100, expanding to 300, and still claiming that additional wolves/wolf populations will be needed for recovery. The proposed action is connected with the reasonably foreseeable recovery plan revision, which the Service states is expected to be completed following issuance of a revised final rule. Both are interdependent parts of the larger Mexican Wolf Recovery Program and depend on the larger action for their justification, and therefore should be evaluated in a single EIS.

**Our response:** Section 1508.27 of the NEPA regulations, defines the word “significantly” as used when the Act refers to “a major Federal action significantly affecting the quality of the human environment.” Such actions require preparation of an EIS, thus the definition of “significantly” indicates how the significance of impacts should be measured in an EA. If the effects of a federal action are not “significant,” then a Finding of No Significant Impact (FONSI) can be issued and the project proceeds with no further NEPA review. If the definition is met, then an EIS is needed. We have drafted an EIS because we acknowledge that the Federal action is in fact “significant” as that term is defined in the NEPA regulations. Furthermore, although commenter referenced 40 C.F.R. § 1508.25, that section provides guidance for determining the scope of an environmental impact statement not an evaluation of significance.

“Segmentation” can occur when a federal action is improperly divided and analyzed in smaller separate components. However, projects that have independent utility and logical termini can be considered individually under NEPA. As specified in our 1998 Final Rule, the reintroduction of the Mexican wolf into the BRWRA was envisaged “as the first step toward recovery of the Mexican wolf in the wild” (63 FR 1752, January 12, 1998). The scope of the 1996 Final EIS was limited to the actions proposed to initiate the reintroduction of Mexican wolves within part of the subspecies’ historical range in the southwestern United States. The scope of our 2014 EIS is limited to considering actions intended to further the conservation of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population. Accordingly, both this EIS and our 1996 Final EIS state that considering actions necessary for the full recovery of the Mexican wolf “are” beyond the scope” of the EIS. The independent utility of our proposed action and its logical termini is the achievement of the goals as laid out in Section 1.2 and summarized in Section 1.3 of the draft EIS. We do intend for the experimental population of Mexican wolves to contribute to recovery. However the size of the metapopulation of Mexican wolves needed for recovery, the number of semi-disjunctive but viable subpopulations that might make up that metapopulation, the areas in which those subpopulations should be established, and the degree of connectivity needed between those areas are some of the many issues associated with revising the 1982 Mexican Wolf Recovery Plan that are, at this time, speculative and the subject of ongoing review and debate. Section 4(f) of the ESA directs the Service to develop and implement recovery plans for threatened and endangered species. While all recovery plans are made available in draft form and public comments are solicited before the plan is finalized, the completion of a recovery plan itself does not constitute a major federal action requiring NEPA review. The management actions needed to implement the guidance of a revised recovery plan for the Mexican wolf may be subject to NEPA review if they are to be undertaken by a Federal agency. However, until that plan is completed those actions that will be needed to achieve full recovery of the Mexican wolf are speculative and not “reasonably foreseeable” at this time. For these reasons we disagree with the commenter’s statements that “the proposed action is connected with the reasonable foreseeable recovery plan revision” or that “the

proposed action and a revised recovery plan should be evaluated in a single EIS.”

**Resolution:** No further action.

**Comment:** The analysis discusses the survival of the experimental population, but does not describe the relative effects this population would have on the recovery of the species *Canis lupus baileyi*.

**Our response:** We state in Section 1.2 of the DEIS that “The **purpose** of our proposed action is to further the conservation of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population.” We also state in subsection 1.2.1 that “we intend for the experimental population of Mexican wolves that we reestablish in the MWEPA to contribute to recovery...” More specifically, we expect that the Mexican wolves in the experimental population in the MWEPA will count toward demographic recovery criteria. An analysis of the possible impact of the proposed action and alternatives on the listed population of the Mexican wolf is provided in section 4.3.

**Resolution:** No further action.

**Comment:** Commenters stated that the Service does not justify how keeping wolves within the MWEPA contributes to the conservation of the Mexican wolf, as opposed to allowing them to disperse beyond the MWEPA boundaries. More specifically, the Service rejects a proposal to capture wolves north of I-40, west of highway 87 and east of Interstate 25, in part because it would not meet the intent of Section 10(j)(2)(A) to further the conservation of the Mexican gray wolf (see dEIS, chapter 2, page 6), but never applies this same Section 10(j)(2)(A) criterion to its own proposal to capture and move wolves dispersing north of Interstate-40. Indeed the amount of suitable habitat within the MWEPA west of highway 87 and east of Interstate 25 (I-25) from which wolves would be excluded by the above proposal appears to be similar to or less than the 30,977 square miles of suitable habitat north of I-40 from which the Service proposes to exclude wolves.

**Our response:** The statement in question refers to the proposal to expand the MWEPA north of I-40 coupled with a management provision to remove wolves from this expanded area as well as areas in the existing MWEPA to the west of State Highway 87/I-19 in Arizona and east of I-25 in New Mexico. We do not believe that expanding the MWEPA only to remove wolves from the expanded area meets the intent of Section 10(j)(2)(A) “to further the conservation.” This is different than our proposal to authorize the removal of Mexican wolves that disperse to establish territories in areas outside of the MWEPA under a revised and reissued section 10(a)(1)(A) research and recovery permit. We address the issue and rationale of using a revised and reissued section 10(a)(1)(A) to remove Mexican wolves that disperse to establish territories in areas outside of the MWEPA in subsection 1.2.4.4 of the EIS.

**Resolution:** We have revised subsection 2.2.1.5 in the final EIS to better explain that expansion of the MWEPA in Arizona and New Mexico north of I-40, coupled with the proposed management provision that would require removal of any wolf in the expanded area regardless of its involvement in depredation or nuisance behavior, would not provide increased flexibility to the Reintroduction Project in making decisions related to the release, translocation, take and removal of Mexican wolves necessary to improve the effectiveness of our management of the experimental population.

**Comment:** Commenters stated that the 1982 Mexican Wolf Recovery Plan needs to be revised to provide the appropriate scope for the proposed action as it relates to the overall recovery needs of the Mexican wolf. Commenters stated that the scope of the EIS and the proposed rule are beyond the 1982 Mexican wolf recovery plan, which had a prime objective to establish a wild population of more than 100 wolves in 5,000km<sup>2</sup>, and are therefore unjustified.

**Our response:** Section 4(f) of the ESA directs the Service to develop and implement recovery plans for threatened and endangered species; however, the requirement of a recovery plan itself does not constitute a major federal action requiring NEPA review. The 1982 Mexican Wolf Recovery Plan provided a prime objective: “To conserve and ensure the survival of *Canis lupus baileyi* by maintaining a captive breeding

program and re-establishing a viable, self-sustaining population of at least 100 Mexican wolves in the middle to high elevations of a 5,000 square mile area within the Mexican wolf's historic range" (USFWS 1982). To date, that prime objective has not been met. This objective provided the guidance to the proposed action and preferred alternative of the 1996 Final EIS "to reintroduce Mexican wolves, classified as nonessential experimental, into the Blue Range Wolf Recovery Area." The preferred alternative of the 1996 Final EIS was selected for implementation through issuance of the 1998 Final Rule. The scope of the proposed action of our 2014 EIS (as specified in section 2.3 of the draft EIS) is based on our purpose and need statement in section 1.2 of the draft EIS. Subsection 1.2.1 of the draft EIS explains why the prime objective of the 1982 Mexican Wolf Recovery Plan, which represented "a working hypothesis" which would be "subject to amendment as more data on the Mexican wolf are acquired" (USFWS 1982), has been superseded and is not considered applicable to the actions proposed for implementation in this EIS.

**Resolution:** No further action.

**Comment:** Several commenters noted that the scope of the project is not fully explained, such as the planned total number of wolves the Service intends to release, the number of wolves which the Service expects to successfully propagate in the wild, an end date for the project or trigger for when the Service would stop releasing wolves.

**Our response:** The scope of the project is provided in our description of the proposed action and alternatives. In Appendix D (formerly Appendix F in the DEIS), we discuss the number of wolves that would need to be released to reduce our genetic concerns with the experimental population: 2 or fewer effective migrants (from the captive population into the MWEPA) per generation depending on the size of the MWEPA population. Given our success rate with initial releases (21 percent), we expect that we will need to release a pack of two adults and several offspring to achieve one effective migrant. We may conduct initial releases for other management purposes other than addressing genetic concerns, such as replacing animals removed for nuisance behavior, depredations, or other problem behavior. We do not provide a schedule of releases at this time; rather, determination of the timing and location for initial releases will be developed with our partners and in communication with the local communities as the circumstances warrant over time, as also described in Appendix D. We expect that we can decrease the number of effective migrants (and therefore the number of initial releases) from 2 migrants per generation to 1 per generation when the population reaches around 250 animals, as a population of this size will be less reliant on effective migration for persistence than it is when it is smaller than 250. When we achieve our population objective of 300-325 Mexican wolves in the MWEPA, we may continue to conduct occasional initial releases to address genetic concerns or for other management purposes, but we would expect to conduct fewer releases over time as the population stabilizes around 300 wolves.

**Resolution:** Revisions made in section 2.3 and Appendix F of the final EIS.

**Comment:** The Service claims that wolves are habitat generalists; then how do you know that wolves will primarily inhabit "suitable habitat" as opposed to areas with high human and livestock density? There are large areas of unsuitable habitat in the revised MWEPA.

**Our response:** We agree that historically wolves worldwide occupied a wide range of ecosystems in North America and in Europe, Russia and southwestern Asia. As discussed in sub-section 1.1.3 of the EIS Mexican wolves historically inhabited montane woodlands and adjacent grasslands in northern Mexico, New Mexico, Arizona, and the Trans-Pecos region of western Texas (Brown 1988) at elevations of 4000-5000 ft. where ungulate prey were numerous (Bailey 1931). We modeled suitable wolf habitat in the project study area based on a number of factors including vegetation type, wild prey availability, and the absence of anthropogenic disturbances such as roads, human habitation, and cattle grazing. The MWEPA encompasses areas that have suitable habitat for wolves and areas that do not. While wolves may disperse through or temporarily occupy areas that we do not consider suitable habitat, we do not expect

them to establish pack territories or to persist in these areas. We will not release or translocate wolves into areas that do not have suitable habitat. Under all three action alternatives proposed management Zone 3 is an area where neither initial releases nor translocations would occur and where wolves, should they occur, would be more actively managed under the authorities of the proposed rule to reduce human conflict.

**Resolution:** No further action.

**Comment:** Commenters provided additional alternatives or modifications to alternatives for our consideration, such as:

- Modify Alternative 3 to allow for more initial releases from captive breeding facilities and provide all wild Mexican wolves more room to establish territories in suitable historical habitat, should also strengthen protections against shooting and trapping Mexican wolves;
- Alternative that allows wolves to disperse north of I-40;
- Alternative that specifies Annual population growth of at least 10% must be documented before any provisions in this rule resulting in 1) lethal control by the agencies, 2) permitted lethal take by anyone for any reason, or 3) removal of wolves from the wild population (except temporary removal for legitimate management purposes for no more than 6 months) can be authorized by the Service. This provision applies to any entity granted decision authority under this rule. When any annual population count fails to document at least 10% growth of the wild population, the above restrictions would remain in effect for the entire following year. This provision will remain in effect until the expanded BRWRA population reaches at least 350 wolves, or until an approved Mexican Wolf Recovery Plan establishes some other numerical population objective for the expanded BRWRA population;
- Alternative that uses a projection model with faster growth and longer timeframe;
- Arizona Cooperator's Alternative Proposal; and
- Alternative that minimizes the burden on small (business) entities.

**Our response:** Section 2.1 of the draft EIS provides the criteria we used to evaluate whether a proposed alternative or a proposed component part of an alternative substantially meets the purpose of, and need for, the proposed action. We addressed additional alternatives and modifications to alternatives submitted for our consideration using these criteria and eliminated those that were not economically or technically practical or feasible and/or did not substantially meet the purpose of, and need for, the Proposed Action. To meet our objective to “facilitate the federal, state agency, local and tribal cooperation necessary to improve the effectiveness of the management of the experimental population of Mexican wolves” we have incorporated into Alternative One (proposed action and preferred alternative) the management concepts developed in cooperation with Arizona Game and Fish Department (AGFD) to adopt a phased management approach to address their concerns regarding possible impacts from Mexican wolves on potentially vulnerable elk herds west of Highway 87, and to incorporate a Mexican wolf experimental population objective of from 300 to 325 wolves within the entire MWEPA. We have also adopted the AGFD proposal, as further refined by the New Mexico Department of Game and Fish (NMDGF), to define unacceptable impacts of Mexican wolf predation on wild native ungulate herds. An unacceptable impact would be determined by a state agency based upon ungulate management goals, or a 15 percent decline in an ungulate herd as documented by a State agency, using their preferred methodology, based on the preponderance of evidence from bull to cow ratios, cow to calf ratios, hunter days, and/or elk population estimates.

**Resolution:** Revisions made to section 2.3.1 of the final EIS to incorporate management concepts developed in cooperation with AGFD and NMDGF.

**Comment:** Commenter suggested the list of criteria we used to determine alternatives brought forward for consideration should include “Meets the duty to conserve mandate of the Endangered Species Act”.

**Our response:** We state clearly in Section 1.2 of the DEIS that “The **purpose** of our proposed action is to further the conservation of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population.” We developed criteria to evaluate whether a proposed alternative or a proposed component part of an alternative substantially meets the purpose of, and need for, the proposed action. To add the suggested sentence would be redundant.

**Resolution:** No further action.

**Comment:** Several commenters stated that the range of alternatives is too narrow and contrary to 40 C.F.R. 1502.14.

**Our response:** Based on comments received on the DEIS we have incorporated suggested elements into Alternative One (Proposed Action and Preferred Alternative), such as establishing a population objective of from 300-325 Mexican wolves, adopting a phased management approach, and adding a definition of unacceptable impacts to wild ungulate herds. These changes to Alternative One now more clearly delineate it from Alternative Two and Alternative Three.

**Resolution:** Comment addressed by making substantive changes in the final EIS Section 2.3 Proposed Action and Alternatives Considered.

**Comment:** Commenters stated that by describing the Purpose and Need in terms identical to the Preferred Alternative, the Service has predetermined that the Preferred Alternative will be selected. The Service cannot define the Purpose and Need so narrowly that only the Preferred Alternative will meet the objectives.

**Response:** The statement of purpose in Section 1.2 of the DEIS is written as “The **purpose** of our proposed action is to further the conservation of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population.” Our need is summarized in Section 1.2. In sub-sections 1.2.2 through 1.2.4 we provide the detail and objectives for each existing condition we feel must be changed. We established criteria for the evaluation of alternatives to help us determine whether a proposed alternative substantially meets the purpose of, and need for, the Proposed Action (see section 2.1 in the draft EIS). All three of the action alternatives, not just Alternative One (Proposed Action and Preferred Alternative) that are described in Chapter 2, Section 2.3 achieve in varying degrees the objectives as stated in Chapter 1, Section 1.2.

**Resolution:** No further action.

**Comment:** Commenter stated that the best available science confirms that areas beyond the Mexican Wolf Experimental Population Area (MWEPA) are essential for Mexican wolf recovery. The proposed action, as well as all alternatives in the DEIS, place significant roadblocks in the way of achieving full recovery for Mexican wolves. How then can the MWEPA be helping to conserve the Mexican wolf?

**Our response:** We do not agree with the statement that the proposed action and alternatives place significant roadblocks in the way of achieving full recovery for the Mexican wolf. We state in Section 1.2.1 of the draft EIS that: “While we intend for the experimental population of Mexican wolves that we reestablish in the MWEPA to contribute to recovery, full recovery is beyond the scope of this EIS”. And we state that: “Our intention, under Section 10(j)(2)(A) of the Act, is to “further the conservation” of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population of Mexican wolves.” Our need is summarized in section 1.2 of the draft EIS. In sub-sections 1.2.2 through 1.2.4 we provide the detail and objectives for each existing condition that we feel must be changed. To this end we are proposing actions to meet the need as stated in section 1.2 and to achieve the goals summarized in section 1.3 of the draft EIS. We address in sub-section 2.2.1.5 of the draft EIS the

reasons why we do not consider expanding the MWEPA to include areas of suitable habitat north of I-40 in Arizona and New Mexico would meet our current purpose and need. We have provided additional edits in subsection 2.2.1.1 to make the rationale more clear. If a revised recovery plan recommends establishment of Mexican wolves north of I-40, the experimental rule for the MWEPA could be revised, or other (new) regulations established, pending appropriate analyses and decisions, including NEPA review and public involvement.

**Resolution:** Additional edits made in subsection 2.2.1.1 of the final EIS.

**Comment:** Due to spatial constraints in the captive breeding program, the Service needs to adopt an alternative that will allow for significantly higher numbers of initial releases so that valuable genetic information will not be lost.

**Our response:** The need to increase the number of initial releases and improve the level of recruitment from the captive population into the experimental population is included in the statement of purpose and need (Section 1.2 in the draft EIS) and further explained in subsection 1.2.2 of the EIS. One of the criteria we used for the selection of alternatives also specifies: “Improves the recruitment of wolves from the captive population into the experimental population of Mexican wolves” (Section 2.1 of the draft EIS).

**Resolution:** No further action.

**Comment:** The entirety of the MWEPA will not be managed to conserve wolves to the extent necessary to ensure survival and recovery because “Zone 3 is an area of less suitable Mexican wolf habitat where Mexican wolves will be more actively managed under the authorities of this rule to reduce human conflict.”

**Our response:** The MWEPA encompasses areas of suitable and unsuitable habitat for wolves. While wolves may disperse through or temporarily occupy areas that we do not consider to be suitable habitat we do not expect Mexican wolves to establish pack territories or to persist in these areas. We will not release or translocate Mexican wolves into areas that do not have suitable habitat; therefore under all three action alternatives proposed management Zone 3 is an area where neither initial releases nor translocations would occur and where wolves, should they occur, would be more actively managed under the authorities of the rule to reduce human conflict. Wolves that attempt to establish themselves in areas lacking suitable habitat are less likely to survive and more likely to engage in depredation or nuisance behavior. Therefore, we view active management in proposed management Zone 3 as necessary to the conservation Mexican wolf and that this management will contribute to improving the effectiveness of the reintroduction project.

**Resolution:** No further action.

### **Tribal Issues**

**Comment:** The DEIS does not identify or assess the likelihood of big game depredation. The Tribe’s elk hunts are recognized worldwide as exceptional big game hunting experiences. As a result, the Tribe and its member outfitters benefit economically from elk and deer hunts on the Reservation.

**Our response:** The potential impact of Mexican wolf predation on wild ungulates, specifically elk, resulting from implementation of the proposed action and alternatives is addressed in section 4.3 of the EIS. The potential impact on big game (elk) hunting is addressed in sub section 4.4.2 of the EIS. Based on information from AGFD (AGFD 2012a) and the White Mountain Apache Tribe (Tribal Sub-Group MWRT 2014), there have been no significant impacts to big game population numbers due to Mexican wolf presence in the BRWRA or on the Fort Apache Indian Reservation. In addition, based on our proposed rule, tribal governments may request that Mexican wolves be removed from tribal trust land for any reason, including due to impacts to wild ungulate herds.

**Resolution:** We have added a brief discussion of the WMAT experience with Mexican wolves and

effects on big game hunting on the FAIR to subsection 4.4.2 of the final EIS.

### **Impacts Analysis – General**

**Comment:** The analysis discusses the survival of the experimental population, but does not describe the relative effects this population would have on the recovery of the species *Canis lupis baileyi*.

**Our response:** We state in Section 1.2 of the DEIS that “The **purpose** of our proposed action is to further the conservation of the Mexican wolf by improving the effectiveness of the Reintroduction Project in managing the experimental population.” We also state in subsection 1.2.1 that “we intend for the experimental population of Mexican wolves that we reestablish in the MWEPA to contribute to recovery...”

**Resolution:** We provide an analysis of the possible impact of the proposed action and alternatives on the Mexican wolf experimental population and the listed entity in Chapter 4.

**Comment:** The Service only analyzed impacts to “suitable” habitat. The area deemed “suitable” by the Service includes only 27% of the MWEPA. If adopted, however, the proposed rule will result in wolves being released and translocated, and dispersing throughout the entire MWEPA. Therefore, the effects of the action throughout the entire MWEPA should be analyzed.

**Our response:** The MWEPA encompasses areas that have suitable habitat for wolves and areas that do not. While wolves may disperse through or temporarily occupy areas that we do not assess as suitable habitat we do not expect them to establish pack territories or persist in these areas. We will not release or translocate wolves into areas that do not have suitable habitat. Under all three action alternatives proposed management Zone 3 is an area where neither initial releases nor translocations would occur and where wolves, should they occur, would be more actively managed under the authorities of the proposed rule to reduce human conflict. Chapter 4 of the draft EIS analyzed the environmental consequences of our proposed action and alternatives throughout the project study area including all three proposed management zones.

**Resolution:** No further action.

**Comment:** The DEIS states that the Proposed Action and alternatives would not directly or indirectly affect community services such as police, fire and ambulance in those portions of Arizona or New Mexico within the project study area. However, there are direct, indirect and cumulative affects to community services in the City of Sierra Vista and Cochise County that were omitted from the NEPA analysis. When our communities lose a portion of our local tax base from livestock producers that suffer economic losses due to wolves, as documented in Carey (2012), community service budgets are often the first to be impacted. When a wolf threatens or attacks people, pets or livestock, police officers and fire fighters are often the first responders. This directly impacts their time, manpower allocations, wages and fuel costs. Indirect impacts include lost benefits due to the investment that the City of Sierra Vista and Cochise County spend training their community service employees, as revenues for such services decrease, and employees leave the economically depressed communities.

**Our response:** The possible direct and indirect impacts from the proposed action and alternatives to livestock producers is addressed in section 4.4 of the draft EIS, including a discussion of property value impacts. The possible direct and indirect impacts from the proposed action and alternatives to public safety is addressed in section 4.5 of the draft EIS. We have no verifiable data that attributes a loss of county tax base to Mexican wolf depredation in the BRWRA. We have no verifiable data that suggests that the presence of Mexican wolves in the BRWRA has adversely affected the provision of police, fire or ambulance services and the analysis of section 4.5 of the draft EIS concludes that no significant impact to human health or public safety is expected from implementation of the proposed action or alternatives. In accordance with CEQ (2005) guidance: “It is not practical to analyze how the cumulative effects of an

action interact with the universe; the analysis of effects must focus on the aggregate effects of past, present, and reasonably foreseeable future actions that are truly meaningful”.

**Resolution:** No further action.

**Comment:** The DEIS states that no direct impacts will be made to water resources (Chapter 3, Page 2, Lines 2 – 4). The majority of water sources in the proposed reintroduction area within the City of Sierra Vista and Cochise County are those constructed and maintained by livestock producers. Wolves will have to use the livestock water sources to survive. The use of livestock water sources by wolves will at times affect livestock - livestock will avoid areas where wolves are present. Ranchers can stop maintaining certain water sources due to presence of wolves. That action would directly impact water sources for wolves and other wildlife. When ranchers go out of business due to wolf depredation, their water sources can go dry due to lack of maintenance, pumps being turned off, and sediment filling tanks. The results can include a reduction in the number of water sources for livestock and wildlife, including wolves. This in turn concentrates livestock, predators and other wildlife at fewer water sources. Excess trampling of water sources can occur, decreasing the quality of the water sources or causing springs to go dry. The direct and indirect impacts to water sources need to be analyzed.

**Our response:** We define “Water Resources” in section 3.1 of the draft EIS as “those portions of the natural environment related to surface water and groundwater, water quality, floodplains and wetlands.” We do not include in this definition stockponds. The assertion that “wolves will have to use livestock water sources to survive” is unsupported and the connection drawn from wolf presence to indirect adverse effects on water quality and natural springs is speculative.

**Resolution:** No further action.

### **Land use**

**Comment:** “In Arizona and New Mexico, federal land ownership often dominates the land status within county boundaries. Generally counties have county plans to guide land use through the development of county planning decisions. Counties can also use zoning laws and regulations to guide county development and land uses. County plans are an important tool to provide county residents opportunities for involvement in activities within a county, and knowledge of county goals and objectives. These plans directly affect the management of private lands, but have limited authority over Federal land management. Federal land managers work closely with counties to maximize consistency between county and Federal plans and to promote cooperation.” The Service mischaracterized the authority of city and county government, which may be why they constantly attempt to dominate local government under the auspices of federal supremacy. The way the Service phrases the local jurisdiction issue is incorrect. Both Cities and Counties have jurisdiction on federal lands. That jurisdiction includes protecting citizens against wolves and other harm.

**Our response:** County land use plans and city zoning ordinances do not apply to federal land. Federal land management agencies are not legally bound by local planning decisions but attempt to work closely with local planning officials to prevent conflict and promote cooperation. Cooperation at the early stages of planning is a key factor to the prevention of potential conflicts and provides consistency in planning. Public safety is an important aspect of both local government and federal agency decision making and is an integral part of the planning process. Emergency response on federal land from state and local first responders and mutual aid may be provided under cooperative agreement.

**Resolution:** Edits have been made in Section 3.3 of the final EIS to make the jurisdictional relationship between federal agencies and state and local government more clear.

**Comment:** Chapter 4, Page 5, Lines 26 - 39

“Non-Federal Land use activities on non-federal land would remain the same as that currently occurring. State owned lands are often scattered and the total amount of state land within suitable wolf habitat is limited. Impacts to land uses on state owned lands would be similar to those on federal land and are not considered significant. The Service makes conclusions with no analysis, in violation of NEPA.

**Our response:** The MWEPA is made up of a mix of federal and non-federal (state, private and tribal) lands. Under all three action alternatives we propose to allow wolves to occupy federal and non-federal land in the MWEPA. Although Mexican wolves on non-federal private and state land would not be subject to removal, except in the case of depredation or other nuisance behavior that cannot be effectively managed through non-removal techniques, land owners would continue to control the use of their land. Consultation under Section 7 of the Act is not required, except on National Park and National Wildlife Refuge lands, and critical habitat cannot be designated for nonessential experimental populations designated under Section 10(j) of the ESA. Accordingly, a new final 10(j) rule would not impose regulatory restrictions on current or future land use on private or state land.

**Resolution:** Additional analysis has been provided in section 4.2 of the final EIS to better support the conclusion that no significant adverse impact to land use on non-federal state, tribal or private land is expected to occur from implementation of the proposed action or alternatives.

**Comment:** “Based on this information, we do not expect Alternative One to result in direct significant, less than significant, or indirect effects to federal land use. Therefore, it is not anticipated that the presence of the Mexican wolf would require the development or implementation of mitigation measures to ensure the continuation of current land uses.” Where is the analysis? The 1996 EIS did not analyze impacts to Zone 2, where the City of Sierra Vista and Cochise County are located or to land in adjacent Zone 3. The EIS makes broad conclusions as if they are facts, without the requisite NEPA analysis. The Service must provide an in-depth analysis and documentation of the proposed expansion area in relation to prey, livestock - wolf conflicts, water sources, health and safety and other relevant factors before concluding there will not be significant impacts.

**Our response:** Implementation of the proposed action and alternatives does not require changes to any federal agency land use plans that guide authorized land use on federal land within the MWEPA. Section 10(j) of the ESA expressly states that critical habitat shall not be designated for nonessential experimental populations. A new final 10(j) rule would not impose regulatory restrictions on current or future land use on federal land nor require changes to federal agency policy or management. Temporary area closures of limited scope (approximately one mile in radius) and duration (only during the period of wolf occupancy) may be required to limit human access and disturbance at wolf release sites, dens and rendezvous sites on federal land. These actions are expected to be consistent with the management direction, including standards and guidelines to implement temporary area closures for the protection of wildlife during breeding seasons or other vulnerable periods, of all federal agencies. The analysis of the potential impacts to prey species, livestock, and health and human safety are addressed in sections 4.3, 4.4 and 4.5 of the draft EIS. Section 3.1 of the draft EIS addresses those resource areas, including water resources, to which impacts from implementation of the proposed action and alternatives are unlikely to occur.

**Resolution:** Additional analysis has been provided in section 4.2 of the final EIS to better support the conclusion that no significant adverse impact to land use on federal land is expected to occur from implementation of the proposed action or alternatives.

### **Economics-Livestock Production**

**Comment:** Several commenters noted that the draft EIS inappropriately included milk cows and feeder cows in its estimation of the number of cattle and calves potentially impacted by wolf reintroduction.

**Response:** We agree that inclusion of milk and feeder cows in our estimates of the number of cattle and calves potentially impacted by wolf reintroduction is not valid.

**Resolution:** We have removed milk cows and feeder cattle in our estimate of the number of cattle and calves in the potentially affected area in the final EIS.

**Comment:** Several commenters noted the availability of more current data to describe the affected agricultural community.

**Response:** We agree that current data have become available since the publication of the DEIS.

**Resolution:** We have updated our description of the affected environment using the more recently available 2012 Agricultural Census data.

**Comment:** Several commenters questioned the appropriateness of comparing depredations to Animal Unit Months within the BRWRA.

**Response:** We concur that the comparison may not be useful.

**Resolution:** We have deleted this comparison in the final EIS.

**Comment:** A commenter disagreed with the appropriateness of including the results of several of the information sources we used to estimate the average number of unconfirmed depredations for every confirmed depredation in the BRWRA.

**Response:** We have re-examined the papers of concern referenced by the comment and have concluded that it would be appropriate to exclude one of the papers from our calculation of average unconfirmed annual depredations because it provided observational mention of the ratio of confirmed to unconfirmed depredations without data to substantiate the statement. The effect of excluding the results of this paper resulted in a modest increase in the number of unconfirmed depredations for every confirmed depredation.

**Resolution:** We have modified our ratio of confirmed to unconfirmed depredations in the final EIS.

**Comment:** Several commenters expressed concern about the methodology used in the draft EIS to compute the value of depredated livestock, in particular relying too much on the simplifying assumption that depredated cattle were mainly calves.

**Response:** We have revised the final EIS to be clearer about how both the type of cattle likely to be depredated (cow, calf, yearling, or steer) and computed value.

**Resolution:** The final EIS derives, and utilizes, a value for a depredated cattle unit based on the distributional weight of the type of cattle killed by wolves since 1998 and market price.

**Comment:** Several commenters noted that the draft EIS did not include a consideration of how sheep and lambs could be impacted by the proposed action and alternatives.

**Response:** The final EIS includes a characterization of how the number of sheep and lambs and associated ranches have been impacted within the BRWRA.

**Resolution:** Information has been added to the final EIS.

### **Economics - Big Game Hunting**

**Comment :** One commenter disagreed with the Service's characterization of an internal review conducted by the Arizona Game and Fish Department regarding Mexican wolf impacts on deer and elk populations in Arizona 1998 through 2012 as a formal study of the issue.

**Response:** We agree with the commenter that the above mentioned paper is not a formal peer reviewed study. Nonetheless, because this paper represents one of only a few that formally review the effects of interactions between Mexican wolves and elk population estimates, we believe it prudent to include in our EIS.

The paper was obtained through AGFD's website and can be found through the following URL:  
[http://www.azgfd.gov/w\\_c/wolf/documents/130523\\_FAQ2-MWImpactsonPreyPopulationsinAZThrough2012\\_000.pdf](http://www.azgfd.gov/w_c/wolf/documents/130523_FAQ2-MWImpactsonPreyPopulationsinAZThrough2012_000.pdf).

**Resolution:** We have changed our descriptive wording referencing this paper from "study" to a "review."

### **Human Health and Public Safety**

**Comment:** The Service is not following their own Data Quality Guidelines (FWS Environmental Checklist for Some of the More Common Social Concerns) and it is out of compliance with the Best Available Science Policy by refusing to accept the two mental health assessments of children in the BRWRA.

**Our response:** The cited FWS environmental checklist is a guide that can be used to help focus the analysis on those areas where impacts might plausibly occur and to eliminate from further consideration those areas to which impacts from the proposed action and alternatives are implausible. The checklist does not mandate impact analysis on each of the 20 line items presented for consideration. Section 4.5.2 of the draft EIS includes information from the Martin (2007) and Thal (2006) studies and notes, in accordance with 40 C.F.R. § 1502.22, that "No peer reviewed studies have been conducted, and there is no scientifically collected data available to make an evaluation as to whether the reintroduction of wolves into the BRWRA has, or has not, had a positive, neutral, or negative psychological effect on children living in the rural communities within or proximate to the recovery area." As both Martin (2007) and Thal (2006) acknowledge, neither the data they collected, nor their findings, were scientifically conducted or peer reviewed. Therefore, we consider the information presented in these studies as anecdotal and not evidence of widespread psychological trauma (adverse impact) to children from the presence of the Mexican wolf in the BRWRA. We also consider the numerous letters we have received from children expressing their interest in the Mexican wolf and their desire to see wolves in the wild as anecdotal and not evidence of a widespread psychological benefit (beneficial impact) to children. The analysis provided in section 4.5.2 considers the relevant scientific information, considers opposing views and acknowledges incomplete or unavailable information. In the absence of science based studies, we do not consider that psychological damage to children is a reasonably foreseeable significant adverse effect from implementation of the proposed action and alternatives.

**Resolution:** No further action.

**Comment:** Comment that Walsh 2013 study is misinterpreted and referenced in the DEIS. The author(s) of the DEIS are twisting the conclusions Walsh reaches in her 2013 paper. In the paper referenced in the DEIS, she never once mentions that wolf encounters are interpreted through a "filter" of ideas. She has a completely different analytic approach that focuses on rhetoric and how that rhetoric can be used to isolate ones beliefs values, and norms. Walsh starts from a statement made by ranchers or wolf program administrators and works back to identify the beliefs, values and norms of particular statements. She then compares the beliefs, values, and norms statements of the people on both sides of the debate to find where they are common and where they diverge. Her research is an analysis of rhetoric and has nothing to do with how people interpret wolf interactions.

**Our response:** Citations from Rutherford and Clark 2005, Wilmot and Clark 2005 and Carnes 2004, as well as Walsh 2013 are presented to support our statement in Section 4.5 of the DEIS that "How a wolf-human interaction is interpreted is therefore inextricably linked to, and filtered by, the observer's own belief system and emotions and the wolf's perceived intent, rather than its actual behavior, and is often reported in that context." We contend that bias is inevitably introduced into reports of wolf behavior both from people who support wolf recovery and from those who oppose it. Therefore our analysis of possible impacts from our proposed action must take that bias into account when evaluating reports of wolf-human interactions.

**Resolution:** No further action.

**Comment:** The authors of the DEIS strongly imply that eye witness reports of dangerous encounters with wolves are to be dismissed outright because 1) Eye witness reports of dangerous encounters are misinterpreted because of exposure to biased cultural background knowledge, 2) Residents of the BRWRA value eye witness accounts more than research conducted by agencies that are inherently biased against and hostile towards opponents to the wolf reintroduction project. The authors of the DEIS failed to mention that Walsh (2013) specifically mentions those biases (p. 466): The attitudes represented in this rich rhetorical archive have not yet been seriously addressed for at least two reasons. First, the conservative politics of the majority of Area ranchers run counter to the prevailing political drift of the academic programs concerned with environmental communication and rhetoric (Klein & Stern, 2004; Zipp & Fenwick, 2006); this “red/blue “ divide raises concerns about bias in academic approaches to rancher attitudes, a concern that has been already been raised for environmental risk assessment (Ball, 2002). Concerns are heightened when academics reconstruct rancher attitudes as part of a wider effort to persuade rural citizens to accept predators in their area (Bath, 2000; Ericsson & Heberlein, 2003; Meadow, Reading, Phillips, Mehringer, & Miller, 2005; Naughton Treves, Grossberg, & Treves, 2003; Thompson, 1993).

**Our response:** Citations from Rutherford and Clark 2005, Wilmot and Clark 2005 and Carnes 2004, as well as Walsh 2013 are presented to support our statement in Section 4.5 of the DEIS that “How a wolf-human interaction is interpreted is therefore inextricably linked to, and filtered by, the observer’s own belief system and emotions and the wolf’s perceived intent, rather than its actual behavior, and is often reported in that context”. We contend that bias is inevitably introduced into reports of wolf behavior both from people who support wolf recovery and from those who oppose it. Therefore our analysis of possible impacts from our proposed action must take that bias into account when evaluating reports of wolf-human interactions.

**Resolution:** No further action.

**Comment:** The author(s) go on to state that as noted in the 5-Year Review (AMOC and IFT 2005): “fear is not necessarily a fact, data, or logic based emotion, and absence of a factual or logical foundation for fear does not make the personal impact any less real. Fear is a very personal thing: some people will fear wolves no matter what the facts are, others will not fear wolves no matter what the facts are.” The presentation of the statements in tandem apparently is an attempt to dismiss concerns regarding the significant negative impact dangerous wolf encounters have on the psychological well-being of children. The authors imply that 1. Because there are no peer reviewed studies corroborating the association between PTSD and dangerous wolf encounters there must be no association, and 2. Simply because some fears are irrational, the PTSD and other psychological trauma experienced by children after dangerous wolf encounters must be imaginary or somehow illegitimate.

**Our response:** The paragraph entitled “Psychological effects to children from fear of wolves” in subsection 4.5.2 and the use of the quote from the 5-Year Review are not intended to be dismissive but rather to point out that how a person reacts to an encounter with a wolf or how a person feels about the presence of wolves (whether fearful or fearless) is very much based on their own personal emotions, social influences and associations.

**Resolution:** Subsection 4.5.2 has been modified in the final EIS to remove the quote and address the comment.

**Comment:** The author(s) of the DEIS do not acknowledge the need for further research into the psychological damage experienced by children in the wolf re-introduction area. Simply put, their argument is that because no peer reviewed studies exist, the psychological damage does not exist. In general, Service does not adequately include consideration of mental stress as part of public health and safety. Section is lacking first-hand information from practitioners who have dealt with wolf related

mental trauma in the reintroduction area. Service needs to include information from Julia Martin and Alex Thal.

**Our response:** Section 4.5.2 of the draft EIS includes information from the Martin (2007) and Thal (2006) studies and notes, in accordance with 40 C.F.R. § 1502.22, that “No peer reviewed studies have been conducted, and there is no scientifically collected data available to make an evaluation as to whether the reintroduction of wolves into the BRWRA has, or has not, had a positive, neutral, or negative psychological effect on children living in the rural communities within or proximate to the recovery area.” As both Martin (2007) and Thal (2006) acknowledge neither the data they collected, nor their findings, were scientifically conducted or peer reviewed. Therefore, we consider the information presented in these studies as anecdotal and not evidence of widespread psychological trauma (adverse impact) to children from the presence of the Mexican wolf in the BRWRA. We also consider the numerous letters we have received from children expressing their interest in the Mexican wolf and their desire to see wolves in the wild as anecdotal and not evidence of a widespread psychological benefit (beneficial impact) to children. The analysis provided in section 4.5.2 considers the relevant scientific information, considers opposing views and acknowledges incomplete or unavailable information. In the absence of science based studies we do not consider that psychological damage to children is a reasonably foreseeable significant adverse effect from implementation of the proposed action and alternatives.

**Resolution:** No further action.

**Comment:** Walsh (2013) concludes her report by recommending “that the MOU Cooperators take the initiative to validate the values and norms forming the top ranked expectations in the rancher’s filters in a systematic way...” (p. 479). In other words, she is recommending that MOU Cooperators listen to rancher concerns regarding (among other things) the psychological trauma inflicted upon children, and treat them as valid. This recommendation was omitted from the DEIS by the author(s).

**Our response:** Walsh 2013 examines rancher rhetoric concerning the Mexican Wolf Blue Range Reintroduction Project and applies filter theory to induce a model of stakeholder attitudes that “enables prediction of future interpretive judgments, comparison of attitudes among groups, and identification of the power dynamics pressuring interpretive attitudes” (Walsh 2013). The recommendations she provides are intended to help “build common rhetorical and political ground and reduce resistance on the basis of misaligned attitudes.” We agree that validating the concerns, values and norms held by other people (i.e. putting oneself “in another person’s shoes” and being able to understand another person’s point of view) helps to build common ground.

**Resolution:** No further action.

### **Biological Resources**

**Comment:** Commenter requested the Service consider a study by Mech, L. David, “Prediction Failure of a Wolf Landscape Model” (2006). Dr. Mech pointed out that Mladenoff’s study showed where wolves are, but predictions based on his model were wrong more than 50% of the time. “Wolves locate their home ranges in areas with adequate prey and low levels of human interference (Mladenoff et al. 1995).”

**Our response:** Wolves are a large, wide-ranging carnivore, and are ecological generalists. We preface the discussion of wolf numbers and future distribution in Chapter 4 by the following:

Future wolf distribution will probably be determined by variable prey abundance, the patchwork of human settlement, and livestock distribution. How quickly the wolf population grows and where wolves will be found will differ to some degree across the four alternatives and will likely depend on the location, frequency, and distribution of initial releases and translocation events.” Mladenoff et al. (1995) also noted the caveat that wolves in Minnesota were colonizing areas formally thought to be unsuitable habitat by their criteria, and the authors noted that even their conclusions of what constituted suitable habitat may have been conservative. The commenter correctly states that Mech (2006) re-analyzed the Mladenoff et al. (1995) model and found that it failed to predict where Wisconsin wolves would recolonize. While we

are aware of the study by Mech (2006), Mladenoff et al. (2006) replied to Mech (2006) noting that Dr. Mech's re-analysis could not be replicated, and was based upon a subjective method of analysis.

**Resolution:** No further action.

**Comment:** The Service should assume higher densities of wolves when it assesses impacts, and needs to use more current literature related to predator-prey dynamics. The Service is correct that wolf density is often related to prey. However, the Service omitted the fact that density can be as high as 30.8/100 km<sup>2</sup> and fails to analyze potentially high densities within the proposed Mexican wolf expansion area. There should be an analysis of the carrying capacity. “ Strong (1992) suggests ecosystems are driven by resource abundance and weather with no significant influence from carnivore predation as predation would be considered compensatory for mortality that would have occurred in the population otherwise. “ Strong wrote his statement before he knew that wolves have rapidly reduced the elk population in Yellowstone National Park more than 80% and the moose in Northwest Minnesota by more than 99%. Any and all theories and hypotheses regarding carnivore predation being compensatory have been proven wrong when they are applied to wolves. See Mech (2014) for a full explanation of this fact. Delete the 22 year old Strong citation, since it is obviously wrong. Use Mech (2014) and other more recent literature.

**Our response:** We have revised the action alternatives from the DEIS such that the density in Alternative Two and Alternative Three will be higher than predicted in the DEIS. We do not consider it likely that density would exceed our projections, as discussed in Appendix F. A higher density of wolves above that which is stated in the EIS is unlikely in the project study area based on prey densities and the amount of suitable habitat. Densities in the Yellowstone ecosystem were able to reach high densities because of the contiguous habitat available to wolves. The proposed MWEPA is by contrast, made up of a mixed-use landscape comprised of federal lands, private lands, and human settlement, and much of it is used for livestock production. Hamlin et al. (2009) stated that in areas where wolf depredations consistently occurred (wolves were actively managed), wolves were controlled and did not reach numbers or predator:prey ratios where wolf densities were high or population impacts on ungulates were detected. Ungulate prey in northern latitudes, such as Montana, Canada, and Alaska are exposed to deep snow which increases their vulnerability to wolves and other predators. Ungulates in lower latitudes with little or no snow will not be so disadvantaged, and will likely stand a greater chance of escaping wolves. Mech and Boitani (2003) report a relationship between territory size and latitude since prey biomass density declines with latitude. However, a larger territory size does not necessarily correlate with a higher pack size. A colonizing pair of wolves establishing a new territory in unoccupied habitat may select an area significantly larger than what they would initially need for survival because they will require additional resources for raising pups. The pack size of Mexican wolves has traditionally been small (see IFT annual reports), while pack sizes in Yellowstone, Montana, Alaska can reach upwards of 15 or more animals. Wolf pack sizes will likely be correlated with food supply (prey biomass) in the MWEPA.

**Resolution:** No further action.

**Comment:** The best scientific data available shows Yellowstone fires were a significant factor in aspen regeneration. Wolves were not the sole cause of aspen, cottonwood and willow restoration. The Service should use science to accurately portray the Yellowstone vegetative changes associated with fires as well as wolves.

**Our Response:** The commenter is correct that wolves were not the sole cause of aspen, cottonwood and willow restoration in the Greater Yellowstone Area. In Chapter 4, Alternative 1, under subheading: Impacts to Vegetation, we state, “Within each zone, disturbance and modification of vegetation communities has occurred from many factors unrelated to predator-prey dynamics.” We did not intend to imply that wolves were the sole cause of the vegetative change but rather that the absence of native predators can affect native plant community structure due to increased browsing pressure.

**Resolution:** We have added verbiage which addresses the Yellowstone fires of 1988 as part of our discussion of vegetative changes in the Greater Yellowstone Area.

**Comment:** The Service needs to update its literature search and use the best available science in its discussion of trophic cascades, see Mech 2012.

**Our response:** Mech (2012) is cited in our discussion of trophic cascades in Chapter 4, under 4.3.2 as follows: “Mech (2012) challenges the cascading effects attributed to wolves in earlier studies of wolf restoration and questions whether the findings of those studies conducted in national parks are relevant to areas where overriding anthropogenic influences on prey, vegetation, and other parts of the food web are present.”

**Resolution:** We have added several recent papers (Winnie (2012, 2014) and Beschta et al. (2014)) to our discussion regarding behaviorally mediated trophic cascades.

**Comment:** The DEIS at Chapter Page 17, Lines 16 – 17, states:

“Domestic livestock comprised from 8% (Reed et al. 2006) to 16.8% (Merkle et al. 2009) by mass of the diet of Mexican wolves. “ In their overall dietary analysis, Merkle et al. 2009 found that 80.3 percent of the Mexican wolves' diet was elk, 16.8 percent was cattle; deer, squirrels and rabbits comprised less than 1 percent each, and rodents made up 2 percent. This fell largely in line with a previous dietary study by Reed et al. in 2006, but it's important to note that the Luna pack consumed 52.7 percent of their diet as cattle and 45.9 percent as elk one year. The following year, the pack ate 24.1 percent of their diet as cattle, and 75.1 percent as elk. By comparison, in 2005 the Saddle pack consumed less than 4.3 percent of their diet as cattle, and 94.5 percent as elk while the Rim pack, in 2006, ate no cattle and 96 percent elk. The point being that the average does not tell the entire story. Problem wolves can significantly impact livestock producers, a fact that is not given adequate consideration in the DEIS.

**Our response:** The commenter is correct in noting that a problem wolf may consume a disproportionate amount of cattle in its diet compared to the wild population, in general. However, should this occur, and should there be a disproportionate amount of cattle depredation, problem wolves would be quickly managed by the Interagency Field Team. Management may involve hazing, wolf removal, and an increase in proactive wolf management activities. The economic analysis looks at the sensitivity of ranches to earning a profit following a model ranch approach, which was adopted from New Mexico State University. The ranches are broken down into small, medium, and large ranches based on the number of cattle in their operations. The pro-forma financial statements show the sensitivity of each ranch to changes in baseline conditions and shows the number of cattle that must be sold under current market conditions for the ranch to earn a profit from operations. Depredations, of course, would affect a ranch's revenue stream and depending on the number of depredations, may or may not affect a ranches ability to turn a profit, depending on compensation.

**Comment:** BLM species of concern may need to be added to Appendix C as suitable wolf habitat is present on BLM land in Zones 2-3.

**Response:** We do not provide a specific description of BLM species of concern due to the limited acreage of suitable wolf habitat on BLM land.

**Resolution:** No further action.

**Comment:** The Service must modify the impact analysis to provide factual support for its assertion that the Proposed Action will have no significant impacts on ungulates. The Service predicts no significant impact on ungulates because the Arizona Game and Fish Department has shown no decrease in the elk population at current rates of depredation. The Service, however, does not compare the current wolf : elk ratio and rate of depredation on elk with the anticipated wolf : elk ratio and the rate of depredation that will occur under the Proposed Action.

**Response:** The current wolf to elk ratio in the BRWRA is provided in Chapter 3. Numerous factors are involved in determining the rate of predation on elk by wolves (elk killed per wolf per period of time) such as vulnerability of prey, availability of alternate prey, seasonal variation, wolf group size, and offtake by scavengers, among others. Furthermore, in a multi-predator ecosystem, the overall trend of prey population dynamics depends on the combined (usually additive) effects of all predators (e.g., Gasaway et al. 1992, Kunkel and Pletscher 1999).

**Resolution:** In the final EIS, we refined our impact analyses based on maximum population sizes that may occur under each alternative, as described in Appendix F, including wolf to elk ratios.

**Comment:** The Service omitted relevant analysis of the adverse impact that increased numbers of ravens will have on Sonoran and Mojave desert tortoises, sage-grouse and other federally protected wildlife.

**Response:** The availability of wolf-killed carcasses in areas previously not colonized by wolves may lead to an increase in scavenger species. Ravens may therefore increase in areas where wolves occupy suitable habitat and establish their territories. It is unlikely however, that this potential increase in ravens will lead to an adverse impact on Sonoran and Mojave desert tortoises or sage-grouse because these species do not occupy a significant portion of the suitable habitat available to wolves in Zones 1 or 2. Roads and power line rights of way attract potential avian predators of Sonoran desert tortoises, such as ravens, that use power lines as nesting and perching sites, and the proximity of roads can serve as sources of carrion (Knight and Kawashima 1993, p. 266). Conversely, wolf-killed carcasses will not likely be located in proximity to roads, and will not act as an attractant to the use of powerlines as perches for avian predators. Raven populations, and potential risk of predation of Sonoran desert tortoises by ravens, are both higher with increasing proximity to human development (Kristan and Boarman 2003, p. 2432). While ravens have been identified as a subsidized predator on juvenile Mojave desert tortoises, and possibly on juvenile Sonoran desert tortoises (Boarman 1993, p. 192), very few observations of raven predation of Sonoran desert tortoises in Arizona or Sonora have been documented in the literature, leading us to conclude that raven predation on the Sonoran desert tortoise is not a concern.

**Resolution:** No further action.

**Comment:** In the FEIS, discuss the extent to which the US/Mexico border fence may inhibit or preclude the migration of wolves from Mexico and how this affects the potential for extension of the MWEPA to the Mexico border to offer a stepping stone habitat.

**Response:** We concur that this is useful information. The Environmental Protection Agency and the U.S. Customs and Border Patrol provided us with additional information.

**Resolution:** We have added a discussion of the US/Mexico border fence in section 1.2.3.

### **Environmental Justice**

**Comment:** The Alamo Band of Navajo is within the congressional boundary of the Magdalena Ranger District of the Cibola National Forest. The Alamo Band of Navajo is not listed in several places where tribes are identified, including as an Indigenous/Tribal Population Group of Concern. The Cibola National Forest consults with the Alamo Band separately from the Navajo Nation.

**Our response:** In coordination with the Navajo Nation for the purposes of identifying tribes as population groups of concern, we address the Alamo Band as well as the Ramah Navajo as part of the larger Navajo Nation.

**Resolution:** No further action.

**Comment:** The analysis claims there are a lack of data on demographics within local industries. The DEIS utilizes data from the Agriculture Census. The 2012 Census of Agriculture for New Mexico provides a description of how census data are frequently used and includes data about the demographics and financial well-being of producers. The census includes demographic data on agricultural producers at

the county level, and the DEIS used data from the census elsewhere in the analysis. Why were these demographic data not used?

**Our response:** Portions of data and analysis in the economics section have been revised. State level data have been added on minorities that are the main proprietor of beef cattle ranches. The minority data are available in the aggregate of all farms at the county level. Since this dataset did not disaggregate to the type of farm, the data requested by the commenter were not added.

**Resolution:** No further action.

**Comment:** Commenter stated that Presidential Executive Order 12898 recognized the importance of research, data collection, and analysis, particularly with respect to multiple and cumulative exposures to environmental hazards for low-income populations, minority populations, and Indian tribes. Thus, specific data on these exposure issues should be incorporated into the analyses.

**Our response:** Other hazards such as environmental contaminants could be added yet qualitative conclusions on how exposures may change impacts would be highly speculative and require independent studies.

**Resolution:** No further action.

**Comment:** Mitigated less than disproportionately high and adverse impacts on environmental justice; (DEIS, pp. XIII XV). The findings are not credible based on the Service's own statements that many cow-calf operations in Arizona and New Mexico depend heavily on federal lands for forage (DEIS, Chap. 3, p. 48) in a context where 55% of the growers ranch herds that count fewer than 10 cattle, and 75% of the growers ranch herds that count fewer than 20 cattle (DEIS, Chap. 3, p. 48), for whom the loss of even one animal can have devastating economic consequences when the number of cattle representing profit is as low as 2 (DEIS, Chap. 4, Table 4-8, p. 36).

**Our response:** It was determined that no alternative had disproportionately high and adverse impacts to any population groups of concern. Designations were elevated above the level of no disproportionately high and adverse impacts due to uncertainty. The determinations represent the upper bound of impacts in all resource areas (including but not limited to economics). The determinations are in effect based on the highest impact assessed. Mitigation measures are provided in chapter 4 in the economics and environmental justice sections. The economic analysis details the ranching industry's use of public lands for forage and therefore it is already incorporated into the analysis.

**Resolution:** Discussion on the proactive programs available to ranchers is in chapter 4 economics and additional discussion on mitigation was added to the chapter 4 environmental justice including the new Livestock Forage Disaster Program in the Agricultural Act of 2014. The program provides assistance to producers for excess livestock deaths due to attacks by animals, including wolves, reintroduced by the federal government or protected by federal law.

**Comment:** Commenter stated that crime increases in relation to poverty and lack of opportunity, in and surrounding wolf recovery areas, were never analyzed during the last DEIS (1998) of the Mexican wolf reintroduction, or the current DEIS. In Catron County alone, property crime has risen drastically since wolf depredation numbers have risen, and ranches have been forced to sell out. This may be attributed to the cumulative impact of wolf recovery and all of the other government implemented endangered species protections implemented under the ESA without compliance with the CEQ.

**Our response:** Including additional social data on the communities with environmental justice concerns was considered and ruled out. No peer reviewed papers on a causal link (as opposed to a correlation) between wolf presence and crime rate increases have been found. The economic analysis discussed that an established link between depredations and losses on the sale of ranches has not been found. ESA compliance is not discussed in the cumulative impacts. Cumulative impacts on Indian tribes from ESA compliance would require independent studies as to the effects on these groups.

**Resolution:** No further action.

### **Appendices**

**Comment:** The fact that 43% of known wolf-human interactions over the past 9 years involved the presence of dogs casts serious doubt on the Service's claim that the addition of a provision allowing the killing of wolves attacking dogs would not lead to increased taking of wolves.

**Our response:** We specifically incorporated some level of additional take with the provision for taking a wolf that is in the act of biting, wounding, or killing non-feral dogs on non-federal lands, such that our analyses of Alternative One and Two project annual growth rates of 10% (the alternatives with this provision) versus an annual growth of 11% for Alternative 3 (the alternative without these provisions) (see Appendix D, formerly Appendix F in the DEIS). It is also important to note that known wolf-human interactions include: (1) interactions on public land (where the provision to kill wolves in the act of biting, wounding, or killing non-feral dogs does not apply), (2) interactions where wolves were not in the act of biting, wounding, or killing a non-feral dog, but where wolves approached a human with a dog present, and (3) interactions at night. In all of these cases, killing of wolves would not be allowed or would be infeasible because of the difficulty of killing a wolf at night. In Alternative One, we do allow for take of a wolf (including killing) on non-federal lands (private, state, and tribal trust) when wolves are in the act of biting, wounding, or killing non-feral dogs, and we have appropriately considered the effect on Mexican wolves from this provision in our annual growth projection in Appendix D (formerly Appendix F in the DEIS).

**Resolution:** No further action required.

**Comment:** The Service claims that the projected baseline population growth rate (11%) estimated for the Mexican wolf experimental population would exhibit similar growth as the naturally recovering populations of northwestern Montana and Wisconsin (Figure 1-Appendix F) when these populations were fully protected as endangered species (DEIS, Appendix F, p. 2). However, the Montana Fish, Wildlife & Parks Department Minimum Wolf Count in Montana, indicates that over the 12 years that preceded the delisting in May 2011, the annual growth rate was an average of approximately 22%.

**Our response:** Average growth rate of 22% is not numerically equivalent to an annual growth rate of 22% because negative and positive growth is encapsulated in the average growth rate. For instance, if we had a starting population of 100 wolves that had 5 years of 10% growth, it would end at approximately 161 wolves. However, if we instead had growth rates of 80%, 20%, 10%, -40%, and -20% (this is an average of 10%), the population would end at 114 wolves. Regardless, the baseline population growth was largely based on the average growth of the Mexican wolves between 2008-2013 (9.5%) and our expectations of how the proposed changes would affect our overall growth rate. We noted that the projected Mexican wolf population exhibited similar growth to populations in northwest Montana and Wisconsin. It appears that the commenter has conflated average growth rate with annual growth rate and numerically similar population sizes with average growth rates.

**Resolution:** We modified Appendix D (formerly Appendix F in the DEIS) to clarify some of these issues.

**Comment:** The Service correctly employs the exponential biologic population growth equation  $N_t = N_0 (r * N_0)$ . However, there are three issues with the Service projected population, and when these three issues are addressed, the population projection looks significantly different. 1) The projection does not integrate an additional 10% of wolves being missed during the census (DEIS, Appendix F, p. 3). An undercount of 10% is probably a minimum number in as much as various studies have documented that on average 10 to 15% of wolf populations are composed of lone or dispersing wolves (Fuller et al. 2003). Further, estimate for total numbers of wolves exceeding the minimum count by as much as 40% remains within that observed in other studies of wolves (Becker et al. 1998) or more common ungulate species (Hamlin and Ross 2002, Vander Wal et al. 2011). If an undercount correction of 10% is applied to the

starting population for the projection (the January 2014 count identified a minimum of 83 wolves as the 2013 annual population), the starting number becomes 83. Ten percent of 83 equates to 8 = 91, and the wolf number for the environmental impact analysis at the end of the period becomes 315 wolves instead of 287.

**Our response:** We significantly modified our approach to Appendix D (formerly Appendix F in the DEIS) based on adjustment of Alternative One and an adjustment to the time frame of consideration. We used an annual growth of 10% under Alternative One until the population was between 300 to 325 wolves (Year 13), consistent with the population objective under Alternative One.

**Resolution:** We modified Alternatives Two and Three to represent populations of wolves that were habitat limited, or limited at a population of 534 wolves (year 19 in Alternative Two or year 17 in Alternative Three).

**Comment:** Under a revised and reissued section 10(a)(1)(A) research and recovery permit the Service would authorize removal of Mexican wolves that can be identified as coming from the experimental population that disperse to establish territories in areas outside of the MWEPA. We fail to see how the 10(a)(1)(A) research and recovery permit achieves any legitimate recovery objective. In fact, as we have shown elsewhere in these comments and in our comment on the proposed rule, the proposed permit would serve to preclude recovery of Mexican wolves. The permit is simply an unlimited take order for wolves that establish outside the MWEPA, where considerable suitable wolf habitat exists. This permit should not be issued until it can be shown to be necessary based on a revised recovery plan for Mexican wolves.

**Our response:** The Service is limiting the revised MWEPA to areas south of Interstate 40 in Arizona and New Mexico in order to more effectively manage the reintroduction project. Our intention is to effectively manage Mexican wolves within the expanded MWEPA in a manner that furthers the conservation of the Mexican wolf while being responsive to the needs of the local communities and minimizing wolf-human conflict. Any geographical area outside of the MWEPA important for the conservation and recovery of the Mexican wolf will be addressed in a future revised recovery plan. We initiated the revision of the 1982 Mexican Wolf Recovery Plan in 2010. The revised plan will provide information about suitable habitat and population sizes for Mexican wolf recovery in the United States and Mexico. A draft plan will be provided for public and peer review before being finalized.

**Resolution:** No further action.

### **10(a)(1)(A) permit**

**Comment:** The Service fails to analyze the impact of the 10(a)(1)(A) permit in the DEIS. The Service implies that there are no substantive changes to the permit and therefore no analysis is required. The permit is a significant part of the Proposed Revision from which impacts will flow, and therefore analysis of this permit is required under NEPA.

**Our response:** We concur that analysis of the impact of the 10(a)(1)(A) permit should be included in the EIS.

**Resolution:** We have added a discussion of the impacts of the 10(a)(1)(A) permit as it applies to areas outside the MWEPA in Chapter 4, section 4.3.

### **Cumulative Impacts**

**Comment:** “Therefore, we do not predict significant beneficial cumulative impact on the federally listed Mexican wolf would occur from the proposed action and alternatives when added to the aggregate effects of other management actions in the project study area.” If the wording of this statement is intentional, then FWS has clearly abrogated its duty to conserve under the ESA.

**Our response:** The sentence immediately preceding the quote provided in the comment states: “We expect implementation of the proposed action and action alternatives to provide direct and indirect

beneficial impacts to the federally listed Mexican wolf.” The question under consideration is whether there are other actions that, interacting with the proposed action and alternatives, may raise the level of significance of the beneficial impact to the Mexican wolf that we predict from implementation of our proposed action alone.

**Resolution:** No further action.

**Comment:** Cumulative impacts section limits itself to impacts on Federal land. CEQ regulations require analysis of federal and non-federal land. Cumulative impacts need to be considered over a longer time frame than 2015.

**Our response:** 40 C.F.R. § 1508.7 defines a cumulative impact as the “ incremental impacts of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.” The discussion of cumulative impacts should reflect the severity of the impacts and their likelihood of occurrence, but it need not provide the same level of detail as the discussion of the environmental effects attributable to the project alone. In determining what information is necessary for a cumulative effects analysis, agencies should use scoping to focus on the extent to which information is “relevant to reasonably foreseeable significant adverse impacts” (CEQ, 2005, 40 C.F.R. § 1502.22). While we recognize that wolves may inhabit suitable habitat on non-federal land, the majority of suitable habitat in the project study area occurs on federal land, with the majority of this on Forest Service land. This is where cumulative effects are most likely to occur. Therefore, because “it is not practical to analyze how the cumulative effects of an action interact with the universe” we narrowed the focus of our analysis of environmental effects on the aggregate effects of past, present and reasonably future actions that are truly meaningful (CEQ 2005). In section 4.7 of the draft EIS we address the cumulative impact of our proposed action on ranching/livestock production across the project study area (which includes both federal and non-federal land) when added to the aggregate effects of human caused global climate change. We also address the cumulative impact of our proposed action on wild prey (elk) across the project study area (which includes both federal and non-federal land) when added to the aggregate effects of NMDGF and AGFD elk management actions. We have added an analysis of the cumulative effects of the proposed action on wild prey (elk) across the project study area (which includes both federal and non-federal land) when added to the aggregate effects of human caused global climate change.

**Resolution:** We have revised section 4.7 in the final EIS to add an analysis of the cumulative effects of the proposed action on wild prey (elk) across the project study area (which includes both federal and non-federal land) when added to the aggregate effects of human caused global climate change.

**Comment:** The evaluation of cumulative effects on land use is insufficient. The DEIS and proposed 10j rule say that wolves will be allowed to occupy non-Federal land, but only Federal land is considered under Land Use.

**Our response:** Based on our analysis in section 4.2 of the EIS we expect that implementation of the proposed action and alternatives will have no significant direct or indirect impact on land use on either federal or non-federal land within the project study area. NEPA requires only a discussion of those cumulative impacts with the potential for significance and only for those resources that are affected by the proposed action and alternatives (EPA 1999). Therefore, we do not consider cumulative impacts to land use in section 4.7 of the EIS.

**Resolution:** No further action.

### **Other**

**Comment:** The Service must provide more than unsubstantiated assertions of the environmental consequences of a Proposed Action for a consequence as significant as illegal killing. The DEIS must analyze the Proposed Action in relation to illegal killings, and discuss the environmental effects of illegal

killing which cannot be avoided if the proposal is implemented. (40 C.F.R. 1508.8.) The DEIS fails to explain how the Service will mitigate the impact of illegal killing that will occur with the Proposed Action. The Service must discuss how the adverse impacts from illegal killing can be avoided and whether the mitigation measures will be effective.

**Our response:** We have incorporated Mexican wolf mortality (from all sources) in our population growth estimates in Appendix D (formerly Appendix F in the DEIS), recognizing that illegal killing will likely continue to occur and possibly increase as the wolf population increases in size. Nonessential experimental populations are treated as threatened for purposes of section 9 of the ESA, and thus all illegal killings will be subject to law enforcement investigation. In addition, the threat of illegal killing of the Mexican wolf is addressed in our final rule to reclassify the Mexican wolf as an endangered subspecies.

**Resolution:** No further action.

**Comment:** The Service has failed to analyze and quantify the proposal's impact on future oil and natural gas development and associated economic benefits in the affected area and undermined the effects on other species in the experimental population area that will occur due to Mexican wolf release and occupation.

**Our response:** The majority of oil and natural gas production in New Mexico is located either outside the project study area (i.e., in the San Juan Basin of northwestern New Mexico) or in areas of the Permian Basin of eastern New Mexico that have no suitable habitat within proposed management Zone 3. Because proposed Management Zone 3 has only a small amount of suitable wolf habitat, we expect few, if any, Mexican wolves will occupy it. Should Mexican wolves disperse into this zone, we would more actively manage them under the authorities of the proposed rule to reduce conflict with humans due to depredation or nuisance behavior. Therefore, no significant impacts to land use or economic activity in Zone 3 are expected. Additionally, consultation under Section 7 of the Act is not required except on National Park and National Wildlife Refuge lands, and critical habitat cannot be designated for nonessential experimental populations designated under Section 10(j) of the ESA. Accordingly, a new final 10(j) rule would not impose regulatory restrictions on current or future land use on federal or non-federal land. Scoping for an EIS is used to identify resource areas on which there might be reasonably foreseeable significant adverse impacts from implementation of the proposed action and alternatives. Section 3.5 of the draft EIS addresses those economic components that we consider to be potentially affected by the proposed action and alternatives. For these reasons we do not include oil and natural gas development in the analysis because there is no reasonably foreseeable adverse impact to this economic sector from implementation of the proposed action and alternatives.

**Resolution:** No further action.

**Comment:** The DEIS provides in Chapter 4, page 82 a list of plans, policies, and ordinances that were submitted to the Service and reviewed in the development of the DEIS. Why did the Service only consider policies, plans, and ordinances that were submitted to them? Do other state, county, or local government entities have policies, plans, or ordinances that should be considered?

**Our response:** All of the counties within the project study area were included in the list of 87 federal and state agencies, counties and tribes that we invited to participate in the development of the EIS as cooperating agencies. Ultimately 14 counties and the Eastern Arizona Organization of Counties entered into agreements to act as cooperating agencies. However, all counties, soil and water conservation districts and natural resource conservation districts within the project study area were included in periodic communications with stakeholders on the status of the development of the EIS. We requested assistance from, and relied on the expertise of the cooperating agencies and engaged stakeholder governments in gathering applicable policies, land use plans and ordinances for inclusion in the analysis.

**Resolution:** We have revised subsection 4.8.2 of the final EIS to review for consistency additional plans, policies, and ordinances provided to the Service as part of the commenting process on the draft EIS.

**Comment:** The proposed rule and DEIS are out of compliance with multiple Presidential Executive Orders, including 12898, 13132, and 13563.

**Our response:** We prepared this EIS in compliance with, and including but not necessarily limited to, the Federal acts and executive orders listed in subsection 4.8.1 of the draft EIS. In compliance with Executive Order 12989, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629) we identify and address in sections 3.7 and 4.6 of the draft EIS the potential for disproportionately high and adverse human health or environmental effects of our proposed action and alternatives on minority populations and low-income populations. Executive Order 13563, Improving Regulation and Regulatory Review (76 FR 3821) requires federal agencies to develop plans to conduct a retrospective review of their existing rules and to provide the public with a timely opportunity to comment on proposed and final rules, and to make electronic rulemaking dockets, including the scientific and technical findings relevant to a proposed or final rule, available and searchable online. Our review of our 1998 Final Rule, our proposal to revise this rule, which forms the basis for the proposed action of this EIS, and our proposed rulemaking process which has included extensive opportunity for the public to review and comment is in compliance with E.O. 13563. Executive Order 13132, Federalism (64 FR 43255), concerns the federalism implications of agency actions. Our proposed rule provides an analysis of the federalism implications of the action we have proposed, as will our final rule.

**Resolution:** No further action.

**Comment:** The DEIS must, but does not, discuss inconsistencies of the proposed action with any approved local plan. Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan. See 40 C.F.R. 1502.2(d). Chapter 4 at 82-83 of the DEIS indicates that the Service considered a number of local government land use plans. The Service asserts that, under the Constitution, it cannot be made to submit its proposed action to a local government before implementation or be made to adhere to local government requirements. However, the NEPA regulations simply require that FWS discuss inconsistencies and state the extent to which it would reconcile inconsistencies. FWS makes no attempt to do that.

**Our response:** In subsection 4.8.2 of the draft EIS we state that state and local government directives and resolutions that require federal agencies to submit management plans for review by state or local agencies before implementation, require federal agencies comply with the provisions of county land use policies, ordinances, plans, resolutions and/or procedures or place restrictions on, or assert local government authority over, Service actions taken in accordance with the ESA are inconsistent with federal law and Article 6 of the U.S. Constitution which establishes federal law as the highest form of law in the United States legal system. Therefore, the Service cannot reconcile the proposed action of this EIS with sections of local government policy statements, county and conservation district land use plans and ordinances that clearly contravene the nonessential experimental rule.

**Resolution:** No further action.

**Comment:** The Service fails to analyze the impact of the 10(a)(1)(A) permit in the DEIS. The permit is a significant part of the Proposed Revision from which impacts will flow, and therefore analysis of this permit is required under NEPA.

**Our response:** We concur that this is a necessary component of our analysis.

**Resolution:** We have included discussion of the impact of the 10(a)(1)(A) permit in section 4.3 of the EIS.