

Master Response 1C

California Condor Take and Habituation

Table MR1C-1. Comments Addressed in Master Response 1C

Comment	Commenter
05-16	Defenders of Wildlife, Pamela Flick
04-115	Center for Biological Diversity, Adam Keats
I293-26	Clendenen, David A., Janet A. Hamber, Allen Mee, Vicky J. Meretsky, Anthony Prieto, Fred C. Sibley, Dr. Noel F.R. Snyder, William D. Toone
I293-27	Clendenen, David A., Janet A. Hamber, Allen Mee, Vicky J. Meretsky, Anthony Prieto, Fred C. Sibley, Dr. Noel F.R. Snyder, William D. Toone
I293-34	Clendenen, David A., Janet A. Hamber, Allen Mee, Vicky J. Meretsky, Anthony Prieto, Fred C. Sibley, Dr. Noel F.R. Snyder, William D. Toone
I293-35	Clendenen, David A., Janet A. Hamber, Allen Mee, Vicky J. Meretsky, Anthony Prieto, Fred C. Sibley, Dr. Noel F.R. Snyder, William D. Toone
1948-27	Manning, Jeffrey A
I1054-6	Moore, Stan
I1163-3	Palmer, Bruce

1C.1 Summary of Substantive Comments

The following summarizes the substantive comments received on the Draft EIS and Draft TU MSHCP related to take and habituation of the California condor. Table MR1C-1 provides a list of the commenters and a reference to the individual comment, as summarized below. The parenthetical reference after each summary bullet indicates where a response to that comment is provided.

This response begins with an overview of take as defined under the Federal Endangered Species Act (ESA). This overview discussion is followed by responses to individual issues raised by comments.

- Attraction of condors to humans and development can alter condor behavior. (Response provided in Section 1C.2.2, Attraction of Condors to Humans and Development.)
- Development on “key ridges” will bring people into proximity with condors, altering behavior. (Response provided in Section 1C.2.3, Development on Key Ridges and Proximity of People and Condors.)
- Condors removed from the wild are not ecologically valuable. (Response provided in Section 1C.2.4, Ecological Value of Condors Removed from the Wild.)
- The Federal incidental take permit (ITP) does not allow for lethal take. (Response provided in Section 1C.2.5, Federal Incidental Take Permit and Lethal Take.)
- Indirect effects on condors are not adequately analyzed. (Response provided in Section 1C.2.6, Analysis of Indirect Effects on Condors.)
- Supplemental feeding can lead to unnatural condor behavior. (Response provided in Section 1C.2.7, Supplemental Feeding and Condor Behavior.)

- Loss of foraging habitat and critical habitat as a result of development would lead to “take” of condors. (Response provided in Section 1C.2.8, Loss of Foraging Habitat and Critical Habitat Due to Development Resulting in Take.)

1C.2 Responses to Substantive Comments

1C.2.1 Overview

The ESA generally prohibits the take of federally listed animal species, including the California condor (Section 1.4.1, Federal Endangered Species Act, in Volume II of this Supplemental Draft EIS). However, the ESA expressly authorizes the Service to allow take of listed species by permit under Section 10, if the Service finds that the take will be incidental to otherwise lawful activities, the applicant’s plan will minimize and mitigate the effects of the take to the maximum extent practicable, and the take will not appreciably reduce the likelihood of survival and recovery of the species in the wild. Congress added Section 10 to the ESA to provide private landowners with a legal mechanism to develop their private property or engage in other lawful activities on their lands that might inadvertently take a listed species, so long as such take is appropriately minimized and mitigated and does not jeopardize the continued existence of the species. In accordance with Section 10, Tejon Ranchcorp (TRC) has applied for an ITP to cover incidental take of 27 species, including the California condor, that may occur as a result of the Covered Activities (including proposed development) on a portion of Tejon Ranch (i.e., Covered Lands), as described in the TU MSHCP. Over a proposed 50-year permit term, TRC has requested the Service to authorize up to four nonlethal instances of incidental take of California condors in the form of harassment or harm. No lethal take of condors has been applied for or would be authorized under the ITP.

Under the regulations defining take under the ESA, “harass” is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering.” “Harm” is defined in the Service’s regulations as “an act which actually kills or injures wildlife” and includes “significant habitat modification where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.” As noted above, no lethal take of condors is being sought by TRC and the TU MSHCP is designed to avoid physical injury to condors.

Take of condors, as contemplated under the TU MSHCP, would be in the form of habituation, that is, the circumstance where a condor becomes attracted to development or other human activity and becomes unresponsive to measures incorporated into the plan to deter such condor/human interaction such that its “normal behavioral patterns are disrupted”, thereby creating a “likelihood of injury” to an individual bird.

1C.2.2 Attraction of Condors to Humans and Development

A commenter stated that many current problems with released birds are related to the attraction of condors to humans and development, and noted that efforts are being made to ensure that birds have as little contact with humans and development as possible. Another commenter stated that developing the TMV Planning Area into urban or suburban living areas would degrade habitat on Tejon Ranch such that it would not be viable for California condors, as historical records show the original condor population did not occupy urban or suburban areas for reasons that likely include various forms of molestation of birds by humans, collisions with overhead objects and wires, and disturbance at feeding sites. Another commenter stated that condors are inquisitive and can become

behaviorally compromised through interactions with humans or human structures, which can lead to individual condors teaching other condors inappropriate behaviors.

While lead ammunition poisoning remains the primary cause of condor mortality in the wild, the Service agrees with the commenters that many of the current problems associated with released condors are related to attraction to humans and development. As recognized in the comments, the Service is actively implementing measures to avoid and minimize the attraction of humans, and human structures to condors. Such measures include hazing (e.g., the use of noise, dogs, or other measures to deter condors from perching on human structures such as communication towers and buildings), and working to keep areas frequented by condors free of attractants, such as trash, microtrash (Master Response 1D, California Condor Microtrash and Lead Ingestion), and food resources, as described in more detail below.

The Service anticipates there is a potential for condors to be attracted to human activities and structures associated with the development proposed under the TU MSHCP during and following its construction, and for condors to be attracted to other uses of the Covered Lands, such as film-making activities or passive recreational activities. However, the Service considers the potential for take to be unlikely given the proposed minimization and avoidance measures included in the TU MSHCP, such as provisions for an onsite Service-approved biologist to monitor condors on the ranch and coordinate daily with the Service regarding condor locations and activity. The ability of the Service to respond quickly to situations involving negative interactions between condors and humans, or human structures, and to deter condors from such adverse situations, is one of the primary measures that the Service believes would minimize the potential for take to occur.

Throughout the existence of the condor recovery program, and in accounts of historical condor activity (Mee and Snyder 2007, Wilbur 1978, Koford 1953), human and condor interactions have been recorded. At times, negative interactions have occurred more frequently than at others. The Service attributes some of the variation in frequency and number of negative interactions to the age structure of the wild condor population. Condors that have reached reproductive status spend more time pursuing mates, nesting, and foraging than juveniles. During periods of the recovery program when only juvenile condors occurred in the wild, there were more frequent occurrences of destructive behavior. This does not mean that mature condors are free of the attraction to humans and/or human structures. Both adult and juvenile condors have been attracted to hunting cabins and other structures when food resources, such as animal parts, gut piles, cleaned carcasses, and trash and debris, are left out in the open. These practices increase the potential for harmful interactions, including destruction of property, injury to condors (i.e., entanglement in structures, ingestion of trash or harmful chemicals), and positive reinforcement (i.e., food) that, in turn, increases the potential for such interactions to occur more frequently if allowed to continue unabated. Communication towers in the San Gabriel Mountains (where anti-perching devices have not been consistently maintained) have also recently been attractive to condors as perching or roosting locations, even without the presence of food. In April 2011, one adult condor was entangled in a loose strap hanging from a communication tower, resulting in loss of one of the bird's wings.

These examples demonstrate the need to ensure that measures to avoid and minimize such interactions are properly implemented and maintained. If anti-perching devices are installed on towers, bird flight diverters are installed on relocated transmission lines and towers and regularly maintained, and residential, commercial, recreational and other sites occupied by humans are kept free of trash and other dangerous debris, the Service believes that the potential for injury to condors from these sources can be effectively minimized.

As described in Chapter 4, California Condor, of the TU MSHCP, and summarized in Table 2-3 in Chapter 2, Proposed TU MSHCP and Alternatives, in Volume II of this Supplemental Draft EIS, the applicant has proposed avoidance and minimization measures to reduce the potential for take of condor as a result of the Plan-Wide Activities, including film production, passive recreation, and

maintenance and use of roads and back-country cabins. These include measures to reduce and/or avoid exposure of the condor to microtrash, disturbances to condors, potential collisions with powerlines and utility structures, habituation to human activities and artificial structures, and exposure to lead ammunition.

In addition, the Tejon Ranch Conservancy has developed a public access plan that describes how public access is currently managed, and will be managed in the future. , The plan will be reviewed and revised as necessary in connection with the development of the Ranchwide Management Plan (RWMP) under the requirement to preserve existing conservation values of the Ranchwide Agreement. Depending on the easement holder, a separate public access plan could be prepared for the TMV Planning Area Open Space. Regardless, the Service would review and approve the public access plan(s) to ensure consistency with the TU MSHCP, ESA, and any applicable recorded conservation easement restrictions, both during and following the end of the permit term (i.e., in perpetuity), and to ensure that any public use of the TU MSHCP Mitigation Lands is consistent with preserving the conservation value of the Covered Lands for the Covered Species, including condors.

1C.2.3 Development on Key Ridges and Proximity of People and Condors

A commenter stated that allowing development on “key” ridges would bring people into close proximity to condors, thus altering their behavior.

Development on “key ridges” as suggested by commenters does have the potential to attract condors, bringing them in proximity to human development and altering their behavior. As part of the TU MSHCP process, proposed development was removed from some key ridges. Nonetheless, based on the increased use of the ranch by condors, as indicated by updated geographic positioning system (GPS) data, and the likely continuing use of the ranch as indicated by the U.S. Geological Survey (USGS) analysis of the condor data (Johnson et al. 2010, Appendix I), the Service recognizes that land currently used by condors for foraging, feeding and overnight roosting would be directly and indirectly affected as a result of the development proposed under the TU MSHCP. The proposed ITP would recognize the potential for take due to habituation, and the measures incorporated into the TU MSHCP are intended to minimize the potential for such take. Given that condor activity occurs across most of Tejon Ranch at any given time, and is not concentrated in any particular area (except for the traditional roost site in the Condor Study Area that condors regularly use), the Service anticipates that condors would continue to use the vast majority of ranch lands located outside of the proposed development area that support essential condor foraging, feeding, and roosting. The measures proposed in the TU MSHCP and identified above, including restrictions on public access to the TU MSHCP Mitigation Lands, enforceable covenants, conditions, and restrictions (CC&R) on TMV Project lands to minimize human/condor interactions, continual monitoring of the Covered Lands to identify condor activity, and provision for immediate and consistent responses to deter birds away from humans and human structures, if carefully implemented, should effectively minimize the potential take of condors due to habituation.

1C.2.4 Ecological Value of Condors Removed from the Wild

A commenter stated that birds that “seek out people ... may be considered ecologically dead” and must be returned to captivity before inappropriate behavior is passed on to other birds.

The Service agrees that birds removed from the wild are no longer contributing to the wild population. As discussed above, under the TU MSHCP, the removal of a condor from the wild that has become habituated to humans and acquired behaviors that create a likelihood of injury or death is considered a take of the condor, even if “physical injury” to an individual condor has not occurred.

However, removal of a condor from the wild due to habituation has not in the past, and is not expected in the future, to result in the actual death of the condor, whether such removal is temporary or permanent. A condor that is removed from the wild could, under specific circumstances, become a necessary part of the captive breeding population. However, at this time all condor founder genes are represented in the wild and captive breeding populations, and the wild and captive populations, are managed independently of each other to ensure all original condor founder genes are represented both in captivity and in the wild.

Because a condor that becomes unafraid of humans and is attracted to human activity puts itself at risk of injury or death by acquiring harmful behaviors, such as ingesting microtrash, eating from dumpsters, or becoming attracted to harmful human structures such as transmission towers, residences, and vehicles, that condor must be removed from the wild. Property can also be damaged by condors, which have been known to pull the shingles off houses and windshield wipers off of vehicles when attracted to humans and human structures. These negative behaviors can be taught to other condors if not acted upon quickly, further exposing more of the population to the potential for habituation.

Removal of a condor from the wild may be temporary if the condor can be trained to avoid human interaction and released back into the wild; capture may be permanent if such training is not successful. Permanent removal of a condor from the wild may occur in the most extreme cases for the safety of the affected condor and for the benefit of the other members of the wild flock when a condor cannot be returned to the wild because a "time out" and/or additional aversion training to eliminate negative behaviors are not successful. While there have been instances where condors have been permanently removed from the wild, early and consistent intervention to deter condor interaction with humans and human structures has typically proven to be an effective deterrent to habituation.

For the purposes of the analysis in this Supplemental EIS, the Service has assumed that up to four condors may be removed from the wild over the 50-year term of the proposed permit. When condors no longer respond to hazing efforts to deter them from approaching humans and human structures on Tejon Ranch, and the Service has determined the birds must be removed from the wild, take of that condor will have occurred.

The Service has determined that take in this manner of up to four condors over a 50-year timespan is reasonable, given the expanding condor population and the Service's experience with previous undesirable interactions between humans and condors, as well as the minimization and avoidance measures proposed in the TU MSHCP. It is not anticipated that removing four condors from the wild over 50 years would have a substantial effect on the population, particularly if the removal is temporary. The potential for the permanent removal of condors from the wild as a result of habituation is low. Most permanent removals of the condor from the wild occurred early in the recovery program, when younger condors were released without the benefit of adults that would normally serve as models for juvenile birds in avoiding human/condor interactions. Relatively few condors have needed to be permanently removed from the wild in recent years due to increased use, and effectiveness, of hazing techniques in potential habituation situations and the growing presence of mature adult birds in the wild that are less likely to engage in undesirable behaviors and can serve as models for juvenile birds. To date, no breeding condors have been permanently removed from the wild as a result of habituation. Please refer to Section 4.1, Biological Resources, in Volume I of this Supplemental Draft EIS for a more in detailed discussion of the potential effects of habituation.

1C.2.5 Federal Incidental Take Permit and Lethal Take

A commenter indicated that the California condor is a state fully protected species for which no incidental take may be authorized pursuant to the California Endangered Species Act (CESA).

CDFG, not the Service, is responsible for administering CESA, and for determining whether the Covered Activities contemplated under the TU MSCHP would result in take, as that term is defined under California state law. As explained in Section 1C.2.1, Overview, above, and as discussed further in Master Response 8, Regulatory Considerations, the applicant is not proposing, and the ITP would not allow, lethal take of condors under the ESA and its implementing regulations.

1C.2.6 Analysis of Indirect Effects on Condors

A commenter stated that the Draft TU MSHCP does not analyze how much additional human use would occur outside the development areas associated with recreational access; the dispersed nature of the development would maximize edge effects and difficulty in regulating those effects. The commenter also states that disturbance associated with the proposed development, including increased traffic, construction, recreation, and noise, would reduce condor use in adjacent areas such as the Condor Study Area, as well as the entire ranch, even though they are outside the direct effects area.

As explained in Master Response 1E, California Condor Loss of Foraging Habitat, in addition to habituation, the Service is considering the direct and indirect effects on the condor that may occur as a result of the loss of foraging habitat caused by the Covered Activities in the TU MSHCP. The Service recognizes the increase in human use of the ranch contemplated under the TU MSHCP would create edge effects that would result in a reduction in habitat value beyond the habitat eliminated by the immediate development footprint of the proposed Commercial and Residential Development Activities. The Service anticipates indirect effects on the California condor, and its habitat, may also occur in the form of development-related noise and light and increased passive recreation and human activity in and adjacent to the proposed development. Direct and indirect effects on the condor and its habitat may also occur as a consequence of human activity in the TU MSHCP Mitigation Lands contemplated under the TU MSHCP.

In assessing the potential effects on the California condor and its habitat on the Covered Lands from the development proposed under the TU MSHCP, the Service revised the model of foraging habitat to include indirect effects associated with the proposed development. For example, the Service estimates that lands within an additional distance of up to 0.5 mile from the TMV Specific Plan/Oso Canyon Development Envelope proposed under the TU MSHCP may be indirectly affected by increased noise, light, and human activity resulting from the development. The Service assumes that suitable foraging habitat beyond the additional 0.5 mile from the proposed Development Envelope would likely continue to provide opportunistic feeding opportunities for condors. Please refer to Master Response 1E, California Condor Loss of Foraging Habitat, for an additional discussion of how indirect effects on condors are considered in the revised habitat model.

Because there is a substantial amount of suitable foraging habitat outside of the proposed development areas in the Covered Lands that condors currently frequent, and hunting and grazing would continue under the TU MSHCP at historical levels (Master Response 1E, California Condor Loss of Foraging Habitat), the Service does not believe injury or harm to condors would occur as a result of the loss of foraging habitat associated with the development proposed under the TU MSHCP. As previously stated, the Service recognizes condor behavior could be altered by the proposed development, but anticipates that proposed take avoidance and minimization measures would effectively reduce the potential for such behavioral changes to result in take. The Service will also formally address the issue of adverse modification of critical habitat in the biological opinion

prepared in compliance with ESA Section 7 and in connection with the Service' decision on the issuance of an ITP.

The Service recognizes there is a potential for interactions between humans and condors as a result of increased public access to the TU MSHCP Mitigation Lands. Public access into the TU MSHCP Mitigation Lands would be limited to the passive recreation identified in the TU MSHCP, in accordance with public access plans prepared by the Tejon Ranch Conservancy (and potentially other easement holders in the TMV Planning Area Open Space) and reviewed and approved by Service. Public access would be confined to designated trails, or existing roads, unless part of a guided group.

Existing Ranch Uses and passive recreation generally consist of activities that the Service considers compatible with condor use of the ranch. Some activities such as TRC's existing grazing program and the ranch hunting programs (not a Covered Activity under the TU MSHCP), are considered beneficial to the condor and its habitat because they augment food sources for condors foraging in TU MSHCP Mitigation Lands. The Service also notes that ranching activities and passive recreation occur, or have occurred, elsewhere in the range of the California condor and in the vicinity of some of the release and supplemental feeding sites, such as Los Padres National Forest and Pinnacles National Monument. Although there have been incidences of human/condor interaction in these areas, negative interactions are uncommon. Therefore, the substantial amount of habitat protected from development in the TU MSHCP Mitigation Lands would retain its conservation value for condors foraging in the Covered Lands. Similarly, it is not anticipated that many incidents of human/condor interaction on the Covered Lands would occur, particularly with implementation of the minimization measures proposed under the TU MSHCP (Section 1C.2.2, Attraction of Condors to Humans and Development, above). The Service believes the potential for take to occur as a result of ranchwide activities and passive public recreation to be low, but not entirely absent, and therefore it is appropriate to cover existing ranchwide activities and passive public recreation under the permit.

1C.2.7 Supplemental Feeding and Condor Behavior

A commenter stated that relying on feeding programs to lure condors away from development in the Tehachapi Mountains would continue to result in altering natural condor behavior. Another commenter stated that artificial feeding stations would themselves constitute take of the species.

For clarification, the Service is not pursuing a permanent supplemental feeding program on Tejon Ranch. The Service anticipates that any supplemental feeding of condors on Tejon Ranch would be limited in scope and duration, and implemented at the sole discretion and direction of the Service, if needed. The main purpose of any supplemental feeding on the ranch would be for trapping condors as part of routine health examinations and transmitter upkeep, if the Service determines it would benefit the species. Please refer to Master Response 1H, California Condor Supplemental Feeding, for a more detailed discussion of the supplemental feeding program.

1C.2.8 Loss of Foraging Habitat and Critical Habitat Due to Development Resulting in Take

A commenter stated that development in the TMV Planning Area is a major threat to recovery of the California condor, and the TMV Project would lead to "take" of the species and adverse modification of critical habitat. Another commenter requested an explanation of the Service's determination that the loss of foraging habitat associated with the TMV Project would not significantly adversely affect or cause "injury" or "harm" to condors or interfere with their behavioral patterns. The commenter also stated that despite the preservation of habitat and avoidance, minimization, and mitigation measures proposed in the Draft TU MSHCP, the loss of habitat and indirect effects of fragmentation

would negatively affect the condor and cause direct and indirect take. Another commenter stated that the assertion that proposed development would "preclude condor recovery" is unsupported, and that condors stand to benefit from the proposed TU MSHCP.

As explained in Master Response 1B, California Condor Critical Habitat, and Master Response 1E, California Condor Loss of Foraging Habitat, the Service' initial evaluation of the proposed TU MSHCP Mitigation Lands, including the Condor Study Area, is that these lands would continue to provide substantial foraging, feeding, roosting habitat for the condor, and continue to facilitate condor access to other areas in the condor's historic range, even though some suitable habitat, including critical habitat, would be lost or adversely affected by the Covered Activities. The Service has evaluated the foraging habitat that would remain on the Covered Lands and throughout the Tejon Ranch after construction of the proposed development associated with the TU MSHCP, and assessed whether the remaining habitat would maintain the ranch's habitat contribution to the increasing wild condor population anticipated in the future. The Service believes that with continued grazing and commercial hunting on the ranch, there should be ample, unfragmented foraging habitat in the Covered Lands and on the ranch generally to accommodate the growing condor population.

As discussed above, because there is a substantial amount of suitable foraging habitat outside of the development areas proposed under the TU MSHCP that condors currently frequent, and hunting and grazing would continue under the TU MSHCP at historical levels (Master Response 1E, California Condor Loss of Foraging Habitat), the Service does not believe injury or harm to condors would occur as a result of the loss of foraging habitat associated with the proposed development. The Service will formally address the issue of adverse modification of critical habitat in the biological opinion prepared in compliance with ESA Section 7 in connection with the Service' decision on the issuance of an ITP.