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CUSHENBURY MINE TRUST

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September 15, 2003

West Mojave Plan
Bureau of Land Management
22835 Calle San Jose De Los Lagos
Moreno Valley, CA 92553

**RE: Draft Environmental Impact Report and Statement for the West Mojave Plan,
May 30, 2003.**

Dear Sirs:

The Cushenbury Mine Trust is a trust created by agreement between the United Steelworkers of America and the former Kaiser Steel Corporation to which Kaiser deeded its mineral properties containing carbonate rock, consisting of both limestone and dolomite, and gravels derived primarily from those rocks when Kaiser ceased steel making operations. Those properties currently consist of over 9,000 acres of patented and unpatented mining claims and fees simple lands located on the north slope of the San Bernardino Mountains and on the adjacent alluvial fans south of the community of Lucerne Valley, California.

The Trust's objective is to produce revenue streams from development of the mineral assets on those properties to fund health benefits of some 2,400 hourly retirees of Kaiser's steel making operations, and their dependents, who were denied those promised benefits due to the closure of the company.

For several years, CMT worked as a part of the Carbonate Habitat Management Strategy (CHMS) group in cooperation with the Bureau of Land Management, the Forest Service and Fish and Wildlife Service, along with representatives of the mining industry and other claim holders and property owners with interest in the area, to formulate a program under which the five federally listed carbonate endemic plants would be adequately protected, yet the long-term future of the carbonate and gravel mining industry would also be preserved with much of its mineral resources still recoverable.

The Trust is generally in agreement with the BLM's intention to protect the federally listed carbonate endemic plants within the designation of an Area of Critical Environmental Concern (ACEC).

In section 2.2.4.10.2 Carbonate Endemic Plants of the draft EIR/EIS for the West Mojave Plan, pp. 2-91 through 2-93 and Map 2-12, the draft document indicates that it is the BLM's

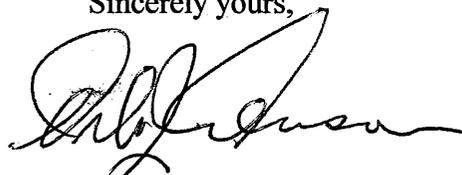
intention to designate an ACEC consisting of 4,393 acres of federal lands and 762 acres of private land. Of those acres, unpatented mining claims held by the Trust would provide approximately 1,920 acres, and the Trust's private lands would provide approximately 380 acres of that total for the creation of that ACEC. The Trust is hopeful that it can reach an accord with the BLM in achieving its objective, however the BLM must be aware that the extensive Trust's holdings within the proposed ACEC, and immediately adjacent to it, contain deposits of high-grade cement and whiting-grade limestone, as well as cement stone of lesser quality, and deposits of gravel.

The Trust's has similar mineral assets on adjacent lands administered by the Forest Service and on private lands. Due to the rugged topography of the Trust's holdings, the only opportunities for the construction of access roads to those adjacent lands are located within the lands proposed for the ACEC. Consequently, the Trust's exploration roads leading to those adjacent lands, which it's predecessor constructed with earthmoving equipment and the Trust maintained by those means over many years, are located within that proposed ACEC. Any agreement between the Trust and the BLM for the transfer of Trust lands to the ACEC must provide for continued access by the Trust on existing roads and must also provide for the construction of alternative improved roads in the ACEC sufficient to support a future mining operation on and an ore haul from those adjacent lands should that development ever be undertaken.

The EIR/EIS, on page 2-92, only provides for access as follows: "All existing routes of travel on public lands within the proposed ACEC would be designated as open, limited or closed. Access roads would be gated in several places with access limited to non-motorized users included equestrian and hikers. Vehicle entry would be limited to research activities, permitted recreation events and emergency access, such as fire, rescue, or enforcement access." Obviously, the Trust feel that such restriction on the Trust's access to its mineral properties and claims is too restrictive, and the isolation of those Trust holdings by the elimination of roads, such as cited in the EIR/EIS, would deny the Trust its historical right to access, to maintain, and to develop its mineral properties.

The Trust is interested in meeting with the BLM, at your convenience, in an effort to further discuss in detail this and other matters related to the Trust's participation in creation of the proposed ACEC for the carbonate endemic plants.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Orlo J. Anderson". The signature is fluid and cursive, written over a horizontal line.

Orlo J. Anderson
Mining Manager

cc: F. Bitonti, CMT



DEPARTMENT OF FISH AND GAME

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December 22, 2003

Mr. William Haigh
Bureau of Land Management
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Mr. Randy Scott
County of San Bernardino
Land Use Services Department
385 North Arrowhead Avenue
San Bernardino, CA 92415

Mr. Scott Priester
City of Barstow
Community Development Department
220 East Mountain View Street
Barstow, CA 92311-2888

**West Mojave Plan
Habitat Conservation Plan and
California Desert Conservation Area Plan Amendment
Draft Environmental Impact Report and Statement
SCH #2003011017**

Dear Messers Haigh, Scott and Priester:

The Department of Fish and Game (Department) appreciates the opportunity to review and provide comments on the West Mojave Plan (Plan) Draft Environmental Impact Report and Statement (DEIR/EIS). The Plan is intended to serve as a Habitat Conservation Plan (HCP) and federal land use plan amendment. The plan presents a proposed strategy to conserve and protect the desert tortoise (Federal and State Threatened), the Mohave ground squirrel (State Threatened) and 57 other sensitive plant and animal species, while providing a streamlined program for complying with the requirements of the California and federal Endangered Species Acts (CESA and FESA, respectively). The plan proposes a series of conservation measures which are intended to mitigate for the future incidental take of the 59 proposed "covered species" and to allow the Department to issue an Incidental Take Permit (ITP) for those species. Proposed activities to be covered under the ITP, which could result in incidental take of the covered species, include

private activities subject to the permitting authority of a city or county participating in the HCP, public activities undertaken by a participating city or county, specified Caltrans maintenance activities, activities on public lands, and Southern California Edison (SCE) maintenance activities. The proposed term of the requested permit is 30 years. Incidental take of the covered species associated with public and private activities undertaken or permitted by agencies not participating in the HCP, and private activities not subject to a development or building permit would not be covered by the requested ITP. The planning area includes 3.2 million acres of BLM-administered public land, and 3.0 million acres of private land, generally encompassing portions of Inyo, Kern, Los Angeles, San Bernardino, and Riverside counties. The plan presents seven alternative conservation strategies, each of which presents a different approach to achieving biological goals and objectives for the covered species.

Department staff have been actively involved since 1992 (Memorandum of Understanding By and Between the U.S. Bureau of Land Management and the Undersigned Participating Agencies) as a "participating agency", along with 11 local jurisdictions, 5 counties, a water agency, several state agencies, the U.S. Fish & Wildlife Service and the Bureau of Land Management (BLM), in the development of what was initially called the West Mojave Coordinated Management Plan. The Department's involvement has been both at the technical and policy guidance level and has included participation in meetings with various stakeholder groups, the "Supergroup" and the "Steering Committee".

The Department is providing comments on this DEIR/EIS as the state agency having the statutory and common law responsibilities with regard to fish and wildlife resources and habitats. California's fish and wildlife resources, including their habitats, are held in trust for the people of the State by the Department (Fish & Game Code section 711.7). The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitats necessary for biologically sustainable populations of those species (Fish & Game Code section 1802). The Department's fish and wildlife management functions are implemented through its administration and enforcement of the Fish and Game Code (Fish & Game Code Section 702). The Department is a trustee agency for fish and wildlife under the California Environmental Quality Act (see CEQA Guidelines, 14 Cal. Code Regs. Sec. 15386(a)) and National Environmental Policy Act (NEPA). The Department is also a permitting agency pursuant to Fish and Game Code Section 2081 (CESA) and 1600 et seq. (Streambed Alteration Agreements). The Department must use the EIR/EIS to support its issuance of the ITP and any necessary Streambed Alteration Agreements required by the Plan. As such, the Department is also a responsible agency pursuant to CEQA. The Department is providing these comments in furtherance of these statutory responsibilities, as well as its common law duty as trustee for the public's fish and wildlife.

State and Federally listed species proposed for coverage in the plan include: Desert tortoise, Mohave ground squirrel, Inyo California towhee, Southwestern willow flycatcher, Western yellow-billed cuckoo, Least Bell's vireo, Cushenbury buckwheat, Cushenbury milkvetch, Cushenbury oxytheca, Parish's daisy, Lane Mountain milkvetch, Mohave tarplant, and Triple-ribbed milkvetch, to name only a few. In addition to the 59 species proposed for coverage in the plan, a total of 32 natural communities are known from the planning area. All species inhabiting these natural communities could potentially be affected by activities proposed for coverage in the Plan. We also note that not all listed species occurring within the planning area are proposed for coverage by the Plan. Activities potentially resulting in the incidental take of those species are not covered by the Plan and would not be covered by the ITP.

The Department recognizes that a considerable amount of work has gone into developing the Plan to date by many participating agencies and interested public. It is the Department's belief that there still remain significant unresolved but resolvable concerns regarding a number of important aspects of the document, as it is currently written. We believe that these concerns have been communicated to the lead agencies at several key points during development of the Plan. This letter focuses on these significant unresolved issues. The attachments to the letter provide more detail on CESA (Attachment 1), CEQA (Attachment 2), General Comments on the Conservation of All Species (Attachment 3), Specific Comments on Individual Species (Attachment 4) and Miscellaneous Comments (Attachment 5). Specific comments are pertinent only to Alternative A, the preferred alternative.

Significant unresolved concerns are outlined below, and discussed in further detail in the enclosed attachments:

→ **CESA** - In order for the Department to issue an ITP, the take must be incidental to otherwise lawful activities, and be minimized and fully mitigated. The mitigation measures must be roughly proportional in extent to the impact of the take, maintain the applicant's objectives to the greatest extent possible, and be capable of successful implementation. Adequate funding must be provided to implement conditions of the permit, and the actions cannot jeopardize the continued existence of the species. (Fish & G. Code § 2081.)

For all of the species proposed for coverage in the Plan, our review indicates that the conservation measures included in the HCP do not meet the above requirements. The areas in which there are remaining unresolved issues are:

Fully mitigated - In order to meet the fully mitigated standard pursuant to CESA, the Plan must include take and conservation estimates for each species expressed as acres and percentages of habitat type within the Plan area. Furthermore, the numbers and range of the species must be maintained through creation of new functional habitat, or restoration or enhancement of existing functional habitat. Full mitigation also requires that habitat is not further fragmented

as a result of permitted activities, that all life requirements of the species are provided for, and that permanent commitment to the mitigation measures (land protection and management actions) is ensured. Our review of the HCP indicates that for the covered species, full mitigation as described above has not been achieved. In some cases, the Plan proposes designating covered species populations as conserved on BLM-administered public land as mitigation for losses on private land. However, the Plan does not provide sufficient guarantees that the species will experience on-the-ground management that would result in increased population levels and expansion of occupied habitat to fully mitigate for loss on private lands. Some species do not occur on BLM lands in sufficient numbers or range to assure their persistence proportional to the take proposed. Full mitigation for these species is likely to require protection in perpetuity of currently unprotected habitat. The Plan is also based primarily upon payment of compensation fees, however, sufficient biological justification for the mitigation ratios proposed is not provided in the Plan. Another common conservation measure often relied upon in the Plan is "heightened environmental review" of projects within conservation areas. Enhanced environmental review does not guarantee habitat enhancement and conservation and thus does not qualify as mitigation. These and other concerns are discussed more thoroughly in the enclosed attachments.

Take Minimization - For most of the covered species, little attempt is made to avoid or minimize the take of individuals. Payment of compensation fees at various rates is used in most cases as the sole mitigation measure. Requirements for site specific surveys, which would allow for site specific take avoidance and minimization measures such as design of the project to avoid known populations or individuals, are often absent. This reliance on compensation fees ignores the CESA requirement that the take must first be minimized and any unavoidable incidental take must then be fully mitigated.

Mitigation Measures Proportional to Impact - For most of the species proposed for coverage, no rationale is provided in the document to support the compensation fee ratios as proposed. It appears that desert tortoise habitat quality was used to establish compensation fee ratios. These ratios are proposed for all covered species. This is not based on any biological justification. Low quality desert tortoise habitat requiring only 0.5:1 compensation may in fact be high quality habitat for other species, such as burrowing owl. For these species, proposed compensation ratios are not proportional to the impact of the take.

Capability of Successful Implementation - As discussed in specific examples found in the attachments, the success of proposed conservation measures is speculative and not assured. In some cases, conservation measures rely on adoption by other agencies which are not cooperators to the plan. In other cases the proposed conservation measures require funding which has not been authorized or guaranteed. The Department believes that, for those conservation measures proposed for BLM lands, these are often a reiteration of actions which BLM has already committed to implement, as a result of existing management plans for Areas

of Critical Environmental Concern (ACECs). Since the management plans have not been implemented in the past, we remain concerned whether they will be implemented in the future.

Adequate Funding - It appears that the compensation fees are currently proposed to only cover the initial costs associated with purchasing compensation habitat, which may not be sufficient for all covered species. Costs associated with maintenance, enhancement, and monitoring of the habitat lands in perpetuity must also be factored into the compensation fee structure. Proposed monitoring is contingent upon securing adequate funding. Because this Plan relies on adaptive management to achieve its goals, which in turn relies on an effective monitoring program, implementation of the monitoring program is an integral component of the conservation plan. This funding must be secured and committed to in order for the conservation plan to function effectively. For example, Table 2-26 is introduced by the following statement (Pg. 2-153, para. 1): "The success of the West Mojave Plan's conservation strategy would depend, to a great degree, on the ability of the participating agencies to ensure that its measures are being properly implemented...". It is apparent to the Department that most, if not all, of the measures in the Table are mitigation for the take allowed under this Plan, yet many of the measures are qualified by the statement, "subject to available funding". The Department will need stated assurances that the proposed compensation fee structure is adequate to fully implement all the actions required to meet the fully mitigated standard.

CEQA and NEPA - Although we have cited CEQA Guidelines section numbers in Attachment 2, we believe the discussion also applies to requirements of NEPA. Our review of the document indicates that it needs to provide more information in order to meet the requirements of CEQA and NEPA in the following areas: project description, affected environment, impact analysis (including a determination of significance of impacts), cumulative impacts, effectiveness of proposed mitigation measures, and range of alternatives.

The comments provided below provide more detail for areas in which there are remaining unresolved issues:

Project Description - The Department assumes that part of the project analyzed in the document is a series of development actions that require local agency approvals, and that the implementation of the HCP is intended to provide the required mitigation for these actions. The DEIR/EIS needs to clearly describe the project. The project description should therefore include specific types, acreages and locations of discretionary actions that will be permitted for each of the jurisdictions and State agencies seeking permits, as well as for federal activities which would impact covered species.

Affected Environment - Species account summaries beginning in Section 3.3 (Page 3-63) are too abbreviated and do not give the reader an accurate portrayal of

the status of the species in question. Updated information for each species has been compiled in complete species accounts prepared for the planning effort and provided to the Department on request. Most of these complete species accounts are also available on BLM's West Mojave Plan website and they also need to be available in this document. In several instances, we found that vital information included in the complete species account was omitted from the summaries included in the document, thus providing the reviewer with not only an incomplete but often an inaccurate description of the species life history, threats, and recommended conservation actions to conserve these species within the planning area. This is important because for some species, the conservation actions as proposed in the Plan only address those threats that are discussed in the summaries. Other significant threats, which are discussed in the complete species accounts but omitted from the summaries, are not addressed by any of the proposed conservation actions in the HCP.

Impact Analysis - Impacts should be discussed and quantified for each of the following in the Plan: a) loss and degradation of habitat for State and Federally-listed threatened and endangered species and other wildlife and plant species; b) take of state and federally-listed species, and California Species of Special Concern; c) fragmentation of habitat; d) disruption of daily and seasonal animal movement and migration patterns; e) loss of genetic diversity for desert tortoise and other species and e); the impact from increased predation on sensitive species which may result from the improvement of habitat for common species (e.g. ravens). Although species not proposed for coverage in the Plan would not be included in the ITP, we believe CEQA requires that the document also disclose impacts to these non-covered species, as well as to those natural communities found within the planning area.

Cumulative Impacts - Although the HCP proposes coverage for certain identified activities occurring within the planning area, other activities would not be covered by the HCP and thus would not be covered in the ITP. These activities are generally described in the document as activities not requiring discretionary permits from the jurisdictions, such as agricultural activities for example. Nevertheless, these activities could still result in loss of habitat for covered species and take of covered species. In addition, there needs to be an analysis of the impacts of other planning efforts (eg. Northern and Eastern Colorado Desert, Northern and Eastern Mojave, etc.) and large-scale projects (e.g. Fort Irwin Expansion) on the biological resources of the West Mojave Planning Area. These cumulative impacts should be disclosed and discussed in the document.

Mitigation Measures - CEQA Guidelines require that mitigation measures be: a) feasible; b) identified for each significant effect; c) not deferred until some future time; d) fully enforceable; e) consistent with applicable constitutional requirements, including an essential nexus; and f) roughly proportional to the impacts. Specific examples are provided in Attachment 4 for each species where we believe these requirements have not been met.

Alternatives Analysis: Alternatives that lessen impacts to the desert tortoise, and to a lesser extent, Mojave ground squirrel, are provided in the document, however, no alternatives are proposed that would result in fewer significant impacts to plant or other animal species or natural communities. The Department would like to see alternatives presented and considered for other proposed covered species as well.

Other Significant Issues

Mojave River – The Department disagrees that existing regulatory mechanisms are sufficient to protect and conserve riparian habitat for listed species along the Mojave River. The Department's regulatory authority for the Mojave River stems from its permitting authority under Fish and Game Code Sections 2081 and 1600 et seq., and its State Trustee authority under CEQA. Projects impacting riparian habitat along the Mojave River and resulting in the take of listed species may be permitted by the Department as long as the take of listed species is minimized and fully mitigated. The Mojave River water adjudication process, referenced in the Plan as providing adequate protection for 10 species proposed for coverage is a separate process and cannot be used as justification for providing adequate conservation for the species. The Department believes that adequate conservation for Mojave River species will require the jurisdictions to place land use restrictions (e.g. zoning, ordinances, etc.) or permanent protection for areas adjacent to the River.

Implementing Authority - The Department believes that it is essential to create an implementing authority, presumably a Joint Powers Authority (JPA), for the successful integrated implementation of all Plan obligations. The JPA's responsibility will be to track the take of covered species occurring in the planning area, assure conservation lands are being protected in "rough step" with the take of habitat of covered species in the planning area, and be responsible for ensuring that monitoring and adaptive management actions identified in the Plan are accomplished. The Department contends that any newly acquired conservation lands, protected as mitigation for take of covered species, should be managed by the aforementioned implementing authority.

In summary, the Department has identified numerous significant unresolved issues in the Plan which we believe must be rectified in order for the plan to provide assurances that the incidental take of covered species is minimized and fully mitigated and meets all of the additional requirements of Fish and Game Code Section 2081. This, in turn, will allow us to issue an Incidental Take Permit for the actions that will result in take of the covered species. The Department is willing to provide guidance, technical assistance and work closely with the jurisdictions, the U.S. Fish and Wildlife Service and the BLM to ensure that all requirements of Fish and Game Code Section 2081 are met for all covered species in any revisions to the Plan.

Thank you for the opportunity to review and comment on the document. Further questions may be directed to Mr. Glenn Black, Senior Environmental Scientist, by telephone at (909) 597-5043.

Sincerely,

December 22, 2003
Original signed by:

Sandra C. Morey, Chief
Habitat Conservation Planning Branch

Attachment(s)

cc: U.S. Fish and Wildlife
Mr. Ray Bransfield
State Clearinghouse

Department of Fish and Game

Mr. Curt Taucher
Eastern Sierra and Inland Deserts Region
Chino Hills, California

Mr. Chuck Raysbrook
South Coast Region
San Diego, California

Mr. W. Loudermilk
San Joaquin Valley-Southern Sierra Region
Fresno, California

Mr. Ronald Rempel
Sacramento, California

bc: Flint, Presley, Steele, Drongesen HCPB
Sudduth, Racine IDESR

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ATTACHMENT 1 CESA COMMENTS

1. Full mitigation not demonstrated.

a. Determination of impacts and required mitigation with no surveys. Under CESA, full mitigation requires that direct and indirect effects to a species, caused by a project, be minimized and adequately mitigated. It is therefore necessary for the Department to be informed of what species and habitats are being directly and indirectly impacted at the project level. The proposed Plan is based largely upon payment of compensation fees, which, in part, would result in elimination of project-specific biological resource surveys (see Pg. 2-32). Without biological survey information, we cannot determine project impacts or whether mitigation measures are adequate. This leads to an inability to demonstrate whether impacts to covered species have been “fully mitigated”.

Additionally, without project-level biological surveys, we will never know whether other rare species, perhaps even those that have yet to be described, occur in the project area. For example, the re-discovery of a presumed extinct species such as the Ventura Marsh milkvetch or San Fernando Valley spineflower would not have occurred had project-level botanical surveys not been conducted. While the Plan would provide some habitat conservation for covered species, it provides very little or no conservation of those species that may become rare but are not covered, rare natural communities, isolated wetlands, desert washes, and other biological resources of local, regional and state-wide significance.

While we recognize that there is interest in eliminating project-level biological survey requirements, we do not believe that this “incentive” is a viable strategy given the intent of CESA.

b. BLM action and full mitigation. For some species, the Plan proposes designating covered species populations as conserved on public land as mitigation for losses on private land. The Plan needs to provide sufficient assurances that the species will experience on-the-ground management that would result in increased population levels and expansion of occupied habitat to compensate for loss on private lands. The Department believes the designation of conservation areas on existing public lands does not constitute full mitigation under CESA, without supporting information on the specific mitigation measures for each species.

Many management actions that are proposed for public lands under the various alternatives only serve to offset impacts that are currently happening on public lands under BLM management. The Department contends that changes in BLM management merely offset impacts for which the BLM is already responsible, and do not serve to offset loss in numbers and range of plant and animal species from development on private land. For example, “prevent any further damage to identified riparian areas on all cattle allotments managed by the BLM” (Pg. 2-186, AD-29), merely offsets impacts that are currently happening on the public land (due to grazing, in this example).

The Department is concerned about future uses of BLM lands that cannot be controlled, such as exercising valid existing mineral rights, and the vagaries of future federal funding for and commitment to policing OHV activity. These concerns further reduce the level of certainty that the proposed mitigation will be effective and permanent, as CESA and CEQA require.

Existing public lands, including ACEC lands, are managed for multiple uses which are, in some cases, contradictory to the conservation needs of the covered species. BLM lands managed for species conservation must commit to restoration and enhancement as needed for species management, and specify who is responsible to carry out the management actions necessary for full mitigation. The Plan must demonstrate how these actions will be accomplished.

Absent such a detailed demonstration, including the necessary commitments acceptable to the Department, compensation should occur by conserving currently unprotected lands. These new compensation lands should be held by a conservation entity that can provide assurances acceptable to the Department. The conservation entity could be formed through an instrument such as a Joint Powers Authority (JPA) between the permittees and wildlife agencies, for the express purposes of holding compensation lands and endowment funds, and carrying out management and monitoring of those lands.

c. Mitigation not linked to impact. It is difficult to determine whether full mitigation can be achieved for individual species based on the generic nature of many of the Plan's "implementation tasks" and management actions. Some of these cannot be tied to a specific mitigation measure which would assist the Department in determining whether impacts to species will be fully mitigated

d. Open space corridors. The discussion in Section 2.2.1.1.5 (Pg. 2-16) is insufficient to determine the mitigation value of these linkages. For linkages to provide conservation value for covered species, they must consist of livable habitat of sufficient width to accommodate life history needs of covered species and withstand edge effects. The Plan must include a more detailed description of each linkage that explains the target acreages by habitat type, species benefits, and the mechanisms to assure protection, management, and monitoring.

e. No biological justification for mitigation ratios. The Plan proposes to apply different multipliers on the base fee depending on the location of the project. Projects in the HCA will pay a fee five times the average land value. Projects in the in-fill areas will be at a ratio of 0.5:1, and all other lands will pay a fee at 1:1. Any type of fair distribution of costs system must have a biological justification so that it is clear how the ratio provides for full mitigation. For example, the HCA lands have the highest conservation value, but it is unclear why the ratio was set at 5:1 instead of some other multiplier.

f. Land acquisition. The proposed land acquisition approach in Section 2.2.4.1 (Pg. 2-51) is not sufficient to demonstrate how the plan will fully mitigate for all species proposed for coverage. The plan should identify targeted acquisition areas quantified by vegetation community and species protected that will allow the wildlife agencies to analyze the conservation to be provided against the take requested. The targeted acquisition areas should be identified on maps and ranked by priority. A complete description of how the Implementation Team will choose properties for acquisition, and the mechanics of how acquisitions will be completed must be included in the Plan.

g. Full mitigation requirements. To address full mitigation requirements, the Plan needs to more fully develop on-the-ground restoration and enhancement measures which actually increase population levels and occupied habitat in areas intended to offset losses elsewhere. Actions not directly addressed in the Plan that should be evaluated include control of invasive species to increase carrying capacity, restoration of hydrologic regimes for wetland plant species, and enhancement and restoration of degraded habitat with potential to support the covered species. Such actions to expand the current range and enhance the total population size of the species are needed for full mitigation. The Plan should also contain commitments to implement the mitigation measures.

h. Conservation efforts should keep pace with habitat loss. The Plan does not provide adequate assurances that conservation efforts will keep pace with habitat loss. To ensure that full mitigation is achieved, project-driven habitat losses should not be allowed to outpace on-the-ground mitigation work. This provides appropriate mitigation for direct impacts, assures that development does not eliminate important conservation options, and also avoids temporal impacts. Ensuring that, at build-out, take does not exceed permitted levels and mitigation was successfully implemented will require tracking project impacts to biological resources and mitigation accomplishments throughout permit life.

i. Monitoring and adaptive management. Some of the adaptive management and monitoring tasks do not have sufficient performance standards which will be necessary for the Department to determine if the Plan is meeting the biological goals. The Plan also does not assure adequate funding for these tasks as required in CESA [2081(b)(4) of the Fish and Game Code].

2. Take Avoidance Measures

All take avoidance measures (multiple places in Plan, e.g. Pgs. 2-55 and 2-56) must be stated as requirements rather than with permissive language. The measures must be made measurable, and the Plan must indicate how compliance with take avoidance measures will be assured (e.g. with the use of biological monitors).

3. Cost Estimates and Funding

CESA requires that permit applicants ensure adequate funding to implement all mitigation measures and for monitoring compliance with and effectiveness of the measures. Appendix N (Pg. 37, para. 2) states that the mitigation fee is based solely on

the average cost to acquire an acre of private land. Basing the mitigation fee solely on acquisition costs will not provide adequate funding for all the implementation measures. The Plan must contain current cost estimates for all implementation measures including land acquisition, adaptive management, monitoring, restoration, enhancement, GIS tracking, annual reporting, reserve operations (e.g. patrol, fencing), plan administration, etc., and mechanisms for adjusting for inflation. The Plan must then provide a comprehensive funding analysis showing how the costs will be covered based on the implementation strategy. The Plan should start with the overall funding need and work backwards to the justification of the mitigation fee.

ATTACHMENT 2 CEQA COMMENTS

Complexity of the Document and CEQA: Understandably, it is a challenge to provide a clear description of a project of this magnitude and complexity. The CEQA Guidelines provide a framework that facilitates review of environmental documents by decision-makers and responsible agencies. The Department recognizes that the document is prepared as a joint EIR/EIS to provide compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Department also recognizes that the CEQA Guidelines Section 15220 encourages the use of jointly prepared documents to minimize duplication and improve efficiency in review of projects that involve combined actions by both federal and state or local agencies to implement a project. The Department understands that the lead agencies have adhered very closely to the CEQA statute provision 21083.7 that directs lead agencies to, whenever possible, use the environmental impact statement as the environmental impact report. Department staff found it difficult to determine the document's adequacy for future use in fulfilling its duties as a responsible and trustee agency with regards to this project. The comments provided below are offered to ensure that the document complies with CEQA in regards to the Department's role and responsibilities. The Department wishes to ensure that the document can be relied upon for future actions by the Department that are identified in the document on Pg. 1-8 (Uses of the EIR/S by Agencies and Jurisdictions) and Pg. 1-18 (Agency and Jurisdiction Decisions and Approvals).

1) 15121 (a) and (b) Informational Document: This section requires an EIR to "inform decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project". We could find little discussion in the document of the environmental effects of the proposed activities anticipated by the Plan, for which the Plan is apparently intended to mitigate. Subsection (b) also states that the lead agency must respond to each significant effect identified in the EIR. The document lacks a thorough discussion of each impact, and a clear determination of the significance of each impact. For example, no mitigation measures are proposed for clearly significant impacts to natural communities (see Pg. 4-11, Table 4-4, e.g., potential take of 100% of alkali seep, fan palm oasis, freshwater seep, interior live oak woodland, and montane meadow).

2) 15123 Summary: Pursuant to Guideline 15123, an EIR should include a summary that identifies: a) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid this effect; b) areas of controversy known to the Lead Agency including issues raised by agencies and the Public; and c) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects. The DEIR portion of the Plan provides an executive summary (Pgs. ES 1-14) but the Summary should be revised to identify the impacts to wildlife resources that occur as a result of implementing the plan. These impacts may include but not be limited to loss, degradation and fragmentation of habitat associated with permitted

activities, take of plants and animals, increased human disturbance, disease predation, edge effects of permitted activities and disruption of population genetic interchange. The summary should briefly list the impacts that are more fully addressed below.

3) 15124 Project Description: Though the Draft EIR portion of the Plan does provide a project description (Pg. 1 ES-1 and Pg. 1-1) it does not clearly describe the "Project" for future use by the Department. The Department, in issuing an Incidental Take Permit for the jurisdictions participating in the Plan, will also require a thorough description of the project. For Department purposes the project is assumed to be the development actions that will be streamlined and the Plan is the mitigation. The Project description should therefore include specific types, acreages and locations of discretionary actions that will be permitted for each of the jurisdictions and State agencies seeking permits.

4) 15126 ,15126.2 Consideration and Discussion of Environmental Impacts: Impact analysis and disclosure is the basis of CEQA. For Department purposes in relying on this document for future action, the Department suggests that the following revisions or clarifications be made:

a) The Plan does not clearly present the impacts of the project on wildlife resources. Often, the document does not present enough information to infer the required information. For example, the Plan summarizes authorized take acreage of suitable or occupied habitat for particular species versus conserved acreage in Table 2-11. As is discussed under the general comment regarding take calculations based on acreage, it is not possible to determine the actual impacts (and their significance) to species based on these figures alone. For example, what percent of the total population will be taken? How much of its range will be lost? Will significant physical habitat components or processes for the species be lost? These impacts should be identified for each species covered in the plan. Acreages of potential impacted habitat (by species) should also be displayed for each proposed permitted activity covered by the Plan. These impacts should be separated into those occurring on private lands from those on public lands. A determination should be made for each identified impact as to the significance of the impact, and whether the proposed mitigation measures reduce the impact to a level below significance. Acreages of conserved habitat by species and by jurisdiction should also be displayed.

b) Tables in Section 4.2.2.2 of the Plan present details of "benefits" and "residual impacts" to desert tortoise from actions such as DWMA designation and private land acquisition. Given these tables, however, it is unclear if the "residual impacts" are considered significant and avoidable or can be mitigated to a level of insignificance, as under 15126(a) above, or significant and unavoidable, as in 15126(b).

Other species proposed for coverage in this plan are discussed in less detail than desert tortoise, in part because the actual distribution and habitat requirements for the other species are less understood than for desert tortoise. This makes it difficult to evaluate the plan for these species, in regards to CEQA Sections 15126(a) and 15126(b). Thus, further analysis and clarification will be required.

c) Additionally, Section 15227 of the CEQA Guidelines requires a state agency that is officially commenting on a federal project that may have a significant effect on the environment to include or reference all of the subjects in Section 15126 of the Guidelines. The Department believes that if revisions to the document as noted above and elsewhere contained in this comment letter are sufficiently addressed, the Department can assist in preparing or confirming the adequacy of specified mitigation. This is further addressed below.

5) 15126.4 Mitigation Measures:

The Department has concerns regarding the basic adequacy of the mitigation measures with regard to:

- Nexus between fees and impacts
- Nexus between impacts on private lands and mitigation on public lands
- Ability of BLM lands to be restored, enhanced, managed and monitored
- Success criteria/Monitoring
- Lack of adaptive management strategy – if success criteria are not met
- Funding adequacy

For example, the successful implementation of mitigation and monitoring measures is without funding assurances, as evidenced by the following statement in Table 2-26 (Pg. 2-153, para. 1), "The success of the West Mojave Plan's conservation strategy would depend, to a great degree, on the ability of the participating agencies to ensure that its measures are being properly implemented...". Most, if not all, of the measures in the Table are mitigation for the take allowed under this plan, yet many of the measures are qualified by the statement, "subject to available funding" (e.g., M-5 for Barstow Woolly sunflower). See also General Comment on Compensation Fees in Attachment 3.

6) 15126.6 Range of Alternatives: CEQA also requires evaluation of a "range of alternatives...which would avoid or substantially lessen any of the significant effects of the project..." (CEQA Guidelines 15126.6). Alternatives that lessen impacts to the desert tortoise, and to a lesser extent, Mojave ground squirrel, are provided, but not for other species. The DEIR should also consider alternatives that result in reduced impacts to sensitive plant species and natural communities. For example, no alternatives address the potential loss of up to 100 percent of the wetland and riparian communities; this is significant per Section IV (b) and IV(c) of the Environmental Checklist of the CEQA Guidelines and the State's No Net Loss of Wetlands policy and should be addressed in the Plan.

7) 15130 Cumulative Impacts: The cumulative impacts analysis needs to be revised to address the following points: a) the Cumulative Impacts sections for each alternative need to address not only the impacts from the alternative but from other projects such as other large scale plans (NEMO, NECO) or large projects within the Plan area (eg. Fort Irwin Expansion), which are required to be listed by 15130(b)(1)(A); b) the DEIR/S must define the area concerned as required in 15130(b)(1)(B)(3); c) the DEIR/S must

identify significant cumulative impacts under each alternative; and d) the DEIR/S must discuss mitigation for the cumulative impacts it considers significant, as required in 15130(b)(3).

ATTACHMENT 3 GENERAL COMMENTS – ALL SPECIES

1) Covered Species List - Please provide an explanation in the document of how and why the existing covered species list was derived. That's an important piece of background information for the reader.

2) Known populations - The plan frequently states that "known" populations are to be conserved. We recommend this term include both populations "currently known" to the West Mohave planning process, and populations that would be located in the future based upon the outcome of further survey work. In a slightly separate issue, the discussion of conservation of occurrences or populations should also include a statement that the entire population or occurrence must be conserved.

3) Biological Goals and Objectives - Biological Goals are vague and not easily measurable as described (Pg. 2-2 and Table 2-1). We found that this table does not do an adequate job of summarizing the species conservation measures proposed in Chapter Two for the preferred alternative.

The goals and objectives in Table 2-1 should reflect actions that minimize and fully mitigate, as is required by a CESA 2081(b) permit (see general comment on full mitigation requirements).

4) Funding - Several implementation tasks that are part of the monitoring program in the Plan (Table 2-26), have a phrase stating, "subject to available funds". This phrase needs to be deleted, as the Department requires the full funding of all conservation measures and field study/monitoring actions necessary for protecting each species covered by the Plan.

5) Directed acquisition of conservation lands - The plan does not provide adequate linkage between development-generated habitat losses, fees obtained, and compensation lands acquired. The Department is concerned that existing priorities in the Plan will result in directing funding and staffing towards tortoise and ground squirrel acquisition while other species habitats go unprotected.

For example, Pg. 2-51, HCA-36 lists several variables that would be used to prioritize sites for acquisition. The only variable listed with a direct nexus to plant conservation is the last one, which indicates acquisitions with more than one species would be a priority. Comments elsewhere in the Plan further indicate that plant acquisitions may be a lower priority than other conservation actions. For example, the Plan indicates, "in locations where desert tortoise and Mohave ground squirrel habitat overlap with occurrences of desert cymopterus, acquisition of private land would be a priority" (Pg. 4-73). To correct this problem, specific language is needed under HCA 36 and elsewhere to ensure that acquisition needs for other species are prioritized and protection actions keep pace with habitat loss.

6) Compensation fees. A related concern is whether the proposed ratios and compensation fees will be adequate to acquire lands near urban areas that may be substantially more expensive than remote lands in the desert core. Compensation fees are to be based on the average cost of an acre of private lands to be acquired for implementation of this plan (Pg. 2-32). The Economic Study presents a mitigation fee acreage value of \$770 (Appendix N, Pg. 39). This number is based on analysis as summarized in Exhibit 12. Assuming the \$770 is correct, then the Department believes the funding available for acquisition to mitigate take of species on private lands will be inadequate, especially for many of the plant species, which sometimes occur in areas of much higher land values. For example, the interim and permanent alkali mariposa lily conservation areas are primarily in the Los Angeles County subarea, for which the average value of unimproved private property in 2002 was \$2,587/acre, per Exhibit 12.

Furthermore, the Department is not able to ascertain how much, if any, of the \$770 mitigation fee will be available for implementing the various tasks, surveys, monitoring and adaptive management actions in DWMA's, ACEC's, MGS CA's and other conservation lands referred to in the Plan. The justification for the fee and what it will fund in the implementation of the Plan must be clearly identified in order for the Department to have the assurances that adequate funding is provided.

7) Preserve design - Basic preserve design and buffering tenets need to be discussed and incorporated into the design of Conservation Areas and other lands slated for acquisition and preservation. "Preserves" should include recently confirmed known populations, historically occupied areas, potentially suitable habitat to accommodate population fluctuations, connectivity between occupied habitat areas, and habitat necessary for maintenance of ecological processes (hydrology, erosion, pollinator habitat etc).

For instance, a specific buffer is needed at specific small sites for certain covered species, such as Rabbit Springs, that support several single occurrence records for the planning area. The Department recommends the acquisition target at Rabbit Springs be at least 50 acres in size. Specifically, it needs to include adjacent uplands, which may support pollinator habitat and refugia for ground-dwelling animals during unseasonably wet conditions, etc.

8) Adjustments of conservation area boundaries. The Plan recommends adjusting the boundaries of conservation areas following the results of field surveys (e.g., Barstow woolly sunflower/North Edwards CA), leading to the potential downsizing of recommended areas. It is important that fundamental preserve design objectives be identified in the Plan and further refined for each specific area to ensure that boundary adjustments do not compromise the integrity of the remaining habitat. Lands found to be not currently occupied following comprehensive field surveys may nonetheless have value to the long-term integrity of the Conservation Area. This should be acknowledged in the Plan.

Additionally, the Plan should discuss the possible expansion of the Conservation Area, if additional populations are found.

9) Mojave River Bioregion and Groundwater Criterion – Pgs. 2-71 & 2-72 – The Department contends that the existing groundwater adjudication process is not part of the Plan, when it comes to conservation of species – the impacts should be considered under “cumulative impacts” only. The real issue is that the jurisdictions have offered nothing in the way of land use designations, ordinances, etc. to conserve the 10 Mojave River – dependent species for which the Plan requests coverage. The Department is willing to work with the affected jurisdictions to identify possible mechanisms for future conservation of these species.

10) Acquisition of surface and groundwater water rights – The Department believes, that in some locations, the Plan may need to ensure the supply of water necessary to maintain populations of wetland plants, wetland and riverine processes, and associated wildlife populations. Lead agencies may also need to adopt measures to limit ground water extraction and prevent further increases in building density where ground water resources would be tapped with potential to adversely affect the hydrology of desert wetlands at key sites. The Plan needs to identify where (location and species) current threats to surface and groundwater may impede conservation actions being successful.

11) Monitoring of plan implementation - The introduction acknowledges the importance of monitoring plan implementation and effectiveness (Pg. 2-153), however, the Department finds the proposed Monitoring Plan, described in Table 2-26 (Pgs. 2-153 to 2-157), does not address this need. Preparation of a detailed Mitigation Monitoring Program is a requirement of both CEQA and CESA, and needs to be more fully developed in this section of the Plan.

A monitoring program should be developed which monitors: a) whether or not the mitigation measures in the Plan were implemented and b); whether the implemented mitigation measures were effective. If implemented measures are found to be ineffective, new, modified, and/or additional mitigation measures must be developed and implemented. Remedial actions may also be warranted to offset any uncompensated take which results from failed mitigation measures.

The proposed Monitoring Program frequently refers to survey tasks (e.g., M-4, conduct surveys for mariposa lily within saltbush scrub west of EAFB), however the Department believes these tasks would be more accurately described as resource assessment needs, rather than monitoring. For many species, field assessments (“surveys”) should not only focus on the rare species but other components of their environment, for instance, competing vegetation, or expansion of non-native weeds, are other important ecosystem components that can correlate back to the viability of covered species populations and necessary management actions. Establishment of photo monitoring points for representative populations could add information as to long term changes in the habitat that can provide feedback for adaptive management decisions.

The proposed Monitoring Program also needs to address monitoring specified populations and habitats to determine whether or not adverse impacts are occurring. As an example, drainages supporting Little San Bernardino Mountain gilia should be periodically monitored (patrolled) to determine if off- road vehicle impacts are occurring.

12) **Adaptive Management:** This section represents a good start toward addressing adaptive management needs (Section 2.2.9, Pg. 2-166 to 2-170). However, it should more fully develop a suite of management options aimed at increasing population numbers, occupied habitat acreage and on-the-ground management needs. (See general comments on full mitigation requirements).

13) **Cumulative Impacts** - On Pg. 4-132, the Plan states that “loss of habitats exceed conservation under all alternatives” and “Cumulatively, this loss would reduce populations of many species in a very substantial way”. We agree with these statements. However, the discussion goes on to conclude, “as long as the targeted species...are adequately conserved...the cumulative impact would not be significant or adverse.” The Department disagrees with this conclusion, as our review suggests the proposed Plan has substantial and therefore significant, unmitigated adverse residual impacts to habitats and species (including some covered species) which are cumulatively significant.

In regards to growth projections and habitat loss outside conserved areas, the Plan states- “undeveloped lands would remain available if alterations are needed in the quantity of conserved lands in the future” (Pg. 4-132). The Department questions whether this will turn out to be the case and believes that it is more likely that dispersed residential development, and resulting habitat fragmentation and over-utilization of limited resources like groundwater, will hamper future opportunities to adjust conservation strategies. The Plan should provide for these possibilities, however, this will take some land use commitments by the participating jurisdictions to keep this option open in areas that would be considered to be most sensitive and adjacent to conservation areas.

ATTACHMENT 4 SPECIES COMMENTS

BIRDS

Burrowing Owl:

General Comments The Plan does not contain specific objectives and appropriate measures for conserving the species nor does it meet the “fully-mitigated” standard under CESA for impacts to the burrowing owl (BO). In order for the Department to cover this species under a CESA permit and to meet the requirements of CEQA, the following concerns need to be addressed to the Department’s satisfaction.

Specific Comments

Pg. 2-3 Table 2-1, Biological Goals

- 1) The first of two biological goals for this species in the Plan is, “Prevent direct incidental take in urban areas”. This goal appears to be too narrow, limiting preventative measures to urban areas. The Plan should apply this goal to all areas designated by the HCP for incidental take of the burrowing owl.

- 2) The Plan should establish a third biological goal for the BO, as follows: ‘Conduct research and monitoring programs’. Objectives to achieve this goal should include the following: a) ‘To find and describe nesting populations or pairs of the BO within the incidental-take area, conduct spring surveys’, b) ‘To describe the quality and diversity of existing vegetation at occupied sites and to determine distribution and densities of local nesting populations of the BO on public land, conduct base-line surveys on permanent study transects representing all grassland areas within the planning boundary’, and c) ‘Conduct a long-term monitoring program tracking changes in habitat quality and extent and changes in the overall population of the BO on public land’.

- 3) The existing second biological goal in the Plan is, “Establish reserves of occupied habitat”, with the single stated objective to meet the goal as, “Acquire lands containing occupied habitat”. We find that the goal is unclear, not knowing whether it applies to public land, land currently in private ownership, or both. Regardless, we recommend that it be redefined to be the following: ‘Protect and enhance known populations and habitat on public land’. The existing objective should be expanded and split, as follows: a) ‘Acquire private land to establish a series of reserves representing all grassland areas within the HCP’s boundary’, b) ‘Acquire grasslands on private land adjacent to public land to conserve existing habitat and to allow restoration and expansion of habitat by natural means’, and c) ‘On private land not having willing sellers, obtain conservation easements requiring that grazing be managed such that it maintains and/or enhances habitat values for BO and restriction of vehicle access to established roads and approved routes’. The following additional objective for the redefined goal should be

established: 'For grasslands on public land, manage livestock grazing such that it maintains and/or enhances habitat values for BO and restrict vehicle access to established roads and approved routes'

Subsection 2.2.2.2 - Mitigation Fee

4) Pg. 2-32, para. 2, states that "outside of the HCA on lands delineated as disturbed habitat the mitigation fee would be based on a compensation ratio of 0.5:1." The criteria used to define disturbed habitat is outlined in table 2-7 on page 2-32. Areas described as disturbed in table 2-7 should be further evaluated and be assessed a higher mitigation ratio if shown to provide BO habitat. Page 2-77, second paragraph (*survey requirements*) states that "the BO is found most often in urban settings or at the urban fringe." The criteria in table 2-7 includes areas that, although have been disturbed and/or are in close proximity to developed areas, provide habitat for BO due in part to the removal of heavy shrub cover and favoring the establishment of sparse, low herbaceous growth preferred by the BO. Disturbed areas near urban fringes and agricultural lands also facilitate the establishment of California ground squirrels which supply the burrows necessary for BO survival. Construction debris, drainage/irrigation pipes and ditches also provide burrow habitat for BO on vacant parcels and agricultural lands. The Department believes that assessing higher mitigation ratios for the BO habitat on disturbed areas is necessary in light of the fact that the BO is more likely to occupy many of the disturbed urban fringe and agricultural areas which are assumed in the Plan not to support other special status species and so have been relegated a lower level of survey effort and compensatory mitigation.

5) Pg. 2-32, para. 3 - States that a mitigation fee would apply to all new land disturbing development which is subject to a grading/ building permit. However, the loss of BO habitat from agricultural clearing is not addressed in the Plan and is of concern to the Department as these practices can be destructive to large areas of native habitats which are not subject to grading/building permits nor invoke CEQA-related biological constraint analysis and appropriate avoidance and mitigation measures. Mitigation measures and compensation for loss of habitat resulting from agricultural clearing and use should be included into the Plan.

6) Pg. 2-42, Table 2-11 - Authorized Take - The number of acres of BO habitat proposed to be taken over the life of the plan should be displayed here. There should be a comparison between the amount of proposed take and the proposed number of acres of conserved habitat.

Subsection 2.2.4.7.2 Compensation Measures

7) Pg. 2-77, second para. – Survey Requirements : states that "the BO is found most often in urban settings or at the urban fringe. These locations correspond with incidental take areas for the desert tortoise(DT) and most, if not all other species." For areas where no DT clearance surveys are required the jurisdiction would provide applicants for discretionary permits with an educational brochure. This statement appears to

contradict Map 2-9 (Tortoise "survey and "no survey" Areas) which indicates that large areas within western Los Angeles County including much if not all of the cities of Lancaster and Palmdale are identified within the no Survey Area for DT (and thus no concurrent abbreviated surveys for BO are required). If the BO is most often found in urban settings at the urban fringe, as stated in the Plan, it does not seem to be in the best interest of BO conservation to forgo BO surveys within these areas which provide BO habitat. The last remaining known BO occupied breeding habitats in Los Angeles County occur within the Planning Area of the Antelope Valley. The few recently documented occupied BO sites known to the Department have occurred within the Cities of Palmdale and Lancaster. The Department is concerned that take of BO will occur within the "no survey" areas if potential BO habitat is not surveyed by appropriately skilled biologists. This proposal will leave detection of BO and consultation with the Department at the discretion of the applicant which is also not necessarily in the best interest of BO conservation. Therefore, the Department believes that appropriate surveys in all potential BO habitat should be required, especially during the nesting season.

8) Pg. 2-77, Rap-6 - Please define "abbreviated" survey.

9) Pg. 2-77, Rap-9, Education – Please note, the Department does not move owls. Please see comment above regarding our concerns with take which could occur as a result of projects which are non-discretionary. This potential take will not be mitigated by measures currently proposed in the Plan.

10) Pg. 2-77, Rap-10 - Take Minimization - Regarding minimizing incidental take of the BO, the Plan states, "Burrowing owls can be excluded from a site by eviction, [which allows an owl to leave its burrow on its own] followed by [human] collapse [sic] and filling of the burrows. The expectation for evictions is that incidental take (killing of the BO would be avoided and that the owls would re-establish in a suitable location nearby of their own accord". The Department would not consider the measures described in the Plans as minimizing "take" of BO's to be adequate or to "fully mitigate" for potential impacts. Typically, adequate habitat preservation would be required as part of any mitigation.

11) Pgs. 2-77 & 2-78 - In the discussion of a conservation strategy for the BO, the Plan says, "In some cases[,] burrowing owls can be [captured and] relocated into artificial nest sites. ... Relocations into artificial nest sites would not be required by the Plan], but would be encouraged in cases where minimal habitat requirements are met and where the applicant and the CDFG staff agree on sharing of costs and on the relocation site". The Plan should not encourage such 'active translocation' of the owl. If this activity is allowed by appropriate permits from the Department and the Service, it would be on a case-by-case basis outside the terms of any permits issued for this plan. However, the Plan should address the issue by requiring applicants to work with the Department. The Plan should omit any reference to translocating the BO or otherwise sharing costs with the Department for such activities..

12) Pg. 2-77 - Take Minimization - BOs are vulnerable to predation by raptors and ravens if excluded from collapsed burrows during daylight hours. Exclusion of BOs from burrows should take place after dark so that evicted birds may find alternative burrow sites, natural or created on lands preserved for this purpose, during the evening hours or as otherwise directed by a raptor biologist.

13) The Plan's discussion of conservation measures for the BO in Alternative A should be augmented with specific measures based on Department comments on goals and objectives, above.

14) Pg. 2-78, Rap-11 - Land Acquisition – The Plan states that “ Acquisition would take place where other species benefits are evident or where lands provide essential linkages for the Plan.” Protection for BO and land acquisition for same appears to address BO conservation in an incidental manner. BO habitat assessment and acquisition should be evaluated on its own merit for the protection of the BO and reversing declines in the West Mojave. This would be required in order for the plan to meet the “fully- mitigate” standard required by CESA.

15) Pg. 78, Rap-12 - Research Program - The document states that “The implementation team would track all new sightings and new nest locations of BOs as they are detected in the future”. It has been the Department's experience that occupied BO habitat is discovered during the biological assessment process prior to a proposed development and subsequent destruction of the occupied habitat. Because the Plan does not propose mandatory BO surveys within much of western Los Angeles County, the BO may go undetected within this area, as jurisdictions have not always required BO surveys in appropriate habitat as a condition of project approval. Relying on an educational program, as proposed by local jurisdictions, would leave BO detection and protection to the discretion of developers and is not in the best interest of BO conservation . It would also not meet the CESA standard to minimize or avoid “take”. If a BO is discovered occupying a proposed development site this may occur too late in the planning process to consider mitigation measures for the loss of habitat. Loss of occupied BO habitat in Los Angeles County would be considered a significant adverse impact under CEQA as the planning area includes the last remaining known occupied BO nesting habitat in Los Angeles County. The Department suggests a proactive detection approach for determining occupied nesting BO habitat. Detection methods used by the implementation team should be clarified. Suggested detection methods may include but are not limited to: periodic focused surveys of likely habitat to determine baseline data; the solicitation of BO sightings from the general public, state, federal and local resource agency personnel who frequent BO habitat, biological consultants, and conservation groups including local bird clubs. Resources to fully implement proposed detection methods, including adequate funding, must be identified to assure success of detection methods used and adequate coverage.

16) Pg. 2-78, Rap-13 - Limitations on Take – The plan states that “ Prior to the establishment of the baseline conservation acreage, take would be allowed only within city limits.” and that “Acquisition of occupied habitat would add to the baseline

conservation acreage.” The Department contends the “take” of BO within city limits should not occur until the baseline acreage selection criteria for conserving BO habitat is clearly defined. As stated on Pg. 2-77, second paragraph, entitled *survey requirements*, “the BO is found most often in urban settings or on the urban fringe” implying that these areas are likely to be located within city limits. The Department is concerned that “take” of BO would be allowed within some areas most likely to support BO in the Planning Area. Bullet item #2 under *Limitation of Take*, pg. 2-78, states that “Take of occupied BO habitat would not exceed the baseline acreage at any time”. It is unclear how this goal would be accomplished if there are no provisions for requiring BO surveys (No Survey areas, Map 2-9). This proposal would make declaring baseline acreages for BO within areas of occupied habitat including city limits unlikely, as habitat within these areas could be lost before the baseline is determined. While this proposal may prove less burdensome for land developers within specified city limits such as Palmdale and Lancaster, this concept should be further clarified as to how this will conserve further declines of BO habitat within areas identified most likely to support this species.

Subsection 2.2.8 Monitoring

17) Pg. 2-154, Table 2-26 - In Alternative A’s discussion of monitoring for the BO, the Plan proposes implementation task M-16, as follows: “Survey sites in [the] Antelope Valley and along [the] Mojave River ...”. This task appears to be related only to lands likely to be considered for acquisition. Using the third biological goal for the BO as a guide, Table 2-26 should omit task M-16 and add a description of those implementation tasks necessary to meet the objectives of the goal.

18) Pg. 3-171, Section 3.3.6.3 - Regulatory Status – The document needs to mention that burrowing owls, along with other raptors are protected under Fish and Game Code Section 3503.5.

20) Pg. 4-55, para.1 - This section should provide evidence that this type of measure (eviction of BO’s) has resulted in full mitigation for the “take” of this species. Has this strategy been used successfully in other locations or for other species? We believe that take of BO will occur even with implementation of this measure and that this take has not been “fully mitigated” by measures contained in this Plan. The Department would not view such efforts as fully mitigating impacts to BO unless there adequate preservation of habitat for the species is included.

21) Pg. 4-55, para. 2 - Improved management on BLM lands does not meet the definition of fully mitigate for take of this species on private lands. In addition, the Department would like evidence that BO’s occupy habitat in the Coyote, El Mirage, Fremont, Kramer, Newberry Rodman, Ord, Red Mountain, and Superior subregions.

22) Pg. 4-55, para. 3 – The document needs to explain that CESA requires a higher standard than FESA in regards to mitigation. CESA requires that the take is “fully

mitigated”, which is significantly different than the FESA standard of “to the maximum extent practicable”.

23) Pg. 4-55, para. 4 - The Plan states that the BO conservation strategy does not address the potential threat of poisoning by pesticides or rodenticides because ongoing agricultural operations are not regulated by the Plan. The Plan states in Volume One, pg. 2-78, para. 2, entitled *Land Acquisition* that, “This raptor is also very well adapted to inhabiting edges of agricultural operations, especially near water so these limited areas would also be prioritized for acquisition.” The Department recommends a more comprehensive evaluation of agricultural pesticide and rodenticide use effects on BO (including rodent burrow fumigation, a common agricultural pest control method) as acquisition of such areas may inadvertently result in preservation of mortality sinks for the species.

24) Pg. 4-55 - The fourth paragraph, lines 3-4 states that “rodent control outside agricultural areas is minimal and normally employs mammal-specific compounds which do not secondarily poison burrowing owls.” The Department’s Pesticide Laboratory has documented several lethal poisonings and sub lethal poisonings in various raptors species known to have had territories within suburban areas and the urban fringe. These species include the great-horned owl, golden eagle, and sharp-shinned hawk. The noted mortality and detectable pesticide blood levels in raptors have been determined to be the result of secondary poisoning from anticoagulant rodenticides containing brodifacoum and/or bromabialone. These compounds are commonly found in rodenticides which are approved for over the counter use by the general public for rat and mouse control only, and are considered high concentration, single feeding lethal for target rodents. These household rodenticides are used in areas around homes, vacant lots and urban fringes to kill rats, mice and for the unapproved control of ground squirrels and have minimal levels of control for proper use once purchased by the general public. Because BOs are, as the Plan acknowledges, most often found in urban settings or within the urban fringe, they are at greater risk of ingesting and being poisoned by prey items targeted by rodenticides. BO mortality as the result of secondary poisoning is likely to go undocumented because of the BO’s fossorial nature. If one of the acknowledged Plan’s strategies is to include the conservation of BOs and the acquisition of occupied habitat then secondary poisoning issues within that habitat needs to be addressed in the Plan to achieve that goal.

Raptors: Ferruginous hawk, Golden eagle, Long-eared owl, Prairie falcon

General Comments The Plan does not contain specific objectives and appropriate measures for conserving these species nor does it meet the “fully-mitigated” standard under CESA for impacts to these species. In order for the Department to cover these species under a CESA permit and to meet the requirements of CEQA, the following concerns need to be addressed to the Department’s satisfaction.

Specific Comments

1) Pg. 2-3, Table 2-1, Biological Goals and Objectives – The Department recommends that the goals and objectives be written to minimize impacts associated with exposure to toxic substances for all four species.

2) Pg. 2-5, Table 2-1, Biological Goals and Objectives - For the ferruginous hawk the single biological goal stated is to prevent electrocution. No objectives are offered to achieve this goal. This goal does not reflect the threats as stated in the species account. The account for this species states that prey availability is the most important factor during winter, and that maintenance of habitat and protection of the prey base are important for conserving this species. New goals and objectives should be written based on the background information provided in the species account. The species account also states that Antelope Valley has the highest number and density of wintering Ferruginous hawks in southern California. A goal and corresponding objectives should be written to maintain this wintering population.

3) Same Page as for # 2 (ferruginous hawk) – In the case of the Golden Eagle, the stated objective is to make all electrical transmission and distribution lines raptor safe, in which the Department agrees, however, it does not relate to the two stated goals in the Plan which are to preserve all nest sites and to maintain the baseline number of territories. A goal should be written to minimize the number of eagles killed on transmission lines within the plan area. Objectives should also be written which relate to the two stated goals. An additional goal and corresponding objectives should be written to maintain the prey base and foraging habitat for this species in winter as well as during nesting.

4) Same Page as for #2 (ferruginous hawk) – The Department recommends that for the long-eared owl, objectives should be written which relate to the single stated goal, which is to preserve all nest sites and communal roosts. The species account states that nesting occurs in dense vegetation adjacent to grasslands and shrublands. Since these adjacent areas are likely important as foraging areas for this species, an additional goal should be written to maintain foraging habitat and the prey base adjacent to the nest sites and communal roosts. The species account also states that Great-horned owls, which benefit from urbanization, are primary predators of Long-eared owls. A goal should be written to minimize impacts associated with predation by Great-horned owls. Corresponding objectives should be written for these goals.

5) Pg. 2-7, Table 2-1, Biological Goals and Objectives – The Department recommends that for the prairie falcon, goals be added to protect and maintain foraging habitat and prey base. Objectives need to be developed for these goals.

6) Pg. 2-42, Table 2-11, Authorized Take - It should be noted that all raptor species are protected under Fish and Game Code Section 3503.5 which makes it unlawful to take, possess, or destroy any bird-of-prey, or to take, possess, or destroy the nest or eggs of any such bird. For this reason, the Department cannot issue Incidental Take

Permits for any of the raptor species covered by the plan, until or unless they eventually become listed under CESA.

7) Pgs. 2-42 to 2-47, Table 2-11 Authorized Take - This table states that foraging habitat may be taken throughout the planning area for all species. The document should disclose the quantity of foraging habitat anticipated to be lost, and offer mitigation measures to fully mitigate this impact. In the Habitat Conserved column, the protected habitats should also be quantified.

8) In regards to prairie falcon and golden eagle, Table 2-11 states that take of active nest sites may occur outside the nesting season. This impact should also be quantified, and mitigation measures developed to fully mitigate this impact. Authorizing the take of any nest in non-breeding season could be a violation of Fish and Game Code sections 3503 and 3503.5. The Department suggests that the Plan provide more detail about specific situations where the take of nests would be required.

9) Regarding ferruginous hawk and golden eagle, no take of individuals is proposed (Table 2-11), yet the Habitat Conserved column shows that raptor-proofing of powerlines will address the major threat to this species. While we agree that raptor-proofing all new powerlines, and retrofitting existing problem lines is an important conservation measure, it does not relate back to the threat of loss of foraging habitat. Conservation measures which protect foraging habitat and wintering areas need to be developed.

10) Pg. 2-76, Raptors - This section should define what protective measures will be invoked when an area is designated as an ACEC or Key Raptor Area. If these designations are being used as mitigation for loss of habitat elsewhere, the document should disclose the level of protection afforded by these designations.

11) Pg. 2-76, Rap-2: This measure is somewhat confusing. The first sentence states that development projects....must stay ¼ mile away from occupiednests....We assume this means during nesting season only. The second sentence then goes on to say that no construction...would be allowed during the nesting season. We interpret this to mean that there is no limitation on avoiding nest sites outside of the nesting season. This impact should be disclosed and fully mitigated. The Department believes a measure must be included here to require pre-construction surveys, otherwise other nest protection measures will likely be ineffective

11) Pg. 2-76, Rap-3 The document should provide biological justification for the use of the thresholds used in this measure. The Department believes that 410 feet from a blast site may not be adequate depending on the raptor. The Department recommends that nest monitoring during any blasting within ½ mile of known nests should be required so that the activity can be immediately halted if the activity disturbs nesting activity at the nest.

The next iteration of the plan should include nest monitoring protocol and thresholds for determining disturbance of nesting activity.

12) Pg. 2-76, Generally Applicable Raptor Prescriptions - The Department believes a measure must be included here to require pre-construction surveys, otherwise other nest protection measures will likely be ineffective. Additional conservation measures should also be developed in this section which relate back to the recommended goals and objectives, above.

13) Pg. 2-79, Section 2.2.4.7.3 - Ferruginous hawk - The document should state where the existing transmission and distribution lines proposed for retrofitting are located. This measure also states that this applies to problem poles identified through monitoring and would be voluntary by the utility companies. We believe there is enough existing data to know where the ferruginous hawk wintering areas are, and to target certain transmission lines in those areas for intensive monitoring. Leaving the mitigation measure as a voluntary action provides no assurance that it will be accomplished and therefore won't meet the CESA requirement for full mitigation.

14) Pg. 2-79, Section 2.2.4.7.4 - Golden eagle - Rap-15 states that take of eagle nests would be allowed on transmission lines and in places where direct conflicts exist with resource extraction or recovery, such as mining. There is no mitigation proposed for this take. Mitigation measures must be developed. Although this measure is not specified for prairie falcon, will it also apply? We are aware of certain instances where prairie falcon nest sites have been destroyed during permitted mining activity.

15) Pg. 2-79, Para 3 - This statement does not accurately describe the status of the golden eagle. The Department may only issue Incidental Take Permits for species listed under CESA. If the Fully Protected designation is removed, this species still would not be included in an Incidental Take Permit, until or unless it becomes listed under CESA.

16) Pg. 2-79, Rap-16 - This measure states, "New mines located where mineral deposits preclude adherence to the restrictions above would initiate a nest relocation effort in cooperation with the wildlife agencies". It is unclear whether this measure is intended to apply to active nest sites during the nesting season, or to activities outside the nesting season. If it is intended to apply during nesting season, as we have stated earlier, no take of raptor nests is allowed pursuant to Fish and Game Code Section 3503.5. If it is intended to apply outside the nesting season, the document should disclose whether this measure has been effective as a mitigation measure in other instances. In order to qualify as mitigation, the measure must be proven to be effective.

17) Pg. 2-79, Section 2.2.4.7.6 - Prairie falcon - Rap-19 states, "BLM would enforce seasonal road closure where practical..." In order to qualify as full mitigation, there must be assurance that the measure will be implemented.

18) Pg. 2-154, Table 2-26, Monitoring and Pg. 2-166, Table 2-28 - Adaptive Management - The Department requests additional monitoring and adaptive management measures relating back to goals, objectives, and conservation measures

be developed for all species. A commitment must be made to accomplish the monitoring and adaptive management strategies.

19) Pg. 2-155, Golden Eagle - The Plan proposes to only survey historic nest sites existing in 1979. The Department does not agree with this approach and recommends that broader surveys be conducted to detect newly established sites. The need for up-to-date and broader surveys extends to all raptor species, not just the golden eagle.

20) Pgs. 4-55 to 4-60 - Environmental Consequences - This section should be rewritten to reflect information found in the complete species accounts. We disagree with many of the assertions made in this section, and we believe these assertions are not supported by information in the species accounts. As an example, for the ferruginous hawk, this section states that take of wintering habitat is not an issue. This statement is not supported by evidence in the record. In another example, this section does not discuss potential take of golden eagle nests due to mining activity, as suggested in Chap. 16. These are just two examples of the deficiencies in this section that must be corrected.

Riparian Birds : Brown-crested flycatcher, Least Bell's vireo, Southwestern willow flycatcher, Summer tanager, Vermilion flycatcher, Western yellow-billed cuckoo, Yellow warbler, Yellow-breasted chat.

General Comments: The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to these species. In order for the Department to cover these species under a CESA permit and to meet the requirements of CEQA, the following concerns (specific comments) have to be addressed to the Department's satisfaction.

Specific Comments:

1) Pgs. 2-3 to 2-8, Table 2-1, Biological Goals and Objectives - The Plan should not refer to suitable habitat, or distinguish between nesting habitat and seasonal habitat, or habitat used for breeding and migratory stopovers. Because the Plan's glossary does not define a 'developed area', we cannot agree with the goal as written. Therefore, the Department suggests one of the following biological goals: a) "Conserve all suitable riparian nesting habitat"; b) "Conserve all riparian habitat used for breeding and migratory stopovers"; c) "Conserve all existing riparian habitat outside developed areas" or d); "Conserve all potential nesting and migratory stopover habitat".

The Department recommends the Plan have a second biological goal for these species, written as follows: 'Conduct research and monitoring programs'. Objectives to achieve this goal should include the following: a) 'Conduct base-line studies on permanent study transects to describe existing vegetation and to determine distribution and densities of local nesting populations and b); 'Conduct a long-term monitoring program, tracking changes in habitat structure and extent and changes in the overall populations of these species within the Plan's boundaries'.

A third biological goal is suggested for all species, except the Western yellow billed cuckoo, and could read as follows: 'Protect and enhance local populations'. An objective to meet this goal could be the following: 'Reduce parasitism and predation of nests by the brown-headed cowbird'.

The Plan offers a single objective for achieving the goal of conserving habitat for Brown-crested flycatcher and Least Bell's vireo, which reads as follows: "Maintain groundwater levels in [the] Mojave River that support the riparian habitat". The Department recommends that this objective be rewritten (for all species) to more clearly address the issue, as follows: 'Achieve and sustain groundwater levels adjacent to the Mojave River sufficient to maintain riparian habitat and allow its restoration and expansion by natural means'. In addition, the Department believes the Plan should include the following objectives for land adjacent to the Mojave River: a) 'Acquire private land to conserve existing habitat and to allow restoration and expansion of habitat by natural means'; b) 'On private land in this area, not having willing sellers, obtain conservation easements requiring elimination of grazing and vehicle access and allowing removal of non-native vegetation'; c) 'Establish and enhance riparian forests on public land'; d) 'Remove non-native vegetation on public land'; e) 'Eliminate grazing on public land in canyons and washes of the eastern Sierra Nevada'; f) 'Close unpaved roads and other vehicle routes on public land in canyons and washes of the eastern Sierra Nevada, allowing access only for maintaining structures' and g); 'Enforce grazing restriction and road/route closures'.

For Southwestern willow flycatcher, Western yellow-billed cuckoo, Yellow-breasted chat and Yellow warbler, the Plan's second objective for achieving the single goal is, "Achieve regional public land health standards for grazing in east[ern] Sierra canyons". The mention of health standards appears to be a reference to the BLM's regional rangeland health standards. If so, this objective should be omitted from the plan unless it can be shown that this will provide adequate habitat requirements for these species. The Department has not seen evidence that the BLM's rangeland health standards address optimum or minimum habitat requirements for survival and reproduction of these species. Protection of these species is best served by elimination of grazing within riparian areas of their geographic range.

2) Pg. 2-42, Table 2-11 – Authorized Take - This table states that the only take authorization being requested is for Southwestern willow flycatcher, Summer tanager and Vermilion flycatcher. We question the assertion that no take will occur of the other species. Loss or degradation of riparian habitat is likely to result in the direct or indirect take of all of these species over time. This table should be revised to include acreage figures of riparian habitat that is likely to be impacted over the life of the Plan, and should state that take of all of these species will likely occur.

3) Pg. 2-71, Conservation Measures - The Plan's discussion of conservation measures for riparian birds in Alternative A is limited to only a cursory discussion of the Mojave River Bioregion. Based on the objectives recommended and described in the preceding

paragraphs, the Plan should provide specific conservation measures for these species in Alternative A, as well as all other alternatives.

4) The Department recommends that Alternative A's discussion of monitoring for these species (Pg. 2-157, Table -26) should omit implementation tasks M-85, M-13, and M-82, and substitute those measures necessary to meet the objectives described above for the second biological goal. In Table 2-26, the Plan should omit implementation task LG-9.

Bendire's Thrasher, Le Conte's Thrasher, Inyo California Towhee:

General Comments

The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to these three species. In order for the Department to cover these species under a CESA permit and to meet the requirements of CEQA, the following concerns (specific comments) have to be addressed to the Department's satisfaction.

Specific Comments

Bendire's thrasher

1) Pg. 20-80, Section 2.2.4.8.1 - The Plan states that this species has been removed "from the list for which incidental[-]take coverage is requested[,] until additional studies are able to demonstrate specific private lands in need of conservation. The conservation strategy for Bendire's thrasher is based on conservation of habitat on public lands where thrashers were seen in 2001 or were abundant in the mid[-]1980s and [where] conditions appear [to be] unchanged". The Department believes this approach is not sound conservation, and we encourage the jurisdictions to reinstate the thrasher under Plan coverage. In doing so, the conservation strategy should be revised to describe specific measures for the thrasher.

Regarding the strategy for the thrasher as presented in the Plan, the approach considerably varies from the general strategy for other vertebrate species, which is to conserve populations and/or habitat and, for some species, to enhance habitat quality. The approach for the thrasher should not be dissimilar. The Plan itself offers indirect evidence that conditions indeed have changed for the thrasher in the western Mojave Desert. The following statement appears in section 3.3.6.1 (page 3-170): "Surveys conducted in 2001 failed to detect [the] Bendire's thrasher at most of [the] locations [at which it occurred in 1986] or at a control site in the east Mojave [Desert]. Only Coolgardie Mesa and Joshua Tree National Park had nesting birds".

2) Pg. 2-3, Table 2-1 - The single biological goal for this species in the Plan is "Protect known populations and habitat on public land". In the interest of promoting natural recolonizing in areas from which the thrasher has been extirpated and for improving the

quality of its habitat, this goal should be rewritten, as follows: 'Protect and enhance known populations and habitat'.

3) Pg. 2-3, Table 2-1 - The Plan offers no objectives to meet the goal. The Department recommends the following objectives be added to address the rewritten goal of conserving and enhancing populations and habitat for the thrasher in its geographic range within the Plan's boundary: a) 'Establish a series of reserves representing all areas in which the thrasher was found in the 1986 survey'; b) 'Eliminate livestock grazing'; c) 'Restrict vehicle access to established roads and approved routes'; d) 'Enforce grazing and road/route restrictions'; e) 'Prohibit removal of Joshua trees, yucca, and cactus'; f) 'Acquire private land to conserve existing habitat and to allow restoration and expansion of habitat by natural means' and g); 'On private land not having willing sellers, obtain conservation easements requiring elimination of grazing and restriction of vehicle access to established roads and approved routes'.

4) The Plan should have a second biological goal for the thrasher, as follows: 'Conduct research and monitoring programs. Objectives to achieve this goal should include the following: a) 'To describe existing vegetation and to determine distribution and densities of local nesting populations of the thrasher, conduct base-line surveys on permanent study transects representing all areas within the planning boundary having historic populations' and 2); 'Conduct a long-term monitoring program tracking changes in habitat structure and extent and changes in the overall population of the thrasher'.

5) Pgs. 2-80 & 2-82, Section 2.2.4.8.1 - The Plan's discussion of conservation measures for the thrasher in Alternative A should be augmented with specific conservation measures based on the objectives described in #'s 3 & 4 above.

6) Although the thrasher's distribution has included Yucca Valley (see statement in section 3.3.6.1, pg. 3-170), the proposed conservation area (2.2.4.8.1, B-4, pg. 2-81) for this species omits this area. The Plan should describe the evaluation based on biological considerations that the BLM conducted to justify the omission.

7) Pg. 2-153, Table 2-26 - In Alternative A's discussion of monitoring for the thrasher, the Plan proposes implementation task M-10, as follows: "Establish baseline numbers within three years [after formal approval of the HCP] for all portions of the conservation area. Future monitoring would be habitat-based". The first sentence of task M-10 is consistent with our recommended objective 1) in the second biological goal. However, the second sentence changes the purpose of monitoring from that of tracking population changes to tracking habitat changes. We do not concur with the latter approach to population monitoring. Thus, Table 2-26 should omit the second sentence of task M-10 and add a description of those implementation tasks necessary to meet objective 2 of the second biological goal.

LeConte's thrasher

1) Pg. 2-83, Section 2.2.4.8.4 - The Plan states the following: "The conservation strategy for the LeConte's thrasher recognizes that the establishment of the DWMA's and other conservation areas provides sufficient habitat[-]protection for this bird with [the need for] few additional measures". Because the Plan has no mention of additional measures other than land acquisition, we cannot concur with the strategy as written. Therefore, the Department asks the Plan include reasonable measures providing protection and enhancement of habitat and populations (see below).

2) Pg. 2-5, Table 2-1 - The single biological goal for this species in the Plan is "Conserve a large area capable of supporting viable populations in perpetuity". We do not concur with this goal, for the following reasons: a) It needs more specificity. There is no description of what constitutes a "large" area for the thrasher. There is no description of the method for determining that an area is found to be "capable" of supporting the species "in perpetuity" and b); The Plan's glossary does not define a 'viable population'. Without a definition for the purpose of the Plan and a description of a process to determine whether a population is 'viable, we cannot evaluate the substance of this part of the biological goal. In the interest of expanding the thrasher's population and improving the quality of its habitat, this goal should be rewritten, as follows: 'Protect and enhance known populations and habitat'.

3) Pg. 2-5, Table 2-1 - The Plan offers no objectives to meet its original goal. The Department requests the following objectives be added to address the rewritten goal of protecting and enhancing populations and habitat for the thrasher on public lands in its geographic range within the Plan's boundary: a) 'Establish a series of reserves representing all historic areas'; b) 'Eliminate livestock grazing'; c) 'Restrict vehicle access to established roads and approved routes that exclude washes'; d) 'Enforce grazing and road/route restrictions'; e) 'Prohibit removal of desert-wash vegetation and of Joshua trees, yucca, and cactus'; f) 'Acquire private land to conserve existing habitat and to allow restoration and expansion of habitat by natural means' and 7); 'On private land not having willing sellers, obtain conservation easements requiring elimination of grazing and restriction of vehicle access to established roads and approved routes that exclude washes'.

4) The Plan should have a second biological goal for the thrasher, as follows: 'Conduct research and monitoring programs'. Objectives to achieve this goal should include the following: a) 'To describe existing vegetation and to determine distribution and densities of local nesting populations of the thrasher, conduct base-line surveys on permanent study transects representing all areas within the planning boundary having historic populations' and b); 'Conduct a long-term monitoring program tracking changes in habitat structure and extent and changes in the overall population of the thrasher'.

5) Pg. 2-83, Section 2.2.4.8.4 - The Plan's discussion of conservation measures for the thrasher in Alternative A should be augmented with specific conservation measures based on the objectives described in #'s 3 & 4 above.

6) Pg. 2-155, Table 2-26 - In Alternative A's discussion of monitoring for covered species, the Plan does not propose implementation tasks addressing monitoring for the thrasher. Table 2-26 should add a description of those implementation tasks necessary to meet objective 2 of the second biological goal.

Inyo California towhee

1) Pg. 2-5, Table 2-1 - The single biological goal for this species in the Plan is to, "Protect a viable population on public lands that would, in conjunction with military conservation programs, be large enough to meet the [federal] Recovery Plan criteria for delisting". We do not concur with this goal, for the following three reasons: a) The military bases within the Plan's boundary are not contributors to, or formal participants in, the Plan. The result is that the bases will not commit to maintaining any current conservation programs for the towhee or other covered species. Therefore, for the purpose of the Plan, any proposed conservation of the towhee largely is the responsibility of the jurisdictions participating in the Plan; b) The Plan's glossary does not define a 'viable population'. Without a definition for the purpose of the Plan and a description of a process to determine whether a population is 'viable', we cannot evaluate the substance of this part of the biological goal and 3); Although we would expect any HCP resulting from the West Mojave planning process to contribute to recovery of the towhee, we also would expect to see all conservation measures continue for the life of the Plan whether or not formal recovery is acknowledged.

Based on our stated concerns about the Plan's goal for the towhee, we recommend that this first goal be rewritten to state the following: 'Conserve all riparian habitat and adjacent hillside vegetation to the ridgeline in each watershed'. This goal is based on the necessity of conserving upland habitat adjacent to riparian habitat, which the towhee uses for nesting. Towhees forage extensively in adjacent upland habitats.

2) Pg. 2-8, Table 2-1 - The Plan presents no objectives in for achieving the goal as written. The Department requests the following objectives be added to address the new goal of conserving riparian and adjacent upland habitat for the towhee within its geographic range : a) 'Acquire private land to conserve existing habitat and to allow restoration and expansion of habitat by natural means'; b) 'On private land not having willing sellers, obtain conservation easements requiring elimination of grazing and vehicle access and allowing removal of non-native vegetation'; c) 'Establish and enhance riparian woodland on public land'; d) 'Remove non-native vegetation on public land'; e) 'Eliminate livestock grazing on public land'; f) 'Exclude livestock from all springs on public land by fencing'; g) Discourage human access to all springs on public land by signing, conducting educational programs, and enforcing trespassing restriction'; h) 'Close unpaved roads and other vehicle routes on public land'; i) 'enforce grazing restriction and road/route closures', 9) 'Stop any illegal water extraction from springs'; j) 'At earliest opportunity, end any legal water extraction from springs on public land'; k) 'Remove all burros and horses from public land within two years after formal approval of the HCP' and l); 'Withdraw public land from mining entry'.

3) The Department recommends a second biological goal for the towhee, as follows: 'Conduct research and monitoring programs on public land'. Objectives to achieve this goal should include the following: a) 'Conduct base-line surveys on permanent study transects in all areas not examined in the two years prior to formal approval of the HCP, to describe existing vegetation and to determine distribution and densities of local nesting populations of the towhee and b); 'Conduct a long-term monitoring program, tracking changes in habitat structure and extent and changes in the overall population of the towhee'.

4) In addition, the Department recommends a third biological goal for the towhee, as follows: 'Protect and enhance local populations'. An objective to meet this goal is the following: 'Reduce parasitism and predation of towhee nests by the brown-headed cowbird'.

5) Pg. 2-83, Section 2.2.4.8.3 - The Plan's discussion of conservation measures for the towhee in Alternative A should be augmented with specific conservation measures based on the objectives described in #'s 2 through 4, above.

6) Pg. 2-155, Table 2-26 and Pg. 2-158 - In Alternative A's discussion of monitoring for the towhee, implementation task M-32 should be eliminated and measures should be substituted that are necessary to meet objective 2, described above. It is also suggested the Plan redefine implementation task M-33 as requiring monitoring surveys every third year after the baseline studies addressed in the second biological goal.

7) Pg. 4-57, Environmental Consequences - This section fails to demonstrate how the loss of 2% of this species habitat on private lands will be fully mitigated by the proposed conservation actions on BLM lands. Funding has not been assured to complete the habitat enhancement projects on BLM lands. Furthermore, the Department believes protection of the habitat on BLM lands from vehicle intrusion, burro and livestock grazing, illegal water diversions, and tamarisk invasion, are actions that BLM should be taking regardless of activities on private lands and should not be used as mitigation for impacts on private lands.

MAMMALS

Mojave River Vole

General Comments

The Plan, as currently written, does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the Mohave River vole (vole). In order for the Department to cover this species under a CESA permit and to meet the requirements of CEQA, the following concerns (specific comments) have to be addressed to the Department's satisfaction.

Specific Comments

1) Section 2.1.2 Table 2-1 (Pg. 2-7) - The single biological goal for this species is to "Conserve all remaining riparian and wetland habitat". However, there are no biological objectives for achieving the goal. The Plan should list the following specific objectives: a) achieve and sustain groundwater levels adjacent to the Mojave River sufficient to maintain habitat and allow its restoration and expansion by natural means; b) acquire private land adjacent to the Mojave River to conserve existing habitat and to allow restoration and expansion c); on private land not having willing sellers, obtain conservation easements requiring elimination of grazing and vehicle access and allowing removal of non-native vegetation, and d); remove non-native vegetation on public land.

2) The Plan should have a second goal, as follows: 'Conduct research and monitoring programs'. Objectives to achieve this goal should include the following: 'a) establish permanent study plots and conduct base-line studies on these to describe existing vegetation and to determine distribution and densities of local populations of the vole; b) implement a long-term monitoring program tracking changes in habitat structure and extent and changes in the overall population of the vole and c); identify, map, and survey all appropriate habitat along the Mojave River corridor'.

3) Section 2.2.2.2 – Pg. 2-32 – Mitigation Fees - This section states that a single mitigation fee will be established as compensation for habitat disturbance within the planning area. Outside of the HCAs, compensation ratios would vary from 0.5:1 to 1:1 depending on disturbance criteria. The Department notes that the Mojave River corridor has not been designated as a HCA, so mitigation ratios would be limited to 1:1 or less. According to Map 2-8, it appears that much of the Mojave River would be in a 0.5:1 mitigation ratio area. If a compensation fee structure such as this is envisioned, separate accounts must be set up to prevent mitigation fees collected for one species or habitat to be utilized to acquire habitat for different species. In other words, mitigation fees collected for developments along the Mojave River, which impact riparian and wetland habitats, must not be used to acquire desert tortoise or Mohave ground squirrel habitat. A tracking system must be developed and implemented. It needs to be demonstrated to the Department how the acquisition of suitable, occupied habitat, at a ratio of 0.5:1, meets the fully mitigate standard for incidental take of individuals as required by CESA.

4) Pg. 2-41, Table 2-10 - Activities Covered and Not Covered by the Incidental Take Permit - This table states that agricultural uses, land grubbing and clearing, and weed abatement, among other activities, would not be covered by the proposed plan. According to the species account, agricultural activities are one of the primary threats to this species. Losses of a significant amount of vole habitat and individuals could occur as a result of these activities, and they should therefore have mitigation requirements established.

5) Pg. 2-46, Section 2.2.3.3, Table 2-11 - Authorized take is allowed for flood control maintenance, as per existing biological opinion, but there are other projects in the area that will also need authorized take (i.e. Caltrans 1-15 bridge widening, VVWRA pipeline projects, etc.) Also, according to Page 2-72, Para.4, the existing biological opinion for flood control activities covers only least Bell's vireo and southwestern willow flycatcher. Since the vole utilizes different habitats than these two bird species, mitigation measures appropriate to the vole must be developed. In the Habitat Conserved column of the table it states that all potential habitat in the Mojave River is outside flood control maintenance areas if ground water criteria are met. Since most of the area is privately owned, the plan must provide for protection of habitat on the properties to ensure they are conserved.

6) Pgs. 2-71 to 2-73, Section 2.2.4.4 - This section discusses the Mojave River Bioregion of which the vole is one of the species listed. It relies on the Mojave Basin Adjudication for protecting the species listed. Unfortunately, the adjudication has been unable to increase ground water depths to what they should be because of the transfer of free production allowance. For small construction projects, it states that projects would take place during the fall and winter to reduce impacts to birds, but no mention is made of the vole. Mitigation measures need to be added for the vole such as fencing, trapping and moving voles out of harms way prior to commencement of activities which will impact vole habitat. Since the Plan will promote increased development in and around the Mojave River, and most of the impacts to the river are from increased water usage, adequate mitigations must be incorporated.

7) The Department disagrees with the statement on Pg. 2-72, para.1, that existing wetland and riparian habitat laws and regulations are sufficient to provide conservation of riparian vegetation. Since this subspecies relies entirely on habitat found only along the Mojave River, protection of the habitat onsite is the only reliable way of ensuring its survival.

8) Pg. 2-74, Section 2.2.4.6 - The Plan's discussion of conservation measures for mammals in Alternative A does not include the vole. Based on the objectives described in the preceding paragraphs, the Plan should provide specific conservation measures for this species in all Alternatives.

9) Pg. 2-156, Monitoring Table 2-26 - M-54 proposes to track groundwater levels quarterly and report them annually. However, Conservation Measure MR-1 proposes that if groundwater criteria are not met for two consecutive quarters, coverage would be revoked. If groundwater levels are only being reported annually, it is possible that groundwater criteria could not be met for four consecutive quarters, before coverage is revoked. Please clarify.

10) Pg. 3-169, Section 3.3.5.2 - This section discusses the activities affecting the vole. It says that habitat destruction and fragmentation due to agriculture, urbanization, off-highway - vehicle use and other surface-disturbing activities are the threats. Mitigations for these impacts are not adequately addressed in any of the alternatives.

11) Pg. 4-53, Section 4.2.2.5.2 - The Plan's description of threats to the vole is incomplete. In addition, the Plan offers contrary statements about such threats. One statement is, "Protection of the ... vole is habitat-based, and depletion of groundwater is almost the only threat to this species"... The biological goal of providing long-term conservation of all remaining ... habitat would be met [,] assuming that groundwater levels are sufficient". Elsewhere (3.3.5.2, page 3-169), the Plan says, "Habitat destruction and fragmentation due to agriculture and urbanization are the primary threats. Concentrated off-highway-vehicle use and other surface-disturbing activities are also threats". The Department believes that the suite of threats for the vole includes those listed in both of the above statements, as well as flooding, displacement of native vegetation by salt-cedar, and competition of the non-native house mouse. The Plan should address all threats to the vole and offer adequate mitigation measures to offset those threats.

12) Pgs. 4-52 & 4-53, Section 4.2.2.5.2 - Although the Plan alludes to "trail construction" along the Mojave River as a threat to the vole, we were unable to find any description of this activity in the document. The Plan should state whether trail construction along the Mojave River is an actual project, either approved or pending, and whether it passes through riparian habitat, and should describe its location.

13) Pg. 4-256, Section 4.8.2.5.2 - In the No Action alternative, it says that if the Mojave Basin Adjudication is not sufficient to stop the overdraft and restore groundwater to the Mojave River, drying of the surface would cause the habitat to shrink to areas where permanent water is present. The Department believes this statement would be true for all the alternatives, including Alternative A and should be so noted in the Plan.

Yellow-Eared Pocket Mouse

General Comments

The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the yellow-eared pocket mouse (pocket mouse). In order for the Department to cover this species under a CESA permit and to abide by the requirement of CEQA, the following concerns (specific comments) need to be addressed to the Department's satisfaction.

Specific Comments

1) Pg. 2-8, Table 2-1 - The single biological goal for this species is to "Maintain and enhance existing habitat". However, there are no biological objectives for achieving the goal. The Plan should list the following specific objectives within the generally-known geographic range of the pocket mouse: a) grazing on public land be managed such that it maintains and/or enhances habitat values for this species b); close unpaved roads and other vehicle routes in canyons and washes on public land, except for structure maintenance c); enforce grazing restriction and road/route closures; d) permit no new wind-energy projects on public land, thereby allowing no new roads and e); acquire

private land to conserve existing habitat and to allow restoration and expansion by natural means.

2) The Plan should have a second goal, as follows: 'Conduct research and monitoring programs'. Objectives to achieve this goal should include the following: a) establish permanent study plots and conduct base-line studies on these to describe existing vegetation and to determine distribution and densities of local populations of the pocket mouse and 2); implement a long-term monitoring program tracking changes in habitat structure and extent and changes in the overall population of the pocket mouse'.

3) Pg. 2-35, Tables 2-8 and 2-9 – Exempt Activities - These tables contain certain activities which are proposed to be exempt from mitigation fees and other mitigation requirements. Yet some of these activities, taken cumulatively, could result in the take of significant habitat or numbers of individuals of this species. Mitigation measures for these activities should be developed.

4) Pg. 2-48, Table 2-11 - Authorized Take - This section should specify how many acres of habitat are found on private and public lands within the planning area, and how much of this habitat is subject to incidental take. It should also specify how much habitat will be conserved in the designated ACECs.

5) Pg. 2-50 - Section 2.2.4.1 - HCA-34 states that conversion of habitat to agriculture that is allowed by local agencies without issuance of a discretionary permit is exempt from the mitigation fees. Yet some of these activities, taken cumulatively, could result in the take of significant habitat or numbers of individuals of this species. Mitigation measures for these activities should be developed.

6) Pgs. 2-75 & 2-76, Section 2.2.4.6.2 – Mam-8 - This mitigation measure does not provide any commitment to conserve habitat within the ACECs. This mitigation measure should specify habitat-based measures which will be implemented.

7) Same Pgs. & Section as Above - Mam-9 - It appears to be an assumption the pocket mouse will benefit from habitat acquired for Kelso Creek monkeyflower. Table 2-11 states that there is "potential" habitat for pocket mouse at the Kelso Valley Monkeyflower Conservation Area. If this conservation area is to be used as mitigation for impacts to pocket mouse, it should be surveyed to verify that it is indeed occupied by pocket mice.

8) Same Pgs. & Section as Above - Mam-10 - The Plan's discussion of conservation measures for the pocket mouse in Alternative A includes the following statement: "Grazing by cattle ... would be monitored [on public land] to prevent excessive loss of topsoil and depletion of shrubs.... Compliance with the BLM regional rangeland health standards is the standard for conservation of ... pocket mouse habitat on public land". The pertinent implementation task is Mam-10, which should be omitted from the Plan. The Department has been presented no evidence that the BLM's rangeland health standards address optimum or minimum habitat requirements for survival and

reproduction of this species. Protection of the pocket mouse is best served by managing grazing within its geographic range to levels that benefit the species, thus erring on the side of conservation. Based on the objectives described in earlier paragraphs, Alternative A should provide specific conservation measures in addition to those in section 2.2.4.6.

9) Pg. 4-53, Section 4.2.2.5.3 - Regarding grazing, the Plan makes the following statements: a) "Monitoring of grazing impacts, using regional rangeland health standards as a benchmark (M-94), would assist in maintaining habitat for [the pocket mouse]"; and b) "Alternative A achieves the goal of maintenance and enhancement of existing habitat [of the pocket mouse] through provisions related to grazing on public land". We disagree with the contention of these statements, as noted in the preceding paragraph. Implementation task M-94, and its equivalent task LG-9, should be omitted from the Plan.

Bats: Townsend's big-eared bat, California leaf-nosed bat, Pallid bat, Western mastiff bat, Spotted bat, Long-legged myotis.

General Comments

1) The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to these 6 bat species. In order for the Department to cover these species under a CESA permit and to abide by the requirements of CEQA, the following concerns need to be addressed to the Department's satisfaction.

2) Please clarify why there are species accounts for two bats (pocketed free-tailed bat, *Nyctinomops femorosaccus* and fringed myotis, *Myotis thysanodes*) which are not covered per Table 2-11 (pg. 2-43). These latter two species were apparently covered at one point during the preparation of the plan, as the last bulleted conservation measure under (Bat-1), Section 2.2.4.5 (pg. 2-73) refers to the Townsend's big-eared bat, California leaf-nosed bat and the "other six species". Are these two species to be considered for coverage?

3) We believe that it is inappropriate to lump all 6 bat species into one group. Life history requirements, survey methodology, known threats, and data sets vary from one species to another. Goals, objectives, conservation measures, monitoring, adaptive management strategies, and impact analysis (environmental consequences) should be prepared for each species. The grouping approach used in the plan is not supported by the literature compiled in the species accounts. For this reason, and additional reasons provided in our comments below, we do not believe that the following species should be covered in the plan: Pallid bat, Spotted bat, Western mastiff bat, and Long-legged myotis.

4) Townsend's big-eared bat and California leaf-nosed bat -

In reviewing the proposed plan, the Department does not believe that the compensation measures proposed for these two species meets the CESA full -mitigation standards referred to in our letter. Gating of significant roosts and other proposed species conservation measures for bats are good, since there is little in the way of existing regulatory mechanisms to conserve bat roosts or foraging habitat. However, these measures do not protect these roosts from future mining activities or non-discretionary actions. In addition, no mitigation is offered for the take of non-significant roosts. Efforts should also be made to restore lost sites or create new sites which could mitigate for the take of non-significant roosts. There is also no funding mechanism proposed to ensure that these actions take place. In order to cover these two species, the above deficiencies must be corrected.

5) Pallid bat, Spotted bat, Western mastiff bat, Long-legged myotis - We believe that a significant amount of revision and development of mitigation measures will be necessary in order to meet the "full mitigation" standard. More thorough survey and protection standards must be written to cover these species roosting habitats which include rock crevices, cliff faces, old buildings, bridges, and trees. Many of the activities which could impact these structures do not require discretionary permits and would therefore be allowed without mitigation under the proposed plan. Additionally, spotted bat and western mastiff bat are not colonial roosters, and using a threshold of 25 bats could potentially impact dozens of roosting sites and an undetermined number of acres of foraging habitat for these species. No significant roosts for these species are known from the planning area.

Specific Comments

Pg. 2-3, Table 2-1 - Biological Goals and Objectives

1) "Goal: Maintain and enhance viability of all bat populations in the planning area, regardless of species." Define "enhance viability", so that we will know how this goal will be achieved.

2) Objective 1 will protect significant roosts from vandalism and human entry, unrelated to mining activity. It will not protect roosts from future mineral exploration or mining impacts. In order to meet the "fully mitigation" standard, conservation areas must be protected in perpetuity, typically through transfer of fee title of the land to a conservation entity or placement of a conservation easement over the property. In this case, where the majority of mining activity is on public lands, fee title or conservation easements may not be an option. Therefore, the Department requests that all significant roost sites be protected from future disturbance by withdrawing the site from future mineral entry.

3) It should be noted that Objectives 1 and 2 contribute to the conservation of primarily 2 species, Townsend's big-eared bat (*Corynorhinus townsendii*) and California leaf-nosed bat (*Macrotus californicus*).

4) Objective 3, to adopt uniform survey requirements and mitigation measures, could apply to all 6 species, and the plan needs to demonstrate how it will achieve this objective, since no survey protocols, standards, or mitigation measures are presented for the cliff, crevice, tree, bridge, or building-dwelling species.

Pg. 2-43, Table 2-11 - Authorized Take

5) This section should be clarified to read that the "take" authorization being contemplated is for roosts supporting aggregations of the covered species up to the threshold of "significance" as defined in the Plan. Utilization of the "safe eviction" procedures should avoid and minimize "take" of individual animals. It needs to be made clear that "take" of non-significant roosts without utilizing the safe eviction procedures would not be authorized.

6) This section states that "Incidental take permits would not cover the loss of significant roosts". Yet on Pg. 4-50, (Environmental Consequences) para. 6, the plan states that "If significant roosts were found, either on public or private lands, protection would be provided via negotiated agreements with the CDFG." Our understanding of the conservation measures being proposed in this plan, and the permit requirements that must be met, is that all significant roosts will be protected. Protection of significant roosts is being used as the mitigation for the take of "non-significant" roosts. No future negotiated agreements with CDFG are required or needed because no future disturbance to significant roosts will be allowed. This discrepancy in the Plan should be clarified.

7) Habitat Conserved: this section states that nine significant roosts are found on BLM and NPS lands. Yet it is our understanding that NPS is not a signatory to this plan, and that conservation measures proposed in the Plan are not binding on NPS lands. This needs to be clarified. Of the nine significant roosts, this section should state how many roosts are known for each species. Nine significant roosts are also recognized for military lands. But on Pg. 2-73, Conservation Measure Bat-1 states that the majority of known significant roosts are found on military installations. This discrepancy also needs clarification.

Pg. 2-73 - Conservation Measures

8) Bat-1, second bullet: This states that "incidental take permit coverage is not dependent on military protection". But in the event that the nine significant roosts on military installations are not conserved, the Department does not believe that the measures proposed in this Plan are strong enough to achieve the stated Biological Goal to maintain and enhance viability of bat populations in the Plan area and thus should be noted.

9) Bat-1, third bullet: Based on information provided in the species accounts, we believe that the threshold for "significant roosts" of 25 bats for the other 4 species is too

high. The Department recommends that a threshold of 10 bats of any species should be considered a "significant" roost.

10) Bat-2: The Department has been led to believe that the NPS is not a signatory to this Plan. There is no assurance this measure, which relies on cooperation of the NPS, will be accomplished. The Plan offers no justification of why the Pinto Mountains was selected as a bat management area. In reviewing the species accounts and maps provided, it appears that other mountain ranges within the Plan area also contain concentrations of known roosts. These areas may offer more conservation benefit than the Pinto Mountains. Precluding surveys or conservation in those other areas is not appropriate. The Department requests the selection of only the Pinto Mountains be supported by documentation.

11) Bat-2, first bullet: Any bat management area, regardless of its location, should also require the systematic survey of other geologic features which could harbor bats, such as rocky outcrops, cliff faces, abandoned buildings, etc. These potential roosts sites should be specified here in the Plan.

12) Bat-2, second bullet: Notification of claim holders on BLM lands containing significant roosts offers no assurance that the claim holders will protect the roost. Mineral withdrawal is necessary to guarantee that the sites will be protected from future mining activity.

13) Bat-3: This is a good conservation measure. However, it should offer more specifics on how the protection of the riparian habitat will be accomplished. There are no monitoring measures offered that will measure the implementation of this conservation measure. As stated in the species account for *Macrotus*, sand and gravel mining in a desert wash removed riparian vegetation and is believed to have contributed to the loss or decline of a *Macrotus* maternity roost although the roost itself was undisturbed. The Plan needs to identify how riparian vegetation will be protected from this potential disturbance. Please define "undue degradation".

14) Bat-4: This is also a good conservation measure, but needs more specifics. "Substantial damage" should be defined. The Plan needs to identify who will make this determination, what methodology will be used and what is the threshold.

15) Bat-5: The Plan needs to note that design and construction of these structures must be accomplished in consultation with a qualified bat biologist.

16) Bat-6: The language in the introductory sentence on page 2-74 for species conservation measure (Bat-6) should be changed to read "Any project which would disturb" The resulting sentence will include both discretionary and non-discretionary activities. Activities such as old building destruction, mine hazard abatement, quarrying, and recreational climbing should trigger surveys to determine bat use and potential impacts. Also, in this same first sentence (and throughout the Plan), the term "mine

shafts” should be changed to “mine features”, since “shaft” is just one of many types of mine structural features and descriptive terms.

17) Bat-6, first bullet: Department recommends that qualified bat biologists should also be used to determine if any features that might support a bat roost are present.

18) Bat-7, second bullet: this measure calls for entering a roost for a minimum of two nights after the evening exit flight to capture and remove any remaining bats. The ability to capture bats in a mine or cave situation may be infeasible, given potential structural access and safety issues. The Plan needs to acknowledge this measure will be applied “as feasible”.

19) Bat-7: This measure only applies to roosts located in mines, caves, and some man-made structures such as buildings. It would not apply to cliff faces, rocky outcrops, certain buildings and bridges. The Department believes that conservation measures for these features must be developed.

Pg. 2-153, Table 2-26 - Monitoring

20) M-6: Survey protocols must be developed. Different survey protocols will apply to the different species and different geologic features of their roosts. Some of the species accounts recommend utilization of night vision equipment to monitor roosts. However, we believe these species accounts were prepared several years ago, and it is our understanding that some researchers now rely on newly - developed technologies for more accurate counts. If the sites are only monitored every five years, technological advances over time will likely alter survey results, making comparisons difficult. For other species with different roosting habits, acoustic surveys may be the more appropriate choice. These questions should be resolved in a complete monitoring program that needs to be developed as part of this Plan.

21) M-8: It is unclear whether this measure applies to the entire planning area or only to the proposed bat management area. This should be clarified.

22) M-9: More specifics are needed regarding the development of this monitoring measure.

Pg. 2-166, Table 2-28 - Adaptive Management

23) AM-5: The Department requests the following questions be addressed in the Plan - What are the criteria that will be used to determine if a site should be withdrawn from mineral entry? Who will make that determination? What is the process?

24) AM-6: The species accounts do not indicate that any of the proposed covered species readily accept bat houses – please provide justification. The effectiveness of this proposed measure should be evaluated, corrective actions proposed and discussed and commitments identified in the Plan.

Pg. 3-166 Species Accounts

25) The species accounts provided in the Plan are incomplete and, at times, give an inaccurate representation to the public of the species life history, status, distribution and threats. Therefore, the Department requests that the species accounts furnished to our staff, but not included in the draft Plan, be placed in the next iteration of the Plan in order to have current and accurate disclosure on each individual species.

26) para. 3: The statement that the pallid bat is a cliff dweller is somewhat misleading and should be clarified to read that in desert habitats, pallid bats apparently roost mostly in rock crevices. This bat has fairly plastic roosting requirements and although rock crevices may be more numerically available as roosts than other sites in the desert, pallid bats could be found in tree cavities, old buildings, under bridges, in caves and mines, and even in mud tubes where these sites are available.

Pg. 4-50 Environmental Consequences

27) para. 1, first sentence: We agree that the primary need for conservation of bats is protection of maternity and hibernation roosts, as well as protection of transitory roosts used during migration. We also believe that protection of foraging habitat is also key to conservation of bat species. This section should more thoroughly discuss the importance of protection of foraging habitat and water sources for the conservation of bats. This priority is reflected in several of the proposed conservation measures but it is not supported elsewhere in the document. Additionally, the proposed conservation measures in the Plan focus primarily on protection of maternity and hibernation roosts, largely ignoring the conservation of transitory roosts. Typically, bats are not found in dense concentrations during migration as they are during hibernation and maternity season. Using the standard of 25 bats (for four species) would likely eliminate most if not all of the roosts used during migration and we, therefore, support the standard of 10 bats for the four species.

28) The second and last sentences in the first paragraph under Section 4.2.2.4 (pg. 4-50) are inaccurate and need to be changed to reflect the following thoughts. The species accounts do not support the assumption that roosts for the six covered species are most often mine shafts and adits and less often rock crevices, abandoned buildings, highway bridges and water tunnels. Mines and caves would likely be where Townsend's big-eared bat and California leaf-nosed bats are most often found, but that is certainly not the case for the spotted, pallid and mastiff bats, as well as the long-legged myotis.

29) para. 2: We disagree with the assertion that Alternative A protects all known significant roosts by restricting human access with placement of gates that can be traversed by bats. First, this conservation measure does not protect significant roosts from being disturbed or destroyed from mining or exploratory activity. This measure also does not apply to the four species which are not highly dependent on mines and caves (pallid, spotted, mastiff, and long-legged myotis). Therefore it does not meet the

Biological Goal of the Plan or Objective 1. If disturbance of the bat roost under the I-15 crossing of the Mojave River will be mitigated separately by Caltrans and not through this Plan, then there are no assurances it will meet the goal or objectives of this Plan.

30) para. 3: Please clarify whether the "important" roost in the Pinto subregion is the same as a "significant" roost and for what species it is a roost. This section should discuss that NPS is not a signatory to the Plan and, therefore, proposed conservation measures for NPS lands are not binding. Please identify the funding sources necessary to guarantee that the gating of significant roosts in the Pinto subregion, as well as other significant roosts, will be accomplished. Please do likewise for the funding mechanism of establishment of bat management area(s) and the management and monitoring of the species in these areas. This section should discuss that other areas within the Plan area also contain concentrations of roosts and discuss their likelihood of being surveyed and protected.

31) para. 4: We disagree that the proposed alternative provides for survey procedures at potential roost sites. While the Plan does call for surveys at potential roost sites, no guidelines, survey protocols or standards are proposed. We believe these must be developed for all proposed covered species in order to meet Objective 3. This paragraph also states that significant roosts will be protected via negotiated agreements with the Department. These protective measures must be developed and agreed to by all parties prior to permit issuance.

32) para. 5: This section states that "The level of take of the target bat species is minimized by the limitation to sites where less than 25 bats are present.....". We disagree with the assumption that take of sites with less than 25 bats for these target species (pallid, spotted, mastiff and long-legged myotis) is minimized, because these species are either not colonial roosters (spotted) or few to no roosts of 25 or greater bats of these species are known from the planning area. Using 25 or fewer bats as the threshold for these species could eliminate countless sites used by these species, albeit in low numbers.

This paragraph also states that foraging habitat would be protected for Townsend's big-eared bat and California leaf-nosed bat. However, as stated above, the plan offers no protection of foraging habitat from sand and gravel or other mining operations which could remove foraging habitat. Additionally, evaluation of vehicle impacts on the foraging habitat is proposed to be done on a case-by-case basis, which does not meet Objective 3, which is to adopt uniform mitigation measures. We also disagree with the last sentence of this paragraph which states that the small allowed incidental take is fully mitigated by gating of roosts. Gating of roosts only offers partial protection for those particular roosts, and the take of all the smaller roosts which could occur throughout the planning area would be unmitigated by the Plan.

33) para. 6: The Department does not agree with the assumption that the survey requirements and adaptive management program proposed in the Plan could lead to additional conservation and management. The only suggested corrective action in the Plan is to install bat houses, which most of the target species do not use.

34) para. 7: We disagree that the goal of maintenance and enhancement of all bat populations in the planning area is met by the conservation measures proposed in the Plan. The Plan offers partial protection for the largest roosts of 2 species. Numerous smaller roosts for all six species would be allowed to be destroyed or taken by the Plan, with no mitigation.

Mohave Ground Squirrel

General Comments

1) The boundary of the proposed Conservation Area largely avoids private land. The Department contends the Conservation Area should be designed to include some portions of the squirrel's geographic range that now are in areas with little public land. This action is necessary mainly to provide new connections among core populations. To this end, the Plan should restore to the proposed Conservation Area those private lands requested for exclusion by local governments, particularly in Inyo County:

2) A number of other parts of the proposed Conservation Area are small, isolated fragments. These include the triangular area south of the Jawbone Canyon Open Area, the little peninsula southeast of Ridgecrest, and the narrow 'bridge' squeezed between the private lands at Hinckley and those around Harper Dry Lake. The Conservation Area must provide reasonable connections between these small areas and the major part of the Area. The rationale is not clear for the proposed Conservation Area excluding certain public lands which would help in providing connections (eg. Public lands south and west of Ridgecrest). The Department recommends the Plan be revised to include these areas.

3) To establish a connection between the AFB and the DTNA, a revised Conservation Area should incorporate a large block of mostly-private land between State Route 58 and the DTNA. Although there had not seemed to be any previous records of the squirrel in the area east from State Route 14 to the northern end of Rogers Dry Lake on the AFB, and from California City south to the northern boundary of the AFB, recent observations of the species on the site of the proposed Hyundai test track confirm that habitat exists within this 12 x 18-mile block. Because the area is comprised of private land holdings, and because no previous surveys presumably have been done on those lands, the squirrel population in the vicinity of the Hyundai site has not been studied. However, the presence of the species demonstrates the need for establishing a connection from the AFB to the DTNA, which would provide benefit for the desert tortoise as well.

4) The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the Mohave ground squirrel (squirrel). As the Plan currently is written, only 35% of the known range of the squirrel would receive protection. The major weakness of the Plan, as it regards the squirrel, is the lack of participation by the three military installations containing habitat and populations of the squirrel. In order for the Department to cover the Mohave ground

squirrel, under a CESA permit and to abide by the requirements of CEQA, the following concerns need to be addressed to the Department's satisfaction.

Specific Comments

1) Pg. 2-6, Table 2-1- The Plan's first biological goal for this species is to, "Ensure long-term protection of MGS habitat throughout the species [*sic*] range". Because the proposed Conservation Area for the squirrel largely is in the northern half of its known range, this goal's title is misleading. The goal provides no qualification of the term 'protection'. In addition, the goal does not define the period of protection envisioned in the use of 'long-term'. We recommend that the Plan restate the goal, as follows: 'In perpetuity, protect sufficient habitat to sustain reproducing populations of the species in representative parts of its known geographic range and to connect these populations'.

2) Pg. 2-6, Table 2-1, Objective 1.1 - The first of five objectives for meeting the first goal is to "... establish management areas for the long-term conservation of MGS habitat: (a) the MGS Conservation Area for the protection of unfragmented habitats outside [of] military installations; (b) ...; and (c) ...". We recommend omitting the term 'unfragmented' in 1.1(a). The land designated as the Conservation Area is extensively fragmented and degraded, as a result of the pattern of land ownership and of land uses other than for conservation of native species and habitats.

3) Pg. 2-6, Table 2-1 - Objective 1.2, for the first biological goal states, "Allow for adjustments to the MGS Conservation Area boundary based on findings of scientific studies". Although we do not know what the Plan envisions in this objective, we cannot see the Conservation Area being reduced in size. Upon its being designated, the Area should be of sufficient size to meet the first goal. The Plan should omit objective 1.2.

4) Pg. 2-6, Table 2-1 - The second of two biological goals for the squirrel is, "Ensure long-term viability of the MGS throughout its range". Because we have similar concerns with this wording as we did for that of the first goal, we recommend that the Plan restate the goal, as follows: 'In perpetuity, take all necessary actions to sustain reproducing populations of the species in representative parts of its known geographic range and to maintain habitat connections among these populations'.

5) Pg. 2-6, Table 2-1 -The first of four objectives for the second goal should be rewritten to omit the introductory phrase and reflect the restated goal, as follows: 'Minimize and fully mitigate the impacts of the Plan's authorized incidental take of the MGS'.

6) Pg. 2-12, Section 2.2.1.1.3 - In the description of the MGS Conservation Area, Alternative A states, "The MGS in ... areas outside of the Conservation Area] would either be managed by the military or be available for incidental take ...". Although we concur with the concept of establishing a group (2.2.4.3.3, page 2-71) to coordinate with and advise military installations about management of the squirrel, the Plan should not give the impression that these installations are required to manage for the squirrel. The military bases within the Plan's boundary are not contributors to, or formal participants in, the Plan. The result is that the bases will not commit to maintaining any current, or

establishing new, conservation programs for the squirrel. Therefore, for the purposes of the Plan, any proposed conservation of the squirrel largely is the responsibility of the BLM. The Plan should evaluate whether this species can be conserved without the participation of the military, given the concerns expressed below.

The only area in the southern portion (i.e., south of State Route 58) of the known geographic range of the squirrel in which viable populations are known to persist is on Edwards Air Force Base (AFB). Furthermore, the small portion of the proposed Conservation Area surrounding Saddleback Butte State Park is connected to the northern portion of the Area only through the AFB. Conservation of the species in the southern portion of its range does not appear to be feasible without the involvement and agreement of the AFB.

The northwestern portion of the proposed Conservation Area (i.e., Olancho, Haiwee, and Rose Valley) effectively is cut off by the North Ranges of the China Lake Naval Air Weapons Station (NAWS). The narrow corridor west of U.S. Highway 395 and east of the Sierra Nevada escarpment around the Inyo County-Kern County line likely would not be a workable connection for gene flow. At Little Lake, this corridor narrows to almost nothing. Additionally, the two major blocks of military land making up the NAWS effectively isolate that portion of the Conservation Area that surrounds Searles Lake. Both the NAWS North Ranges and the NAWS Mojave B Range include large expanses of habitat that are known to or highly likely to support important populations of the squirrel. Yet, these populations cannot be managed through the Plan.

Military training on the National Training Center and Fort Irwin has impacted a great deal of habitat for the squirrel. The recently approved expansion of Fort Irwin will potentially affect about 100 square miles of what probably is excellent habitat. Furthermore, the expansion isolates the relatively-intact Goldstone area, at which there is evidence of good squirrel populations. The Plan's cumulative impact analysis does not include the expansion of Fort Irwin. The potential expansion likely represents the single largest threat to the viability of the squirrel. With military lands representing over one-third of the range of this species, the cumulative impacts of the Fort Irwin expansion and other military actions on the Mohave ground squirrel must be included in a revised Plan

7) Pgs. 2-106 to 2-112, Section 2.2.5 - The "Public Land Livestock Grazing Program" for Alternative A requires major changes to meet the Plan's first biological goal for the squirrel. First, the Plan should acknowledge that the BLM's grazing standards primarily apply to the health of rangelands for the purpose of sustaining livestock. The described ecological assessment for habitat of "Native Species" on rangelands (pgs. 2-109 and 2-110) is general in nature and does not necessarily set the standard for protecting habitat of the squirrel. We have no evidence that the BLM's rangeland health standards address optimum or minimum habitat requirements for survival and reproduction of this species, particularly as they apply to livestock consumption of the shrubs winterfat, spiny hopsage, and saltbush.

8) Pgs. 2-121 to 2-124, Section 2.2.5.7 - The Department believes the Plan would best serve protection of the squirrel by targeting elimination of grazing within a Conservation Area for the species. The recovery plan for the desert tortoise states that livestock grazing is generally incompatible with recovery. We contend that the effects of livestock on the tortoise also apply to the squirrel, in regards to the trampling of burrows and shrubs used as protection from predators, soil erosion and compaction, and competition affecting quality and quantity of plant food. Thus, the discussion of voluntary relinquishment of grazing allotments should be supplemented with a discussion of the prospects and timetable for terminating or not renewing those allotments that are not voluntarily relinquished.

9) Pg. 2-182, Section 2.5.2 - Alternative A should incorporate certain conservation measures currently found only under Alternative D. These measures are as follows: 1) 'Designate the Conservation Area for the squirrel as an ACEC', and 2) 'Reclassify all class-M lands within the Conservation area for the squirrel as class L'. In addition, Alternative A should provide for eliminating competitive and non-competitive vehicle events in the Conservation Area for the squirrel.

10) Pg. 2-185, Section 2.5.4 - In its discussion of conservation measures under Alternative D, the Plan states, "If 'source areas' for [the] MGS were to be identified in the future, site-specific mineral withdrawals of these areas would be considered". The Plan should apply this measure to Alternative A but expand the concept to include all known core populations of the squirrel, as determined by the Department's Mohave Ground Squirrel Technical Advisory Group. For Alternative A, the Plan should restate the measure to provide the following: 'The BLM will withdraw a site from mineral entry, determining the area of withdrawal using biological considerations developed by the Mohave Ground Squirrel Technical Advisory Group'.

REPTILES

Desert Tortoise

General Comments

The Department is concerned that only 2 of the 4 goals and 1/3 of the objectives, agreed upon by the Department, USFWS and BLM in 1998 for desert tortoise conservation to be accomplished by the Plan, will be met with the Preferred Alternative (A).

The Plan does not have provisions for monitoring desert tortoise populations on mitigation lands and must include that as part of the requirements in the Department's issuance of a CESA permit.

The Department is concerned that there is no quantification of take of tortoise, either within the DWMA's or outside DWMA's. This information is required in order for the Department to issue a CESA permit.

The Plan falls short of achieving specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the desert tortoise (tortoise). In order for the Department to cover the desert tortoise, under a CESA permit and to abide by the requirements of CEQA, the following concerns need to be addressed to the Department's satisfaction.

Specific Comments

1)Pg. 2-44, Table 2-11 & Pg. 2-59, Map 2-9 – The Plan identifies areas in which it says there will be no anticipated “take” of tortoises and designates these areas as “no survey zones”. The Department does not agree with “no survey zones” in Kern County. There have been recent discoveries of tortoise and Mohave ground squirrel near California City, on private land (Hyundai site) that have not been surveyed previously. The Department believes there are significant areas of private land in Kern County that have never been surveyed for tortoise or Mohave ground squirrel. For that reason, the Department requests that “no survey zones” be withdrawn and surveys required for tortoise, as well as Mohave ground squirrel. In addition, the Department does not believe that the mitigation ratio of 0.5:1 for Kern County is adequate because we believe it does not reflect suitable compensation for potentially undisturbed tortoise habitat.

2) Pg. 2-51 & 2-52, Table 2-12, HCA-35 – The Department questions the figure used for the amount of acres of tortoise habitat to be disturbed by the expansion of highway US 395. Recent plans shown to the Department indicate a new parallel freeway being built to the east (at least a mile) of the existing highway that goes through much more habitat than originally proposed and would cause significant fragmentation in the DWMA.

3) Pg. 2-51, Land Acquisition with the HCA, HCA-36 – The Department does not agree that that the facilitation of the public's motorized vehicle access to an area should be considered a positive factor in determining land acquisition, since this type of activity fragments tortoise habitat.

4) Pg. 2-52, Mining Exploration Access, HCA-38 - The Department believes that a “closed route” needs to be monitored monthly for a year before deciding whether closure was successful. If use has persisted after 1 year then route would count as part of AGD.

5) Pg. 2-53, Recreation, HCA-41 - The Department is opposed to dual sporting events in DWMA's. Past events that have been monitored have demonstrated impacts to habitat. The impacted habitat needs be counted as part of the AGD. In addition, opening up the Rand Mountains to dual sport use is inconsistent with the 1994 Rand Mountains Fremont Valley Management Plan. The Rand Mountain-Fremont Valley Management Plan clearly explains that non-competitive organized events (such as dual sport rides) are prohibited per the FWS Biological Opinion. If dual sporting events are allowed, they need to be monitored and impacted habitat needs to be mitigated and the impacted habitat counted as part of the AGD

Pg. 2-54, Section 2.2.4.2.1, DT-1 - The following conditions need to be added to this measure. Filming projects need to have a qualified biologist on site to prevent take of

tortoises, throughout the time they are on location. All tortoise burrows need to be marked and avoided. If the burrow can not be avoided and there is a tortoise in the burrow, it must be relocated by an authorized biologist. BLM must also report take of tortoises and loss or damage to habitat as proposed for the local jurisdiction in DT-3. This measure also needs to address any relocation as an impact that must be fully mitigated

6) Pg. 2-54, Take Avoidance Measures, DT-3 - Local jurisdiction must also require a full time biologist on site to minimize take as described above.

7) Pg. 2-55, Highway Construction Maintenance, DT-8 – The measure needs to recognize the specifications for berms 12" high or a slope of 30 degrees may need to be adjusted, if it is determined that this does not work for young tortoises.

8) Pg. 2-55, Hunting and Shooting, DT-10 - This measure also calls for no shooting in open areas, which implies that, this activity will be moving to areas outside open areas, a lot of which is DWMA. Yet, according to section 3.3.3.5, 160 square miles are impacted by target shooting and it is most prevalent in open areas. In past discussions with the BLM Planning Team, target shooting was always excluded from DWMA's because of the information about impacts to tortoise from firearms (please see appendix J page 56 of the West Mojave Plan DEIR/DEIS). No biological basis is given for this change and it appears unsupported by any data in this document. An activity that accounts for in excess of 20% of known mortality should be considered for restriction in areas where management for recovery is proposed. If the Bureau needs to provide opportunities for target practice, designated target-shooting areas should be established outside DWMA boundaries. The Department is opposed to allowing target practice of any kind in the DWMA's.

9) Pg. 2-58, Survey and Disposition Protocols, Outside DWMA's, DT-13 – The Department does not agree that construction in "No survey areas" should not require pre-construction surveys prior to ground disturbance and the presence of a biological monitor would not be required during construction. This does not reflect an attempt to fully avoid the take of tortoise. We are especially concerned in Kern County, where tortoises and Mohave ground squirrels have been found on private land that had not been surveyed in the past.

10) Pgs. 2-61 & 2-62, Handling Guidelines, DT-15, 3rd & 4th bullets - Options b & c need to address disease transmittal and carrying capacity of DWMA's. Option d will result in the loss of a significant number of tortoises from the wild tortoise genetic pool. The only criteria for the establishment of translocation sites are by a determination of the implementation team. Measures to fully avoid any "take" of desert tortoise need to be in place prior to the consideration of removing a tortoise from the wild. If no other options are available, translocation may be a consideration. Translocation sites need to be in place prior to the approval of this plan and monitoring of both the recipient and donor populations need to address carrying capacity and possible disease transmittal issues prior to implementation of this plan. If tortoises removed are ill the plan needs to

address the funding of the necropsies as proposed in the Salvage Protocol. Relocation should be considered only if all other options for avoiding take have been unsuccessful.

11) Pgs. 2-62 & 2-63, Table 2-14, DT 17 Table 2-14

Management/Vector Control last bullet: Since it appears that disease is only one factor causing declines in tortoise population and there is a high likelihood that anthropogenic impacts to habitat degrade it so that disease symptoms and its spread are exacerbated, it will be very important to correct the habitat problems (eg. Ravens) before a head starting or re-introduction program begins.

12) Pg. 2-65, Headstarting, DT-26 - Before a headstarting program can begin, the Department recommends the following need to addressed and considered: a) the translocation area needs to be assessed to determine why tortoises are no longer there; b) the effect of handling stress on the female in laying eggs, hatching success of the eggs, permanent effects on the young tortoises or altered sex ratio; c) capability of tortoises, positive for URTD, reproducing in the wild; d) chance that hatchlings from individuals positive for URTD are free of disease and able to reproduce and e); criteria for selection of egg donors for specific geographic areas. Furthermore, the Department believes young tortoises need to be tracked for at least 15 years in order to determine if they ever succeed in becoming reproductive animals in the wild.

13) Pg. 2-70, Other Measures, DT-41 - This study should also include information on use by ravens, feral dogs, coyotes and foxes.

14) Pg. 2-116, New Management Prescriptions, LG-10 - Request clarification if this measure means that the Pilot Knob grazing allotment will be retired

15) Pgs. 2-116 & 2-117, LGs -13, 14 &15: The amount of ephemeral forage production for the trigger point of cattle to be allowed or removed should remain at "a minimum 350 pounds per acre dry weight ephemeral forage" as stated in the CDCA plan and not lowered to 230 pounds per acre. There is no justification for this change in the DIES/DIER. It is assumed that the 230 pound figure was from Avery's 1998 Ph.D. thesis where the studies were conducted in the East Mojave, which is very different from the West Mojave in vegetation, climate and anthropogenic uses. Until studies are conducted in the West Mojave, this figure should not be changed.

From dietary studies conducted by Henen, Jennings, Oftedal and others, it appears that annual plants are a very important component of the tortoise diet. Avery (1998) noted that cattle depleted some specific annual plants. Using the potassium excretion potential Oftedal et al. (2002) calculated the effect of diet shifts on tortoise diets and determined that there is a potential for substantial impact of cattle grazing on the nutritional quality of tortoise diets. Since tortoise densities in the West Mojave appear to still be declining, decreased forage will

not help recover the population. Therefore, the ephemeral forage amount should not be decreased.

16) Pgs. 2-124 to 2-147, Public Land Motorized Vehicle Access Network -

Because of the impacts that roads can have on tortoise, plants and other animal using the desert area, a plan that will conserve and recover desert habitat is imperative. Unfortunately, the document does not indicate how many miles of open and closed routes are in designated critical habitat, but the preferred alternative adds hundreds of miles of designated open routes within the West Mojave. Currently, 4,260 miles of roads are designated open, the preferred alternative plans to designate 5,098 miles open. The Plan needs to identify where these new open routes are located and analyze the impact on desert tortoise.

17) Pg. 2-141 MV-5 - In regards to camping and parking in DWMA's, the Department does not support this activity within 50 feet of the centerline of a route. Instead, we recommend that parking and camping only be allowed in designated areas. The reason being that biological soil crusts are important for the needs of plants and probably animals found in the desert. According to Belnap (2003), the condition of biological soil crusts, which are stressed by human activities, should be considered a top management priority in desert regions, because once this resource is gone, it is often gone for more than a human lifetime.

18) Pgs. 2-144 to 2-146, Implementation - A timeframe needs to be placed on when the second phase would begin. The factors for prioritization of work needs to be reviewed. In appendix K, Dr. Kraysik's reports II and III report that the correlation between tortoise sign and tortoise densities are not reliable. It may be more important, depending on tortoise populations, to do rehabilitation in areas of lower vehicle use, to stop it from proliferating and keep the larger areas more intact. The Department believes the rehabilitation of closed roads is a very important mitigation measure, and it clearly needs to be funded in the Plan.

19) Pg. 2-154, Table 2-26, Monitoring - Dry lake beds need to be added to the list of places to monitor.

20) Pg. 2-167, Table 2-28, Adaptive Management – Adaptive management prescriptions need to be developed for the tortoise – there are currently none in the Plan.

21) Pg. 4-22, Table-12, Filming - Filming should not be allowed in higher density tortoise areas, especially in DWMA's.

22) Pg. 4-131, The Fort Irwin expansion and the effects of other planning efforts (eg. NECO, NEMO, etc.) need to be addressed under the Cumulative Impacts section. CEQA Section 15355 (b) states the cumulative impact from several projects is the

change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects.

Mojave Fringe-Toed Lizard

General Comments

The Plan falls short of achieving specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the Mojave fringe-toed lizard (MFTL). In order for the Department to cover the MFTL under a CESA permit and to abide by the requirements of CEQA, the following concerns need to be addressed to the Department's satisfaction.

Specific Comments

- 1) Pg. 2-14, Table 2-3, Other Conservation Areas – Big Rock Creek – The Department is concerned that the Plan relies on protection of this area for the MFTL through Los Angeles County changing the boundaries of the Big Rock Creek Significant Ecological Area (SEA) as suggested in conservation action R-5 (Pg. 2-85). The Department contends that this does nothing more than cause Los Angeles County to make developers conduct a more in-depth review of the impacts of an individual project on the MFTL and will not ensure the accomplishment of conservation measures. Therefore, the Department cannot accept this as mitigation for impacts of the Plan.
- 2) Pg. 2-47, Table 2-11, Authorized Take / Habitat Conserved – Although the table identifies areas for which proposed take will be authorized and areas where habitat will be conserved, there is no specificity as to the amount of habitat (acres) to be taken or the amount of habitat to be conserved under this Plan. This is essential information that must be provided if the Department is to issue a take permit for this species.
- 3) Pg. 2-85, Specific Conservation Action, R-4 – This measure commits BLM to retaining scattered parcels with the Big Rock Creek blowsand ecosystem, however, there is no commitment by BLM or Los Angeles County to set aside other critical lands within this blowsand ecosystem for the MFTL. If this is to be an area of conservation for this species, then these critical lands must be acquired or easements obtained.
- 4) Pg. 2-156, Table 2-26, Monitoring , M-53 – While it is commendable that the OHV Commission is willing to fund periodic monitoring of lizard populations at two “open areas” (El Mirage and Rasor), it is important that the other areas set aside for MFTL conservation also be monitored for status of the population periodically. There needs to be commitments to monitoring the success of these conservation areas built into the Plan.

Panamint Alligator Lizard

General Comments

There is almost no information provided in the Plan or in the full Species Accounts provided the Department, which are not in the Plan, regarding the distribution and occurrence of this species in the Plan Area. Without this type of information, the Department finds that it is not possible to then determine impacts of the Plan on the species, allowable take, appropriate mitigation / conservation measures and monitoring and adaptive management necessary to ensure success of the conservation. The Department recommends that without the above-mentioned type of information, the Panamint alligator lizard be dropped from the list of covered species in the Plan.

Additional information on the species may be available from Dr. David Morafka of the California Academy of Sciences. In an ongoing study "Multidisciplinary First Assessment of the Environmental Status of the Panamint Alligator Lizard (*Elgaria panamintina*), researchers have expanded the known localities to 29 drainages including the west slope of the Argus Mountains and new localities in the Cosos.

San Diego Horned Lizard

General Comments

The known distribution of the San Diego horned lizard (SDHL) includes the southern portion of the Plan Area. The Plan provides for conservation of this species on public lands, however, the Department does not think this will be adequate to fully mitigate impacts to SDHL that are expected to occur on private lands. There does not appear to be an adequate mechanism for determining the effectiveness of the mitigation measures in the plan.

Specific Comments

1) The full Species Account furnished the Department (Hollingsworth and Beaman), separate from the one in the Plan, states that "management efforts should be directed at identifying the best remaining habitat and largest populations to determine areas that should be protected from human disturbance. The Department is concerned because the Plan identifies only two areas, Big Rock Creek and Mescal Creek for additional conservation (Table 2-1 and Table 2-11) and yet provides no rationale or supporting survey information for how these areas were selected. This information needs to be furnished in the Plan.

2) Pg. 2-47, Table 2-11, Authorized Take / Habitat Conserved - See Comment #2, under Mojave fringe-toed lizard.

3) Pg. 2-156, Table 2-26, Monitoring, M-74 – Conducting a periodic review of potential effects of adjacent development on horned lizard populations in the two areas proposed

for conservation is not acceptable to the Department. Monitoring must include periodic biological surveys of the horned lizard populations coupled with assessment of impacts from nearby development to assess the success of the conservation measures implemented.

4) The Department is concerned about the viability of Big Rock Creek as a conservation area for SDHL. See comment #1, under Mohave fringe-toed lizard.

PLANTS

GENERAL COMMENTS

1) Definition of occupied and suitable habitat. Terms that must be defined include, but are not limited to, occupied habitat and suitable habitat. Please provide an explanation in the Plan that describes how acreage of occupied habitat has been determined. For example, 4-76:4:4 refers to 47,000 acres of "occupied and suitable habitat" for Mojave monkeyflower, of which the maximum allowable take is 9,300. Please explain the basis for stating that there are currently 47,000 acres of "occupied and suitable habitat" for this species

Information in our files supporting the occurrence record tables for selected taxa indicate acreages shown in the tables were based upon California Natural Diversity Data Base (CNDDDB) polygons. Please clarify whether the Plan considered that, for some CNDDDB records, only point data is available, and that sometimes, where the exact location is not specific, a larger circle is mapped around that uncertain point record. The Plan needs to define the difference between "occupied" and "suitable" habitat and when the most recent surveys were completed that caused this habitat to be considered in one or the other of these two classifications. If the "suitable habitat" is based on habitat modeling, then the model information needs to be presented in the Plan.

Additionally, the plan must specify how the local agencies or implementing authority will determine "occupied" or "suitable" habitat for the purposes of implementing this plan.

2) Species occurrence records. The fundamental basis for addressing conservation of covered rare plants is based upon known occurrence records. For planning purposes, it appears that point records from a variety of sources have been used, but verification of many records in the field has not been undertaken. This means records came from differing sources, seen by different surveyors at differing points in time. Some records have not been re-examined in recent decades, and we know at least some mapped locations may represent sites that no longer occur due to changes in land use at those locations. The Plan needs to acknowledge these issues and at the implementation stage, it is imperative that occurrences records be brought up to date so that the slated conservation actions are effective and tied to real-world conditions on the ground. The Plan will have a more credible foundation if more complete field verification and data gathering for rare plants had been undertaken during plan preparation.

During our review, we used tables that we had been provided in 2000 - 2001 for a subset of covered plant species. We did not have this information for some species, and indeed, other reviewers would not have had access to these data at all. We found it extremely difficult to correlate Mojave Records shown in these tables with mapped occurrences on miscellaneous localized maps for covered species, and with discussion points in the various Species Accounts. Place names are not consistent, occurrences overlap, and population density and acreage of known occupied habitat is not consistently provided in the tables and not provided at all in the Plan and DEIR/S. Further, large areas of the planning area have not been surveyed for plant species. These deficiencies make it impossible to determine impacts that will occur to most species, as a result of this Plan.

3) Incidental take based upon "acreage" of plant species. Although the basic underpinnings of the Plan are occurrence records, the proposed incidental take strategy often emphasizes "take" limitations based upon acreage of habitat taken versus habitat conserved. Without accurate data on the number of plants in the "acreage," the size and health of the population, the percentage of the total plant population across its range, and the genetic or ecological importance of the plants on the acreage to be taken, as well as an assessment of indirect impacts to the species on adjacent land, it is not possible to assess impacts to the species. As a simple example, take of an acre of "occupied habitat" with one or two plants presumably would not be the same as take of an acre of the largest and most robust population of the entire species range. See also the discussion about the definition of "occupied habitat" above.

Under the proposed plan, take is limited to 50 acres for many plant species. Aside from the problems discussed in the previous paragraph, the plan provides no rationale for a take limit of 50 acres. This seems an arbitrary number, especially because it apparently does not vary by species based on the total known range of the species, life history, or other factors.

4) Determination of "acreage." Additionally, incidental take based upon acreage creates difficulties in interpretation. An acre of take needs to be defined. The Department assumes that it is not only the exact location where a population was seen. However, if this is how "take" is assessed during implementation, significant and unknown impacts could occur. If six plants occur on a parcel, would the entire acreage of the parcel counted for "take" calculation purposes, or just the few square feet the plant happened to occupy in the year that the project is proposed? Will it include surrounding habitats that may be occupied by seed bank? Will it include suitable habitat in the vicinity that may be unoccupied or occupied under differing environmental conditions? Will "suitable habitat" acreage be refined if more information becomes available? All of these questions need to be addressed in the Plan.

5) Partial disturbance of parcels. If a project would only disturb a portion of a parcel, the proposed Plan would allow project proponents to avoid payment of the full compensation fee for the entire parcel by ensuring that the rest of the parcel would remain undisturbed. For example, the portion could be fenced and placed under a

conservation easement (2-34:4:3). The Plan needs to provide criteria for when this would be appropriate. We recommend that the avoidance and preserve design criteria discussed in Attachment 3 be applied to those situations where a project may propose to avoid impacts and conserve the resource onsite. We note that fenced-off areas within developments do not provide viable habitat in the long run unless proper preserve design criteria have been implemented. Additionally, provisions need to be included, under these circumstances, which provide for management and monitoring of habitat conserved via this mechanism. If the easements are not monitored for compliance regularly, landowners can legally use the land in whatever way they wish.

6) Monitoring in wet rainfall years. Monitoring should emphasize the need to collect field survey data for most rare plants, especially annuals/wetland species, during years of normal to above normal rainfall. Data collected in below normal or dry years is likely invalid and cannot be relied upon to characterize the resources being lost or conserved, nor is it likely to provide accurate feedback on trends.

7) Monitoring of reference populations. A program to establish a system to monitor reference populations should be established for all covered plant species, especially annuals. Knowing how populations and occupied habitat areas fluctuate could be useful for comparisons when projects come forward or less frequently monitored locations are assessed.

8) Natural Communities - An inadequacy in the proposed Plan is the lack of protection for natural communities within the planning area. As seen in Table 4-4, significant acreages of unique natural communities, including rare natural communities and wetlands, would be lost or otherwise not adequately protected. The aforementioned Table describes the potential for incidental take of natural communities. This is a misnomer- there is no incidental take of habitats. Loss of natural communities as described in the proposed plan constitutes a significant adverse impact under CEQA. The Plan does not acknowledge these impacts, nor is any mitigation proposed to offset them. As a result, residual, unmitigated significant impacts will occur to natural communities under-represented in the Plan.

A considerable diversity of the natural communities occurs along the western and southern transitional areas that lie between higher elevation forested lands and the core conservation areas. These habitats are species rich due to their location between valley, montane and desert floristic provinces. Many of the populations of plant species here occur at the edges of their ranges and are likely to be genetically unique. Species in these areas may also be uniquely adapted to drier growing conditions and warmer temperatures, and could prove important to the continued survival of species in the face of global climate change. The proposed Plan (pg 4-10) notes that chaparral, for instance, would be protected on higher elevations within the National Forests. However, the loss of lower elevation/desert transitional habitats in these areas could result in reduced long term adaptability of the species within these habitat types.

The first paragraph on pg. 4-10 states, "the West Mohave endemic species, particularly plants, are often found only in unique and rare natural communities, and their conservation results in nearly complete protection of these areas." This statement seems to be unsupported by data as listed in Table 4-4, especially when considering the loss of 100 percent of the alkali seeps, 100 percent of fan palm oasis, 100% of freshwater seeps, 46 percent of the mesquite bosques, 27.5% of cottonwood-willow riparian forest, and 100% of the montane meadow. Their potential loss would represent a violation of the State's no-net-loss of wetlands policy and would represent a failure to conserve wetland habitats essential for desert wildlife. These deficiencies need to be corrected through better conservation in the Plan.

9) Alkali Seeps and Springs - The need for additional inventory and protection of alkali springs, seeps and other wetlands is acknowledged on Pg. 2-92. This section needs to be more fully developed, and needs to include Tasks applicable to jurisdictions who may be reviewing projects that would affect these resources (see Appendix B).

10) The Plan falls short of achieving specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the 29 plant species (plants). In order for the Department to cover these plants, under a CESA permit and to abide by the requirements of CEQA, the following concerns need to be addressed to the Department's satisfaction.

Specific Comments

Alkali mariposa lily (*Calochortus striatus*)

1) Pg. 2-3, Table 2-1: Biological Goals and Objectives - Goals 1 and 2 need to be modified to indicate that a) hydrologic processes are maintained at both the Rosamond Basin area and at miscellaneous outlying populations and b); that playa habitat adjacent to Edwards and at outlying springs is conserved.

2) Pg. 2-43, Table 2-11, Authorized Take- The amount of authorized take seems to significantly exceed the amount of theoretical habitat conservation. If 17,051 acres of take is authorized around Lancaster, a compensation ratio on an acre for acre basis (we assume this means 1:1 acreage ratio) would potentially result in up to a 50% loss of habitat and would only provide for acquisition of up to 17,051 acres, well below the potential need to acquire 23,810 acres plus 3,620 acres located in the permanent and interim HCA areas. Examination of the Compensation Area Map 2-8 suggests that a considerable portion of the proposed Lancaster Incidental Take Area has been assigned a compensation ratio of 0.5:1, which would mean even less land acquisition could occur. Additionally, see general comment about compensation fees in Attachment 3 for a discussion of why this is inadequate mitigation for take of this species.

The Plan should clarify that, in order to build an effective conservation area for alkali mariposa lily, funds generated within the Lancaster take area would go directly to acquisition for this species in the permanent and interim conservation areas (see

comment regarding directed acquisition of conservation lands in Attachment 3). Additionally, the compensation fee in this area would need to be high enough that there would be sufficient funds to purchase sufficient acreage for conservation of existing habitat. The statement on page 4-68 "(c) considering ...the high cost of land (practicability), the conservation program in the Antelope Valley fully mitigates the take of this species" is not acceptable justification for the lack of full mitigation for take of this species, both from a CEQA and CESA standpoint. The fees must be raised in take areas for the species to allow adequate protection for alkali mariposa lily.

3) Pg 2-93, Compensation Ratios - These ratios need to be set by the agencies issuing take permits, rather than lead agencies. The appropriate ratio should be determined based upon the habitat conservation acreage goals, our ability to enhance populations through management, and anticipated take planned.

4) Pg. 2-33: Compensation Area Map 2-8 - This map should reflect that the proposed Alkali Mariposa Lily Conservation Area immediately west of Edwards and interim areas should be assigned a 5:1 compensation rate.

5) Pg. 2-93, Mitigation Measure P-5 – Please clarify the following. The interim conservation acreage shown here (47,620 acres) differs from the 23,810 acres shown in Table 2-11. Also, the large-scale conservation maps provided for our review show five interim areas around Edwards, rather than four mentioned here. Further, Table 2-3 identifies three interim areas, not four or five.

6) Pg. 2-92, Mitigation Measure P-4 - Indicates the goal is acquisition of 50% of the suitable habitat. To meet a no-net-loss objective as required to achieve full mitigation, the plan would need to increase carrying capacity and occupied habitat, which does not appear to be proposed.

7) Pg. 2-93, Mitigation Measure P-7 - We note that species occurrence records indicate most known populations outside Edwards AFB are outside the interim conservation areas, and few records for this species exist within the interim conservation areas. We are therefore concerned that the Plan proposed to establish a large Incidental Take Area on lands with known populations and proposed compensatory habitat conservation in areas that may turn out to not support the species. Because most of the known suitable habitat for this species is on private lands, and it has not been confirmed that the species occurs on lands slated for conservation, it is important that authorized take keep pace with compensatory habitat conservation of verified populations and habitat.

8) Appendix B - The Plan does not provide a mechanism for reporting incidental take for this species, which will make it not possible to demonstrate full mitigation.

9) Pg. 2-93, Isolated Sites - Additional information is needed regarding proposed take at several isolated sites: Green Springs, Playas 28-32, and Turner Springs. The Department requests that conservation opportunities be proposed for these areas.

10) Pg. 2-43, Table 2-11 - This suggests other isolated springs such as Box S and Cushenbury are also conserved. However, the discussion on Pg. 4-94 gives the impression that Box S and Cushenbury would only receive "review" by San Bernardino County. Review is not acceptable to the Department because it does not assure conservation of the species.

11) Pg. 2-93, P-6 - Language is needed requiring that recommendations from the hydrologic study are actually implemented. The recommended hydrologic study should not only be aimed at helping to identify appropriate locations for conservation, but also to identify hydrologic conditions that would need to be maintained to ensure that sheet flow, ponding and associated water tables are maintained at levels which sustain the species and its habitat.

There is potential for the hydrologic study to require additional measures outside the conservation areas themselves. For example, Little Rock Creek may prove important to maintenance of the water table south of Edwards, yet the creek itself is largely located in areas not slated for protection. Provisions should be included in the plan to allow these types of issues to be addressed once the information has been obtained.

Barstow Woolly Sunflower (*Eriophyllum mojavense*)

1) Pg. 2-3, Table 2-1, Biological Goals and Objectives - Revise biological goal to state that several specific Conservation Areas will be established.

2) Pg. 2-3, Table 2-1, Objective 2 - Directs that private land with "known" populations be acquired. Note that most populations here have not been examined in recent years. All records are from 1983-1986, and so the Department recommends these populations be re-examined. Suitable habitat should also be mapped where feasible, and private parcels supporting suitable habitat should be acquired if presence/absence cannot be established on private lands.

3) Pg. 2-14, Table 2-3 - Other Conservation Areas This table only describes the NE Kramer Junction Conservation Area. It should also describe the North Edwards Conservation Area, and areas recommended below.

Additional Conservation Areas are needed. The following population areas appear to be located in DWMAs and they should be specifically designated as Conservation Areas: Waterman Hills; Lane Mountain; Harper Lake Road; North Harper Lake; Cuddeback; Hwy 395 S; Transmission Line.

NE Kramer Conservation Area should be expanded to include the Transmission Line area, outside the utility corridor. The Department needs to know whether reported Transmission Line occurrences were impacted or conserved, whether the records are all from 1988 and what proportion of these populations is still extant.

The Species Account indicates populations were also impacted by the Mohave Pipeline at Harper Lake Road population and it is important to know whether mapped populations in this area are still extant. The Species Account provides some useful information, but different geographic terms are used that we cannot correlate to our records. For instance, we cannot correlate the data Andre collected South of Hwy 58 from 1991-1998 to a Mohave record. Andre's account mentions an Opal Mountain occurrence found by MacKay in 1998. This occurrence does not appear to be addressed in the plan (not shown on our maps or listed as a Mohave record).

4) Pg. 2-43, Table 2-11 - Incidental take within utility corridors is described in Table 2-11, but we were unable to locate specific information on this topic. Pg 3-268 indicates corridors can be two to five miles wide. We could not locate maps of where these corridors occur – Please provide them in the future to assist in our analysis.

Authorized Take shown in the table is not quantified. Page 2-49 indicates the 50 acre take limit applies to this species. See our general comment regarding incidental take based on acreage, above. Additionally, no provisions are included for reporting take (in Appendix B), and so impact and mitigation cannot be tracked (see comment on determination of impacts with no surveys in Attachment 1).

Take within utility corridors should be more fully discussed. Eight records are listed for the Transmission Line (area 8). Is it therefore anticipated that all populations from the two to five mile wide utility corridor would be taken? If so, this should be stated.

Take due to widening of Highway 395 and Highway 58 must be more specifically discussed.

5) Pg. 2-43, Table 2-11, 1% development cap - Development should not outpace our ability to inventory, update species records and acquire lands slated for conservation. A mechanism needs to be created to ensure that proposed conservation areas support viable populations, functional habitat, and the ecological processes that sustain such habitat, before projects are allowed to remove viable populations and functional habitat.

6) Pg. 2-94, P-12 - Language should be changed indicating private parcels would be "prioritized and acquired."

7) Pg. 2-95, P-18 - The DEIR/S should disclose the proportion of the populations slated for conservation that are subject to valid existing claims.

8) Pg 2-153, Table 2-26 - Conducting additional field surveys is a resource assessment need rather than a monitoring action.

9) Pg 2-166, Table 2-28 & Pg 2-171, Prescription AM-3 – The Plan indicates that the boundaries can be adjusted based upon the outcome of new survey information. Refining boundaries for the North Edwards area to "closely correspond with" plant occurrences (pg 2-171) does not address the need for the conservation area to

incorporate appropriate preserve design criteria, including buffer areas and pollinator habitat. Similarly, reduction in the size of conservation areas due to negative findings around the edges must not occur if these areas contribute to the overall viability of the conservation area and good preserve design needs.

Carbonate endemics

Cushenbury buckwheat (*Eriogonum ovalifolium* var. *vineum*)

Cushenbury milkvetch (*Astragalus albens*)

Cushenbury oxytheca (*Oxytheca parishii* var. *goodmaniana*)

Parish's daisy (*Erigeron parishii*)

1) The conservation strategy for the four carbonate endemic plant species is addressed in the proposed Plan through implementation of the Carbonate Habitat Management Strategy (CHMS). This strategy represents a commendable effort to achieve conservation of carbonate endemic habitats while allowing continued extraction of valuable carbonate minerals. The CHMS probably represents the best possible strategy balancing competing resource needs and legal requirements under the ESA and federal mining law. However, aspects of the CHMS suggest that full mitigation, as required under CESA, is not possible in this case.

The underpinnings of the CHMS would be to build conserved habitat for the carbonate endemics over time through a combination of set asides, purchase of valid existing mineral rights, and other measures. However, there will be a net loss of populations and habitat where lands supporting these species are mined. While there will be efforts to reclaim and revegetate mined lands, these procedures are unlikely to duplicate habitat quality and populations found in undisturbed, un-mined natural sites. The draft Plan acknowledges that habitat fragmentation has occurred and that restoration to native conditions is not possible in mined areas (pg 4-71). Given this, we would conclude that there are significant, unmitigated impacts to the carbonate endemics under the proposed strategy and therefore, full mitigation under the CESA can not be achieved.

2) Pg. 2-44, Table 2-11 - The amount of authorized take allowed under the Plan needs to be specified.

3) Pg 2-167, Table 2-28 - An additional management action is needed to address potential off road vehicle impacts and to address further route consolidations in the carbonate habitat conservation areas.

Charlotte's phacelia (*Phacelia nashiana*)

1) The proposed plan would allow take of existing or newly found occurrences on private land (Pg.4-71) and "a potential small loss of plants from vehicle traffic in the El Paso Mountains and grazing in the east Sierra Canyons" (Pg.2-96); the standard compensation fee would be imposed for take on private lands (Pg.4-71). Take would be limited to 50 acres (Pg. 2-96), although it is unclear if this refers only to take on private land, or if it includes take on public lands due to development, grazing and vehicle

traffic. The plan calls for health assessments of BLM cattle allotments within the range of the species to be completed within 2 years of the plan's adoption (Pg.4-171). Impacts to habitat for the species could be reduced from route designation in the El Paso Mountains, "assuming that ... routes are closed" during the "community collaborative process" of designation (Pg. 4-71). If monitoring shows damage from OHV use in the El Paso Mountains or from grazing in the east Sierra canyons, occurrences will be fenced as necessary (Table 2-28); it is not clear that if monitoring shows OHV damage, BLM's fencing decisions would override the community collaborative process and result in fencing off routes that the process does not designate as closed.

The Department does not agree with the statement that "because potential take is less than 10% of habitat conserved, the incidental take is fully mitigated" (Pg.4-71, as all take must be mitigated under CESA.

Based on information in this plan, we do not know how many plants or populations (or what percent this would be of the total for the species) could be taken under this plan. See general comment regarding take based on acreage, above. Because 7 of 37 known occurrences are on private land, we believe take could be substantial and impacts to this species significant. However, the Plan does not provide enough information to determine the impact to the species. For example, it is important to know what percent of the total range and or number of populations and individuals do those 7 occurrences contribute and what percentage could be lost to the 50 acres of take.

Compensation fees would be used to buy habitat from willing sellers, although the habitat apparently does not have to support Charlotte's phacelia (see general comment about directed acquisition of conservation lands in Attachment 3). In regard to the health assessments and grazing monitoring, see comment regarding BLM action and full mitigation in Attachment 1. Further, the proposed assessment does not guarantee that funding of monitoring and corrective action is committed as required by CESA, since "cooperative funding and assistance from other agencies, individuals, and groups would be sought to collect prescribed monitoring data for indicators of each Standard" (Pg. 2-113).

For the above reasons, allowable incidental take is not fully mitigated under the proposed plan.

Crucifixion thorn (*Castela emoryi*)

1) Under the proposed plan, BLM would establish the Pisgah Crater ACEC. An "existing mining operation" within the ACEC "would not be restricted" (Pg. 2-96), although the operation might impact the habitat of the species (Pg. 4-72). New mining would be allowed in the ACEC, subject to 1% AGD and payment of compensation fees (Appendix D.2.9). Larger populations would be posted with signs stating that firewood collection is prohibited (Pg. 2-96). Stipulations to the Johnson Valley to Parker race

“attached to the event at the time” would prevent damage to the plants in the area (Pg. 4-72). “Isolated occurrences” would be subject to take (Pg. 4-72). Reduction in the road network in the Superior-Cronese DWMA would lessen current impacts of vehicles on the species (Pg. 4-72). Take would be allowed on private land within its range, as long as it does not degrade the conservation areas (Table 2-11, Pg. 2-44). General take provisions allow for take of any new occurrences on private land outside the CA (Pg. 2-42). Fencing would be constructed at woodland sites if monitoring indicates damage (Table 2-28).

The Department recommends that all populations (except inaccessible or very small populations) be signed to notify campers that firewood harvesting is prohibited and that the sign explain why firewood harvesting of this species is prohibited and where firewood is available to campers.

The size of the populations on private land in relation to the entire population is unknown. It is also unclear if these are the “isolated occurrences” that are subject to incidental take, and so the impact to this species can not be determined. Further, the permitted impacts to the species of the existing mining operation in the Pisgah Crater ACEC, if any, are not disclosed. Potential impacts from the allowable new mining and other activities in the Pisgah Crater RNA ACEC are unknown. Additionally, the 1% AGD within the Superior-Cronese DWMA, totaling 6,207 acres (per Table 2-3, Pg. 2-14), could result in significant impacts to the species from large-scale clustered development (as is discussed similarly on Pg. 4-21 for desert tortoise). Similarly, the 1% AGD from new mining in the ACEC could result in significant impacts depending on the location of the mining activity.

The Department supports designation of the 22,162 acre Pisgah Crater Research Natural Area ACEC, which would include 3 of the 11 known occurrences of crucifixion thorn according to the “South Central Bioregion” map provided by BLM. (A fourth known occurrence is on private land within the ACEC.) However, as described in Appendix D, the management actions proposed for this ACEC would allow existing uses – mining, rockhounding, utility easements and competitive recreation events – to continue, and no provision is made for fencing or prohibiting vehicle traffic to protect *Castela emoryi* in the ACEC. The management action calls for “stipulations to protect biological resources” to be placed on the Johnson Valley to Parker race, however, no performance standards or measurable criteria for this measure are given, as required by CEQA, and so we cannot evaluate the effectiveness of this measure.

An unknown amount of take of individuals and populations of this species would occur on private and public lands in the ACEC and DWMA. The mitigation measures proposed only mitigate take that is occurring on BLM lands, and so will not fully mitigate for any take on private lands. See comment about BLM actions and full mitigation in Attachment 1

For the above reasons, allowable incidental take is not fully mitigated under the proposed plan.

Desert cymopterus (*Cymopterus deserticola*)

1) Under the proposed Plan, pre-project botanical surveys would be required for land-disturbing projects within suitable habitat ("the area within the North Edwards Conservation Area, and the Fremont Kramer and Superior Cronese DWMA's," although "suitable habitat" isn't defined) and any occurrences of the plant would be avoided to the maximum extent practicable; the North Edwards Conservation Area would be established, although its boundaries might change based on botanical surveys and monitoring; and BLM would "maintain rangeland health standards" in the Harper Lake allotment (Pg. 2-97). "Ephemeral use by cattle" would be prohibited on the Pilot Knob allotment, and if the permittee voluntarily relinquished the lease there, it would be retired (Pg. 4-72). Reduction of the route network in the Superior subregion would reduce current ongoing impacts to cymopterus habitat (Pg.4-72). The 5:1 mitigation ratio would be required for take in the in the North Edwards Conservation Area (Appendix B, Kern County). Acquisition of private lands with desert cymopterus would be a priority, but only if they also support MGS or DT (Pg. 4-73), and have willing sellers. Take would be limited to 50 acres (Table 2-11). General take provisions allow for take of any new occurrences on private land outside the conservation area (Pg. 2-42).

2) The document should provide an expected timeline in which permanent conservation area boundaries are to be established, and when the surveys to establish the boundaries will be conducted. It should also discuss the rangeland health standards in the Harper Lake allotment and explain how they will specifically benefit this plant.

3) Actual take and conservation for this species, under Alternative A, is not possible to discern from the DEIR/S. Information about the number of occurrences proposed for take is incomplete: "Incidental take would be limited to private land locations outside the DWMA's and to 1% of lands within the DWMA's and the North Edwards Conservation Area. Acreage of potential take is estimated at XXX acres. Conservation would cover YYY acres and XXX of YYY known occurrences of desert cymopterus within the West Mojave" (Pg.4-73).

4) Statements about when surveys are required are contradictory: One section (Pg. 4-72) states, "on public lands within the DWMA, botanical surveys would be required within the range of the cymopterus" while another (Pg.2-97) states, "land disturbing projects within suitable habitat (the North Edwards Conservation Area, the Fremont Kramer and Superior Cronese DWMA's) would be required to perform botanical surveys for the species" (on public and private lands, presumably). Please clarify these statements.

5) Statements about allowable take are likewise confusing and contradictory. Page 4-72 states, "on public lands within the DWMA ... avoidance would be mandated to the maximum extent feasible," yet Table 2-11 reports, "Avoidance of all occurrences on public land in DWMA's" (emphasis added). Full avoidance is a higher standard than "to the maximum extent feasible." Also, it is unclear if the 50 acres total take (Pg. 2-97) is to be summed across public and private lands, or just private lands (also see comment

about incidental take based on acreage, above), and if it is in addition to the 1% AGD. Please clarify these statements.

6) An additional uncertainty is whether or not private land supporting desert cymopterus would actually ever be acquired and conserved, since acquisition of such lands would only be a priority if they also support DT and MGS (Pg. 4-73), and if the sellers are willing. See general comment regarding directed acquisition of conservation lands in Attachment 3.

7) It is unclear how California City will determine what is "suitable habitat" for desert cymopterus for the purposes of requiring surveys for this species (Appendix B, California City, Desert cymopterus portion of table). It is inappropriate for the Department to delegate authority to California City, which may not have the biological expertise to determine "suitable habitat." The potential for conflict of interest also exists, as the City would define suitable habitat in cases that may financially affect the City.

8) The Department disagrees with the statement that "the private land available for take is less than 10% of the habitat conserved, so that the conservation plan meets the fully mitigate standard" (Pg.4-73). Aside from the problems with addressing take of plants on an acreage basis as discussed above, there is no basis for stating that take of less than 10% meets the full mitigation standard, as CESA requires mitigation for all take. Additionally, see general comment in Attachment 1 regarding BLM action and full mitigation in relation to the statement that "BLM would maintain rangeland health standards in the Harper Lake allotment" (Pg. 2-97). Therefore, the Plan does not fully mitigate take of this species, which, as stated on Pg. 3-184, "remains one of the rarest and least known of the West Mojave target species." The Department does, however, support the establishment of a conservation area north of Edwards AFB to protect the majority of the currently-known populations of this plant that are not on the AFB as partial mitigation for impacts to this species.

Flax-like monardella (*Monardella linoides* var. *oblonga*)

1) Information regarding the status of this species, its habitat, and conservation measures is sketchy at best. There is no species account. The Plan (Pg. 3-184) indicates there is only a single known occurrence in the proposed Middle Knob ACEC, while Pg. 2-97 indicates it is only known from isolated occurrences, plural, in Middle Knob. We need additional information on its habitat requirements. Does the single known occurrence represent the outcome of a comprehensive survey of all suitable habitat in the area? Is there suitable habitat outside the proposed ACEC? The lack of information and the rarity of this species within the Plan Area suggest that it probably should not be a covered species.

Kelso Creek monkeyflower (*Mimulus shevockii*)

1) The proposed Plan would designate all public lands in the Kelso Valley as a conservation area, require avoidance of this monkeyflower by development on public lands, result in monitoring and managing of cattle grazing to avoid occupied habitat and to determine the need for changes in the conservation area boundary or for fencing. In addition, it would possibly result in acquisition of private lands supporting this species, if the lands support multiple target species (Pg. 4-73). However, approximately half of the known occurrences of this plant are on private lands that could be completely built out under the Kern County General Plan (Pg. 4-74), and the plant is extremely restricted in its range (only one occurrence occurs outside the planning area and it is on private land).

2) The DEIR/S does not provide any evidence that improved protection and management on public lands would compensate for the loss of approximately half of the numbers and range of the species (see general comments regarding directed acquisition of conservation lands in Attachment 3 and BLM actions and full mitigation in Attachment 1); in fact, it acknowledges the proposed plan would have a significant impact on the species (Pg. 4-74).

3) Note that, although the DEIR/S (Pg. 4-74) states that the "trend of new development of rural residences in the occupied habitat" means adverse impacts would be lower than normally expected under a full buildout, there is little conservation value for rare plants on rural ranchettes, which often support grazing animals (especially horses) that impact the species.

Kern Buckwheat (*Eriogonum kennedyi* var. *pinicola*)

1) Pg. 2-5, Table 2-1, Biological Goals – The biological goals for this species are to protect all occurrences. We note that populations are shown mapped outside the proposed Middle Knob Conservation Area on private land. The only conservation measures listed for populations on private land are for those within the Middle Knob Conservation Area (Pg.2-98). Therefore, it does not appear that the plan is protecting all occurrences as described.

2) Please clarify whether the Sweet Ridge populations are inside or outside of the Middle Knob Conservation Area and whether private land within the Conservation Area is proposed for acquisition.

3) The Species Account (Greene) and observations by Sandy Hare and others indicate that off road vehicle use has been an ongoing threat to the fragile and unique habitat that supports this species. Seasonal closure via installation of locked gates has been recommended to prevent vehicle use in this area during the wet season when the clayey habitats can be damaged. The Plan should incorporate this measure along with the other proposed conservation activities to limit off road use and habitat damage. The Species Account mentions a proposed BLM campsite along the Pacific Crest Trail. Has this proposal been dropped? Also, the Species Account recommends signage to protect

the pebble plain habitat from trampling by trail users. This measure should be included in the Plan.

4) Pg. 2-45, Table 2-11 - The Plan would authorize some minimal level of take from restoration activities, however it needs to be quantified. Additionally, several populations are mapped to the north, outside the Middle Knob Conservation Area. As written, no take would be allowed in those areas. Please clarify whether this is correct. However, we note that Kern County is only required to avoid occurrences within, not outside, the Conservation Area (Appendix B). This should be corrected to ensure conservation of populations outside the Conservation Area.

5) The large maps show several Kern buckwheat populations straddling the northern boundary of the Conservation Area (as well as outside to the north). Populations of the rare (not proposed for coverage) Piute Mountain jewelflower, also occur in this area. How was the boundary of the proposed Conservation Area determined? Can the boundary be increased to the north to fully encompass mapped occurrences and suitable habitat?

Lane Mountain milkvetch (*Astragalus jaegerianus*)

1) The Plan proposes to establish the Coolgardie Mesa and West Paradise Conservation Areas (CAs), which "include all known populations ... outside of the Fort Irwin expansion area" (Pg.2-98). However, based on Map 2-10 and on a map provided by BLM ("Central Bioregion," plotted by N. Patrini on March 05, 2002 and provided to DFG in October 2003), three occurrences of the species are outside of the proposed conservation area boundaries. Please rectify this in the Plan.

2) No take would be allowed on public lands (Table 2-11). Within the CAs, BLM would require botanical surveys and no use permits for BLM lands would be granted for projects that would result in take of this species (Pg. 2-98). Grazing would be prohibited within the CA (Pg. 2-98), although it should be made clear if this refers to public land only.

3) Acceptable open routes within the CAs would be designated by the BLM (2:98 and Appendix B). Approved routes would be fenced "as necessary." However, there are no criteria for determining which routes would be "acceptable" or when fencing would be "necessary" and so the effectiveness of this mitigation measure cannot be determined.

4) All private land within the West Paradise CA and occupied habitat in the Coolgardie Mesa CA would be acquired to the extent feasible and from willing sellers (Pg. 2-99). See general comment about directed acquisition of conservation lands in Attachment 3 as to why we believe there is inadequate assurance that this will happen.

5) Lands in the CAs would be withdrawn from mineral entry and claimholders with valid rights compensated (Pg. 2-99). BLM would be responsible, and the unknown amount of required funding would come from the Army or "RA" (an undefined term in Appendix C).

The Department is unsure if funding is guaranteed for this measure or how BLM will fund this if it is the responsible agency. Please clarify.

6) DFG agrees with the biological objective of acquiring all occupied habitat on private lands (Pg. 2-5, Table 2-1), especially because "several substantial populations are known from private lands" (Evaluation Report October 15, 2001, Pg. 4-33). Although Table 2-33 (Pg. 2-207) states that zero acres are proposed for take, Table 2-11 (Pg. 2-45) states "take on private lands would be prohibited unless economic use of the parcel is precluded." Please clarify these statements. This is the only mention of this exception in the document, and mitigation for take in this instance is not proposed.

7) The second objective (Pg. 2-5, Table 2-1) should be to minimize and fully mitigate impacts on public land. For this reason, and because we cannot evaluate the effectiveness of the measures as discussed above, we cannot determine that the proposed plan fully mitigates for take of this species.

8) Although Table 2-33 (Pg. 2-207) states that no take is proposed for Alternative A, a statement in the discussion of Alternative C implies that there is 1% AGD under the proposed plan by way of comparison ("[Alternative C] would attempt greater land acquisition than Alternative A...[h]owever, no 1% allowable ground disturbance would apply, nor would the 5:1 mitigation ratio be in effect" (Pg. 4-169). This needs to be corrected or clarified.

Little San Bernardino Mountains gilia (*Linanthus maculatus*).

1) Pg 2-99, P-33 - The conservation strategy emphasizes establishing a Special Review Area aimed at protection of stream channels in selected occupied habitat areas, including a 100 foot setback from the outer banks. For this strategy to be effective, the stream banks should be specifically defined and mapped for each system within the review area. This could be an implementation task to be completed early in the process. The Department recommends the stream channel encompass the 100 year floodplain. This would help ensure an agreed-upon, clear definition of what area is subject to the restrictions, and will reduce disagreements over what constitutes a stream bank. Restrictions within this floodplain area should be clear: there should be no vegetation clearing, ground disturbance, placement of structures, fuel modification zones, grazing animals, or outbuildings that would either directly or indirectly affect the floodplain corridor and 100 foot setback area. Sand and gravel mining within/adjacent to the targeted stream channels and watersheds above these areas should also be prohibited.

2) Take is allowed for populations outside the 100 foot stream setback. How many known populations occur outside these areas?

3) One of the biggest threats to occupied habitat for this species is off road vehicle use within washes (Sanders, Species Account). Vehicles, ATVs, motorcycles, and possibly even bicycles, are known to use these areas and can damage fragile plants and their habitat. The Conservation Strategy does not address this issue. Existing and potential

Arizona crossings provide locations where vehicles can leave the road and enter the washes. A specific fence design needs to be installed at all crossings, and other potential access points, designed to prevent vehicle access while allowing sheet flow and sediment to pass.

4) The Department believes that another potential conservation measure that lead agencies should be required to adopt would include restrictions on further downsizing of parcels within the Special Review Area and restrictions on vegetation clearing and disturbance outside building sites on parcels adjacent to designated channels.

5) Pg. 2-45, Table 2-11, Authorized Take - The fifty acre take limit applies here. In Appendix B, P-33, take is not to exceed 10% of the acreage now supporting the species on private lands. These two measures may conflict. Is the acreage of habitat for this species currently known, if so what is it? A conservation goal of 90% protection for all occurrences seems appropriate for this species, provided that an effective, active management program can be implemented which will enhance populations to offset losses.

6) Pg 100, P-34 - This measure should also address delineation of the 100 year floodplain and appropriate setbacks to maintain streambed function and habitat values for multiple species, including the gilia.

7) Pg 100, P-35 – The Department recommends that BLM should also retain currently owned parcels within the Special Review Area.

8) The Rattlesnake Canyon population (W Mohave Record Sanders, 1995) appears to be just outside the Bighorn Mountain Wilderness. A Conservation area should be established here for suitable habitat in the general area.

9) Pg 2-100, Adaptive Management Measure 42 - This measure directs that the proposed take limitation would be removed....if new populations are found and protected. This measure has a number of problems, including a) it does not belong in an adaptive management section; b) it compromises the full mitigation requirements and c); it results in an unknown and unmeasurable future outcome that would reduce the enforceability of CESA permit conditions.

The discovery and protection of new populations does need to be discussed and measures agreed upon on how they will be dealt with in the entire plan, for all species.

Mojave monkeyflower (*Mimulus mohavensis*)

1) The proposed Plan would create a Mojave Monkeyflower Conservation Area (CA) consisting of two separate regions, the Brisbane Valley Unit and the Daggett Ridge Unit; designate both as ACECs; result in cessation of sheep grazing and restriction of vehicle access within the CA; put stipulations on utility development and acquire public lands in the CA in the DWMA; close 390 miles of roads to OHV use in the Ord subregion; reduce

current and ongoing impacts from OHV activity in the Brisbane Valley by enforcing off-road travel restrictions; mitigate take by payment of fees in CA at 5:1, with a maximum allowable take of 9,300 acres (Pg. 4-76) However, contradictory language is found in Table 2-11 (Pg. 2-46), which states that take acreage is not determined, and in Table 2-33 (Pg. 2-207), which states that take is limited to 50 acres. Existing and proposed mining on the Brisbane ACEC would continue (Pg. 2-100). BLM lands in the ACEC would be withdrawn from the Land Tenure Adjustment Program (Pg. 2-100). A survey incentive area around the CA would have varying levels of survey/mitigation fee requirements (2-100:7). The mining industry would be allowed to establish a mitigation or conservation bank in the Brisbane Valley (Pg. 2-101). Routes of travel in the Daggett Ridge ACEC would be designated to reduce current and ongoing impacts to the species (Pg. 2-102) and private lands would be acquired west of the Newberry Mountains as they become available (Pg. 2-102). Other public lands may be added to the Brisbane Valley CA if significant new occurrences are found, and areas along the edge of the conservation areas may be deleted if surveys find no plants (2-171:6:1). DFG believes there must be a series of such surveys in good rainfall years before such decisions are made.

2) See general comment about take based on acreage, above. We assume here that either a total of 50 or 9,300 acres of take are authorized, but we cannot know what this means in terms of actual plant habitat, numbers of individuals, or what percent of the total number of individuals or actual habitat this represents. (GIS data provided by BLM reveal that 33 of 87 known occurrences are on private lands.) The Plan needs to indicate whether additional suitable and occupied habitat can and will be purchased, since this relies on willing sellers (see also general comment regarding directed acquisition of conservation lands in Attachment 3, although this does not apply to any mitigation banking program set up by the miners). See also comment regarding BLM action and full mitigation in Attachment 1. The Department requests that the statement on Pg. 4-76, "the maximum allowable take of 9,300 acres is fully mitigated by the conservation measures imposed on 47,000 acres of occupied and suitable habitat" be substantiated in the Plan.

3) The Plan states that if botanical surveys detect Mojave monkeyflower and the ground disturbing activities would avoid the plants, then no additional mitigation would be required (Pg. 2-101). However, while avoiding the actual plants, ground disturbing activities could have indirect affects such as changing the hydrology and/or disturbance regime, and mitigation should be required for such affects, if they are likely to occur.

4) The Department agrees that Conservation Areas to protect this species should be designated and managed appropriately for the species, and that BLM land supporting Mojave monkeyflower should not be converted to private land. However, we do not believe that the take envisioned by this plan is fully mitigated by the proposed actions, as discussed above.

Mohave tarplant (*Deinandra mohavensis*)

1) This species is extremely rare within the Plan area, and known populations are far removed from core habitat for the species in the mountains of Riverside County. According to the Species Account (Sanders), all that is known about this species occurrence in the Plan area is that a population of unknown size occurs in a spring "somewhere near Cross Mountain." We also know that the species has not been re-located in the vicinity of the type locality, near the Mohave River Forks Dam (Sanders' Species Account). Potentially suitable habitat occurs near this area at Las Flores Ranch, but the area has not been surveyed. Finally, the Species Account indicates the species may occur at Red Rock State Park, where previous tarplant collections proved to be potentially mis-identified.

2) Pg 2-46, Table 2-11 - The proposed Plan would allow up to 50 acres of authorized take of new populations should they be discovered on private lands. Additional discussion on Pg. 2-103 (not described in Table 2-11) would further limit take to no more than 50% of any new population discovered on private land. Given the extreme rarity of this species within the Planning area, and lack of basic information on location, population density and amount of occupied and suitable habitat, we contend that allowing up to 50 acres of take for this species is inappropriate.

3) The Department is concerned because the Plan proposes to generally waive biological survey requirements for projects which, in turn, does not allow for the discovery and protection of new populations. Additionally, direction to allow up to 50% of a new population to be taken could compromise the integrity of the remaining population, especially where only a single population and/or spring system may occur. Furthermore, there are no measures proposed to mitigate the proposed "take," which would cause the Department to find that impacts to this species are not fully mitigated. The Department believes a better goal would be to conserve at least 90% of any newly discovered populations and limit incidental take to up to 10%, provided that feasible mitigation measures can be implemented to offset the loss and "take" does not compromise the integrity of populations and occupied habitat slated for conservation. For the Department's proposed strategy to be effective, lead agencies would be required to consult with the Department and adopt our recommendations for newly discovered populations.

4) The Plan needs to acknowledge that Mohave tarplant occurs in wetlands (seeps, springs, margins of wetlands, swales and stream channels). As such, conservation measures for any newly discovered populations will need to address maintenance or improvement of the existing hydrologic regime that allows the species to persist.

5) The potential to re-discover this species in the vicinity of Las Flores Ranch suggests that this area should not be exempted from project-based field surveys and should be required to conserve populations discovered at that site. Conservation measures are therefore needed which would apply to the San Bernardino County portion of the species range.

6) Pg. 2-173, Adaptive Management - This section contains additional language regarding how newly discovered populations on private land would be treated. Language here again indicates that the goal is to not allow more than 50% take of any newly discovered population. This section also states that should new populations be found, "no surprises" type assurances would be provided. "No Surprises" type assurances are not a component of the CESA Section 2081(b).

Nine-mile Canyon phacelia (*Phacelia novemmillensis*)

1) The proposed Plan would allow take of only newly found occurrences on private land up to the lesser of 50 acres total or 50% of occupied habitat; the remainder must be dedicated to conservation (Pg. 2-103, but reporting/tracking is absent from any jurisdiction's responsibility in Appendix B or C). BLM will make a determination ("assessment") of regional rangeland health standards on public lands in the east Sierra Canyons within two years of Plan approval (Pg. 2-116, Table 2-26, but absent from BLM responsibilities in Appendix B).

2) The Plan could result in take of up to 50% or 50 acres of newly discovered populations on private land, while it does not require botanical surveys or reporting and tracking of take on private land. See the comment regarding this 50%/50 acre strategy in the discussion of Mojave Tarplant, which also applies here. The proposed rangeland health assessment on BLM lands (on which all of the known occurrences exist per GIS data provided by BLM) will not provide mitigation for impacts beyond any ongoing take that is due to poor grazing practices (see general comment about BLM action and full mitigation in Attachment 1). Further, the proposed assessment does not guarantee that monitoring and corrective action will be taken, since funding is not assured, as evidenced by the statement, "cooperative funding and assistance from other agencies, individuals, and groups would be sought to collect prescribed monitoring data for indicators of each Standard" (Pg. 2-113).

Parish's alkali grass (*Puccinellia parishii*)

Parish's popcornflower (*Plagiobothrys parishii*)

Salt Springs checkerbloom (*Sidalcea neomexicana*)

These three covered plant species are only known from the Rabbit Springs location within the WMPA. Conservation focuses on the need to acquire this site, either through fee purchase or through conservation easement.

1) Pg. 2-7, Table 2-1 Biological Goals and Objectives - These three species have the same biological goal statement. No objectives are shown, however they need to be developed. The second goal should be modified to indicate that any populations found during surveys will be appropriately conserved.

2) Pg. 2-3, Table 2-11, Authorized Take - Take is not anticipated, but would be allowed if Rabbit Springs cannot be purchased or otherwise protected. Table 2-11 (Pg. 2-46) indicates that if this were to occur, up to 10% take would be allowed under the Plan.

The problem with allowing even a small amount of take of these populations is that Rabbit Springs is a small site, and if even 10% were to be taken, it is likely that indirect, unmitigated impacts to the remaining, conserved area would occur. We also note that the plan does not propose any mitigation measure to offset potential take, therefore, the potential take proposed here is not fully mitigated.

Further discussion of potential for take on Pg. 4-77 (Parish's alkali grass) is conflicting. Discussion here suggests that the small amount of potential take would be at newly detected locations, and presumably not at Rabbit Springs.

3) Pg. 2-49, Species Conservation Measures - The Department suggests that conservation measures be developed in this section for all three species.

4) The Species Account for Parish's alkali grass identifies a number of threats at Rabbit Springs that are not addressed in the Plan. Weed invasion is identified as a significant threat, and therefore, mitigation measures and adaptive management strategies are needed to deal with this threat. These should be priority actions, given the rarity and limited extent of habitat at Rabbit Springs. It is also important to ensure that the current road bisecting Rabbit Springs not be widened further, therefore, specific language is needed in Appendix B to address this concern.

5) Pg. 4-79, Salt Spring Checkerbloom - This section indicates management of Rabbit Springs would be delegated to a local non-profit organization. The Department would like to know why this site was singled out for management by a local non-profit. Given the botanical significance of this site, the complexity involved in managing wetlands and importance of proper management, the Department recommends the site be managed by an experienced land manager.

This section also indicates that a small amount of incidental take could occur if additional sites are found in the future. In that case, mitigation would be imposed by the local jurisdiction on a site-specific basis. This is unacceptable, as the conservation outcome and mitigation strategy is unknown, and the Department cannot evaluate the effectiveness of this strategy. We recommend the local jurisdiction be required to confer with the Department and the USFWS and follow our recommendations for avoidance and mitigation of these very rare species.

Parish's phacelia (*Phacelia parishii*)

1) The Plan has conflicting statements about incidental take. Pg. 2-103 and Table 2-11 (Pg. 2-46) indicate that incidental take of 50 acres of occupied habitat is authorized, whereas Pg. 4-77 states that take would not exceed 5 acres. Additionally, unknown take can occur for newly discovered populations on private land. See general comment about take based on acreage, above. Fifty acres (or five acres) of take are allowed, but the Department does not understand what this means in terms of actual plant habitat, numbers of individuals, or what percent of the total occupied or actual suitable habitat this represents. Because allowable take is not known, because acquisition is not directed under the proposed plan (see general comment regarding directed acquisition,

Attachment 3.), and because proposed actions on BLM lands only mitigate permitted impacts to the species on their lands (see general comment regarding BLM action and full mitigation, Attachment 1), take is likely not fully mitigated for this species.

2) The Department supports acquisition of private lands supporting this very rare species and consolidating the area in which it occurs into public ownership with appropriate management.

Red Rock poppy (*Eschscholzia minutiflora* var. *twisselmannii*)

1) Incidental take would be limited to 50 acres of occupied for newly discovered occurrences on private land (Pg. 2-104, Table 2-11). See comment regarding this strategy in the discussion of Mohave Tarplant, which also applies here. In addition, the Department cannot assess the impacts of this take on the species (see general comment regarding take based on acreage, above). Presumably the compensation fee would apply, however, see general comment regarding directed acquisition of conservation lands in Attachment 3. See also comment regarding BLM action and full mitigation in Attachment 1.

2) The Department encourages route designations that result in avoidance of populations of this species on public lands and avoidance of populations of this plant that are discovered on private lands.

Redrock tarplant (*Deinandra arida.*)

1) The proposed plan proposes no new conservation for Red Rock tarplant. A conservation area would be established only if a significant population is newly detected on public land (Table 2-28).

2) The Plan makes the following two conflicting statements about the allowable take of this plant that need to be rectified. In one place (Pg. 4-78) it says take would be limited to newly-detected occupied habitat "at level not exceeding the area under conservation" – it does not specify whether this is on private or public land. The second place this is mentioned for this species is on Pg. 2-104 and in Table 2-11, where it is indicated that take would be limited to 50 acres of occupied habitat for newly discovered occurrences on private land. The 50 acres of take is presumably mitigated by the payment of compensation fees, however, as discussed in the general comment regarding directed acquisition of conservation lands in Attachment 3, the Department does not consider this full mitigation. See also general comment regarding BLM actions and full mitigation (Attachment 1) and regarding take based on acreage (above). While we endorse the BLM's actions to improve habitat quality for the species on its lands, for the above reasons potential incidental take of this species is not fully mitigated under the proposed plan

Reveal's Buckwheat (*Eriogonum contiguum*)

1) Pg. 2-47, Table 2-11 - This table indicates the Middle Knob ACEC would be established to conserve habitat for this species. We could only locate a single population on the large maps, and it is located in the Middle Knob Conservation Area. However, Pg. 3-190 indicates one disjunct population is located in the Jawbone-Butterbredt existing ACEC. Please clarify whether Middle Knob and Jawbone-Butterbredt are the same population or are different.

2) Pg. 4-79, Potential for Take - This section indicates that take is not anticipated yet it indicates that take "situations" would be evaluated by the local jurisdiction on a case by case basis. This is not an acceptable solution to the Department as the cost and the outcome of this process is unknown and seems to conflict with the measures shown for this species in Appendix B, where it indicates Kern County is required to avoid known locations. We also note that the type of language used in Appendix B is unclear. Do known locations include newly discovered locations or only those "known" to those folks putting the Plan together? This should be clarified in the Plan.

3) Table 2-11 (Pg. 2-47) would allow "take" of populations on private land outside the Middle Knob Conservation Area. Again, this direction conflicts with the Kern County measures in Appendix B, seems to conflict with monitoring direction on Pg. 2-156 ("identify new locations") and with comments on Pg. 4-79 which indicate that monitoring and adaptive management would allow for its future conservation.

4) With only a single population known within the Planning Area, and associated lack of information on the species, it does not appear that any "take" for this species can be justified.

Shockley's rockcress (*Arabis shockleyi*)

1) This species is one of the carbonate endemics, however, information on it is more limited and it is not specifically discussed in the CHMS. Therefore, further discussion relative to this species within the Planning Area is required. For instance, the Department was unable to determine whether there are actually occurrences for this species in the Planning Area and similarly, whether populations of this species occur in the proposed Conservation Areas.

Short-joint beavertail cactus (*Opuntia basilaris* var. *brachyclada*)

1) Pg. 2-7, Table 2-1 and Pg. 2-47, Table 2-11 - Biological Goals for this species direct that two large conservation areas be established. Table 2-11 indicates that only a single Conservation Area, Big Rock Creek (BRC), is proposed for establishment. The Department's review of the large maps provided indicates that there are no known occurrences of short-joint beavertail within the BRC Conservation Area. There do appear to be populations of this species at the Gray Vireo Conservation Area to the east. These inconsistencies should be corrected in the Plan

p. 3-190

2) A large expanse in the vicinity between these two conservation areas (Big Rock Creek and Gray Vireo Conservation Area) is designated as a Los Angeles County Significant Ecological Area (SEA) (also including Little Rock Wash, an ecologically important area overlooked in the West Mohave Plan). The Plan assumes that species conservation can be assured within County SEAs. However, it has been the Department's experience that LA County does not necessarily adopt the recommendations of the SEATAC review committee, and that habitat loss within SEAs is common. For a discussion of some of the history regarding inadequate protection of designated SEAs, see Landis, 1993. Therefore, if the resources within SEAs are to be conserved, a more effective conservation strategy will need to be incorporated into the Plan. Concepts that could be explored include maintenance of the broad, designated floodplains associated with these drainages, limitation on development (no more than 20% ground disturbance with hydrologic connectivity maintained), restrictions on further sand and gravel mining, and restrictions on clearing vegetation and ground disturbance outside approved building sites.

3) Even if adjustments can be made ensuring protection of short-joint beavertail cactus in the vicinity of Little Rock Wash, Big Rock Creek CA and Gray Vireo CA, the remainder of the beavertail populations in the West Mohave planning area have no protection, resulting in a substantial reduction in the species numbers and range. A strategy to conserve representative populations within west Palmdale, south Hesperia, and Las Flores Ranch needs to be developed. Strategies that could be explored in these areas include designation of several smaller conservation areas supporting the species, acquisition of private lands in these locations, restrictions on further subdivision of land parcels, limitations on ground disturbance on larger land parcels, and protection of conserved populations from OHV use.

Triple-ribbed milkvetch (*Astragalus tricarinatus*)

1) This species is not addressed in Table 2-1 Biological Goals and Objectives, nor is it in Table 2-11 Authorized Take, nor is it included in the Plant Evaluation Report, yet it is shown as a covered species and addressed on Pg. 2-105, in Section 2.2.4.10.21. Direction in this section is inconsistent, in that it indicates on the one hand that no take is anticipated, yet potential for take could occur due to highway widening or development of private lands containing suitable habitat.

2) The Plan identifies that vehicular travel in desert washes and canyons in the Little San Bernardino Mountains is a potential threat. Conservation actions are needed to address this threat.

3) Pg. 2-106, P-53 - The Department recommends a designation of the 100 year floodplain associated with drainages, development setbacks and restrictions, as described for the Little San Bernardino Mountains Gilia, and restrictions on new sand and gravel mining in the affected watersheds, to provide additional protection for this species.

4) Pg. 2-106, P-54 - Since the proposed strategy here would involve project level surveys and avoidance of occupied habitat, we recommend the lead agency be required to confer with the Department and US Fish and Wildlife Service for our input and approval of site-specific avoidance measures. This section of the Plan should address whether measures aimed at conservation of linkage corridors/Big horn sheep habitat will benefit this species as well.

White-margined beardtongue (*Penstemon albomarginatus*).

1) For reasons discussed in the general comments regarding take based on acreage, above, on directed acquisition of conservation lands in Attachment 3, and on BLM actions and full mitigation in Attachment 1, the Department expects to determine that take is fully mitigated for this species.

2) While the Department supports creation of the Pisgah Crater ACEC, we encourage closure and restoration of appropriate routes within the ACEC and rerouting of the Johnson Valley to Parker race so that it no longer cuts through occupied habitat for this species. We also believe the ACEC should be extended north of I-40 to encompass all known occurrences of the species there.

References:

- Landis, B. 1993. Significant Ecologist Areas: The Skeleton in Los Angeles County's Closet? In *Interface between Ecology and Land Use in California*, edited by J.E. Keeley. 1993. Southern California Academy of Sciences.

ATTACHMENT 5 MISCELLANEOUS COMMENTS

1) Usability of the document. The current document is difficult to use to determine impacts and proposed mitigation. For example, the information provided is not consistent for all proposed covered species. Considerable time is needed to search through the document to find locations where specific species are referenced in order to determine conservation and mitigation strategies. Numerous page numbers are not correct. There is no index for tables shown in the document. In addition, acronyms used in Appendix C are not defined in the DEIR/S.

2) Definition of terms. Terms used in the document are frequently inconsistent and are often not defined, leaving the interpretation subject to the point of view of the reader. For example, different terms are used in Table 2-1 and elsewhere, i.e., "conserve," "maintain," and "protect." These types of terms should be defined and consistently applied in the Plan document.

The meaning of several key terms could prove pivotal to how impacts will be assessed and conservation actions implemented. For instance, the Plan frequently indicates that impacts to certain species are to be avoided. However, the term "avoided" is not defined. We have found that people with differing perspectives view the concept of avoiding impacts to a specific site very differently. The Department recommends the Plan include a discussion detailing how this term is applied in the plan. The concept for achieving avoidance should discuss basic requirements, including the need to: a) accurately identify occupied habitat; b) include potentially suitable habitat that may be occupied; c) maintain processes that sustain populations and their habitat; d) include adjacent habitats such as uplands near wetland areas, or pollinator habitat for outcrossing species; and e); adequate setbacks and buffers to ensure indirect edge effects do not occur. The types of concepts involved in "avoidance" are similar to preserve design concepts (See general comments on preserve design in Attachment 3).

3) Measurable outcomes. Terms used in the Plan related to mitigation measures need to be worded in a manner that make them measurable and, therefore, not subject to interpretation. As an example, "take an aggressive look at the best placement of waters to facilitate other measures... and minimize impacts to all covered species" (Pg. 2-186, AD-30). The term, "aggressive look", in this particular case, needs to be more specific.

4) Place names. A map that includes geographic place names referred to in the Plan and Species Accounts would be useful to reviewers and plan users.

5) Because the Plan's discussion of monitoring actions (Pgs. 2-153 to 2-157, Table 2-26) for covered species also addresses, or should address, the need for base-line studies, this section should be entitled 'Base-line Studies and Monitoring'.

6) Pg. ES-3, 1st para. – This paragraph states that “with and NCCP, incidental take permits can be based on conservation in the plan as a whole under 2835 (CESA)”. The Plan was not developed according to the steps and standards necessary for a Natural Community Conservation Plan. The Department has reviewed the Plan and DEIR only through the lens of potential permitting under the California Endangered Species Act (CESA) Section 2081(b). All references to the NCCP Act should be deleted..

7) Los Angeles County should be added to Table 1-2 (Pages 1-8 and 1-9), since they are listed elsewhere in the document as a participating jurisdiction.

8) Pg. 1-8, Table 1-2 – Table should say “Incidental Take Permit per section 2081” (not section 2080).

9) Pgs. 2-16 & 2-17 – Open Space Corridors – Document needs to explain how the designation of Big Rock Creek and the Portal Ridge to Antelope Valley Poppy Preserve as “Significant Ecological Area” by Los Angeles County offers assurance of permanent protection for the corridors and species for which coverage is sought.

10) Pg. 2-17 – Biological Transition Areas – These areas need to be depicted on document maps and the jurisdictions that have these BTA's need to commit to what land use ordinances or designations they are going to use to protect the DWMA's and Conservation Areas adjacent to them. The Plan needs to describe how a “review” will ensure that no new landfills will be located within BTA's. In addition, the Plan should address why only certain lands adjacent to DWMA's and CA's are designated as BTA's. The Department believes that all lands adjacent to any conservation area should identify appropriate projects, such that covered species within the conservation area are not impacted by projects within the BTA's.

11) Pgs. 2-35 & 2-36 – Administration of Mitigation Fees – This section needs to state that mitigation fees collected on BLM lands will be used, not only for mitigation but also for monitoring and management. This section references Appendix C as including mitigation measures for implementation, however, very few have any monitoring or management components that BLM is obligated to perform. Monitoring and management of conserved lands for species need to be an integral part of the Plan.

12) Pg. 2-36 – Habitat Rehabilitation Credits – The Department recommends a conservative cap be placed on the amount of habitat that can receive habitat rehabilitation credits within the HCA. In addition, the Department must be involved with final determination of suitable sites, success criteria and ultimately the award of the credit.

13) Pg. 2-39 – Partial Credit – The Department is opposed to the awarding of partial credit for implementation of a habitat rehabilitation program. A rehabilitated site may never support the targeted covered species, yet if partial credit is awarded, the jurisdiction will have been able to conceivably allow the take of occupied habitat for the

targeted covered species, without anything tangible being done towards mitigation and the conservation of the species.

14) Pg. 2-41 – A statement is made that the Department will “add unlisted species to the permit” if they are listed in the future. This is not stated correctly. For species currently unlisted but covered by the Plan, upon their listing the Department would need to make an independent finding that the species protection measures in place under the permit still provide for full mitigation of impacts to the species, and that the conservation measures continue to be adequate given the status of the species at the time of listing. Upon making such a finding, the species can be authorized for take.

15) Pg. 2-42 – A statement is made that if a species not covered by the Plan becomes listed, “CDFG will deem the plan adequate if the habitat is adequately protected.” The correct standard for adding a species to the permit would be for the Department to determine the Plan meets all of the issuance criteria for that particular species, and that the Permit would need to be amended to authorize incidental take.

16) Pg. 2-42 – The comment is made that the “Plan would authorize the take of unlisted species”. The Plan cannot authorize the take, for that is what the permits accomplish. As stated above, species not currently listed cannot be authorized for take until they are listed, however, the Plan can treat them as if they are listed and include them as covered species.

17) Pg. 2-52 – A statement is made that native plant harvesting outside of the HCA will be regulated in accordance with the California Desert Native Plant Protection Act, which is correct, however it should also be in accordance with the Native Plant Protection Act and CESA and the terms of the final HCP and any ITP issued by the Department for listed and covered plant species.

18) Pgs. 2-65 & 2-66 – Law Enforcement – The Department supports BLM's request for a minimum of 8 law enforcement rangers and 8 maintenance workers to be assigned full-time to the DWMA's to facilitate plan implementation. However, due to the lack of assurances that funding will be available through the normal budgetary process, the Department recommends that the mitigation fees be increased to cover the costs of this added habitat protection measure. If BLM is constrained from accepting these funds, then a Joint Powers Authority (JPA) should receive the funds and be able to contract with a third party to accomplish the law enforcement and management activities of these 16 additional positions needed.

19) Pg. 2-71 – Proactive MGS Management Program – The monitoring strategy design and implementation for accomplishment of MGS objectives, as well as the trapping studies in Kern County should be funded through mitigation fees paid by project developers.

20) Pgs. 2-147 (Plan Implementation Table 2-25), 2-153 to 2-157 (Plan Monitoring) & 2-166 to 2-170 (Adaptive Management) – The Department needs assurances that these

actions are going to happen in order for us to issue a CESA permit and we believe that mitigation fees have to be sufficient to fund all aspects of Plan implementation. Therefore, we recommend that, in order to assist BLM and an Implementation Team achieve the goals and objectives of this Plan, an Implementing Authority (such as a Joint Powers Authority) be created to accomplish these tasks from mitigation fees received from the various participating jurisdictions.

21) Pg. 3-36, Section 3.1.5.1 – The last sentence should be changed to read, "That Act, however, allows those undertaking activities described in section 1913, subdivision (a) and (b), to change the land use [delete "even"] when they have been notified a rare or endangered plant is present as long as they give 10 days notice to DFG to allow for salvaging the plant." It should be noted that the Department does not believe salvage of sensitive plant species is a biologically viable option. Also, salvage is not an option in the context of an HCP, where the overall biological goal is to compensate for impacts to covered species and to conserve covered species for the long-term.

22) Pg. 3-39 – The statement is made that DFG typically requires an endowment of \$230 / acre. That is not correct. The Department may have used this figure frequently when requiring monitoring and management on mitigation lands, however, there is no pre-set amount. Endowment costs depend on what the species requirements are and the management actions required on the piece of land to be conserved. In the past, the Department has often used a Property Analysis Record (PAR) to determine these costs.

23) Pg. 4-43 (Table 4-32) – Benefits and Residual Impacts of Utilities - The Department requests that the funding source for the removal of problem ravens from existing utility lines and the revegetation of all right-of-ways in DWMA's be identified. The Department will need assurances that a stable funding source is in place to accomplish these tasks.

24) Southwestern willow flycatcher Species Account

- a) The account states, "the winter distribution and ecology of the subspecies remain unknown." A more accurate statement would be that its distribution and ecology are poorly known, but recent research is beginning to provide information on its and other subspecies habitat needs and threats."
- b) The account states, "...almost all willow flycatchers seen in southern California are *brewsteri*." We are not aware of any accounts of relative subspecies sightings, but recent survey information suggests there are probably 250+ breeding pairs of *E t extimus* in southern California.
- c) The statement suggesting that Yong & Finch's analysis leads to inaccurate information based on apparently inaccurate sub-specific identification should be expanded upon.

- d) The statement that the subspecies can only reliably be identified through comparison of museum specimens is misleading. Genetics work has been used successfully, as well as simply the locale during breeding.
- e) The paragraph regarding nest heights misses data from the Gila in New Mexico where they nest substantially higher (60+- feet).
- f) The statement regarding "dispersal from their natal territory at 14-15 days after fledging, but they may remain longer when, as usual, no second clutch follows" is, not supported in the literature. Post fledging behavior is very poorly known.
- g) The account notes that "young" tamarisk thickets are not occupied anywhere. The term, "young" needs to be defined.
- h) The comment about *Sparganium eurycarpum* seems out of place since it is the only plant in the entire document that is identified to species with scientific epithet. The next sentence comments that 'water and vegetation structure are important, plant-species composition is not.'
- i) The threats analysis is too brief, missing such issues as fire (especially in tamarisk stands); may overemphasize cowbird threats, and is not supported regarding livestock impacts.
- j) Important literature that we expected to see cited, and that was not cited includes:
 - U.S. Fish and Wildlife Service. 2002. Southwestern Willow Flycatcher Recovery Plan. Albuquerque, New Mexico. i-ix + 210 pp., Appendices A-O.
 - Finch, D.M., and S.H. Stoleson (Editors). 2000. Status, ecology, and conservation of the Southwestern Willow Flycatcher. USDA For. Serv. Ten. Tech. Rep. RMRS-60. 131pp.

25) Burrowing Owl Species Account

Some literature regarding topics covered in the account that were not cited are provided below. Some of these might be worth reviewing to see if they add anything to directly or as a way of context for the Plan area. We did not include any references regarding artificial burrow systems as a management tool, but there is a fair amount on that topic. Perhaps some reference to that tool should be included.

Conway, C.J., and J.C. Simon. 2003. Comparison of detection probability associated with Burrowing Owl survey methods. *J. Wildl. Manage.* 67(3):501-11.

Desmond, M.J., et al. 2000. Correlations between burrowing owl and black-tailed prairie dog declines: A 7-year analysis. *J. Wildl. Manage.* 64(4):1067-75.

Gorman, L.R., et al. 2003. Estimation of reproductive rates of Burrowing Owls. *J. Wildl. Manage.* 67(3):493-500.

Haley, K.L., and D.K. Rosenberg. 2000. Effects of supplemental food on burrowing owl reproductive success in an agricultural environment. Abstract, Wildl. Soc. 7th Annual Conf.

King, R.A., and J.R. Belthoff. 2001. Post-fledging dispersal of burrowing owls in southwestern Idaho: Characterization of movements and use of satellite burrows. *Condor* 103(1):118-26.

Lutz, R.S., and D.L. Plumpton. 1999. Philopatry and nest site reuse by burrowing owls: Implications for productivity. *J. Rapt. Res.* 33(2):149-53.

Millsap, B.A., and C. Bear. 2000. Density and reproduction of burrowing owls along an urban development gradient. *J. Wildl. Manage.* 64(1):33-41.

Owings, D.H., and E. Handa. 1975. Shadows and detections of movement by burrowing owl (*Speotyto cunicularia*). *Condor* 77(4):501-2.

Ronan, N.A., and D.K. Rosenberg. 2000. Factors affecting reproductive success of burrowing owls in a grassland ecosystem. Abstract, Wildl. Soc. 7th Annual Conf.

Todd, L.D., et al. 2003. Post-fledging survival of Burrowing Owls in Saskatchewan. *J. Wildl. Manage.* 67(3):512-

26) Pgs. 3-171 through 3-174, Affected Environment - The summaries of the species accounts in the Plan do not accurately reflect information in the complete species accounts, particularly for the ferruginous hawk. The species accounts in the plan should be rewritten to accurately summarize information provided in the complete species accounts. For example, for ferruginous hawk, the species account in the Plan state that this species is "relatively abundant" in the Antelope and Mojave Valleys". The complete species account states that Antelope Valley supports the highest number and density of wintering ferruginous hawks in southern California. Another example: The species account in the Plan states that electrocution is a potential problem and shooting is a minor threat. It makes no mention of habitat loss as a threat. Yet the complete species account does not mention electrocution as a threat, but it does document that loss of habitat is the greatest threat, caused by the conversion of lands to urbanization particularly in the Antelope Valley, followed by recreation, and water distribution.