Response to Comment N-3-1

The U.S. Fish and Wildlife Service (Service) acknowledges the receipt of the comments provided by the Center for Biological Diversity, other nongovernment organizations, and condor researchers on the Draft Environmental Impact Statement (EIS). All substantive comments provided on the Draft EIS were responded to in Volume II of the Supplemental Draft EIS. These letters include but are not limited to Comment Letters O-2, O-3, and O-4 (Center for Biological Diversity); Comment Letter O-5 (Defenders of Wildlife); and Comment Letter I-293 (Clendenen et al.). The following sections respond to additional substantive comments on the Supplemental Draft EIS provided in the Center for Biological Diversity's letter of May 3, 2012, referenced in this document as Comment Letter N-3.

Response to Comment N-3-2

As noted by the commenter, the designation of critical habitat does not preclude development or other lawful uses of critical habitat lands. Please refer to Master Response 2, California Condor Critical Habitat, for a discussion of how effects on condor critical habitat are considered in the EIS and the evaluation the Service will provide in their intra-Service Biological Opinion prepared in accordance with Section 7 of the Federal Endangered Species Act (ESA).

Response to Comment N-3-3

Please refer to Master Response 2, California Condor Critical Habitat, for a discussion of how effects associated with urban and suburban development are considered in the EIS and how they will be evaluated in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comments N-3-4 and N-3-5

Please refer to Master Response 2, California Condor Critical Habitat, for a discussion of the Service's application of "destruction or adverse modification" of critical habitat under ESA Section 7.

Response to Comment N-3-6

The concern that all projects allowed in designated critical habitat would, by definition, impair the overall capability of critical habitat to perform its conservation function is misplaced. The effects of past Federal actions on critical habitat are fully considered during consultation under Section 7 of the ESA. Those effects are taken into account as part of the environmental baseline for any future Section 7 consultations within or affecting designated critical habitat. Any future Federal action likely to affect critical habitat would be evaluated in light of the baseline condition of the critical habitat. This analytical approach precludes the "death-by-a-thousand-cuts" phenomenon suggested by the commenter because the Service takes into account the current status of critical habitat in determining whether the new Federal action is likely to result in the destruction or adverse

modification of critical habitat. Please refer to Master Response 2, California Condor Critical Habitat, for a more detailed discussion of how effects on California condor critical habitat are considered in this EIS and how they will be evaluated in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comment N-3-7

The commenter asserts that effects on critical habitat as a result of the proposed action would "effectively and improperly de-designate this specific critical habitat" because it would destroy a specific area of critical habitat. This assertion is incorrect. As explained in Master Response 2, California Condor Critical Habitat, and recognized by the Ninth Circuit Court of Appeals in *Butte Environmental Council v. U.S. Army Corps of Engineers,* 620 F.3d 936, 948 (9th Cir. 2010), the removal of a portion of critical habitat does not automatically equate to "destruction or adverse modification of critical habitat" under Section 7 of the ESA. Rather, the Service must conduct a project-specific analysis of the impacts of the proposed action, i.e., the issuance of an incidental take permit (ITP) to Tejon Ranchcorp (TRC) supported by the Tehachapi Uplands Multiple Species Habitat Conservation Plan (TU MSHCP), to determine whether the removal of a portion of designated critical habitat would appreciably diminish the overall capability of designated critical habitat to serve its intended conservation role and function. The Service is not aware of any proposal to alter the final, official critical habitat designation for California condor (41 *Federal Register* [FR] 41914, September 24, 1976), and is not considering such a change. As described in Master Response 2, California Condor Critical Habitat, the Service will make a statutory determination on the effects of the proposed action on California condor and its critical habitat in an intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comment N-3-8

Comment noted. Please refer to Master Response 2, California Condor Critical Habitat, for a response to this comment.

Response to Comment N-3-9

The commenter is correct in stating that the Tejon Critical Habitat Unit encompasses 134,871 acres of which 95,068 acres are in the Covered Lands and 19,091 acres are in the TMV Planning Area. As stated in both the Supplemental Draft EIS and TU MSHCP, approximately 13,718 acres (16%) of condor modeled foraging habitat in the Tejon Ranch Critical Habitat Unit occurs in the TMV Planning Area. The TU MSHCP would result in direct *and* indirect[1] effects on a total of 14,837 acres of critical habitat in the TMV Planning Area[2].

As the commenter noted, the 96% figure representing the amount of critical habitat being preserved in the Tejon Ranch Critical Habitat Unit was contained in the earlier draft version of the TU MSHCP.

[1] The Service determined that all modeled habitat within 0.5 mile of the TMV Planning Area and Oso Canyon Development Envelopes would be indirectly affected (i.e., would not consistently provide feeding opportunities for condors due to construction, ongoing human use, visual and noise-related disturbances, etc.).

[2] For the purposes of the EIS analysis, the entire TMV Planning Area was assumed to be directly and indirectly affected by proposed Commercial and Residential Development Activities, although the actual area of effect is expected to be less given that the disturbance area in the TMV Planning Area would be limited to a total of 5,533 acres.

The revised habitat model provided in the Supplemental Draft EIS indicates that a larger acreage of critical habitat (14,837 acres, representing 11% of the Tejon Ranch Critical Habitat Unit) would potentially be directly or indirectly affected by proposed development in the TMV Planning Area. This revised acreage is the acreage considered in the Service's current assessment of potential effects on California condor and its habitat and replaces prior figures provided in older versions of the EIS or TU MSHCP.

Response to Comment N-3-10

Please refer to Master Response 3, California Condor Foraging Habitat, for a discussion of the vegetation communities included in the California condor foraging habitat model, as well as a discussion of the relationship between suitable foraging habitat and critical habitat considered in this EIS.

Response to Comments N-3-11 and N-3-12

Under NEPA, a Federal agency is required to identify a *preferred alternative* that reflects the alternative it believes will best fulfill the purpose and need of the proposed action. This determination should give consideration to the statutory mission and responsibilities of the Federal agency, and consider relevant economic, environmental, technical, and social factors. From a process perspective, the preferred alternative may or may not be different than the *environmentally preferable alternative*, which NEPA defines as the alternative that best promotes NEPA's goals, results in the least damage to the environment, and best protects natural and cultural resources.

The Proposed TU MSHCP Alternative is identified as the Service's preferred alternative in the Supplemental Draft EIS. Since 1999, the Service has provided technical assistance to TRC regarding the development of an HCP for California condor. The Proposed TU MSHCP Alternative has been informed both by the technical assistance provided by the Service, and by input provided by the public during the NEPA process (i.e., during the 2004 public scoping period on the original California Condor HCP and during the 2009 public comment period on the Draft EIS). Each of the different iterations of the TU MSHCP—including the 2004 California Condor HCP, the 2009 TU MSHCP, and the 2011 Revised Draft TU MSHCP—represents a different alternative considered by the Service in developing the EIS, and in identifying the preferred alternative to the proposed action. The Service acknowledges the commenter's request that the No Action Alternative or the CCH Avoidance MSHCP Alternative be selected in lieu of the Proposed TU MSHCP Alternative. Consistent with Council on Environmental Quality (CEQ) guidance, Section 40 CFG 1505.2(b), a final determination will be made in the record of decision (ROD) for the EIS and the Service's ESA Section 10 findings.

Response to Comments N-3-13 and N-3-14

The commenter is correct in noting that the TU MSHCP would allow for construction of two new emergency communication towers (PA-2 and DF-1) in the TMV Planning Area. Since publication of the Supplemental Draft EIS, TRC has determined that the proposed location of the PA-2 tower can be moved 400 feet southeast and 12 feet downslope, adjacent to a stand of oak trees, to minimize the potential for condors to collide with the structure. This location, which is depicted in revised Figure 4.1-2 provided in Chapter 2, Supplemental Draft EIS Errata, of this Final EIS, is consistent with the location proposed by the Service in the Supplemental Draft EIS to reduce the potential for adverse effects on condors.

To achieve adequate radio coverage in this new location, the antennae would need to extend to 78 feet in height (versus 68 feet described in the Supplemental Draft EIS) (Motorola 2012). In addition, tower DF-1 would need to be moved 180 feet northeast and its antenna extended to 70 feet in height (versus 65 feet described in the Supplemental Draft EIS) to provide adequate communication coverage. The Service has reviewed and approved the final locations and heights of both towers. Additionally, in response to comments, the Service has augmented the design conservation measures in the TU MSHCP so that, in addition to requiring that the towers be self-supporting and incorporate Service-approved anti-perching devices, the towers must also be designed so that the facades are primarily solid to improve visibility. Construction drawings and materials need not be finalized at this time, because the final engineering of the towers must adhere to these key design parameters (e.g., no guy wires, anti-perching devices installed, and structure built primarily of solid surfaces). Changes to the location, height, and design of these emergency communication towers are reflected in Chapter 2, Supplemental Draft EIS Errata, of this Final EIS.

Of note, the TU MSCHP also includes adaptive management measures in the event that condors land on artificial structures on the Covered Lands, such as communication towers. Under those circumstances, TRC would work with the Service to assess and implement options to reduce the potential for condors to perch on structures. Options could include revisions to the guidelines regarding location of antennas and towers, as set forth in the TU MSHCP, Section 4.6, Adaptive Management, and implementing Condor Recovery Program recommendations to reduce or eliminate collision risk factors at problem towers (including, but not limited to, potentially redesigning or, if redesign is not effective, relocating problem towers).

Response to Comments N-3-15

As provided in the Response to Comments N-3-13 and N-3-14, the TU MSHCP provides for two emergency communication towers that would be approximately 70 to 78 feet in height, including antennae. These towers are required to be self-supporting (i.e., not supported by guy wires), must include Service-approved anti-perching devices on all landing surfaces, and must be constructed primarily of solid materials to improve visibility. Although not anticipated, any further proposed changes to the design, height, or location of these towers would be subject to review and approval by the Service. If such proposed changes were to result in significant impacts on the condor, potential take of a condor, or other significant effects on the environment, additional NEPA analysis and a permit amendment would be required, which would require additional public review of the proposed action.

Response to Comments N-3-16 and N-3-17

Neither the Supplemental Draft EIS nor the TU MSHCP provide for more than the two communication towers in the TMV Specific Plan Development Envelope. Rather, both documents state that the proposed placement of any future communication towers to meet public safety requirements in the Covered Lands would be subject to review and approval by the Service. Inherent to that process, the Service would have the authority to ensure that the design and location of additional proposed towers are consistent with the TU MSHCP, ESA, and any applicable recorded conservation easement restriction on the Covered Lands *prior* to approving their construction, if construction is approved at all. Further, if the proposed placement of a new tower were to result in potentially significant impacts on the condor, potential take of a condor, or other significant impacts on the environment, additional NEPA analysis and a permit amendment would be required, which would require additional public review of the proposed action.

TRC does not anticipate the need for additional communication towers at this time. However, the Service requested that the above language be included in the TU MSHCP to emphasize that Service review and approval of any additional tower, including its location and design, would be required before the tower could be constructed. These modifications are reflected in Chapter 2, Supplemental Draft EIS Errata, of this Final EIS.

Response to Comment N-3-18

Contrary to the commenter's assertion, direct collisions with stationary transmission or communication towers have not been documented in historical condor populations, or with condors reintroduced into the wild (see Section 4.1.3.2 in the Supplemental Draft EIS). However, as indicated by the commenter, condors have been affected by collisions with power lines and high-voltage transmission lines, and any new above-ground transmission lines, transmission and communication towers, or similar vertical structures installed as a result of development would increase the potential for collision. This is particularly a threat if such towers and lines are located on or near prominent ridgelines or slopes used by condors.

All new power lines would be underground and TRC would remove some existing overhead power lines in the TMV Planning Area Development Envelope in association with the TMV Project, which would reduce the potential for condors to collide with power lines. Further, the design of the two emergency communication towers that would be located in the TMV Planning Area (see Response to Comment sN-3-13 and N-3-14) include features to minimize the potential for condors to collide with those towers or associated infrastructure. Although these towers would be located close to ridgelines to allow for effective emergency communications, since publication of the Supplemental Draft EIS, TRC has determined that they can be relocated downslope, further from the ridgeline, consistent with the Service's recommendations reflected in the Supplemental Draft EIS. In addition, both towers would be required to be free-standing (no guy wires), would include Service-approved anti-perching devices, and would be designed primarily of solid materials to increase visibility. In addition, there would not be any power or transmission lines associated with the communication towers.

As described in Master Response 2, California Condor Critical Habitat, the Service will make a statutory determination on the effects of the proposed Federal action, including the placement of communication towers, on the California condor and its critical habitat in an intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comment N-3-19

An HCP does not have a statutory requirement to set goals and objectives at landscape, regional, natural community, and ecosystem levels. The HCP Handbook Addendum or Five-Point Policy adopted jointly by the Service and NMFS in 2000 states, "the biological goals and objectives of an HCP are commensurate with the specific impacts and duration of the applicant's proposed action." Section 7 of the TU MSHCP provides conservation goals and objectives (including habitat protection and management) in the context of the Covered Species (e.g., acres of modeled habitat, documented occurrences). For some species, the conservation goals and objectives for modeled habitat provide for landscape, regional, natural community, and ecosystem levels of protection through the establishment of large areas of open space. For example, for golden eagle, 107,120 acres of modeled primary breeding, breeding/foraging, and foraging habitat would be conserved in Open Space, or 93% of the modeled habitat in the Covered Lands. Similarly, 90,735 acres of modeled habitat for ringtail (91% of modeled habitat in the Covered Lands) and 81,015 acres of modeled habitat for

purple martin (93% of modeled habitat in the Covered Lands) would be conserved in Open Space. Because these habitats occur at such a broad scale, their protection and management would necessarily provide protection and management at the landscape, regional, natural community, and ecosystem levels.

The large scale and high certainty of habitat protection also makes specific goals and objectives at the landscape, regional, natural community, and ecosystem levels somewhat redundant and unnecessary. Typically, goals and objectives at these broader scales are important if there is some uncertainty about where, when, and how much conservation would occur, particularly if there are rare or unique communities in a plan area (e.g., some rare plant community or vernal pools). These concerns do not apply to the proposed TU MSHCP, which specifies an absolute minimum amount, location, and timeline for habitat conservation. Under the worst-case impact scenario (i.e., assuming the entire TMV Specific Plan Development Envelope were affected), 129,318 acres (91%) of the Covered Lands would be conserved in Open Space (Table 2-5 in the Supplemental Draft EIS). The lowest conservation percentage for a vegetation community in the Covered Lands under the TU MSHCP would be about 90% of grasslands, which excludes grassland that would be preserved in Open Space in the TMV Specific Plan Development Envelope (Table 4.1-2 in the Supplemental Draft EIS). For Covered Species, the lowest conservation percentage would be 42% of modeled wintering habitat for bald eagle; for the remaining 25 Other Covered Species, the conservation percentages would range from 69% of modeled breeding habitat for tricolored blackbird to 99% of modeled habitat for several Covered Species (Table 4.1-3 in the Supplemental Draft EIS). The conservation strategy includes a "hardline" boundary for the Established Open Space, TMV Planning Area Open Space, and the Existing Conservation Easement Areas, so the vast majority of conservation areas are already established. Additional Open Space (i.e., approximately 3,300 acres in the TMV Specific Plan Development Envelope) would be identified when the final development plan is proposed. Therefore, other than stating the actual proposed conservation levels (i.e., acreage retained in Open Space), there is no need to state specific goals and objectives for conservation of natural communities or habitats (as might occur where a reserve system is assembled over time based on specific objectives and criteria in a programmatic HCP). The current large-scale conservation approach subsumes all of proposed conservation levels, so separate goals would be superfluous.

With regard to adaptive management goals and objectives and how they relate to the landscape, regional, natural community, and ecosystem levels, the TU MSHCP states on page 7-104 that:

> The overriding management goal of this TU MSHCP is to establish and maintain a self-sustaining conservation area that focuses on achieving the measurable goals and objectives identified for the Covered Species in Sections 4 and 7 of this TU MSHCP. Ecosystems are dynamic environments of interacting processes and biotic and abiotic components, and ecological processes are not linear. They may function at different spatial and temporal scales. Consequently, adaptive management of ecosystems, landscapes, and associated species requires a flexible, inductive approach where ecological theory and field experimentation are combined to monitor the status of the system and respond to the unexpected. The adaptive management plan for this TU MSHCP encourages such a "learning by doing" approach.

The approximately 140,000 acres of TU MSHCP Covered Lands comprise the biologically distinct Tehachapi Uplands landscape. This portion of Tejon Ranch supports highly diverse natural physical features, including uplands ranging from approximately 2,000 feet to approximately 7,000 feet, complex topography with numerous ridgelines and valleys, varied geology and soils, and different microclimates and microhabitats, which together have resulted in a large richness and diversity of plant and animals species. The Tehachapi Uplands landscape is biologically distinct from the surrounding landscapes of the San Joaquin Valley and Antelope Valley floors to the north and south, the southern Sierra Nevada to the northeast, and the Coastal and Transverse Ranges to the west and south. The Tehachapi Uplands area therefore represents a distinct physiography with a distinct suite of species characteristic of the Tehachapi Uplands landscape. For these reasons, the Covered Lands

comprise a natural landscape-level planning area, as recognized during establishment of the Covered Lands boundary (TU MSHCP Section 1.3, Permit Boundary and Covered Lands).

The vast majority of the Covered Lands would remain in Open Space (91%) and would be part of the 240,000-acre ranchwide open space system conserved through the Ranchwide Agreement, which includes the other lower-elevation, biologically distinct landscapes. The main focus of the management program would be to continue the historical practices that maintain high habitat quality in the Tehachapi Uplands landscape, document and likely improve management of the species habitat through additional measures required for grazing (e.g., fencing of riparian areas in accordance with the Grazing Management Plan), and avoid and minimize threats to Covered Species that may result from increased human presence in or immediately adjacent to conserved Open Space. The management measures, conducted under the TU MSHCP, including invasive species management and grazing management consistent with the goals and objectives, would be coordinated with the RWMP for the larger open space system, as appropriate. The RWMP will be subject to review and approval by the Service to ensure that it is consistent with the ESA, the ITP, and the Implementing Agreement.

Response to Comment N-3-20

The vegetation map used for the conservation analysis in the TU MSHCP is based on the best available data for the Covered Lands. Generation of the vegetation map is described in Section 3.1.3.1, Mapping Methods, in Volume I of the Supplemental Draft EIS and Appendix D of the TU MSHCP. The vegetation map is an amalgamation of the Tejon ranchwide vegetation composite data layer, which primarily reflects the more general classification system outlined in the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), and which preceded the classification scheme outlined in the List of California Terrestrial Natural Communities (California Department of Fish and Game 2003) that was used for the TMV Planning Area during site-specific studies in 2007. Because the two vegetation data layers used different classification systems and because the mapping was more detailed for the TMV Planning Area (i.e., project-level mapping at the alliance and association levels), a "crosswalk" was needed to create a comprehensive vegetation layer for the entire Covered Lands. This crosswalk is described in Appendix D of the TU MSHCP.

The TU MSHCP does not include a vegetation map showing the finest scale of vegetation data used in the conservation analysis for practical reasons. The crosswalk between the Tejon ranchwide vegetation composite map and the TMV Planning Area vegetation map resulted in 49 different vegetation types, including 9 different types of savannah and 11 different types of woodland vegetation communities (Table 4.1-2 in the Supplemental Draft EIS). At the scale of the maps presented in the Supplemental Draft EIS and TU MSHCP, a vegetation map with this many specific types of vegetation would have been unreadable. Therefore, the specific vegetation types were collapsed into the more general habitat types (e.g., scrub chaparral, woodland) for the purpose of visual presentation (Figure 3.1-2 in the Supplemental Draft EIS and Figure 5-1 in the TU MSHCP). Further, the focus of the conservation analysis was on impacts and conservation of modeled habitat for the Covered Species, for which separate maps are provided for each of the Covered Species (Figures 3.1-8 through 3.1-34 in the Supplemental Draft EIS). The species habitat models used the specific vegetation data, which are highly detailed. For example, the habitat model for purple martin used five types of conifers, two types of riparian woodland, nine types of savannah, and 11 types of woodland vegetation communities, as listed in the model vegetation input parameters on page D-30 of Appendix D to the TU MSHCP.

In addition, development in the TMV Planning Area Development Envelope accounts for approximately 89% of the effects on vegetation communities considered in the Supplemental Draft

EIS and TU MSHCP, or 7,860 acres of the total 8,817 acres in that area (Table 2-1, Generalized TU MSHCP Land Use Summary, in the TU MSHCP). As noted above, vegetation in the TMV Planning Area was mapped for the most part at the alliance and association levels per CDFG (2003), and the TMV Specific Plan EIR analyzed impacts at these levels. Therefore, the large majority of natural community impacts under the TU MSHCP have been analyzed at the alliance and association levels.

Response to Comment N-3-21

As discussed in the Response to Comment N-3-19, the Service's Five-Point Policy requires that the biological goals and objectives in an HCP be commensurate with the specific impacts and duration of the applicant's proposed action. As described in the TU MSHCP, the major strategy of the TU MSHCP is to conserve and protect Covered Species populations in the Covered Lands through the preservation of modeled habitat in open space. Given the scope of the proposed action and the conservation approach provided in the TU MSHCP, for the reasons provided in Response to Comment N-3-19, the goals and objectives identified in the TU MSHCP appropriately focus on conservation and protection of Covered Species, avoidance and minimization measures, monitoring and, to the extent practicable, management. Note that the Five-Point Policy does not prescribe the details of the objectives, such as what biological or ecological variables should be measured (e.g., a population estimate, population growth rate, age structure).

Response to Comment N-3-22 and N-3-23

An HCP does not have a statutory requirement to consider species recovery goals and/or plans, or attempt to achieve or promote these goals. However, the Service's Five-Point Policy does require the listing of biological goals and objectives, the purpose of which is "to ensure that the operating conservation program in each habitat conservation plan is consistent with the conservation and recovery goals established for the species." Further, the HCP Handbook states that "applicants should be encouraged to develop HCPs that produce a net positive effect for the species or contribute to recovery plan objectives" (p. 3-20 of HCP Handbook).

With this in mind, four of the Covered Species included in the TU MSHCP have recovery plans: California condor, least Bell's vireo, southwestern willow flycatcher, and valley elderberry longhorn beetle.

With respect to California condor, in general, the purpose of the California Condor Recovery Program is, through captive breeding and reintroduction back into the wild, to establish at least two non-captive, self-sustaining breeding populations within the historical range of the species. Specific objectives to obtain this goal include minimizing mortality factors for the species, managing suitable foraging habitat for use by the recovering condor population, and implementing California condor information and education programs to the public. The TU MSHCP goals for the condor (listed in Section 4.3 of the TU MSHCP and summarized in Table 2-3 in the Supplemental Draft EIS) would promote conservation and recovery of the condor in the wild by maintaining and enforcing a permanent ban on lead ammunition on Tejon Ranch, banning the development of wind farms on the ranch, committing to maintaining a negative easement right prohibiting wind farms on Gorman Ranch, maintaining and promoting condor use of the Ranch through preservation of foraging and traditional roosting habitat in the TU MSHCP Mitigation Lands, and maintaining existing grazing and hunting practices that support condor use of the ranch over the term of the permit. In addition, the TU MSHCP provides for establishment and management by the Service of a trap and release site in the Condor Study Area to support recovery efforts, if deemed necessary by the Service. The TU MSHCP also includes a number of measures to aid in the conservation and recovery of condors, such

as provisions to provide funding to install GPS transmitters on condors not carrying such transmitters, as well as conservation measures aimed at public outreach, such as development and implementation of condor educational materials for residents, staff, visitors, and workers associated with development on Tejon Ranch. For these reasons, the Service considers the conservation measures provided in the TU MSHCP to be consistent with and supportive of the goals and objectives provided in the California Condor Recovery Plan.

Regarding least Bell's vireo, southwestern willow flycatcher, and valley elderberry longhorn beetle, the TU MSHCP Covered Lands and immediate vicinity are not identified in the recovery plans for the least Bell's vireo (U.S. Fish and Wildlife Service 1998), southwestern willow flycatcher (U.S. Fish and Wildlife Service 2002), or valley elderberry longhorn beetle (U.S. Fish and Wildlife Service 1984), so there are no site-specific recovery objectives or actions for these species specifically relevant to TU MSHCP. However, the conservation measures provided in the TU MSHCP, including the preservation of large, interconnected blocks of habitat in open space, generally support the recovery plan goals and objectives for these species. For example, the recovery actions for both the least Bell's vireo and southwestern willow flycatcher include control of nonnative species, which would be addressed in the TU MSHCP through grazing management and invasive species control measures identified in the species goals and objectives. A recovery action for southwestern willow flycatcher is to manage livestock grazing to restore desired processes and increase habitat quality and quantity. Grazing management measures in the TU MSHCP provide for light to moderate grazing levels that would control exotic grasses and prevent overgrazing in southwestern willow flycatcher suitable habitat. Grazing management under the TU MSHCP may also include exclusion fencing in riparian areas. Although grazing management is not identified as a specific recovery action for least Bell's vireo in its recovery plan, these measures would protect and enhance riparian habitat values for this species. The TU MSHCP also requires that invasive plant and animal species be controlled in boundary areas adjacent to proposed development, such as management of Argentine ants that may prey on vireo and willow flycatcher nestlings (see the Response to Comment N-3-33 for details on measures to control Argentine ants). In addition, the TU MSHCP provides for an integrated pest management plan (IPMP) that would include measures to control other invasive species such as bullfrogs (whose prey are small birds and other animals), and would restrict the use of insecticides or herbicides which may have direct or indirect deleterious effects on the vireo and willow flycatcher and/or their prey. Of note, the Service would be provided an opportunity to review and comment on the IPMP under the TU MSHCP, but the use of insecticides or herbicides is not proposed for take coverage under the TU MSHCP.

Response to Comment N-3-24

The commenter is incorrect in asserting the habitat models must incorporate climate change scenarios to accurately evaluate impacts on Covered Species. The approach used for habitat modeling in the TU MSHCP is a standard, well-accepted method used in large-scale habitat conservation planning in California that has met the data standards for federally approved HCPs, such as the San Diego County Multiple Species Habitat Conservation Program (San Diego County 1997), Western Riverside County Multiple Species Conservation Plan (Riverside County 2007), Orange County Southern Subregional Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (Orange County 2006), and the Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (Coachella Valley Association of Governments 2007) (see Master Response 5, Habitat Suitability Model, in Volume II of the Supplemental Draft EIS for a more detailed discussion of the habitat models used in the TU MSHCP and EIS).

Moreover, the exact relationship between climate change and biological resources is not well understood. Although some studies, including the example provided by the commenter, have attempted to determine species' responses to climate change under a given emission and climate response scenario, there are multiple emission scenarios and various scale-dependent climate responses for each scenario. The Service does not expect that introducing the uncertainty of climate predictions, including potential species and habitat reactions to climate change, into a model for a specific species on the scale of the TU MSHCP would provide clarity and better inform the analysis of effects.

Regardless, the Service agrees that climate change should be considered, including effects on species' habitat. To that end, the Supplemental Draft EIS includes substantial information regarding the potential for climate change to affect Covered Species, to the extent it is understood, and how the various alternatives would respond to the potential for climate change to affect Covered Species. Section 4.9, Climate Change and Greenhouse Gasses, in Volume I of the Supplemental Draft EIS, analyzes the effects of climate change for each alternative, including potential effects on Covered Species, and explains how each alternative would respond to threats posed by climate change, concluding that the Proposed TU MSHCP Alternative would best satisfy the management prescriptions identified by Halpin (1997) to respond to climate change. Appendix C to the Supplemental Draft EIS includes a detailed analysis of the relative vulnerability of each Covered Species to the effects of climate change, which is based on methodology introduced by the U.S. Environmental Protection Agency (EPA) in *A Framework for Categorizing the Relative Vulnerability of Threatened and Endangered Species to Climate Change* (Environmental Protection Agency 2009). In addition, Master Response 13, Climate Change, responds to all comments regarding climate change made on the Draft EIS, including many by the commenter about the adequacy of the EIS's discussion of the effects of climate change on the Covered Species, and how these effects might interact with effects from the proposed action.

The Supplemental Draft EIS also specifically recognizes the effects that climate change would have on species movement. For example, Appendix C to the Supplemental Draft EIS describes several anticipated effects of climate change in California, including the extension of species' ranges poleward or upward in elevation, and other shifts in species' ranges. Section 4.9 of the Supplemental Draft EIS also describes how climate change is expected to affect the movement patterns of various species, as well as the distribution of vegetation communities. For example, Section 4.9.3.2 explains that the oak community is expected to shift its range northward and generally decline in California in the future, although the blue oak woodland community may expand into the Tehachapi Mountains. Moreover, Appendix C to the Supplemental Draft EIS describes how climate change is affecting species' movement at both a general, taxonomic level and at an individual level regarding each Covered Species.

The Service expects that climate change effects on biological resources would occur with or without implementation of the proposed action. Under the TU MSHCP, more than 129,000 acres of the Covered Lands would be preserved, thereby protecting the vast majority of habitat expected to be affected by climate change. Preserving large blocks of habitat in the Covered Lands would secure space to accommodate shifts in a Covered Species' range in response to climate change. In addition, the TU MSHCP provides flexible buffers and landscape connectivity in the Covered Lands; design features to reduce the effects of stressors on the Covered Species and their habitat, thereby counteracting stress from climate change; and provisions to allow a flexible response to climate change effects such as drought and wildfire. These measures would satisfy the management prescriptive for habitat maintenance in response to climate change identified in Halpin (1997).

Response to Comment N-3-25

The plant and wildlife species surveys of the TMV Planning Area were not intended to determine the exact usage patterns of the Covered Species on the Covered Lands; rather, these data were considered in developing the species-specific habitat models that largely informed development of the TU MSHCP conservation strategy and the effects analysis provided in the Supplemental Draft EIS. Please refer to Response to Comment N-3-27 for a more detailed discussion of the use of species-specific surveys in developing the habitat models.

As summarized in Table 2-4 of the Supplemental Draft EIS, the TU MSHCP includes provisions for completing preconstruction or preactivity species-specific surveys for all of the Covered Species prior to ground disturbing activities (with the exception of valley elderberry longhorn beetle, where construction in modeled habitat in riparian and wetland areas—the likely location of the beetle's host plant, the elderberry shrub—would be avoided to the extent practicable). The timely implementation of these species-specific surveys will be used to inform the necessary avoidance or minimization measures provided in the TU MSHCP to reduce effects on Covered Species.

The Service will consider these conservation measures and potential effects on modeled habitat when assessing the potential direct and indirect effects of the Covered Activities on the Covered Species in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comment N-3-26

Figure D.1-4, Special-Status Riparian Bird Surveys, in Appendix D1 of the TU MSHCP shows the four survey areas for willow flycatchers. As stated in Section 5.2.2.6.3 of the TU MSHCP, foraging observations of willow flycatchers were made in willow-dominated riparian areas adjacent to Castac Lake, near Cuddy Creek, in Beartrap Canyon, in Rising Canyon, and along Grapevine Creek. As shown in Figure D.1-4, Rising Canyon and Grapevine Creek were included as the same general survey area (the area shown in red in the figure). The 2007 surveys for willow flycatchers and least Bell's vireo were conducted in suitable riparian habitat in the TMV Planning Area and immediately adjacent areas, as identified by permitted biologists during field reconnaissance surveys, comprising approximately 87 acres. The 2007 surveys followed the southwestern willow flycatcher survey protocol in place at the time, as provided in Sogge et al. 1997. The willow flycatcher habitat model, which applies to the entire Covered Lands, was developed after the field surveys were conducted as an analytic tool for the TU MSHCP and EIS analyses (i.e., not to direct where surveys would be conducted). In the TMV Planning Area, the four areas surveyed in 2007 generally align with the modeled habitat, as can be seen by comparing the modeled habitat in Figure 5-13 of the TU MSHCP with the four survey areas shown in Figure D.1-4. The exception is two patches of riparian habitat east of Grapevine Peak and Ridge shown in Figure 5-13 that were not included in the 2007 survey areas. The riparian zones shown along the southeastern boundary of the Covered Lands in Figure 5-13 are outside of the TMV Planning Area and, therefore, were not surveyed in 2007.

The Beartrap Turnout Improvement Project study area was not a subset of the four areas surveyed in 2007. The surveys conducted in 2011 in the Beartrap Turnout Improvement Project study area followed the current survey protocol for southwestern willow flycatcher, as provided in Sogge et al. 2010, and approved by the Service.

It is important to understand that the species occurrence data considered in the TU MSHCP and Supplemental Draft EIS, including the protocol surveys for willow flycatcher, are not based on a single snapshot in time. For each of the Covered Species, both the EIS and TU MSHCP summarize and cite all available information from the various field studies conducted between 1999 and 2011. For

example, willow flycatchers were observed several times during surveys by Jones & Stokes biologists in 2005, Impact Sciences biologists in 2003, and Dudek biologists in 2007 and 2011.

Please refer to Response to Comment N-3-25 for a discussion of how survey data were considered in the effects analysis provided in the Supplemental Draft EIS.

Response to Comment N-3-27

The plant and wildlife species surveys conducted in support of the TU MSHCP are consistent with the approach used to complete other large-scale HCPs. For such plans, it is common for a permit applicant to retain a qualified biological consultant to conduct surveys on a representative portion of the lands that would be covered by an ITP to obtain species occurrence information. Typically, surveys are completed within the area that would be affected by the proposed action, as well as a representative area that would be conserved. Accordingly, TRC completed surveys of the 28,253-acre TMV Planning Area, which included areas that would be affected by development and areas of conserved open space. Requiring surveys on the additional 113,633 acres of the Covered Lands, of which all would be conserved as permanently protected open space, would impose an unreasonable burden beyond that of comparable conservation planning efforts.

In addition, typical presence/absence surveys, which also provide information for the likely distribution of a species on a site, are not adequate for estimating population sizes or densities. Despite the desirability of precise population size and density estimates for conducting take assessments, it is often not feasible to conduct the kinds of field studies required to produce precise estimate of impacts on individuals. This limitation applies to the species where impact numbers were stated in the TU MSHCP to be indeterminable, including Tehachapi slender salamander, yellow-blotched salamander, coast horned lizard, and two-striped garter snake. Another consideration is that surveys for certain species (e.g. salamanders) require invasive sample methods (e.g., disturbing refugia, excavations), and the impacts on the species need to be weighed against the benefits of the survey results.

The TU MSHCP includes species-specific conservation measures, including requirements for preconstruction surveys, capture and relocation of observed individuals to suitable habitat, and establishment of buffers around occupied sites, to minimize potential effects on Covered Species. These measures provide the flexibility to accommodate existing conditions at the time construction activities are initiated, and likely better inform the long-term management of the Covered Lands for the Covered Species than would baseline surveys conducted at a discrete point in time. The Service will consider these conservation measures, and potential effects on modeled habitat, when assessing the potential direct and indirect effects of the Covered Activities on the Covered Species in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA. Revised, species-specific conservation measures, provided primarily in response to comments on the Supplemental Draft EIS, are described in Chapter 2, Supplemental Draft EIS Errata, of this Final EIS and further discussed in Response to Comment N-3-35.

Response to Comment N-3-28

Please refer to Response to Comment N-3-27 for a discussion of the use of species-specific surveys in developing the TU MSHCP and informing the NEPA effects analysis. Please refer to Response to Comment N-3-41 for a discussion of potential effects on, and conservation of, round-leaved filaree on Covered Lands.

The number of plants in a population can vary greatly from year to year depending on a variety of biotic and abiotic factors. Therefore, knowing the exact number of individuals prior to the initial habitat disturbance does not necessarily facilitate better conservation than knowing the general location of a population.

The Service disagrees with the commenter's statement that the applicant's proposal to incorporate any new occurrences of round-leave filaree into open space protected areas is indicative of inadequate surveys. The TU MSHCP would be implemented over a period of years and over a large area; some populations of plants within the TMV Planning Area may not have expressed or may not have been observed during surveys. Incorporating future occurrences of rare species into a conservation plan is an appropriate way to account for uncertainty in a species' location and provide for conservation of an expanding species distribution.

After considering that round-leaved filaree was confirmed present in modeled habitat in the TMV Planning Area and that 91% of modeled habitat for the species would be conserved in Open Space, the implementation of the species-specific conservation measures summarized in Table 2-4 of the Supplemental Draft EIS, and the potential impacts on the species in Covered Lands, the Supplemental Draft EIS acknowledged that the Covered Activities would have a moderate effect on round-leaved filaree on Covered Lands, and a minor effect on the population rangewide. The Service will consider the conservation measures and potential effects on modeled habitat when assessing the effects of the Covered Activities on round-leaved filaree in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA.

Response to Comment N-3-29

The commenter appears to refer to the conservation commitments contained in the Ranchwide Agreement entered into between TRC and several major environmental organizations, and suggests that the Covered Lands have been inappropriately defined to take advantage of these commitments. The relationship between the Ranchwide Agreement and the Covered Lands is discussed in detail in Section 2.1.2.3 of the Supplemental Draft EIS. In summary, the Ranchwide Agreement covers the entirety of the ranch, whereas the Covered Lands, which generally constitute the Tehachapi Uplands portion of the ranch, encompass 141,886 acres and represent the area where activities associated with the alternatives considered in the Supplemental Draft EIS would occur. Thus, while the protections of the Ranchwide Agreement apply to the Covered Lands—and, indeed necessarily apply to any portion of land on the Ranch—the boundaries covered by the Ranchwide Agreement and the TU MSHCP are independent of one another.

Moreover, although entered into with private parties and broader than just the Covered Lands, the Ranchwide Agreement was developed in furtherance of the TU MSHCP. The habitat conservation planning process has spanned more than 10 years, during which time the boundaries and focus of the HCP have changed. Meanwhile, TRC has made more specific development plans. While still pursuing an HCP with the Service that would cover a portion of the ranch, TRC worked with Audubon California, the Endangered Habitats League, Natural Resources Defense Council, Planning and Conservation League, and Sierra Club (together, "Resource Groups"), as well as the newly formed nonprofit Tejon Ranch Conservancy, to establish a broad conservation agreement, the Ranchwide Agreement, that would provide for permanent protection, through a combination of dedicated conservation easements and designated open space areas, of up to approximately 90% of the 270,000-acre Tejon Ranch in exchange for certain development on the ranch, including the TMV Project (consistent with the development scenario included in the TU MSHCP) and the Centennial and Grapevine projects. The stated goals of the Ranchwide Agreement are consistent with the purpose and need of the proposed action, and the Ranchwide Agreement specifically contemplates the TU MSHCP. The Ranchwide Agreement's land conservation requirements form much of the basis

for the TU MSHCP Mitigation Lands, and the conservation provided under the Ranchwide Agreement is appropriately credited as mitigation under the TU MSHCP. Failing to credit this conservation as mitigation would discourage landowners from proactively entering into separate conservation agreements during the HCP development process.

The EIS does recognize that the Ranchwide Agreement is a private agreement that the Service is not a party to, and has no contractual standing under. While the Service considers the likelihood that the Ranchwide Agreement would be terminated remote, for purposes of comprehensive NEPA analysis, the Kern County General Plan Buildout Alternative does not assume continuation of the Ranchwide Agreement except for the permanent protection of the already-recorded conservation easements on the Existing Conservation Easement Areas.

Response to Comment N-3-30

Response to Comment N-3-25 summarizes how surveys of the TMV Planning Area completed in 2007 were considered in developing the habitat models for the Covered Species. Systematic surveys generally were not conducted on Covered Lands outside of the TMV Planning Area, which the Service acknowledges only encompasses a fraction (19%) of the Covered Lands. However, the surveys conducted in the TMV Planning Area do provide representative data for the Covered Lands. Section 3.1.7.1 in the Supplemental Draft EIS describes the appropriate use of the habitat models, and explains that because of the general nature of the data and model parameters, it was not possible to incorporate microhabitat features into the models that may be important for selection and patterns of habitat use for many of the Covered Species. Therefore, the Service considers the habitat models to be conservative and likely overestimate the amount of habitat actually occupied by a Covered Species. Therefore, the habitat models are considered a general analytic tool for completing the effects analysis provided in the Supplemental Draft EIS and the conservation analysis in the TU MSHCP.

This application of habitat-based models to conservation and effects analyses is an accepted method in the absence of detailed species-specific distribution and occupation information. In the discussion of the collection and synthesis of biological data, the HCP Handbook states that HCPs may be habitat-based whereby a particular species can be assumed to be present by the presence of its habitat type (p. 3-12). In particular, this approach can be used for HCPs that address a broader range of species where distributional information is limited, but the HCP planning area is large enough to ensure long-term viability of species populations. The HCP Handbook also states that if the habitat type is addressed in the HCP and included in the mitigation program, additional distribution studies may not be necessary.

The surveys conducted in the TMV Planning Area detected many of the Covered Species in the habitats used for the models. As part of the Tehachapi Uplands, the TMV Planning Area has landscape and physiographic features common with the remainder of the Covered Lands (e.g., an elevation range up to 5,400 feet and diverse topography). Also, the distribution of the different vegetation communities is similar between the TMV Planning Area and Covered Lands. For example, savannahs and woodlands make up about 61% of both areas, with grassland accounting for about 23% of the TMV Planning Area and 18% of the Covered Lands and shrubland (scrubs and chaparrals) accounting for about 15% of the TMV Planning Area and 16% of the Covered Lands. Reflecting the higher elevation areas of the Covered Lands, conifer forests are somewhat more common on the Covered Lands compared to the TMV Planning Area, at about 3% versus 1%. The similarities in vegetation communities not only reflect common physical conditions, but also the common historical grazing practices throughout the Covered Lands that have helped shape the habitat conditions. Given the common overall environmental characteristics (e.g., elevation range, topography, and vegetation communities) of the Covered Lands and the TMV Planning Area, the

Service believes that extrapolating modeled habitat to the remainder of the Covered Lands is an acceptable method for preparing the TU MSHCP.

Similar approaches using habitat-based methods for larger-scale conservation planning have been applied in southern and central California. For example, the conservation analysis for the Western Riverside Multiple Species Habitat Conservation Plan (Riverside County 2007) was based in large part on modeling suitable habitats for more than 150 species, as well as their known or likely occurrence in identified bioregions (e.g., Riverside Lowlands, San Jacinto Mountains), which are analogous in concept to the Tehachapi Uplands. Similarly, the conservation analysis for the Coachella Valley Multispecies Habitat Conservation Plan (Coachella Valley Association of Governments 2007) relied on species habitat models using parameters such as natural communities, elevation ranges, landform data, and soils data for conservation planning.

Response to Comment N-3-31

The Service disagrees with this comment. With the exception of round-leaved filaree, the TU MSHCP includes conservation measures for conserving all currently documented occurrences of Covered Species. Specifically, all currently documented occurrences of Tehachapi slender salamander, yellow-blotched salamander, golden eagle (active nest sites), coast horned lizard, two-striped garter snake, Fort Tejon woolly sunflower, Kusche's sandwort, striped adobe lily, and Tehachapi buckwheat in the Covered Lands would be either conserved in Open Space or otherwise protected (e.g., through establishment of buffers) under the TU MSHCP. In addition, all Tehachapi pocket mouse modeled habitat would be avoided, or all known locations (two occurrences located in the Oso Canyon area) would be subject to avoidance (as defined in consultation with the Service). The conservation measures in the TU MSHCP also include avoidance measures for Covered Species that have not been previously documented on Covered Lands or where site-specific critical resources have not been identified, including for western spadefoot, peregrine falcon (active nest sites), bald eagle (preferred diurnal perches and roosting areas), and breeding burrowing owls. Several other birds may nest on site, but nest sites have not been documented (and specific nest site locations would be expected to change over time in any case), including least Bell's vireo, purple martin, southwestern willow flycatcher, yellow warbler, and western yellow-billed cuckoo. Tricolored blackbirds have been observed to nest on site at Castac Lake, but nesting colonies are transient so avoidance measures provided in the TU MSHCP are flexible to accommodate existing conditions at the time construction activities are initiated. Preconstruction surveys would be conducted for these bird species during the breeding season, all active nests would be avoided, and appropriate setbacks established to avoid and minimize potential indirect effects.

With respect to round-leaved filaree, eight of the 11 known occurrences of this species in the Covered Lands would be directly affected by development activities. The conservation measures in the TU MSHCP provide that known or future detected populations of this species be conserved in one of two ways: 1) three of the 11 known occurrences, totaling approximately 220 to 420 individuals, would be conserved in TMV Planning Area Open Space; or 2) at least three occurrences would be conserved in TMV Planning Area Open Space, including two known occurrences, representing approximately 120 to 220 individuals, and any new occurrence(s)documented in the TMV Planning Area Open Space prior to development, such that the new occurrence(s) would total at least 100 individuals. In addition, 91% of modeled habitat would be conserved in Open Space, preconstruction surveys in suitable habitat within 150 feet of a disturbance zone would be completed, and known locations not affected by development activities would be marked with a protective barrier.

The commenter may also be suggesting that any new documented occurrences of Covered Species during preconstruction and other preactivity surveys (e.g., fuel management, grazing operations) be

avoided to prevent extirpation of a species on site. This general prescription is unnecessary. Several surveys have been conducted in the area subject to the vast majority of the direct permanent impacts (i.e., the TMV Specific Plan Area) and it is unlikely that discrete sites that are critical for maintaining a particular Covered Species would not have been detected or that modeled habitat would not include such sites. In addition, avoidance and minimization measures are required to be implemented for any species detected during preconstruction and other preactivity surveys, so even if occupied sites are not currently known (e.g., western spadefoot), impacts on these sites would be avoided and minimized to the extent practicable. As part of the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA, the Service will evaluate the impacts of the proposed action, including the loss of modeled habitat, which could support additional occurrences of the Covered Species within the TMV Planning Area, in determining whether the proposed action is likely to result in jeopardy to any Covered Species, and will not issue the permit if it is determined the TU MSHCP would appreciably reduce the likelihood of the survival and recovery of any of the Covered Species in the wild.

Finally, the purpose of Section 10 of the ESA is to provide a regulatory mechanism to permit the incidental take of federally listed fish and wildlife species by state, local, or other private parties during lawful activities, provided the impacts of such take are minimized and mitigated to the maximum extent practicable and such take will not jeopardize the listed species. If all impacts on Covered Species were avoided, an HCP and Section 10 ITP would not be needed. The fact that modeled habitat for the Covered Species would be permanently lost assumes that there could be some take of individuals of the Covered Species; all avoidance of Covered Species is not an element of the TU MSHCP.

Response to Comment N-3-32

The TU MSHCP acknowledges the threats rodenticides may pose for some of the Covered Species (Sections 5.2.2.3, 5.2.2.4, and 5.2.4.2 in the TU MSHCP) and requires that use of rodenticides be "avoided to the maximum extent practicable" (p. 7-91). This approach acknowledges the different needs and levels of threats in different areas (i.e., development areas versus open space) in the Covered Lands. To manage such threats from rodenticides, the TU MSHCP requires that an IPMP be developed that meets species-specific goals and objectives. For example, Objective 8.1 for Tehachapi pocket mouse states that to the extent rodenticides are needed, they must be stored in secure containers and stored in rodent proof facilities. This measure would also benefit other special-status species which prey on mice and rodents.

It should also be noted that the TMV EIR prohibits the use of anticoagulant rodenticides by, or at the direction of, property owners in the TMV Planning Area. TMV EIR Mitigation Measure 4.4-14 states, “Covenants, conditions, and restrictions that will be recorded to inform future property owners of applicable requirements shall include language that prohibits the use of anticoagulants (used for rodent control) at Tejon Mountain Village. The Property Owners’ Association, in coordination with the Project Biologist, shall also supply educational information to residents on compliance with federal and state laws governing the use of pesticide products.”

Notwithstanding the measures incorporated into the TU MSHCP, given the lack of adequate data and studies about the specific effects of rodenticides and herbicides on the Covered Species, the Service does not intend to include rodenticide or herbicide use as a Covered Activity if an ITP is issued to TRC; as such, the application of rodenticides and herbicides by TRC would not be insulated from liability for take of the Covered Species. Despite the lack of take coverage for use of rodenticides and herbicides, the Service would be provided an opportunity to review and comment on the IPMP.

Response to Comment N-3-33

The TU MSHCP requires that management controls to avoid and minimize the introduction of exotic species such as Argentine ant into the Covered Lands be incorporated into the IPMP, and would include (1) providing "dry zones" between development activities and species habitat; (2) ensuring that dry zone container plants are ant-free prior to installation; (3) maintaining natural hydrologic conditions; and (4) using drought-resistant plants in fuel modification zones to minimize irrigation requirements (e.g., see Objective 4.2 for Tehachapi buckwheat in the TU MSHCP). The IPMP will define the specific locations of concern and the covenants, conditions, and restrictions (CC&Rs) will require conformance and enforcement of the IPMP.

It should also be noted that Mitigation Measure 4.4-16 in the TMV EIR includes inspection of container plants by the Service-approved biologist immediately prior to installation for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases will be rejected. Irrigation within 100 feet of these areas will be designed to avoid the spread of water from irrigated land into designated open space. Further, this measure includes CC&Rs that require property owners to operate and maintain a year-round low-moisture regime within 100 feet of open space and avoid the spread of water from irrigated land into project open space. These two requirements will minimize the introduction of exotic plant and animal species, such as Argentine ant, from landscape areas into designated open space.

Response to Comment N-3-34

The habitat model for the Tehachapi slender salamander recognizes that it does not uniquely capture the microhabitat features such as rock talus and the litter matrix—these features are not contained in the available spatial data. However, the modeled vegetation communities (including riparian woodlands and the canopy cover parameters used in the model) and north-facing slopes are important components of habitat for the species in the Tehachapi Mountains. Under the existing model, 96% of modeled habitat would be conserved in Open Space. However, just considering the vegetation communities associated with the species alone (i.e., without canopy density, aspect, and distance from blueline streams factored in), approximately 95% of suitable habitat for the species would be conserved. As such, revisions to the model using existing data are not likely to significantly alter the effects analysis.

Furthermore, the construction-related conservation measures for Tehachapi slender salamander were developed in recognition that the habitat model may not capture all of the potential talus and litter matrix habitat features. Through additional surveys or investigation, the Service-approved biologist may find that some areas of modeled habitat are not actually suitable for the species, while other areas of unmodeled habitat may potentially support the salamander (e.g., a talus slope that extends beyond the boundary of modeled habitat). Objective 4.1 was written to account for this uncertainty and states that surveys prior to grading will be conducted in suitable habitat. The Service-approved biologist will make reasonable efforts to capture and relocate any observed individuals to suitable habitat (e.g., on north-facing slopes containing talus) that is the closest distance to the disturbance area from where the individuals were removed. That is, the preconstruction surveys would not be limited to just modeled habitat, but would be conducted in all habitat areas in the disturbance area that the biologist determines to be suitable for Tehachapi slender salamander. The conservation measure also requires that the Service-approved biologist have a scientific collecting permit and a Memorandum of Understanding or letter permit from CDFG to carry out these activities.

Response to Comment N-3-35

The commenter references their prior comment that, for species where a mitigation strategy of relocation or translocation or moving is proposed, the scientific literature indicates that these efforts generally result in failure, citing various sources, including Fischer (2000; note: should be Fischer and Lindenmayer 2000), Wolf (1996; note: should be Wolf et al. 1996) and Dodd and Siegel (1991). The commenter stated that if this experimental strategy is to be implemented, it should be recognized to be experimental, and therefore not a mitigation or minimization measure. Further, in the current letter, the commenter states that the TU MSHCP does not show how the relocation will benefit the salamander.

Preconstruction surveys, trapping and removal would be conducted for Tehachapi slender salamander, and several other Covered Species, as a best management practice (BMP) during construction to try to avoid any unnecessary harm to individuals. The construction-related conservation measure requires that individuals be relocated to the nearest suitable habitat, and that relocations be done with the appropriate Service/CDFG authorizations (see Response to Comment S-1-32). Relocation activities, if any, would be documented in the annual compliance reports, as described in Section 7.3.1, Compliance Monitoring, of the TU MSHCP.

It is important to understand that the intent of the proposed relocation of species detected during preconstruction surveys, as an avoidance and minimization measure, is quite different from the purpose of most of the relocation studies described in the literature cited by the commenter. Wolf et al. (1996) addressed bird and mammalian translocations, which they broadly define as "intentional release of a captive-propagated and/or wild-caught animal into the wild for the purpose of establishing a new population, reestablishing an extirpated population, or augmenting a critically small population…" (p. 1143). The Fischer and Lindenmayer (2000) study focused on reintroductions, supplementations, and translocations at a much larger scale than the relocation effort proposed under the TU MSHCP. It is not the intent of the TU MSHCP to translocate or reintroduce individuals as defined by Wolf et al. (1996) and Fischer and Lindenmayer (2000). Only the Dodd and Siegel (1991) study cited by the commenter examines some relocations similar to the measures proposed in the TU MSHCP. Dodd and Siegel (1991) define the release of individuals into an area normally or currently occupied by the species as *repatriation*. This type of relocation is similar to the proposed relocation of moving a few individuals out of harm's way to the nearest suitable habitat, which has become a fairly standard BMP for many types of development projects. However, Dodd and Siegel (1991) generally refer to moving populations and define success as establishing a viable, self-sustaining population. Such a large-scale relocation program is not the intent of the proposed construction-related relocation measures, especially given the relatively small proportions of modeled habitat that would be affected. The intent of the TU MSHCP is to make a reasonable effort to avoid unnecessarily killing and injuring individual animals.

The primary conservation strategy for the Covered Species is preservation of an open space system large enough to support self-sustaining populations in protected open space. The success of the conservation strategy does not depend on construction-related salvage and relocation of individuals.

Response to Comment N-3-36

The 0.25-mile setback in Objective 4.2 (Section 7.1.1.2.1) of the TU MSHCP is for construction activities related to development (e.g., mass grading), while the 1,000-foot setback in Objective 6.2 relates to long-term operational activities such as recreation and grazing operations, which would not be expected to have the same level of potential indirect effect on peregrine falcons (e.g., loud

noise, levels of human activity). Having different buffer setbacks for these very different types of potential indirect effects is appropriate.

The commenter requests that the Service reconsider prior comments on the inadequacies of small buffers and related issues, as previously provided in their comment letter on the Draft EIS. In response to that request, the following text has been provided to reiterate the Service's response to comments on the Draft EIS that suggested that proposed setback buffers and viewsheds for raptors in the TU MSHCP were inadequate, not based on the best available science, and would adversely affect raptor behavior, including reproduction. This response was originally provided in Master Response 3, Raptors, Section 3.2.1, Buffers and Viewsheds, in Volume II of the Supplemental Draft EIS. Where appropriate, and as indicated by underline, the text has been revised to clarify species use of the Covered Lands (i.e., peregrine falcon), or the guidelines that were considered in determining species-specific buffers (i.e., burrowing owl).

Buffers and Viewsheds

There are five raptor species covered in the TU MSHCP and analyzed in Section 4.1, Biological Reources, of the Supplemental Draft EIS: American peregrine falcon, bald eagle, burrowing owl, golden eagle, and white-tailed kite. Section 7.1.1.2, Birds, in the Draft TU MSHCP describes the species-specific conservation measures that would be implemented to minimize effects on raptors, including implementation of buffers and viewshed protections between raptor nesting, roosting, and perching sites and construction and long-term operational activities. These measures are also summarized in Table 2-4 in Volume I of the Supplemental Draft EIS. This response summarizes the likely habitat present for each species and the corresponding setback and buffer to protect nesting, roosting, and perching sites.

The occurrence and suitable habitat information regarding the five raptor species on Covered Lands is described in Section 3.1, Biological Resources, in Volume I of the Supplemental Draft EIS, and Section 5.2.2, Birds, of the TU MSHCP. Golden eagles nest and forage on the Covered Lands, with three active nests observed in the TMV Planning Area in 2007. The American peregrine falcon, bald eagle, burrowing owl, and white-tailed kite have been observed to use portions of the Covered Lands during the winter for foraging, but none of these species has been documented to nest on the Covered Lands. However, there is modeled nesting habitat on the Covered Lands for peregrine falcon, burrowing owl, and white-tailed kite, and these species are considered to have at least some potential to breed on site because the Covered Lands are within their known breeding range. The bald eagle is expected only to winter and forage on Covered Lands in the vicinity of Castac Lake; it is not expected to nest on site.

Nesting golden eagles are sensitive to human disturbance (Remsen 1978:32; Thelander 1974:11). The TU MSHCP proposes several measures that would avoid, minimize, and mitigate effects on nesting golden eagles. As stated in Objective 6.1, surveys would be conducted for active nests in modeled primary breeding and breeding/foraging habitat during the breeding season (January through August) prior to approval of the grading plan for each phase of development. The results of these surveys would be used during site development and would take into consideration viewshed and distance factors to protect nest sites. For golden eagle, Objective 6.2 of the TU MSHCP includes several criteria to protect active (primary and/or alternate) nest sites from disturbance. No development, new trails or recreational activities would be allowed within 0.25 mile of an active nest site, within or outside the viewshed, and no development would be allowed in the viewshed that is also within 0.5 mile of an active nest. Development would be restricted to low-density development in the viewshed up to 1 mile from the active nest. For development within 0.5 to 1 mile of an active nest site, siting and design criteria would be established to avoid and minimize effects on modeled foraging habitat, primarily through clustering of development. Objective 9.2 states that trail use would be restricted between 0.25 and 0.5 mile within the viewshed of an active nest site

during the primary nesting season (generally February 1 through July 30), when birds would be sensitive to human activities, unless a qualified, Service-approved biologist determines that the nest site has become inactive and the activities would not affect nesting golden eagles.

A commenter expressed concern that the buffers and setbacks are not based on the best available science and that viewsheds for both nesting and hunting habitats should have been calculated using a three-dimensional geographic information system (GIS) tool. Spatial and temporal buffer zones have been suggested as a means to minimize the effects of recreational and other human activities on breeding raptors. In particular, a zone defined by a 0.2-mile (333-meter) radius has been suggested for golden eagles when birds are rearing young and exposed to various human activities (Suter and Jones 1981). Other recommendations include establishing spatial nest buffers from 0.13 to 1.0 mile depending on the terrain and nest location (Richardson and Miller 1997). However, a viewshed approach has been suggested as a more realistic application to buffering active nest sites because flushing distances (from nests, perches, roosts) of adult eagles can be reduced when eagles are visually shielded (by vegetation and/or topographical features) from human activities. A viewshed approach to managing disturbances may require less protected area than standardized buffer zones (Camp et al. 1997).

For golden eagles, a three-dimensional viewshed analysis using GIS was conducted for active golden eagle nests in the TMV Planning Area. This is the only raptor Covered Species documented to nest in proximity to development areas. The analysis took into consideration topography, vegetation cover and height, elevation, distance from the nest tree, and nest height. The analysis included distances measured at 0.25, 0.5, and 1 mile from the nest. A maximum distance of 1 mile was used because that is the outer range of buffer zones listed in the literature as appropriate for golden eagles (Richardson and Miller 1997).The results of this analysis were considered in determining the TMV Development Envelope boundary and would be incorporated into the final site development plans for the TMV Project. In addition, and, as discussed previously, the viewshed guidelines (summarized above) would apply to any future golden eagle nests that are discovered during surveys that would be conducted prior to ground disturbance activities in the TMV Specific Plan Development Envelope. However, the viewshed tool is not practical for use in foraging habitat because hunting by most raptors is carried out on such a broad scale and opportunistically in relation to food sources. For example, the size of golden eagle foraging territories is related to prey density and is quite variable. In southern California, estimated territories are approximately 23,000 acres, and, in northern California, they are approximately 30,700 acres (Zeiner et al. 1990:142).

For the other raptors with some potential to breed on site (American peregrine falcon, white-tailed kite, and burrowing owl), because there are no known nest sites, surveys prior to construction would be conducted, as discussed below, and appropriate measures set forth in Section 7.1.1.2 of the TU MSHCP would be undertaken. Specifically, prior to Commericial and Residential Development Activities, preconstuction surveys in breeding habitat would be conducted. If any of these species are found nesting in proximity to Disturbance Areas prior to construction, setbacks from active nests would be established during the nesting period as follows.

- An 0.25-mile protection zone would be established around each active peregrine falcon nest (Objective 4.2 of Section 7.1.1.2.1, American Peregrine Falcon, in the TU MSHCP). This setback distance is based on the variable response of nesting peregrine falcons to human activities. Birds that nest in urban areas or highly visited areas become habituated to close human activities, while birds nesting in isolated areas tend to be more sensitive to disturbance (White et al. 2002:1). In addition, there is very limited potential nesting habitat for the peregrine falcon on the Covered Lands, it is only expected to forage on site during the winter, and the Covered Lands are not considered to be important breeding habitat for this species. Since the American peregrine falcon is not known to nest on Tejon Ranch, any birds that are attracted to and attempt to nest on the ranch most likely would be individuals more habituated to human activity, such as ongoing ranch activities. Comrack and Logsdon (2008) note that many

peregrines at least attempt to nest in urban settings, but that nesting success is more limited by nest site structure than direct human disturbance. Also, White et al. (2002:1) indicate that human disturbance of nesting sites does not appear to be a significant factor in population declines of the peregrine falcon.

- For the white-tailed kite and the burrowing owl, a setback of 500 feet and 300 feet, respectively, would be established around each active nest site (Objective 4.3 of Section 7.1.1.2.3, Burrowing Owl, and Objective 4.3 of Section 7.1.1.2.11, White-Tailed Kite, of the TU MSHCP, respectively). Once construction activities have been initiated, nesting attempts by the burrowing owl within 300 feet of construction activities would not be subject to the 300-foot setback, although no nests would be directly disturbed. These setbacks may be reduced at the discretion of the Service-approved biologist depending on site conditions (e.g., viewshed or natural noise barriers resulting from topography).

  The adequacy of a 500-foot setback guideline for the white-tailed kite is supported by empirical data. A recent study of white-tailed kite nesting and roosting behavior in Santa Barbara County (Rincon Consultants 2010:5) indicates that individuals of this species are tolerant of urban development and other human activities within 500 feet of nests and roost sites. However, it is likely that white-tailed kites, like peregrine falcons and many other raptor species, exhibit individual tolerances or habituation to urban settings and human activities. Rincon Consultants (2010:5) examined historical nest site locations in Goleta Valley in relation to different types of disturbances, including development (roads, fencing, walls, and fuel management zone), active nonmotorized recreational uses such as equestrian and bicycling, and passive recreation such as walking and bird watching. The data used for the analysis were based on 2008 and 2009 surveys on More Mesa and historical nests and roosts dating back to 1963, backgound literature, and consultation with local experts. Of 42 nest sites, 17 occurred within 500 feet of some type of urban disturbance, indicating some level of tolerance by individuals of this species to human activities. White-tailed kites generally were more tolerant of nonstructural human activities (e.g., recreation), with 9 of the 17 nest sites located within 140 feet of a structure (Rincon 2010:5). Thirteen of the 17 nest sites were within 125 feet of a road, yard, agricultural field, trail, or other nonstructural type of human disturbance. Based on this analysis, Rincon (2010:6) developed the following nest and roosting buffer guidelines:

  - 1 to 125 feet: minimum area of no human activity
  - 125 to 200 feet: passive recreation (walking and bird watching)
  - 200 to 265 feet: active recreation (equestrian, bicycling; no motorized vehicles)
  - 265 to 340 feet: roads, fencing, walls, lawns, 100-foot fuel management zone
  - 340 to 525 feet: structures

  For the burrowing owl, the proposed 300-foot buffer to protect nesting sites is consistent with the guidelines set forth by CDFG's Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012), which suggests incorporating site-specific criteria (topography, level/history of disturbance, visual line-of-site, and other site characteristics) to inform appropriate avoidance setbacks and buffers.

  Preactivity surveys related to the long-term effects of Plan-Wide Activities, such as recreation, would also be conducted during the breeding season of the American peregrine falcon and the white-tailed kite. Commenters requested that preactivity surveys be required for fuel management involving tilling or disking. Although tilling and disking is not anticipated in conjunction with fuel management activites, preactivity surveys would be conducted in the 1,773 acres of development-related fuel management activities in open space areas. Setbacks would be established from active nest sites (1,000 feet for the peregrine falcon [Objective 6.2] and 500 feet for the white-tailed kite for passive recreation activities [Objective 7.2]) until all

young have fledged and are no longer dependent on the nest for survival. The commenter specifically questioned the 1,000-foot setback for the American peregrine falcon, recommending that a site-specific analysis be done and that the setback be increased beyond 1,000 feet if needed. The sufficiency of the 1,000-foot setback is discussed above. As noted, peregrine falcons have successfully bred in urban areas.

For the bald eagle (which has not been documented to breed in the Covered Lands), measures would be implemented to reduce effects on overwintering individuals that may perch, roost, and forage on the Covered Lands. Objective 3.2 in the TU MSHCP requires preconstruction surveys for wintering individuals and mapping of preferred diurnal perches and roosting sites if present. Preferred diurnal perches and roosting sites would be conserved according to the protocol described in Objective 3.2, including a consideration of tree size (larger trees are better) and distance from Castac Lake, replacement of affected large trees near Castac Lake, and girdling of some trees to create snags for perching. Objective 3.4 for the bald eagle requires adequate setbacks from preserve roosting areas. These would be determined by a qualified Service-approved biologist based on focused surveys for wintering bald eagles conducted prior to approval of the grading plan for each phase of development within 1 mile of Castac Lake. Objective 3.4 specifies that uses in the roost area and setback would be limited to those approved by the qualified Service-approved biologist in the bald eagle wintering period between October 15 and March 16. Recreational uses would be excluded from the roosting and setback area. Objective 7.3 for the bald eagle specifies that the minumum setback during this period would be 300 feet, but the setback may be adjusted by the qualified Service-approved biologist based on site conditions (e.g., topography). In addition, as stated in Objective 4.1 for the bald eagle, construction-related ground disturbances in wetland habitat associated with Castac Lake and woodland habitat within 1 mile of Castac Lake would be avoided from October through March.

A commenter stated that measures to minimize effects on bald eagle are vague and that Section 7, Conservation Plan for Other Covered Species, of the Draft TU MSHCP refers to a 300-foot setback, while Section 6, Potential Biological Impacts/Take Assessment, of the Draft TU MSHCP refers to a 500-foot setback. The commenter suggested that the setback should be 250 to 400 meters (820 to 1,312 feet), citing Stalmaster and Newman (1978) and Craig (2002). The commenter suggests a management zone of 1,360 to 1,400 meters (4,462 feet to 4,593 feet), citing Buehler et al. (1991).

The reference to 500 feet in Section 6.2.2.2.2, Analysis of Potential Impacts on Bald Eagle, of the Draft TU MSHCP was an error that has been corrected to reflect a setback distance of 300 feet. The TU MSHCP provides a management zone of 1 mile and a minimum setback of 300 feet, which is generally consistent with Stalmaster and Newman's recommendation for bald eagle wintering grounds in disturbance areas. However, the setback can be increased by a Service-approved biologist, consistent with alternate scenarios and buffer recommendations described by Stalmaster and Newman (1978), depending on site-specific considerations. As described in Section 5.2.2.2.3, Occurrence in the Covered Lands, of the TU MSHCP, bald eagle observations at Castac Lake are infrequent and in only one winter has the number of eagles exceeded one. Therefore, bald eagle presence on site is not considered to be a wintering congregation.

The Stalmaster and Newman (1978:506–513) study focused on the response of bald eagle wintering populations to simulated disturbances in three land covers (vegetation zone, riverbank, and river channel). In vegetation buffer zones, the observer was visible to the bald eagles at between 75 and 100 meters (247 to 329 feet). In the riverbank zones, the bald eagles flushed when the observer was within 251 to 300 meters (826 to 987 feet). In the river channel zones, the bald eagles flushed when the observer was within approximately 300 meters (987 feet). For vegetated wintering grounds where disturbances are common, Stalmaster and Newman (1978:512) recommend a buffer of 75 to 100 meters (247 to 329 feet). In open areas,

the authors recommend a larger buffer of 250 meters (820 feet) to protect a congregating bald eagle wintering population; a combination of buffer and vegetation being preferable. The Stalmaster and Newman (1978:512) study also noted that bald eagles can adjust to routine human activities.

Craig (2002) provides recommendations for buffer zones and seasonal restrictions for Colorado raptors, including buffers and setbacks for nesting, roosting, and/or perching raptors, including the bald eagle. Craig (2002:2) recommends a buffer of 0.25 mile (400 meters, 1,320 feet) for winter night roosts between November 15 and March 15. Craig (2002:1) also states that buffer zones can be adjusted depending on vegetation screens and terrain that obscure the activity. Craig (2002:2) also recommends protection of diurnal perches in association with foraging areas and notes that he is aware of two management plans that recommend zones ranging from 0.13 mile (200 meters, 660 feet) to 0.25 mile (400 meters, 1,320 feet).

Regarding the proposed management of lakeside vegetation for the benefit of wintering bald eagles, Buehler et al. (1991:279) recommends management in communal roosting forest stands of 190 hectares (470 acres). The 190 hectares exceeds the minimum communal roost forest stand size of 110 hectares (272 acres) (Buehler et al. 1991:279). The management recommendation was proposed for Chesapeake Bay undeveloped shoreline forest stands extending a minimum of 1,400 meters (4,606 feet, 0.87 mile) inland, with a minimum of 1,360 meters of shoreline edge. Buehler et al. (1991:279) recommended protection of existing tall, large-diameter trees and the promotion of stands of trees where lacking. The TU MSHCP would include the conservation of 795 acres (55%) of wintering habitat for the bald eagle in the Covered Lands, which greatly exceeds the Buehler et al. (1991:279) minimum communal roosting acreage of 272 acres. In addition, the Covered Lands do not support a communal roosting site for the bald eagle; this species is an infrequent winter visitor. Section 7.1.1.2.2, Bald Eagle, of the TU MSHCP includes conservation of preferred diurnal perches and high-quality roost trees for the bald eagle within 1 mile of Castac Lake and the promotion of stands of trees within 100 feet of Castac Lake; this exceeds the Buehler et al. (1991) recommended management zone of 1,400 meters (4,606 feet, 0.87 mile). Thus, the proposed bald eagle Goal 3 and associated objectives would protect diurnal perches and roosts, and would exceed the Buehler et al. (1991:279) minimum communal roosting acreage and management zone recommendations.

Response to Comment N-3-37

The commenter is correct in noting that the removal of 58% of the modeled winter roosting habitat under the TU MSHCP would represent a substantial amount of the existing woodland habitat available to the bald eagle in the Covered Lands. While foraging at Castac Lake would remain largely undisturbed, bald eagle use of aquatic foraging habitat is in part a function of the availability of roosting and perching trees in the vicinity of aquatic foraging habitat. The TU MSHCP includes conservation measures to protect roosting and perching trees, including a prohibition on removal of preferred diurnal perches and high quality roost trees from fuel modification zones within 1 mile of Castac Lake. In addition, snags and large trees would be avoided within 100 feet of the shoreline of Castac Lake, where possible, and an adequate setback from preferred roosting areas would be established by a Service-approved biologist. Finally, affected trees would be replaced with new, large trees (defined in bald eagle Objective 3.2 in the TU MSHCP as trees at least 12-inches in diameter at breast height) at a 1:1 ratio within 100 feet of Castac Lake to preserve and enhance wintering habitat.

As described in Supplemental Draft EIS and TU MSHCP, bald eagles have a widespread distribution in North America, wintering from Alaska eastward to Newfoundland and southward

locally to Baja California, Sonora, Texas, and Florida. In California, breeding populations are more limited and restricted primarily to the northern Sierra Nevada. As noted by the commenter, at least six bald eagles were observed on the Covered Lands in winter 2007, and the loss of 58% of modeled winter roosting habitat would likely reduce the use of Castac Lake by wintering bald eagles. However, the bald eagle is not known to breed on the Covered Lands and surveys indicate that a large wintering population does not occur on the Covered Lands. Because it is unknown from which breeding population in the western United States (or Canada) the eagles that occasionally winter at Castac Lake derive, and without additional long-term data regarding the consistent use of this habitat by wintering eagles, it would be speculative to suggest that the wintering habitat at Tejon Ranch is important to the ability of bald eagle populations in North America to remain self-sustaining. In consideration of the extensive range of the species and the conservation measures that would be implemented to protect the remaining modeled foraging and wintering habitat on the Covered Lands, the Service believes the TU MSHCP would have a moderate effect on the bald eagle in the Covered Lands, and a minor effect on the population rangewide.

Response to Comment N-3-38

While there is overlap between bald eagle modeled wintering habitat (i.e., savannah, woodland, and riparian woodland habitats within 1 mile of Castac Lake that provide perching and roosting sites for wintering bald eagles foraging at Castac Lake) and modeled habitat for a number of other Covered Species, the only overlap in the bald eagle modeled wintering habitat and tricolored blackbird modeled foraging habitat is riparian woodland, of which 92% would be conserved in Open Space under the TU MSHCP. Further, riparian woodlands account for only 59 acres of the 18,553 acres (0.3%) of modeled foraging habitat for tricolored blackbird. Therefore, the loss of modeled foraging habitat for tricolored blackbird in the context of modeled wintering habitat for bald eagle is insignificant.

Response to Comment N-3-39

The Service agrees and the TU MSHCP requires that direct impacts on golden eagle active primary and alternate nests be avoided (Goal 6) (TU MSHCP Section 7.1.1.2.4). To that end, surveys for active primary golden eagle nests and active alternate nests would be conducted during the breeding season prior to approval of the backbone infrastructure grading plan (so as to assist in the constraints planning effort for potential development sites) for each phase of development in modeled primary breeding and breeding/foraging habitat (Objective 6.1).

Response to Comment N-3-40

The comment that 32% of primary breeding habitat for tricolored blackbird would be eliminated is incorrect. The percentages of modeled primary breeding habitat that would be lost and conserved under the TU MSHCP only sum to 77% (69% of modeled primary breeding habitat conserved in Open Space and 8% permanently lost due to development), as indicated in Section 7 of the TU MSHCP and Table 4.1-3 in the Supplemental Draft EIS. This is attributable to the assumptions in the habitat model specific to riparian areas (i.e., 75% of riparian/wetlands are assumed avoided in development areas, but avoided areas are not included in the Open Space acreages) and assumptions specific to future uses of the Lebec/Existing Headquarters Areas (i.e., 145 acres in the Lebec/Existing Headquarters Area are assumed not developed, but are also not included in Open

Space. Kern County land use designations in the Lebec/Existing Headquarters Area would only allow a portion of that land to be developed). Therefore, the impacts on these avoided and undeveloped areas are more analogous to those in Open Space areas than to areas lost to development, and it would not be accurate to treat these areas as "eliminated."

Nevertheless, the net loss of 23 acres (8%) of modeled primary breeding habitat for tricolored blackbird under the TU MSHCP could affect nesting tricolored blackbird colonies in the Covered Lands. Development would surround a significant portion of Castac Lake, which is the largest body of water in the Covered Lands and is also the primary location where tricolored blackbirds have historically been observed. Managing open space to provide appropriate nesting habitat for the species, where possible, along with implementation of the TU MSHCP conservation measures specific to this species (i.e., preconstruction surveys in and immediately adjacent to suitable breeding habitat during the breeding season, creation of a 500-foot buffer around any nesting colony if construction cannot be avoided entirely during the breeding season) would reduce adverse effects on the species.

Response to Comment N-3-41

In general, the ESA does not prohibit the take of federally listed plant species; therefore, incidental take of plant species is not conferred by an ITP. TRC incorporated measures into the TU MSHCP intended to conserve listed plant species in the Covered Lands and requested the Service include these plant species on the ITP in recognition of the conservation benefits provided to these species under the plan, and to receive assurances for them under the Service's No Surprises rule codified at 50 CFR 17.22(b)(5) and 17.32(b)(5). With respect to round-leaved filaree, this species is not currently federally listed (it is included on the California Rare Plant Rank list in California); however, the analysis provided in the EIS and TU MSHCP treat round-leaved filaree as if it were a federally listed species to assess if the conservation measures provided in the TU MSHCP would be adequate to avoid jeopardy if the plant were listed in the future.

As described in Section 5.3.3 of the TU MSHCP and Section 3.1 of the Supplemental Draft EIS, the range of round-leaved filaree extends from northern Mexico to Oregon and southern Utah. Although round-leaved filaree is considered to be rare in southern California, it is broadly distributed in central and northern California and has been documented in 27 counties from Lassen County to San Diego County. Gillespie (2003) determined that 105 unique populations have been reported, with most on the eastern side of the California Coast Ranges. The Jepson Online Interchange for California Floristics (Jepson Flora Project 2011) lists the Sacramento Valley, northern San Joaquin Valley, central western California, South Coast, northern Channel Islands (i.e., Santa Cruz Island), western Transverse Range, and the Peninsular Ranges as the geographic regions in which round-leaved filaree occurs. The California National Diversity Database (CNDDB) currently contains 142 records for the species, of which 12 are documented from Kern County (none on the Covered Lands) (California Department of Fish and Game 2011). Based on occurrence records in the CNDDB that include counts or estimates of individual plants across their range, occupied sites have been observed to support from a few individuals (three or four) to an estimated 16,000 individuals among five colonies at a site on BLM lands (on Payne Ranch in Colusa County).

Presence/absence surveys were conducted for round-leaved filaree in 2007 in the TMV Planning Area. Round-leaved filaree plants were observed in the southeast portion of the TMV Planning Area, in 11 areas that supported approximately 430 to 730 individuals (Dudek 2007b). It is also considered to have potential to occur elsewhere in modeled habitat on unsurveyed portions of the Covered Lands. The commenter is correct in stating that a maximum of 58% of the documented population of round-leaved filaree (up to 420 documented individuals) would be conserved under the scenario described for Objective 2.1.a in Section 7 of the TU MSHCP; i.e., at least 42% of the

currently known population (an estimated range of 205 to 305 documented individuals) would be permanently lost. However, the TU MSHCP would include conservation of 53,076 acres (91%) of modeled habitat for this species in Open Space. Further, as described below, the loss of up to 420 document individuals would represent a small percentage (0.2% to 0.6%) of the population in California.

In response to this comment, an analysis of recent CNDDB records was conducted for round-leaved filaree to examine the status of the documented population on the Covered Lands in the context of the documented populations in California. *Recent* occurrence records are defined as sites where the round-leaved filaree was last seen in the period between 1990 and 2010 (2010 is the most current *Last Seen* date in the CNDDB for the species). Only sites judged to be *Presumed Extant* in the CNDDB occurrence record and only sites for which a numerical population size was reported are included in the analysis; therefore, the estimated populations reported in this analysis are conservative. A total of 59 of the 142 CNDDB occurrence records met these three criteria. Population sizes for each of the 59 occurrences were assigned a low and high value depending on the information in the occurrence record. Where a single estimate was made for a single observation date, the numerical value was included as both the high and low value. Where estimates were made over more than one observation date, the lowest and highest estimates were used. Where an observation was made on a single date, but a population range was reported (e.g., 100 to 200 individuals), the low and high values were used. Several of the records report populations of "at least" or "more than" a certain number of individuals; e.g., the population characterized at least 1,000 individuals. In these cases, the lower end of the estimate was used for both the low and high values to provide the most conservative estimate of the population size.

Based on this analysis, a low of 54,846 individuals (median = 100; mean = 930; range = 0 to 16,000) and a high of 85,857 individuals (median = 135; mean = 1,435; range = 4 to 16,000) of round-leaved filaree are reported in the CNDDB for observations between 1990 and 2010. The documented population on the Covered Lands therefore represents a range of approximately 0.5% (430 of 85,857 individuals) to 1.3% (730 of 54,846 individuals) of the estimated population in documented occurrence locations in California. The actual percentages would be lower because many of the documented occurrences did not report population sizes. The permanent loss of 205 to 305 individuals therefore would represent an effect on 0.2% (205 of 85,857 individuals) to 0.6% (305 of 54,846 individuals) of the estimated population in documented occurrence locations in California. Relative to other documented occurrences, the documented population on the Covered Lands is of moderate size and lower than the mean size of both the low (930 individuals) and high (1,435 individuals) population estimates.

The Supplemental Draft EIS concluded that the TU MSHCP would have a moderate effect on local species abundance, but that the effect on the population rangewide would be minor and that the TU MSHCP would not substantially affect the species. This conclusion is supported by the analysis provided in this response showing that the TU MSHCP would affect a very small percentage of round-leaved filaree in California. Also, there is no reason to believe that the local round-leaved filaree population would be extirpated as a result of loss of 42% of the currently documented population. To the contrary, because a significant threat to round-leaved filaree is competition with exotic grasses and forbs (Gillespie 2003), the goals and objectives requiring grazing management of the TU MSHCP Mitigation Lands at light-to-moderate levels would control the levels of exotic grasses and may benefit existing populations of round-leaved filaree on the Covered Lands.

The Service will formally evaluate the impacts of the TU MSHCP on the survival and recovery of the round-leaved filaree in the intra-Service Biological Opinion prepared in accordance with Section 7 of the ESA on TRC's permit application,

Response to Comment N-3-42

The initial grazing management, integrated pest management, and public access plans approved by the Tejon Ranch Conservancy and by Kern County (as part of the certified TMV EIR), as well as the public access plan adopted by the Tejon Ranch Conservancy, are attached to the TU MSHCP as part of the Interim RWMP (Tejon Ranch Company 2009)(Appendix F to the TU MSHCP). If the Service issues an ITP for the TU MSHCP Covered Activities, the grazing management and public access plans would be revised as necessary to conform to the ITP and the final TU MSHCP, and would be reviewed and approved by the Service as set forth in the Implementing Agreement Sections 5.1.1(d) and 5.2.4. The Service would also review and comment on the IPMP.

The Service believes that the existing management plans attached to the TU MSHCP, combined with the detailed requirements contained in the TU MSHCP for future management plans and revisions to current plans, provide ample information to the public and to the Service for review of the TU MSHCP.

Response to Comments N-3-43 through N-3-45

Section 4.0.4, Methods for Assessing Cumulative Effects, in the Supplemental Draft EIS describes the approach for considering cumulative effects in the EIS, defines the cumulative effects analysis area, and summarizes the reasonably foreseeable actions considered in the assessment. In summary, the analysis of cumulative effects in the Supplemental Draft EIS involves identification of past, present, and future lands uses planning efforts or large-scale projects in a cumulative effects analysis area (broadly defined to encompass the Tehachapi Uplands portion of the Southern California Mountain ecoregion, and the valley and foothill areas outside of the Tehachapi Uplands) that could contribute to the cumulative effects of the alternatives. In determining the present and reasonably foreseeable actions that have the potential, when combined with the effects of the alternatives, to result in cumulative effects, the Service considered other planning effects and large-scale projects that would be likely to result in effects that could interact cumulatively with those of the alternatives. NEPA does not require that cumulative effects be discussed if they are speculative.

Section 4.0.4.2, Other Reasonably Foreseeable Actions, in Volume I of the Supplemental Draft EIS considered whether to include the California High-Speed Rail Project as a reasonably foreseeable project in the cumulative effects analysis of the proposed action, but determined the project was too speculative because the precise timing and details of the project were not known, and because potential alignments that would have crossed Tejon Ranch were not considered in the project EIR/EIS (California High Speed Rail Authority 2005, 2010). However, in response to comments, the Service revisited the status of the high speed rail project to determine if it should be considered in the Final EIS. Although the California High Speed Rail Authority has continued planning for the project and has appropriated some funding (approximately $8 billion dollars) to begin upgrading the existing segments around Los Angeles, Sacramento, the San Francisco Bay Area, and Madera to Bakersfield, the full project has been estimated to require at least $68 billion dollars to construct, and the bulk of that funding has not yet been identified (California High Speed Rail Peer Review Group 2012). According to the California High Speed Rail Peer Review Group (2012), significant planning, managerial, and financial hurdles remain in building this project. Further, all of the proposed programmatic alignments follow SR 58, outside of the Covered Lands, and no specific alternative analyses, biological surveys, or other environmental studies have been conducted for the Bakersfield-Palmdale segment, the segment that would occur in the vicinity of Tejon Ranch. As a result, a meaningful evaluation of the high speed rail project and its potential effects on the Covered Species in the TU MSHCP is not possible and would be considered speculative. Therefore, the Service

has reaffirmed that this project is not adequately defined to be evaluated in this EIS as a reasonably foreseeable action.

Regarding the Desert Renewable Energy Conservation Plan, as of September 2012, only preliminary framework and planning documents have been released for public review. As a result, a meaningful evaluation of the covered activities under that plan and their potential effects on the Covered Species in the TU MSHCP is not possible and would be considered speculative. For the purposes of the cumulative effects analysis in the EIS, the Desert Renewable Energy Conservation Plan is not considered a reasonably foreseeable action.

With respect to the analysis of wind projects in Kern County, Section 4.1.7, Cumulative Effects, in the Supplemental Draft EIS, broadly considered the effects of 16 different wind energy projects in the Tehachapi Wind Resource Area, noting that four of the projects had been approved. Since publication of the Supplemental Draft EIS, the Kern County Board of Supervisors referred the Kern County Wind Resource Area maps back to Kern County planning staff for further refinement. A revised map, depicting approved and proposed wind energy projects in Eastern Kern County, which approximates the previous scope of the Tehachapi Wind Resource Area considered in the Supplemental Draft EIS, has been made available to the public on the County's website (Kern County 2012). This map and associated summary table indicate that, as of December 12, 2011, 12 wind projects had been approved by the County. Table N3-1 provides a summary of the latest data provided by Kern County on wind resource projects in eastern Kern County.

Table N3-1. Approved and Proposed Wind Energy Projects in Eastern Kern County

Project Name	Applicant	Acreage	MWs	Kern County Application Status
Approved Projects				
Alta	Terra-Gen Power, LLC	9,175	800	Approved (2010)
Alta Addendum II	Terra-Gen Power LLC	4,610	330	Approved (2010)
Alta Infill II	Terra-Gen Power, LLC	5,185	530	Approved (2011)
Catalina	enXco	7,440	200	Approved (2011)
Jawbone	Phil Rudnick	640	39	Approved (2011)
Morgan Hills	Terra-Gen Power, LLC	3,604	230	Approved (2011)
North Sky River	NextEra Energy Resources	12,781	300	Approved (2011)
Pacific Wind	enXco	8,300	151	Approved (2010)
PdV	Manzana Energy	5,820	300	Approved (2008)
Windstar	Western Wind Energy	1,007	65	Approved (2009)
	Coram Energy Group	70	3	Approved (2010)
	Coram Energy Group	60	3	Approved (2010)
Proposed Projects				
Avalon	enXco	10,000	255	Pending. Application complete July 13, 2010.
Alta East	Terra-Gen Power, LLC	3,600	300	Pending. Application complete August 30, 2010.
Rising Tree	Horizon Wind Energy	4,019	350	Pending. Application complete July 16, 2010.
Source: Kern County 2012				

Despite these revisions, the Service believes the analysis of cumulative effects on the Covered Species resulting from the combined effect of the proposed action and wind resource projects in Kern County is still accurate. Section 4.1.7.2, Wildlife and Plant Species, in the Supplemental Draft EIS, discloses the following cumulative effects on the Covered Species as a result of wind resources projects, with minor clarifications provided as underlined text:

- Regarding the California condor, the Supplemental Draft EIS states that wind energy projects would be located in areas considered suitable for condor foraging or general flyover movements, but would not be anticipated to substantially affect condors' ability to find food in the cumulative effects analysis area given the ongoing availability of open space and food resources in public and private lands within the historical range of condor. With respect to collisions, the EIS states that wind farms can pose a threat to condors as rotating blades can strike a condor in flight, although there has been no evidence of condors colliding with a wind turbine to date. Avoidance and mitigation measures associated with applicable Federal, state, and local processes would be required for operation of these farms, and would reduce adverse effects from collisions.
- Regarding the American peregrine falcon, bald eagle, golden eagle, and white-tailed kite, the Supplemental Draft EIS states that these species may be directly affected by wind projects if they are injured or killed by spinning turbine blades. While avoidance and mitigation measures are required for these projects through applicable Federal, state, and local approval processes, whether full avoidance can be achieved is unknown. Wind projects would not be expected to result in a substantial loss of foraging habitat for these species, however, because of the small footprint of wind turbines on the landscape.
- Regarding the burrowing owl, the Supplemental Draft EIS states that because of their use of ground burrows as nest sites, the construction and installation of wind turbines could affect existing active owl burrows. Once active, spinning turbine blades could also directly affect owls that may be flying in the same areas. However, potential effects on either nest burrows or individual owls would depend on the habitat in which the turbines are sited. Avoidance and minimization measures for burrowing owls have been identified in the CEQA documents for several wind projects, and would be expected to reduce project-specific effects on this species.

In addition to acknowledging the potential impacts on these species in this EIS, it is important to note that California condor and bald eagle are protected under the California Endangered Species Act (CESA), and that all of these species are subject to California's fully protected species statute, which does not permit state "take." In addition, the requirements of the Migratory Bird Treaty Act (MBTA), which generally prohibits Federal take of migratory birds without authorization from the Service, would apply to each of the five species, and an eagle permit, in accordance with the Bald and Golden Eagle Protection Act (BGEPA), would be required for projects that may affect bald or golden eagles. Avoidance, minimization, and mitigation measures prescribed under these various statutes would further reduce cumulative effects on these species from wind projects.

The "rule of reason" test determines whether the discussion of cumulative effects is reasonably thorough and would allow a decision maker to make an informed decision. The Service believes the consideration of the effects of wind resource projects in Kern County in the Supplemental Draft EIS is thorough enough to assess the potential cumulative effects of their proposed action—issuance of an ITP. The direct and indirect effects of the proposed action on the Covered Species, along with the cumulative effects of other reasonably foreseeable, non-federal activities within the action area of the TU MSHCP on the Covered Species, will be further evaluated in the intra-Service Biological Opinion prepared by the Service.

CENTER *for* BIOLOGICAL DIVERSITY *Because life is good.*

protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

Via Electronic Mail and USPS

May 3, 2012

Roger Root, Assistant Field Supervisor,
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RE: **TU MSHCP Comments on Draft Supplemental EIS and HCP**

Dear Assistant Field Supervisor Root,

The Center for Biological Diversity is pleased to be able to offer comments on the Tehachapi Uplands Multiple Species Habitat Conservation Plan (Draft HCP) and its associated Supplemental Draft Environmental Impact Statement (SEIS). The Center is a nonprofit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 320,000 members and supporters, including members interested in the California condor and some presently and historically active with the condor reintroduction program conducted by the Fish and Wildlife Service (FWS). Our members, staff and supporters are also interested in strong conservation for the suite of other rare species that occur on Tejon Ranch lands and are proposed as covered species in the Draft HCP.

The Center appreciates the effort made by FWS in the SEIS and Draft HCP and appreciates the opportunity to offer additional comments. In general, however, we are concerned and disappointed that although some of the details of the analysis have been updated, the conclusions and results of the previous documents have not. The fact is that the previous iterations of the EIS and HCP were of extremely poor quality, repeatedly utilizing flawed methodologies, inaccurate assumptions, and poor data to rubber-stamp an economically- and politically-powerful landowner's desires and plans. The SEIS and updated Draft HCP appear at first to be improvements on the earlier drafts, but a close inspection reveals significant deficiencies that undermine the documents' conclusions. Sadly, these conclusions are again apparently result-driven, with the authors seemingly working backwards from the desired result to craft a document in support. Regardless of the apparent vigor of the analysis, it has been all for naught, for the sanctity of Tejon Ranch's development plans has yet again not been disturbed and the grave impacts of the project again given the green light.

N-3-1

It is not clear if by rewriting the EIS and the HCP the earlier comments are meant to now be discarded or disregarded; but as the vast majority of the critical comments offered on the earlier drafts, including those by the Center, other environmental groups, and by several important condor scientists (e.g., Clendenen et al. and Palmer) remain relevant, they are all hereby incorporated by reference and their concerns, particularly with the impacts to be caused by the Tejon Mountain Village project (and thus by the approval of the HCP) raised here again. This letter will not endeavor to repeat every concern raised earlier, but rather will supplement those concerns with some specific concerns with the revised documents.

I. California Condor

Condor Critical Habitat:

N-3-2

The SEIS and Draft HCP both repeatedly observe that designated critical habitat is not a wildlife refuge or preserve designation, and that development is not automatically precluded in critical habitat. MR1B-15. Although technically accurate, rather than providing helpful information to the reader these statements instead serve to confuse the issue concerning the development of critical habitat on Tejon Ranch. The vast majority, if not all, of the earlier comments on this issue never claimed that the designation of critical habitat necessarily prevented all forms of development. Rather, what was expressed was a concern that *this type* of development, of houses, commercial spaces, golf courses and the like, is incompatible with the designation of critical habitat for the condor. The land is certainly not a preserve (despite many wishes that it were), and the law permits Tejon Ranch to use the land in many ways that are not incompatible with the designation of critical habitat for the condor—ranching and hunting being among them. But a resort development is not one of those compatible uses. Indeed, FWS admits this, stating that "urban and suburban development generally adversely affect condor conservation." MR1B-16.

N-3-3

If urban and suburban development generally adversely affects condor conservation, how can Tejon Mountain Village's urban/suburban development of 14,837 acres of designated critical habitat not be considered "destruction or adverse modification" of critical habitat within the meaning of the law? According to comments by condor scientists, this development "will appreciably diminish the capability of the critical habitat to satisfy essential requirements of the species" including foraging.[1] Based on the premise that because the project is not destroying *all* of the designated critical habitat for the species and that the remaining critical habitat for the species will continue to perform some of its function and conservation role for the species, the destruction of *these specific acres* of critical habitat is not considered destruction or adverse modification at all. This is a cramped and disingenuous reading of both the spirit and letter of the ESA, improperly avoiding the harsh reality that the Tejon Mountain Village project will

N-3-4

N-3-5

[1] Quoting Joint Endangered Species Consultation Handbook (1998) at 4-34. "Appreciably diminish the value" is defined as "to considerably reduce the capability of designated or proposed critical habitat to satisfy requirements essential to both the survival and recovery of a listed species." In light of *Gifford Pinchot Task Force v. FWS*, 378 F.3d 1059 (9th Cir. 2004), the last clause must be read as "essential to either the survival or recovery of a listed species."

N-3-4 cont.

N-3-5 cont. destroy and adversely modify designated critical habitat and therefore the HCP that permits it cannot be approved.

N-3-6 This interpretation of the ESA improperly confers no special status on designated critical habitat, so long as any single act of destruction of critical habitat is limited just enough so as to leave at least some critical habitat that still performs its critical habitat function. The inevitable consequence would be "death-by-a-thousand-cuts" of designated critical habitat; each instance of destruction, of 10% here and 10% there, would likely never individually be enough destruction to meet the destruction or adverse modification standard as interpreted by FWS. Such an interpretation guts the law by fiat.

N-3-7 By determining that it is acceptable in this instance to destroy critical habitat (since remaining critical habitat will supposedly continue to perform its function and since critical habitat overall for the species will supposedly continue to perform its function), FWS has effectively and improperly de-designated this specific critical habitat.[2] Under the ESA, de-designation, accomplished by formal rulemaking and legitimate notice-and-comment, is the only mechanism available to authorize an action that would have the effect of destroying and/or adversely modifying critical habitat (apart from the extraordinary grant of an exemption through the Endangered Species Committee process).

N-3-9 According to the SEIS and Draft HCP, the Tejon Critical Habitat Unit totals 134,871 acres, of which 95,068 acres are within the Covered Lands and 19,091 acres are within the TMV Planning Area. Of this, 14,837 acres will be destroyed by the TMV development project, or 11% of the Tejon Critical Habitat Unit, 15.6% of the critical habitat within the Covered Lands, and 77.7% of the critical habitat within the TMV planning area. Draft HCP p. 4-54. These numbers stand in stark contrast to the conclusion widely repeated in the earlier draft HCP that "96% of the critical habitat unit on Tejon Ranch" would be preserved; a conclusion demonstrably false and yet confusingly repeated (but not directly contradicted) in the latest iteration of the Draft HCP. Draft HCP p. 4-65.

N-3-10 Further confusing the issue is the SEIS's and Draft HCP's use of "suitable foraging habitat" throughout their analyses. Although the new drafts are substantial improvements over their earlier drafts in many ways, an essential criticism of the earlier drafts remains valid: "suitable" condor foraging habitat is improperly constrained. The SEIS acknowledges an absence of "information in the published literature, or elsewhere, that suggests a specific amount of canopy cover that would restrict condors from foraging and feeding," and acknowledges that condors are "able to locate carrion and feed under the canopy of trees." MR1E-4. The fact that condors feed under tree cover, and in fact have been observed feeding under tree cover in the

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N-3-8 [2] The Center is aware that a destruction/adverse modification assessment has not yet formally taken place, as it will be part of the Biological Opinion issued by FWS as part of its Section 7 consultation. But this is almost certainly a distinction in time only, as FWS alone is making all of the mandated assessments and consultations under NEPA, Section 10, and Section 7 and the SEIS was accordingly prepared by FWS. In the absence of an opportunity to comment on the impending Biological Opinion, these comments should be considered applicable to all of FWS's assessments and consultations.

N-3-10 cont.

Tejon Mountain Village site, was specifically raised in the joint letter by a number of condor scientists commenting on the earlier drafts (Clendenen, et al., 2009). And yet the SEIS continues to unreasonably exclude wooded vegetation communities (e.g., oak woodland, conifer, scrub, chaparral) from its definition of "suitable foraging habitat" for the condor. This unsupportable conclusion undermines the SEIS's and Draft HCP's discussions of the Project's impacts on condor foraging habitat, and because this "suitable foraging habitat" concept is interspersed throughout the SEIS's and Draft HCP's analyses of the Project's impacts to critical habitat, undermines those as well.

N-3-11

Based on the unsupportable conclusions regarding foraging habitat, the only sensible and justifiable decision by FWS is to accept the "No Project" alternative and reject the others. Given that FWS appears committed to permitting some amount of the TMV development to go forward,

N-3-12

it should at the minimum prevent the destruction of critical habitat and select the "CCH Avoidance MSHCP Alternative."

Communications Towers:

The SEIS and Draft HCP authorize two communications towers, one approximately 68 feet in height and one approximately 65 feet in height, to be built on or very near ridgelines in the heart of designated condor critical habitat. Figure 4.1-2. As the SEIS acknowledges, communication and radio towers have the potential to be very harmful for condors, as well as other bird species. In an effort to ameliorate these potential impacts, the SEIS requires these two towers to be self-supporting and include anti-perching devices. While these are important features of any tower in condor habitat, for several reasons they are insufficient to adequately prevent harm and take of condors.

N-3-13

First, while two approximate locations are described in Figure 4.1-2 along with their approximate heights, the actual location, size, materials and design are not included in the SEIS or Draft HCP, as they are all to be determined later "subject to review and approval" by FWS. SEIS p. 2-28. But these are crucial facts needed prior to approval of the project. The most important facts needed to be known now are exactly where the towers will be located and exactly how high they will be, especially in relationship to the height of the neighboring tree canopy. Furthermore, the Center is not an expert in radio tower design but a quick review of commercially available communications towers indicates that there is a huge range of design and material features that affect wind tolerance, strength, attractiveness to birds (i.e., "perchability"), and visibility (i.e., avoidability). The fact that FWS will review and approve these features in the future is not legally sufficient, as the lack of information in the SEIS and Draft HCP prevents a full and accurate analysis prior to project approval of the towers' potential impacts. Each of these important features needs to be disclosed and described in the SEIS, with enforceable

N-3-14

mitigation measures in place to ensure that whenever the towers are built they perform as promised and do not harm or cause take of condors. Ultimately, there is no excuse for this information not being presented in the SEIS or Draft HCP; all of the information related to these towers, including their location and design features, should be easily discernable at the present time.

N-3-15 Second, the approximate locations indicated in the SEIS are known to be extremely windy locations, especially if they are at or near the tops of ridgelines, a fact that will greatly restrict the materials and design decisions and could even require towers in the 65-70 foot height range to be guyed out with wires, use materials that make detection by condors difficult, or designed in a way that encourages perching. The SEIS needs to discuss these important considerations in light of each of their impacts on condors; assuming that they are solvable and requiring only later review and approval by FWS is not sufficient.

N-3-16 Finally, although the SEIS discloses approximate locations for two towers, the SEIS and Draft HCP actually authorize more, provided that additional towers are similarly reviewed and approved by FWS. The placement of any future towers needs just as much forethought and analysis as the placement of the two expected towers; it is not sufficient for the SEIS to defer the analysis of the impacts of such towers until a later date. Given that the placement of additional towers appears to be, at this time, purely a contingency and not something that is planned, such a future action should require amendment of the HCP and further environmental review when details of the additional towers become known. Ultimately, communications towers placed in the heart of condor critical habitat is potentially an extremely significant impact, being (along with normally-associated power lines) one of the most significant causes of condor mortality and harm to date.

N-3-17

N-3-18

II. HCP Fails to Address A Comprehensive Framework of Goals and Objectives for Conservation Planning

N-3-19 Basic tenets of habitat conservation planning incorporate not just species level planning, as the approach in the Draft HCP, but additional levels of ecological integrity. The Draft HCP lacks any recognition of planning at the Landscape –Regional Level and the Community and Ecosystem Level planning goals and objectives[3]. Goals and objectives need to be developed for these levels. These levels of conservation planning become particularly important over the long-term as a framework for adaptive management. Examples of goals and objectives issues that need to be addressed at the Landscape- Regional Level include:

- Identification of the structural measure of patch characteristics, including:
  - Patch size frequency distribution for each community type and seral stage and across all size stages/types
  - Size frequency distribution of each type (minus edges)
  - Total amount of each community/type
  - Total amount of patch perimeter and edge zone (including patch: perimeter area ratios,
  - Patch shape indices

- Identification of the structural measures of patch dispersion, including:
  - Patch density
  - Fragmentation and connectivity indices
  - Interpatch distances

[3] Noss et al. 1997

- Juxtaposition measures (i.e. percentage of area within a defined distance from patch occupied by different habitat types, length of patch border adjacent to different habitat types;
- Structural contrast

- Identification of access, flow and disturbance indicators, including:
  - Frequency, return interval or rotational period of fire & other natural or anthropogenic disturbances
  - Road density for different classes of roads & all roads combined
  - Miles of roads constructed, reconstructed, improved and closed each decade
  - Amount of roads restored through effective closures and revegetation

N-3-20 At the Community-Ecosystem Level, we could not find a vegetation map identified at the alliance level of vegetation mapping in the Draft HCP. Absent an evaluation of the plant communities (habitat types) present on site, many essential issues are also therefore absent in the Draft HCP. Key issues that must have goals and objectives developed for them include, but are not limited to:

- Structural measures, including:
  - Frequency distribution of age classes for each community
  - Ratio of area of natural habitat to anthropogenically-disturbed habitat
  - Abundance/density of key structural features (ex. Snags or trees in riparian areas)
  - Spatial dispersion of structural features/patches
  - Canopy density and size & dispersion (example - oak woodlands)

- Compositional measures, including:
  - Identity, relative abundance, frequency & richness of species/guilds in various habitats
  - Ratio of exotic species to native in community

- Functional measures, including:
  - Frequency, return interval or rotational period of fire & other natural or anthropogenic disturbances
  - Areal extent of each disturbance event
  - Intensity/severity of disturbance events
  - Seasonality/periodicity of disturbance
  - Predictability or variability of disturbance
  - Invasion rates of weedy/opportunistic species
  - Human intrusion rates/intensities

N-3-21 While the Draft HCP does identify goals and objectives at the Species Level, it still fails to actually identify numerous key biological issues including:

- Measures of demographic integrity, including:
  - Abundance, density or cover
  - Fertility or recruitment rate

- Survivorship or mortality rate
- Sex ration and age distribution
- Health parameters (fecundity, growth rate [individual], body mass, stress hormone levels)
- Population growth and fluctuation trends
- Distribution and dispersion of subpopulations or individual home ranges across the region (for some species this was included in vague unquantified ways)
- Trends in habitat components (varies by species)
- Trends in threats to species (depends on life history and sensitivity of species)

It is only with comprehensive goals and objectives can conservation at the landscape, community and species level can truly be assured.

III. HCP Fails to Include Recovery Standards for Species

N-3-22 | The Draft HCP needs to consider condor recovery goals and the condor recovery plan and include those metrics into the HCP. For all covered species that have recovery plans, the
N-3-23 | HCP needs to discuss their individual recovery goals and discuss how the plan achieves or promotes these goals.

IV. HCP Modeling and Surveys Are Inadequate

The Draft HCP relies heavily on habitat modeling to estimate individual species habitat and subsequently to determine the impact of the proposed action. The proposed permit term for the HCP is for 50 years, and the HCP additionally provides "no surprises" assurances, essentially locking in the permittee's conservation commitments for the duration of the permit. The species habitat models do not appear to incorporate climate change scenarios. It is inevitable that during
N-3-24 | the proposed permit timeline of 50 years that climate change will affect the distribution and densities of covered species in the project area. Modeling for climate change based on documented species movements have been done for a number species[4], and therefore is feasible and must be incorporated into the species habitat modeling efforts to accurately evaluate the impact to species.

N-3-25 | The evaluation of occurrences and occupied habitat for the covered species is based on a small subset of studies and appears to be inconsistently applied. For example, a single year of protocol level surveys were done in the proposed project area for willow flycatchers "in four
N-3-26 | survey areas" (Draft HCP at 5-81), yet it is unclear where these four "survey areas" were, and ultimately, they were observed at five locations. Then in 2011, a much smaller area – the Beartrap Turnout Improvement Project study area was surveyed for willow flycatchers (Draft HCP at 5-81). It is unclear if protocol level surveys were implemented. It is unclear if all the modeled habitat was surveyed by protocol surveys in 2007. It is unclear if the Beartrap Turnout Improvement Project study area is a subset of the four "survey areas" that had been previously
N-3-25 cont. | surveyed in 2007. Single-season surveys are a "snapshot in time" of resource use by rare species,

[4] http://birds.audubon.org/sites/default/files/documents/birds_and_climate_report.pdf http://data.prbo.org/apps/bssc/

N-3-25 cont. and to use them to determine impacts for the next 50 years while the permittee is afforded "no surprises" assurances is biologically untenable..

N-3-27 The potential inadequacy in the surveys used to document species on the project site leads to the problematic issue of the Draft HCP's estimates of species "take" that can not be determined. For example, the Tehachapi slender salamander's analysis states that "The expected loss of Tehachapi slender salamander would be a small but indeterminable number." (Draft HCP at 6-6). Indeed four of the covered species have an indeterminable number of individuals that will be impacted by the covered activities. Adequate surveys would have improved and still can improve the ability to estimate the number of individuals likely to be affected by the covered activities.

N-3-28 The inadequacy of surveys is also apparent for rare plant species that are proposed as covered species. For example, the perennial round-leaved filaree (*Erodium macrophyllum*) population documented in the "covered lands" is 11 occurrences totaling between 430-730 – a magnitude of difference in the number of individuals. Here too, adequate surveys would have refined the number of individuals in each occurrence. In addition, the conservation scenario re-enforces the inadequacy of the surveys by specifically providing a mechanism in one of the conservation scenarios to incorporate "any new occurrence(s)" (Draft HCP at 6-60). Adequate surveys for this very rare plant in southern California would have minimized the potential for new occurrences to be found in the future.

N-3-29 The "covered lands" still appear to be arbitrarily defined to capitalize on existing conservation investments (see Center for Biological Diversity's comments dated 7-7-09). Much of the "covered lands" are in fact already set aside as conserved areas as part of an agreement between the Tejon Ranch Company and various environmental groups. Including these lands as "covered lands" and as part of the analysis of impacts from the "covered activities", obfuscates the localized impacts from the proposed project level activities.

N-3-30 Additionally, despite the fact that much of the "covered lands" have modeled habitat for covered species, it is unclear if these already conserved lands have had surveys on them to verify if, in fact, the species are present. It appears that actual surveys of modeled habitat have been implemented on a subset of the covered lands and mostly on lands that would be affected by the "covered activities". This approach then assumes that the unsurveyed modeled habitat lands are occupied habitat, when in fact they may not be. Therefore the presumption that unsurveyed lands provide occupied habitat for "covered species" so that the impact of the covered activities will be negligent (as is presumed for ALL of the "covered species") is seriously flawed. The HCP needs to be based on adequately implemented surveys of all modeled habitat in order to evaluate individual species occurrences on the impact areas and the already conserved lands.

V. Species Specific Conservation Is Inadequate

In addition to the issues identified above, there are numerous species-specific biological goals and objectives that suggest a thorough review of species needs are not being adequately considered.

N-3-31 While we support the conservation of appropriately modeled habitat, most species lack objectives for maintaining documented occurrences of these rare species. The HCP could

N-3-31 cont. conserve all the modeled habitat and still conceivably allow for extirpation of all local populations – certainly not achieving goals for conservation. Therefore goals and objectives must include conservation of existing populations for each species, where species have been identified on the project site.

N-3-32 Because rodenticides are a direct threat to numerous "covered species", the Draft HCP still fails to analyze or incorporate a ban on all rodenticide use on the "covered lands".

N-3-33 A number of the species' objectives include "avoid and minimize the introduction of exotic plant and animal species, such as Argentine ant (*Linepithema humile*)". Please explain how this would actually be successfully implemented.

Tehachapi Slender Salamander

N-3-34 Objective 3.1 may not provide conservation to the Tehachapi slender salamander because as the species description identifies, it does not actually live in riparian/wetland areas, but instead in rock talus and litter matrix typical of Tehachapi slender salamander microhabitat. (Draft HCP at 5-11).

N-3-35 The Draft HCP fails to provide documentation that Objective 4.1 (The project biologist will make reasonable efforts to capture and relocate any observed individuals to suitable habitat (e.g., on north-facing slopes containing talus) that is the closest distance to the disturbance area from where the individuals were removed) actually will benefit the Tehachapi slender salamander over the long-term. Please see our comments on translocation issues from our 7-7-09 letter.

American Peregrine Falcon

N-3-36 Inconsistencies occur between the protection zones for peregrine falcon nests between the Objective 4.2 (0.25 miles) and Objective 6.2 (1000 feet). Please explain. Please see our comments on the inadequacies of small buffers and related issues from our 7-7-09 letter.

Bald Eagle

N-3-37 The proposal of the elimination of 58% of modeled wintering habitat for bald eagle is still excessive, especially in light of the limited amount of wintering habitat on the "covered lands" and the fact that the wintering bald eagle population increased from 1 in 2007 to 6 eagles in 2008, including juveniles (Draft HCP at 5-48). Bald eagle recovery is a proven success of the Endangered Species Act, however, the population must remain self-sustaining and therefore additional wintering habitat for this species needs to be assured through this habitat conservation

N-3-38 plan. These same resources will also be used by other "covered species" such as tricolored blackbirds (see comments below).

Golden Eagle

N-3-39 While Goal 4 states that "All active golden eagle nest sites will be conserved", golden eagles typically have numerous nests within a single breeding territory but may not make use of them every

N-3-39 cont. year. In order to assure that over the long term golden eagle territories are protected, all nests will need to be conserved.

Tricolored Blackbird

N-3-40 As with the bald eagle, the elimination of 32% of the primary breeding habitat for tricolored blackbird is still excessive, especially in light of the limited amount of wintering habitat on the "covered lands".

Round-leafed Filaree

N-3-41 Neither of the two conservation scenarios in Objective 2.1 are adequate to protect the occurrences of the round-leaved filaree, based on the fact that at its most conservative the scenario a. would conserve a maximum of only 58% of this very rare plant, particularly here in southern California.

VI. Key Plans Need to Be Included in the Draft HCP

N-3-42 Many of the conservation activities rely on plans for "covered activities". In order for the public and decision makers to be able to evaluate the efficacy of these plans, they need to be provided as part of the public review process for the Draft HCP. The plans that are referenced in the Draft HCP, but are not available for review include:

- Grazing Plan (Draft HCP at 7-91)
- Integrated Pest Management Plan (Draft HCP at 7-92)
- Public Access Plan (Draft HCP at 7-86)

VII. Cumulative Impact Analysis is Inadequate

N-3-43 The cumulative impacts analysis especially on avian species is inadequate because it only generalizes impacts from the sixteen wind farm projects that are currently proposed in Kern County. For example, the Draft EIS (at 4.1-130) evaluates the impact to California condors from these projects as "some level of effect on condors is possible".

N-3-44 The cumulative impact analysis also fails to include the Desert Renewable Energy Conservation Plan[5], an HCP/NCCP that is being developed for the desert regions of California including lands directly adjacent to the Tejon Ranch.

N-3-45 It also fails to include the proposed High Speed Rail project[6].

VIII. Conclusion

While improvements have been made in the Draft HCP and SEIS and proposed IA from the previous drafts, they remain fatally flawed and still violate the ESA, NEPA, and other applicable statutes and regulations. There are plenty of viable and economically fruitful uses of

[5] www.drecp.org /
[6] www.cahighspeedrail.ca.gov /

Tejon Ranch that would actually serve to conserve the many endangered, threatened, and sensitive species that are found on the Ranch. The development of Tejon Mountain Village, as proposed, is still not one.

Thank you for your time and consideration in reviewing these comments.

Sincerely,

/s/
Adam Keats, Senior Counsel and Urban Wildlands Program Director
Ileene Anderson, Staff Biologist
Center for Biological Diversity

Reference:

Noss, R.F., M. A. O'Connell and D.D. Murphy. 1997. The Science of Conservation Planning: Habitat Conservation under the Endangered Species Act. Island Press, Washington, DC. Pgs. 246.