CHAPTER SIX
PUBLIC COMMENTS AND RESPONSES

6.1 OVERVIEW

The Draft EIR/S was circulated for a 90-day public review that began on June 13, 2003 and ended on September 12, 2003. A total of 276 comment letters were received by the lead agencies during this period. These are listed in Table 6-1 and are identified by a number. A copy of each letter may be found on the compact disk attached to the inside back cover of this volume.

Both the CEQA guidelines and the Council on Environmental Quality's NEPA regulations require that the lead agencies evaluate comments on environmental issues received from persons who reviewed the Draft EIR/S and prepare a written response addressing each of the comments. Responses to comments are presented in Sections 6.2 (topical or general comments) and 6.3 (specific comments), below.

Table 6-1
Comment Letters Received

LETTER	COMMENTATOR
1	Mr. Mark Belles
2	Mr. Philip C. Blanton, Esq.
3	Mr. James G. Herring
4	Ms. Denyse Racine, California Department of Fish and Game
5	Mr. Steven Posey
6	Mr. & Mrs. Jim and Yvonne Wilson
7	Mr. Greg Herring, First Class Miners
8	Mr. Greg Herring, First Class Miners
9	Mr. Jim Wilson, Lost Coyotes Motorcycle Club
10	Mr. Greg Herring, President, First Class Miners
11	Mr. David and Ms. Linda Van Voorhis
12	Mr. William Tuck
13	Mr. William Tuck
14	Mr. William Tuck
15	Mr. Sam Burg
16	Mr. Martin and Ms. Eleanor Koppel
17	Mr. Alan Poppel
18	Mr. Ted and Ms. Karen Meyers
19	State Senator Roy Ashburn
20	Mr. Nick T. Dally
21	Mr. Don D. Surplice
22	Mr. Ryan Stendell
23	Mr. Jerry Grabow
24	Mr. Paul McKinney
25	Ms. Beth Turrini
26	Mr. Charles Brown
27	Mr. Horace Vega
28	Mr. Lee Turini

LETTER	COMMENTATOR
29	Mr. Scott Shumer
30	Mr. Larry Kunkel
31	Mr. Ike Urbanik
32	Mr. Curtis L. Shanter
33	Mr. Tom Holmes
34	Mr. Arthur Jensen
35	Mr. Keith Axelson, Sageland Ranch
36	Ms. Shirley Swoboda
37	Mr. Donald Beyer
38	Mr. Erwin Bock
39	Mr. Al Grovanni
40	Ms. Dolores Dempsey
41	Mr. Lourdes Encinares
42	Mr. Jack Riolo
43	Mr. Don Wilson
44	Mr. Smith
45	Mr. Darrell Runnels
46	Mr. Larry Ensign
47	Mr. Russell Collins
48	Mr. Craig Hoernke
49	Ms. Connie Collins
50	Mr. Paul Krause
51	Mr. Stephen Freeman
52	Mr. Ned Jones
53	Mr. Bill Vanettes
54	Mr. Lee Turrini
55	Mr. Steve Dills
56	Mr. Terry Caldwell
57	Mr. Matt Collins
58	Mr. Arthur Jensen
59	Mr. Jim Blankenship
60	Dave Fisher, Shield F Ranch
61	City of Lancaster
62	Mr. Haruki Yoshizumi
63	Mr. Gary Bender
64	Mr. Roy Watson
65	County of San Bernardino, Department of Public Works
66	Mr. Lewis Trout
67	Ms. Elaine Eberle
68	Mr. Mike Childress
69	Mr. Lori Tracy
70	Mr. Terry Caldwell
71	Mr. Roy Don Moore
72	Mr. Steve Rauen
73	Mr. Larry Kleinschmidt
74	Mr. Jeffrey Heine
75	Mr. Thomas Edmonds
76	Mr. Robert Keller
77	Mr. Wilbur Eveland
78	Mr. Gil Busick
79	Mr. Richard Keller

LETTER	COMMENTATOR
80	Mr. Nicholas Campion
81	Mr. Aaron E. Austin
82	Mr. Tim Morene
83	Mr. Dean Greenwalt, Rock Springs Ranch
84	Mr. John Sileski
85	Mr. James Townsen
86	Mr. Donald Campbell
87	Mr. Mike Kilgore
88	Mr. & Mrs. John Pasquotto
89	Mr. Van Richardson
90	Mr. Jack Garjian
91	Mr. Raul Perez
92	Mr. Jim Geddes
93	Mr. Greg Mellgren
94	Mr. Richard Jackson
95	Mr. Terry Caldwell
96	Mr. Rolan Bonelli
97	Ms. Barbara McIntosh
98	Mr. Tom Holmes
99	Mr. Byran Clark
100	State Senator Bill Morrow
101	Mr. Mike Hawley
102	Mr. John A. Giovanni & Ms. Patricia Decker
103	Mr. Kevin Helfend
104	Mr. Stephen D. Yarber
105	Mr. Patrick Johansen
106	Mr. Lou Connot
107	Mr. Billy Sims
108	Mr. Gary Campbell
109	Mr. Alan Poppel
110	Mr. Kirk Rauen
111	Ms. Genevieve Johnson Doughty
112	Mr. Andrew Hammitt
113	Mr. Steven Smotherman
114	Mr. Douglas Williams
115	Mr. James McGarvie, Off-Road Business Association, Inc.
116	Mr. Thomas Purdy
117	Mr. Mike Konaik
118	Mr. John Stewart, United Four Wheel Drive Associations
119	Asha Van Voorhis
120	Mr. John Northrop
121	Ms. Mary and Mr. Jerry Murray; Mr. Joseph Margason
122	Mr. Ron Mercer, Deep Creek Volunteers
123	Ms. Nancy Rauen
124	Ms. Stacey Rauen
125	Mr. Don Howard
126	Kern County Wool Growers Association
127	Sierra Club, Mojave Group
128	Mr. Billy Mitchell
129	Ms. Jenny Wilder
130	Mr. Louis Schilling

LETTER	COMMENTATOR
131	Mr. Jeffrey Thompson
132	Mr. Thomas Reynaud
133	Mr. Lyle Taylor
134	Quail Unlimited, Chapter 457
135	Mr. Edward Drenten
136	Mr. Jeff Owen
137	Mr. Stephen Gabelich
138	Mr. John Hively
139	Mr. Gauney
140	Mr. Ken Baez
141	Ms. Elizabeth Marshall
142	Mr. Larry Ensign
143	Mr. Gauney
144	Mr. Matt Battaglia
145	Ms. Phyllis Enoch
146	Mr. Steve Hastings
147	Mr. Elisabeth Battaglia
148	Mr. Bill Martin
149	Mr. Ray Leuschner
150	Ms. Ginger Hughes
151	Mr. Robert Furman
152	Mr. Rick Riebsomer
153	Mr. Jess McKinely
154	Ms. Gina Owen
155	Mr. Lee Turrini
156	Mr. Roy Owen
157	Mr. Robert Furman
158	Ms. Robin Clark – Maltas & Mr. Gregory James Maltas, Mr. Joshua Pretzer and Ms Marry Murray
159	Mr. Shawn Girard
160	Mr. Craig Owen
161	K. R. Stevenson
162	Mr. Jay Wickers, Badgers Motorcycle Club
163	Mr. Jerry Bailey
164	Mr. John and Ms. Ellen Kindisvater
165	Ms. Carol Wiley
166	Ms. Molly Barnett
167	Mr. Craig Owen
168	Mr. Larry Hall
169	Mr. Jimmy Lewis
170	Mr. Jeff Leonard
171	Ms. Lorraine Drenten
172	U.S. Borax, Inc.
173	Ms. Cathey Smith, Harper Lake Allotment
174	Ginger Hancock, Newberry Springs – Harvard Real Property Owners Association
175	Ms. Mary Prismon, Santa Monica Bay Audubon Society
176	Los Angeles County, Department of Regional Planning
177	Ms. Linda Van Voorhis
178	Western San Bernardino County Landowners Association
179	Ms. Carol Stubblefield
180	Kern County Waste Management Department

LETTER	COMMENTATOR
181	Mr. Gerald E. Hillier, Public Land Users Services
182	Center for Biological Diversity
183	American Motorcyclist Association, et al
184	Sierra Club, San Gorgonio Chapter
185	Ms. Marie Brashear
186	California Cattlemen's Association
187	Defenders of Wildlife
188	Desert Tortoise Preserve Committee, Inc.
189	DeathValley.com
190	California Native Plant Society
191	Lucerne Valley Economic Development Association
192	Mojave Desert Resource Conservation District
193	Rinker Materials
194	Mr. David Hatcher
195	Mr. Richard Kanatzar
196	Mr.& Mrs. Scott Bart
197	Mr. Paul Vautrain
198	Mr. Scott Kemp
199	Mr. John Gil
200	Ms. Barbara Veale
201	Mr. Tom Willis
202	Mr. Chris Cox
203	Mr. Ken Hansing
204	Mr. Ken Payne
205	Mr. Nick Mlagenovich
206	Mr. John Thornton
207	Mr. Peter Cochran
208	Mr. Marion F. Ely II
209	City of Ridgecrest
210	Fort Cady Minerals Corporation
211	Ms. Mary Grimsley, Gear Grinders 4WD Club, Inc.
212	Ms. Iona Chelette
213	Ms. Sophia Anne Merk
214	Ms. Estelle Delgado
215	Mr. Tom and Ms. Jeanne Wetterman
216	Mr. Karl Krohn
217	Mr. Stephen and Ms, Sandra Sielig, Mr. Phillip and Ms. Kathryn Dampier, Mr. Michael and Ms. Melinda O'Hara, Mr. Nikolas O'Hara, Drew O'Hara, and Ryan O'Hara
218	Mr. Bill Howell
219	Mr. Pedro Indacochea
220	Mr. Spike Lynch and Ms. Ginger Hancock, Newberry Springs – Harvard Real Property Owners Association
221	Ms. Jean Garrett
222	Mr. Ryan Purdy
223	California Mining Association
224	Mr. Thomas Guttry
225	Ms. Jaqueline Campo, Victorville Industrial Minerals, Inc.
226	Mr. Jeff Dillon and Mr. Steven Dillon
227	Mr. Steven Costello
228	United States Marine Corps, Marine Corps Air Ground Combat Center
229	Ms. Jenny Wilder (Petition, 51 signatures)

LETTER	COMMENTATOR
230	Mr. Richard Willett, Hector Mine
231	San Diego Gas and Electric
232	Ms. Carol Stubblefield
233	California State Senator Wm. J "Pete" Knight
234	Ms. Anna Seidman, Safari Club International
235	Mr. Darrin Peterson
236	County Sanitation Districts of Los Angeles County
237	City of Los Angeles, Los Angeles World Airports
238	Mr. Paul D. Condon
239	United States Environmental Protection Agency
240	Petition (5 signatures)
241	Elementis Specialties
242	Mr. Scott and Ms. Kimberly Lynch
243	Mr. David Tonkiss, AMA District 37
244	Lounsbery Ferguson Altona & Peak LLP
245	Vulcan Materials (Jeffer, Mangels, Butler & Marmaro LLP)
246	Mr. Freddie Iturriria
247	Mr. Shane Allen
248	Mr. Charles G. Sudduth, P. E.
249	Mr. Richard Rudnick, Onyx Mountain Cattle Company
250	Mr. Anthony Delmage
251	Mr. Anthony Delmage
252	Mr. Mark Gigas
253	Mr. Chris Shea
254	Mr. Robert Strub, Ridgecrest Steering Committee
255	Mr. Robert Strub
256	Mr. David L. McCarty
257	Maja Block
258	Mr. Seth Carreon
259	Mr. Steven Gardiner
260	Mr. Kerrie Graham
261	Mr. Kent Olsen
262	Mr. Jesse May
263	Mr. Don Brunson
264	Mr. Kevin Allen
265	Ms. Linda Lansburg
266	Ms. Ginger Hughes, President. Desert Dawgs 4WDC
267	Mr. Heinz Leuschner
268	Mr. Scott Spencer
269	Mr. Nate Sciacqua
270	Ms. Tammy Martin
271	County of Kern, Planning Department
272	Metropolitan Water District of Southern California
273	Mr. James Furnish
274	Mr. Anthony Delmage
275	Gerald E. Hillier, Public Land Users Services
276	Cushenbury Mine Trust
277	Dave Fisher, Shield F Ranch
278	California Department of Fish and Game

Comments were also accepted at seven public hearings. These hearings were held at the following locations:

- Victorville (July 15, 2003)
- Lone Pine (July 16, 2003)
- Ridgecrest (July 17, 2003)
- Redlands (July 22, 2003)
- Yucca Valley (July 23, 2003)
- Palmdale (July 24, 2003)
- Barstow (July 30, 2003)

6.2 TOPICAL RESPONSES

Several environmental issues were common to many of the letters received on the Draft EIR/S. These can be generally classified into the following topics: (1) Requests for more information on how the West Mojave Plan will be funded; (2) Modifications of the proposed Pisgah ACEC; (3) A collection of specific comments concerning motorized vehicle route designation that were set forth in very similar letters submitted by many commentators; (4) Route designation in the Juniper subregion; and (5) Landowner concerns regarding motorized vehicle access in the El Mirage Valley. Responses to these oft-repeated topics are presented below. A summary of the topical comment is provided, followed by a response.

Comments unique to a particular letter are addressed in Section 6.3

6.2.1 Topical Comment 1: How Will the West Mojave Plan be Funded?

Many commentators (including 182, 183, 184, 185, 186, 187, 188, 211, 214, 218, 238 and 278) were concerned that the Draft EIR/S did not include an assurance that adequate funding to implement the Plan would be provided. They indicated that assured funding would be critical to the success of the conservation strategy. The Draft EIR/S, commentators asserted, lacked a clear delineation of funding needs, relied on several speculative sources of funding, and did not adequately define the cost of the recovery program. This included the costs associated with acquisitions, monitoring, and adaptive management. Commentators stressed that the HCP must ensure sufficient funding for all agencies (local, state or federal) with implementation responsibilities, and should comply with 1997 Equitable Precept 5's goal of "realistic fiscal considerations, with identified sources." A detailed financial management plan demonstrating the ability to generate needed funds, including a cost analysis and source of funds, was suggested, as was the establishment of a seed fund, trust or endowment earmarked for the acquisition of mitigation lands.

Specific examples of unspecified funding sources include funding needed to make electric transmission lines raptor safe, acquire occupied habitat and essential connectivity for Parish's phacelia, acquire private land within occupied Lane Mountain milk vetch habitat, assign additional rangers and maintenance workers to the DWMAs, conduct raven research measures, and perform botanical surveys for Barstow wooly sunflower within the CDFG West Mojave Ecological Reserve.

Response to Topical Comment 1: The Draft EIR/S, at Appendix C, Exhibit C.1, presented a summary of implementation tasks, costs of each task and possible funding sources, among other information. Exhibit C.1 has been revised and clarified to include the following: (1) annual funds estimated to be available for implementing the West Mojave Plan and their source; (2) implementation priorities; and (3) a year by year implementation schedule, indicating funds available, tasks that could be accomplished given available funding and priorities. Exhibit C.1's implementation chart addresses both the proposed action and a program implemented on federal lands using federal appropriated funds only, as well as a comparison to current mitigation and agency conservation funding programs.

Please also see response to Specific Comment 301 3 (below) regarding a proposal raised by commentator Bob Strub at several public hearings concerning an alternative strategy for applying mitigation fees.

6.2.2 Topical Comment 2: Proposed Pisgah ACEC Modifications

Five commentators (letters 193, 210, 223, 230 and 241) raised concerns about the appropriateness of the boundary of the proposed Pisgah Crater Conservation Area. Commentators states that the western half of the ACEC is dominated by active mining extending from the Pisgah Cinder Cone to the western boundary, and that mining in the area is conducted by at least four mining companies, and has occurred since the 1930's. ACEC designation could limit expansion of these mines. Commentators also noted that the western half of the proposed conservation area is a region of low density tortoise habitat, and that the majority of the species for which the conservation would be established occur to the east and northeast, outside of the proposed boundary.

Response to Topical Comment 2: The boundaries of the proposed Pisgah ACEC have been modified to exclude lands in the western portion of the proposed ACEC and to include sensitive species habitat to the northeast. Overall, the acreage of the ACEC has been increased slightly. Revised Map 2-11 illustrates the new boundaries for the proposed ACEC. The boundaries of the existing Research Natural Area have not been modified. Proposed modifications include:

- To the west, the boundaries of the ACEC have been revised to exclude the western part of the lava flow. The Elementis Specialties Hector Mine, Rinker Materials Lavic Quarry, and Fort Cady Minerals borate leach operation are now excluded. Exclusion of this area also would allow designation of a community pit for collection of lava rock for household decorative use.

- To the northeast, the boundary has been extended to include all verified locations of the white-margined beardtongue, a covered species whose range in California is known only from this area. The new boundary also includes disjunct locations of crucifixion thorn and an eyrie for the golden eagle.

6.2.3 Topical Comment 3: Route Designation in the Juniper Subregion

Several commentators argued that the proposed motorized vehicle access network for the Juniper subregion (southeast of Apple Valley) requires further review and modification. These included letters 11, 67, 83, 119, 122, 127, 129, 164, 165, 177, 179, 184, 229, 232 and 240. These letters raised general concerns, including the compatibility of the route network with the existing Juniper Flats ACEC, landowner concerns in the Milpas Road area, conflicts with sensitive riparian areas in Arrastre Canyon and other locales, and compatibility with United States Forest Service programs. In addition, many of the letters objected to the opening of single-track route J 1299. Many commentators suggested that the Juniper subregion be considered through a separate planning process.

Response to Topical Comment 3: Due to the numerous comments received during the Draft EIR/S public comment period, the Juniper subregion was "reconsidered" and subsequently given the level of attention of other "priority" subregions. A new GPS survey of all motorized routes was conducted, and meetings were held with commentators to clarify and better assess their concerns. Survey data and suggestions made during the commentator meetings were considered during the design of a revised route network for the Juniper subregion. This revised network was developed to address the primary concerns raised by the public, which included impacts to riparian and archaeological resources, private property trespass, recreational access and other activities. A map of the revised network is included on the compact disk attached to this Final EIR/S.

6.2.4 Topical Comment 4: El Mirage Valley Motorized Vehicle Access

Enforce the El Mirage Plan. Routes are improperly designated and signed into the zone of influence inviting motorized trespass into lands not available for riding under the El Mirage Plan.

Close Edwards Bowl to motorized vehicles of all kinds. This area will never be rehabilitated without a complete respite from motorized use. It has above average tortoise sign.

Response to Topical Comment 4: The West Mojave planning team utilized the best available information regarding land use patterns (recreational, commercial and private land uses) and biological concerns. Private property and commercial access needs were provided as necessary and recreational access to public lands was provided where it was deemed to be least impacting to sensitive natural resources and adjoining land uses (i.e. private property trespass). The input of local private landowners was solicited and utilized as part of the route designation process in an effort to minimize known trespass issues. Additionally, the best information available regarding the desert tortoise densities and distribution was specifically consulted as part of the route designation process and utilized to at least minimize if not eliminate impacts to and assist in the recovery of this species.

6.2.5 Topical Comment 5: Motorized Vehicle Access Policy Concerns

Topical Comment 5a: It is critical to complete a survey of existing motorized vehicle routes in those areas where BLM has relied on the 1985-87 route surveys.

Response to Topical Comment 5a: A network of motorized vehicle access routes was designated in the western Mojave Desert in 1985 and 1987, and during the development of ACEC management plans during the 1980s and early 1990s. All twenty-one polygons, or "subregions", were surveyed at that time, and the route network that was adopted was based upon the findings of those surveys.

Since the middle 1980s, new issues have arisen that created a need to redesign portions of the existing network. Among these developments was the listing of the desert tortoise as threatened in the early 1990s. The BLM decided to redesign portions of the existing network to address these concerns. Funds were available to resurvey eleven subregions. These included the seven subregions that are located entirely within desert tortoise critical habitat, which had not been designated when the original network was designed. The remainder of the existing network was unchanged (excepting a very few site-specific modifications).

BLM applied the best available data to the task of designing a motorized vehicle access network for the western Mojave Desert: the regional surveys conducted in 2001-2, the Juniper subregion survey of 2003, and those surveys conducted for the 1985-87 and ACEC networks. We are unaware of any other available data that might have been used during this effort.

The BLM's planning process allows land use plans to be amended as new circumstances and information may require. If future field surveys indicate the need for a modification of the network beyond the scope of what can be addressed by plan maintenance, an amendment could be considered at that time.

Topical Comment 5b: All existing routes should be considered open unless signed closed. … "Use the Closed unless marked Open" policy of signing routes.

Response to Topical Comment 5b: The implementation strategy described by Section 2.2.6.8 is consistent with the route signage policy that was developed by a technical review team appointed by the BLM's California Desert District Advisory Panel. This policy is being implemented throughout the CDCA. The policy relies on signing and encouraging desert drivers to use open routes, while rehabilitating closed routes. The West Mojave Plan would also have the flexibility to take actions in "hot spot" areas designed to deal with unique issues.

Topical Comment 5c: All routes listed as open should be programmatically approved for dual sport and other noncompetitive events.

Response to Topical Comment 5c: The West Mojave Plan allows dual sport rides to be conducted on all routes designated open, subject to the restrictions set forth in prescription HCA-41. It is the intent of the plan to retain the existing requirement that dual sport events be

evaluated on a case-by-case basis, including full NEPA compliance. Prescription HCA-41 (section 2.2.4.1) has been clarified to specifically state that this requirement would be retained.

Topical Comment 5d: No routes should be designated across private lands, including "de facto" routes that are open on two sides of a private section without the permission of the owners.

Response to Topical Comment 5d: Routes located solely on private property or the segments of any routes crossing private lands were not designated as a part of this planning effort. Only those routes or those segments of routes located on lands under the jurisdiction of the BLM were addressed. Routes that cross both BLM and private lands were designated on those portions of the route that crossed BLM lands but those sections that crossed private lands were not designated. The "checkerboard" pattern of land ownership necessitated that the needs of private property access, the concerns of private property trespass and the demands for public access to public lands all be addressed to the extent possible. This designation process utilized the best information available in determining how to address these concerns. In many cases a route to or through private property provided access to private property. Where a route was a known cause of trespass complaints, this fact was considered during the route evaluation and designation process as a user conflict, and handled accordingly (e.g. closing the route, or limiting access to private property owners). It should be noted that private landowners have many additional tools to address trespass problems, including the use of proper signage (e.g. "No Trespassing" signs), fencing, and the assistance of local law enforcement. In addition, if user conflicts continue, the designation of specific routes can be refined or adjusted through the plan amendment processes.

Topical Comment 5e: All duplicate and parallel routes should be returned to open status. No route should be closed without good scientific evidence requiring it. Parallel and duplicate routes provide many varying degrees of difficulty, different terrain and/or other significant variables.

Response to Topical Comment 5e: The route designation team evaluated each route on its own merits, based upon a number of factors including but not limited to the following: potential natural resource impacts, commercial values, cultural resource impacts, private property access, and recreational values (see EIR/S section 2.2.6.2). Routes were evaluated both individually and cumulatively. The evaluators took into consideration whether a route was single or dual track, graded or a rough tread surface, a spur or a loop, straight or serpentine, and one that offered a technical driving challenge or a casual touring experience. Redundant, duplicative and closely parallel routes serving the same purpose were identified through this process. This evaluation enabled the planning team to identify many routes that at first appeared duplicative but that, upon more detailed consideration, were revealed as affording different degrees of difficulty, a variety of terrain types and/or other significant variables that precluded their treatment as "redundant." In those cases where an evaluator determined a route to be redundant (that is, serving the same purpose, providing access to the same location, or offering a similar recreational experience), and where retaining more than one route could lead to increased resource damage, the route was usually closed in accordance with 43 CFR 8342.1. This regulation provides guidance criteria concerning route designation, specifically requiring the

minimization of resource damage and wildlife harassment. The routes identified by Appendix R as duplicative or redundant were determined to be so following the evaluation described above.

Topical Comment 5f: There is no documentation provided indicating the methodology or analysis used to determine which routes would be closed, showing location or identification of routes to be closed and no scientific justification for closure.

Response to Topical Comment 5f: The DEIR/S at section 2.2.6.2 and in Appendix R at sections R.4 describes the methodology used to evaluate each route in determining which should be closed, including the route designation "decision tree" that guided the designation process. The decision tree process was applied to each of the routes for which new designation decisions were made by BLM either through the Western Mojave Desert Designation Project (final decision on June 30, 2003), or modifications of the June 30, 2003 network being considered by the West Mojave Plan EIR/S. Appendix R, section R.5 provides an access table that presents the rationale for recommending each of over 5,000 enumerated routes within the redesign area as open, closed or limited, and includes individual routes numbers, UTM coordinates indicating the approximate location of the route and the decision tree route designation codes that enable one to revisit how the route designation team treated the various criteria in evaluating the route. Also included, as part of Appendix R, is a standard format CD that includes PDF maps of the planning area showing the route network. These PDF maps use the same identification codes utilized in the aforementioned access table and include UTM coordinates that can be cross-referenced to the table.

Justification for closure was derived from a number of statutory guidelines, (e.g. federal Endangered Species Act, FLPMA, National Historic Preservation Act, Federal Code of Regulations (CFR)). The CFR provides specific guidance including designation criteria and requires that areas and trails are to be located to minimize damage to natural resources, minimize harassment of wildlife, minimize significant disruption of wildlife habitat and minimize conflicts between off-road vehicle use and other recreational uses (43 CFR 8342.1).

6.2.6 Topical Comment 6: Motorized Vehicle Access Analysis Concerns

Topical Comment 6a: The study of economic impacts (pages 4-96 and 4-97) grossly underestimates the economic benefits that the off-road industry contributes annually to the California economy. The Motorcycle Industry Council estimates motorized recreation contributes six billion dollars annually to the California economy. Chapter 3.4.4.4, Economic Contribution of OHV Recreation and Table 3-55 offer no dollar estimates. The economic impact analysis must consider the effect on local communities, as well as the regional economies in southern California and the adjoining states.

Response to Topical Comment 6a: Comment noted. The Draft EIR/S analysis focuses on the economic contribution of recreation on the regional economy of the western Mojave Desert. The text recognizes the scale of OHV usage within the West Mojave, estimated to be roughly 2.0 million visitors per year, identifies the number of jobs in sectors influenced by recreation (41,800) and the scale of the retail support provided by recreation visitor expenditures (equivalent of 190 jobs) (draft EIR/S at 4-96 and 97). Table 3-55 presents, for each community,

principal recreation activities on adjoining public lands, the level of nearby OHV use, sources of economic contribution, trends in growth, and miscellaneous comments. We believe that these discussions, prepared by authors with recognized expertise, present a comprehensive and accurate profile of recreation's contribution to the economy of the western Mojave Desert.

Topical Comment 6b: The DEIR/S does not have data supporting the recommendation to reduce open routes in larger populated tortoise areas, or demonstrating actual detrimental effects. There is little data to show why routes were closed.

Response to Topical Comment 6b: Legal justification for the closure of open routes that might detrimentally affect the recovery of the federally listed desert tortoise was derived as appropriate from a number of statutory guidelines, (e.g. FESA, CESA, NEPA, CEQA, FLPMA, Federal Code of Regulations). The endangered species acts establish very low thresholds of tolerance for activities that may affect listed species. NEPA and CEQA both require disclosure and consideration of impacts/activities that may have the potential to affect listed species. The federal regulations provide specific guidance in the form of route designation criteria and indicates that areas and trails are to be located to minimize damage to natural resources, minimize harassment of wildlife, minimize significant disruption of wildlife habitat and minimize conflicts between off-road vehicle use and other recreational uses (43 CFR 8342.1).

Biological data supporting the recommendation to reduce open routes in larger populated tortoise areas as well as data suggesting the potential for harmful effects of off highway vehicle use on desert tortoise populations was discussed in the DEIR/S in Sections 3.3.2.5 and 3.3.2.6.

The DEIR/S at Section 2.2.6.3 (Route Designation Methodology) describes how tortoise population data was considered in recommending which routes should be closed. The manner in which various factors were evaluated for each route was recorded using a designation code for each route. The route number, respective designation codes and any specific comments are included in the Appendix R access database.

Topical Comment 6c: The number of routes should not be reduced until closures are determined on a case-by-case basis supported by site-specific analysis to determine detrimental effects, if any. Other mitigating measures besides closure should be considered as part of the site-specific analysis.

Response to Topical Comment 6c: All route designations were made on a case-by-case basis. The Decision Tree Route Evaluation/Designation process that was used to evaluate and designate routes is described in detail by Section 2.2.6.3. One of those steps requires that each route be evaluated on a case-by-case basis using the best available site-specific information to determine the known, as well as any potential, detrimental effects of each route. Route designations other than close or open were considered on a route-by-basis as denoted by the symbol "*1" in the Decision Tree, and described by Decision Tree footnote number 5 (see Appendix R section R.5).

Topical Comment 6d: There should be at least two alternatives with a variety of route networks selected from existing routes. The proposed alternatives provide no opportunity for choice.

Response to Topical Comment 6d: The Draft EIR/S considered five very different motorized vehicle route networks. Three were analyzed in detail. Alternative A presented a network that was designed after the completion of highly detailed and accurate field inventory of routes that was conducted in 2001 and 2002. The design utilized a state-of-the-art "decision tree" process that ensured that factors having a demonstrated connection to habitat needs were considered, such as the avoidance of washes and areas of high tortoise density, elevation and slope considerations, sensitivity of other species, elimination of redundant routes and motorized access needs. It closed relatively more routes in biologically sensitive areas and opened relatively more routes in the less sensitive, mountainous terrain favored by motorized vehicle recreationists. Alternative D adopted Alternative A's network, but limited its use to "street legal" (that is, non-motorcycle) vehicles in large portions of the tortoise DWMAs. Alternative G examined the route network adopted by BLM in 1985-87. This route web was composed of somewhat fewer miles of open routes than Alternative A, but its design did not ensure that those routes were located outside of biologically sensitive areas. It was based upon a relatively cursory field inventory conducted in the 1980s, prior to the availability of GPS technology and modern field data recording equipment.

In addition, two alternatives "Evaluated but Rejected from Detailed Consideration" were briefly considered. The first of these was the "Interim" route network designed in 1998 and adopted on a temporary basis for five subregions in 2001. This was rejected because it was developed (1) in the absence of information on route type, usage level and access needs collected during the detailed 2001-2 field surveys, (2) prior to the availability of data from the comprehensive field surveys of desert tortoise and other species conducted between 1998 and 2001 and (3) before the completion of detailed species accounts in 1999. The second alternative was a Route Mileage Ceiling Alternative, limiting mileage to 18 miles of open routes per township in Category I habitat and 24 miles per township in Category II habitat. This was rejected due to the arbitrary nature of the mileages chosen, which lacked any basis in either the scientific literature or the desert tortoise Recovery Plan.

6.2.7 Topical Comment 7: Site-Specific Motorized Vehicle Access Concerns

Topical Comment 7a: Reinstate and reopen the "C" (competition) routes adjacent to the Spangler open area closed since 2001. Consider establishing a network of "C" routes in the Cinnamon Hills.

Response to Topical Comment 7a: A portion of the "C" route network would be reestablished (see Route Network maps on attached compact disk). This would include many of those "C" routes located northeast of the Spangler Open Area. Re-establishment of these routes would be offset by selected closure of routes within the Fremon-Kramer tortoise DWMA, Red Mountain subregion. The "C" routes originally located within the Summit Range (south of the open area) would not be reestablished: thar area is simply too close to the tortoise DWMA.

Topical Comment 7b: The Proposed Action, Alternative A, includes the Johnson to Parker and Johnson to Stoddard race corridors. It also states that no races will be permitted outside of the open areas. The plan must include specific language assuring that races will be permitted to use these corridors.

Response to Topical Comment 7b: The West Mojave Plan does not state that no races will be permitted outside of the open areas. In the Draft EIR/S, prescription HCA-40 does state that no speed events would be allowed in either the DWMAs or the Mohave ground squirrel conservation area, and portions of the Johnson Valley to Parker race corridor follow the outer boundary of the Ord-Rodman DWMA. The text has been clarified to indicate that races can utilized the Johnson Valley to Parker corridor along the edge of this DWMA, subject to "yellow flag" conditions. Johnson Valley to Stoddard would be changed from a "competitive events corridor" to a "connector route." Competitive events would not be allowed to utilize this route. The text has been changed to explain the uses permitted on this connector route.

DEIR/S Section 4.2.3.5 (Regional Recreational Opportunities: Competitive Events (page 4-115) did state "*With the exception of the Barstow to Vegas and Johnson Valley to Parker races, and the use of "C routes", all competitive timed speed events have occurred in the OHV open areas since the CDCA Plan was adopted in 1980."* This, however, is simply a statement describing the location of events that have been held in the recent past. It is not a prescription stating that competitive events are only to take place in OHV Open areas.

Topical Comment 7c: Reinstate the Barstow to Vegas racecourse and allow the "B to V" race to proceed.

Response to Topical Comment 7c: The segment of the Barstow to Vegas racecourse that is located within the West Mojave planning area would be deleted. This segment consists of about one-fourth of the total length of the racecourse. The desert tortoise recovery plan found that competitive events are not compatible with tortoise recovery, and the remaining abbreviated segment of the Barstow to Vegas racecourse lies within the Superior-Cronese DWMA. The racecourse, moreover, is now an isolated fragment and is no longer viable given the deletion of the eastern three-fourths of the route by the NEMO Record of Decision in December 2002.

Topical Comment 7d: The proposed tortoise headstart area near Fremont Peak is in an area more suited for recreation as the habitat has been previously impacted by motorized recreation.

Response to Topical Comment 7d: West Mojave planning team survey data indicate that the area between Fremont Peak and Highway 395 presently supports few tortoises. This area corresponds with one of several larger older die-off regions depicted on Map 3-13 (Draft EIR/S p. 3-111). Dr. Berry estimated 70 adult tortoises on the Fremont Peak study plot in 1980 and only 5 tortoises in 1993 (Draft EIR/S p. 3-75). The main advantage of the head-starting program is its potential to reintroduce tortoises into areas where they have been extirpated, which has yet to be demonstrated to be effective. The site is 15 miles north of Highway 58, which is not likely a problem. It is within several miles of Highway 395, but it is suspected that the

highway would be fenced by the time head-starting hatchlings began to disperse. The proposed area is ideal in terms of the intended function to reintroduce tortoises.

West Mojave planning team biologists were aware that there are extensive OHV impacts in the area of Fremont Peak, but that most of these are centered along Lockhart Road to the south, east, and north of Fremont Peak. The headstarting facility location was recommended several miles west of Fremont Peak in an area that is not so nearly impacted as areas to the east. The proposed location satisfies many of the prerequisites identified by Dr. David Morafka and discussed during the planning process. The planning team was aware of the OHV impacts in the proposed DWMA, and recommended route closures, increased law enforcement, and designating an official campground as ways of minimizing impacts to tortoises.

Topical Comment 7e: Please return the Johannesburg triangle back to the open area. The triangle was part of the open area when it was included in the Rand plan. The BLM found no tortoises and it was dropped from the Rand ACEC. I request that the plan leave the eastern Rands open. The boundary would be R44 to R46 to R43 then south to the boundary. Much of this area exceeds 20% grade and thus is unsuitable for tortoise habitat.

Response to Topical Comment 7e: Comment noted. The Johannesburg triangle is immediately adjacent to the Fremont-Kramer DWMA. Designating this region as an extension of the Spangler Hills Open Area would increase the risk of spillover impacts into the adjacent DWMA. Please note that several of the competitive "C" routes would be reestablished to the northeast of the Spangler Hills Open Area. These would satisfy many of the same recreation demands that the Johannesburg triangle is proposed to meet.

6.2.8 Topical Comment 8: Cumulative Impacts

Several commentators requested that additional detail be added to Chapter 4's analysis of cumulative impacts.

Response to Topical Comment 8: The cumulative impacts discussions have been reviewed and additional detail has been provided where appropriate.

6.3 SPECIFIC COMMENTS

In addition to the recurring general issues that were responded to in Section 6.2 (above), commentators offered many specific comments. These are addressed below. Specific comments within each letter are identified with a unique numeric indicator. For example, the third comment in letter 180 is identified as comment number 180-3. The location and numeric designation of each comment are indicated on the copy of the commentator's letter that may be found on the attached CD-ROM. Text that includes the comment is bracketed and labeled. For example, comment number 180 may be found by viewing the copy of letter 180, and looking for the text indicated by a bracket in the left-hand margin that is labeled "180-3".

6.3.1 Letter 9: Mr. Jim Wilson, Lost Coyotes Motorcycle Club

Response 9-1: Barstow Woolly Sunflower Conservation Area Routes (page 1). BLM authority to designate routes as open, closed or limited extends only to public lands. BLM has no jurisdiction over any other routes. Routes F2004, F2005, F2002 and F5002 serve as intra-regional connectors and cross the Barstow Wooly Sunflower Conservation Area. CDFG is currently acquiring lands in this area. Although CDFG has neither objected to nor commented specifically on these routes, CDFG retains its jurisdictional discretion to make a final decision as to whether they should be open or closed. The commentator is encouraged to contact CDFG directly regarding this matter.

Response 9-2: District 37 participation during plan implementation (page 2). Thank you for your interest in the implementation process. We encourage you to work closely with BLM's Ridgecrest and Barstow field offices to ensure that the route implementation team is aware of your concerns as implementation proceeds.

Response 9-3: Unlike dual sport rides, a challenging and competitive recreation experience is the underlying reason for participating in an enduro. A dual-sport ride, by contrast, offers the rider a chance to enjoy a non-competitive, touring experience. A competitive event is consistent with the CDCA Plan multiple use class I guidelines for recreation (applicable to open areas), which allow "recreation activities which generally involve high user densities … all aspects of competitive events will be permitted" (CDCA Plan, page 19). This use level is compatible with competitive events such as enduros. Most of the lands within DWMAs have been designated as multiple use class L, or are within designated critical habitat for the desert tortoise. In Class L lands, the CDCA Plan guidelines direct that the lands be "managed to provide for generally lower-intensity, carefully-controlled multiple use." Class L lands are "suitable for recreation which generally involves low to moderate user densities … non-competitive vehicle *touring*" (CDCA Plan, page 19, emphasis added). Dual sport rides are fully consistent with these guidelines. This is the reason for locating enduro events within off highway vehicle open areas, while allowing dual-sport rides elsewhere.

Response 9-4: The language referred to by the commentator is an accurate quote from the CDCA Plan. We have added additional explanatory language to the dual sport guidelines in Chapter 2 (prescription HCA-40).

Response 9-5: With the exception of those areas between Rose Valley and Olancha, the entire MGS conservation area is located within desert tortoise habitat. Therefore, restricting dual sports within the MGS conservation area to the September through February timeframe, as specified in the USFWS biological opinion, would also benefit tortoises that occur within the MGS conservation area but outside DWMAs.

6.3.2 Letter 10: Mr. Greg Herring, President, First Class Miners

Response 10-1: The two routes referred to by the commentator will be designated as limited access routes, with access provided to your organization only so that it can access the claims.

6.3.3 Letter 60: Mr. Dave Fisher, Shield F Ranch

Response 60-1: Comment 1. Only one overlapping ACEC is proposed for the Ord Mountain allotment area: the Mojave Monkeyflower ACEC (Daggett Ridge unit). Management prescriptions for this new ACEC were described in the Draft EIR/S at section 2.2.4.10.13, and in Appendix D, Section D.2.7. None of the prescriptions proposed for the Daggett Ridge unit would affect livestock grazing management of this area; rather, they guide the designation of off highway vehicle routes and the siting of future major utilities (such as powerlines and pipelines).

Response 60-2: Comment 2. The BLM's Barstow Field Office conducted a rangeland health assessment on the Ord Mountain Allotment in 1999. The implementation of the national fallback standards and guidelines has yet to be fulfilled. Under Alternative A, the national fallback standards and guidelines would be replaced by regional standard and guidelines (see Draft EIR/S section 2.2.5.1) and a re-assessment of the allotment applying the regional standard and guidelines would be scheduled for the near future.

Proposed regional guideline number 8 is intended to provide management flexibility to ensure that seed germination, seedling establishment and native grass species growth can occur even in those years when the weather creates "extraordinary conditions." The provision for "modifying grazing use" could include a temporary reduction in stocking rates, or the deferment of grazing in certain areas to allow for individual plant establishment and seed dissemination.

Response 60-3: Comment 3. Two areas near the Newberry Mountains have historical records of the Mojave monkeyflower: Kane Springs from 1906 and near the Azucar Mine from 1986. The monitoring program of the Plan (page 2-158) prescribes surveys of these areas to determine the current status of the Mojave monkeyflower in these areas. BLM would be able to establish to what extent this species is protected by Wilderness and what might be threats in these areas.

Adaptive management measures (Draft EIR/S pages 2-171 to 2-172) allow for changes in the Conservation Area boundary based on new findings from monitoring. Site-specific measures could also be employed without boundary changes. If protection to a population from cattle grazing is needed, small exclusionary fencing could be established. BLM would notify the commentator if any changes are proposed that may impact use of the grazing allotment.

Response 60-4: Comment 4. The sentence referred to by the commentator (Draft EIR/S page 106) has been deleted.

Response 60-5: Comment 5. The "reasonable and prudent measure" referred to by the commentator pertains to perennial allotments with long-term authorization and an established permitted use. The USFWS assumes that BLM issues each lessee or permittee an annual authorization at the beginning of each grazing year (March 1). If a determination is made that a lessee is not in full compliance with the terms and conditions of the biological opinion, then the BLM is obligated to enforce the terms and conditions pertaining to this requirement.

Response 60-6: Comment 6. Prescription LG-5 has been revised to provide a more flexible timeframe to obtain approval from BLM for cross-country travel to remove carcasses.

Response 60-7: Comment 7. If temporary non-renewable grazing were authorized on an allotment under the elevation provision, the authorization would contain stipulations. These stipulations would identify the number of cattle authorized under TNR to graze rangelands above 4,500 feet. They would not distinguish a "perennial" from a "TNR" cow. Locations authorized for TNR grazing would be identified by the stipulations, developed in a cooperative manner by BLM and the lessee.

Response 60-8: Comment 8. The statutory basis for the prescription referred to by the commentator (LG-13) is the federal endangered species act. This prescription is considered a protective measure under FESA that mitigates nutritional stress to the tortoise that may occur in low production years. This management action only applies to tortoise DWMAs where recovery of the tortoise is a critical land use objective.

The prescription would require 230 lbs/acre of ephemeral forage before perennially based grazing could occur relates to the nutritional needs of the desert tortoise. Avery (1998) concluded that production levels below this threshold (230 lbs/acre) resulted in competition occurring between cattle and tortoises for green ephemeral forage. Although cattle are authorized under a perennial grazing lease they will and do consume ephemeral forage if available.

The studies by Dr. Avery were conducted in the East Mojave on an allotment in the Ivanpah Valley. Although there are differences in climatic patterns between the east and west Mojave Desert these studies represent the only empirical data to date on cattle and desert tortoise foraging research. The DEIR/S proposed that similar research be conducted in the West Mojave.

Response 60-9: Comment 9. The requested change has been made.

Response 60-10: Comment 11. The management action referenced in the 9/27/02 preliminary draft was included in the Draft EIR/S in Appendix C at page 17. It was inadvertently omitted from Draft EIR/S Chapter 2. It has been restored to the Final EIR/S Chapter 2 text.

Response 60-11: Comment 13. The mitigation fee is a fee based on the value of land in the Habitat Conservation Area according to actual purchases that have taken place. This fee is based on a composite of land values, with the value of land in areas to be conserved receiving a higher weight in this weighted average calculation (see Appendix N).

The land values are discussed on pages 3-203 to 3-205, Sections 3.4.1.5.1 and 3.4.1.5.2 of the Draft EIR/S. The analysis contained in these sections reveals that the endangered species habitat within the planning area that is best suited for regional conservation is generally of low real estate value, because of the lack of roads, utilities, and other important amenities that increase the value of land for development. This fact is further substantiated on the bottom of page 3-204 of the Draft EIR/S, indicating that for the West Mojave overall, only about 15% of all private property is located within incorporated cities, yet this small proportion of the West Mojave Plan area accounts for 62% of the total assessed value. As described on page 2-32 of the Draft EIR/S, development of land within the DWMAs must be compensated at a ratio of 5:1.

The commentator questions whether a property owner holding land within a DWMA would have sufficient incentive based on the mitigation fee to protect land for future purchase for conservation purposes. It would very speculative for the preparers of the EIR/S to try to answer this question. Property owners are motivated to sell or retain land for many reasons. The West Mojave Plan is based on the premise that private property would only be purchased from willing sellers. It is anticipated that conventional purchase procedures would be used and rely on standard appraisal methods to value the property. Development of private property within a DWMA would be subject to the normal land development review procedures of local government. Any approved development would be subject to compensate for the loss of habitat at the ration of 5:1, as described above, resulting in mitigation of five times the $770 per acre mitigation fee, or $3850 for every acre disturbed.

Acquisition of isolated private in-holdings within the DWMAs will be a high priority, but mitigation fees and other funding used to implement the Plan would be allocated to fund a broad variety of actions including, but not limited to, land acquisition (see the Implementation Tasks table in Appendix C). Administration of the Plan will be managed in a joint agency manner (see Section 2.2.2.1, Administrative Structure) with an annual, and likely a multi-year, program that will be based on a budget and implementation activities approved by the governing authority. Priorities for funding various implementing activities will be developed jointly with input from a Stakeholders and Scientific Advisory Committees.

Response 60-12: Comment 14. The commentator correctly states that the Ord-Rodman DWMA "…does not seem to be targeted for tortoise translocation or 'headstarting'." This does not mean that the DWMA currently functions at carrying capacity. Carrying capacity is not known for the Ord-Rodman DWMA or for any other particular region (see the discussion of "Carrying Capacity" in the DEIR/S on pp. 3-92 & 3-93).

The commentator stated that tortoises within the Ord-Rodman DWMA are "apparently isolated from other proposed DWMA's [sic] with diseased tortoises," implying that there are no ill animals in the Ord DWMA. Unfortunately, this is not the case. The following information, provided in the Draft EIR/S, indicates that some diseased tortoises have been observed in the

Ord-Rodman DWMA. (1) A 5 mi^2 newer tortoise die-off region that may be due to movement of diseased tortoises from north to south into the DWMA (p. 3-115). (2) Location of two diseased tortoises (one with URTD and one with cutaneous dyskeratosis) in the DWMA (p. 3-115 and 3-116). (3) The 2001 discovery of a new species of mycoplasma (i.e., *Mycoplasma cheloniae*) in the southern part of the DWMA (p. 3-107).

Response 60-13: Comment 15. The commentator provided a quote from the Draft that included the following wording, "…removing cattle from grazing allotments might not be sufficient to support new growth of these essential plants" (see p. 3-73 for full quote). Mr. Fisher then asked the following question: "…does removal of cattle constitute real mitigation?"

The answer is yes. The quote in the Draft EIR/S refers to a paper by Dr. Olav Oftedahl, and then only to the effects of long-term cattle grazing on the residual annual plant seed bank. Even if Dr. Oftedahl is correct in assuming the seed bank has been lost, removing cattle could still contribute to tortoise conservation for the following reasons: (1) Minimize competition between cattle and tortoises for the plants that are presently available. (2) Minimize potential for trampling tortoises and their burrows. (3) Minimize degradation and loss of perennial grasses and shrubs, which are important to tortoise burrowing, thermoregulation, and escaping predators. (4) Minimize impacts to adjacent areas that are inside the DWMA but outside the Ord allotment. These and other measures given in the Draft EIR/S are considered real mitigation even if the seed bank is irretrievably damaged.

Response 60-14: Comment 16. The commentator wrote, "If five regions in the Ord-Rodman DWMA 'support above-average occurrences of tortoise sign…'… what seems to be the problem with continued grazing on the allotment under current AUMs and management?"

Available tortoise sign count surveys represent a "snap shot in time," and generally tell us little about population *trends* (see p. 3-92). Therefore, although there are five regions where tortoises are relatively common, we lack historical data to demonstrate that the population is declining, increasing, or remaining stable in those five regions and elsewhere in the DWMA. Additionally, most of the tortoise concentration areas were outside the grazing allotment, where there is some cattle trespass but little concentrated grazing.

Response 60-15: Comments 17, 18 & 19. The commentator provides two quotes from the Draft EIR/S relative to small declines on BLM study plots in the Ord-Rodman DWMA and a third quote relative to the 4,000 and 4,500-foot contour intervals. These are given as examples of disconnects in the relationships between impacts and mitigation measures.

The two BLM study plots in question (Stoddard Valley and Lucerne Valley) where small declines have been observed are not inside the Ord Mountain Allotment. The Stoddard plot is four to five miles west of the fenced western boundary of the allotment, and the Lucerne plot is two to three miles south of the unfenced southern allotment boundary. Except for some light grazing by cattle that have wandered off the allotment, these two study plots are ungrazed. Therefore, the small tortoise declines on these study plots are not necessarily evidence, one way or the other, of the effect of cattle grazing on tortoises. It is unclear from the comment as to how the 4,000 and 4,500-foot contour intervals represent "disconnects in the logic."

Comment 60-16: Comment 20. Following comments on the relationship between non-native annuals and wildfire, the commentator asked, "…wouldn't certain types of grazing help solve this problem better than mechanical or chemical measure?" In other words, can cattle grazing be used as a means of minimizing the incidence of wildfires?

First, there is no indication that non-native annual vegetation would increase in the absence of cattle, or similarly, that cattle are capable of reducing non-native annual forage to the level that does not support fire. Rather, cattle have been implicated as one means by which non-native annuals have proliferated in the Mojave Desert. There are also no data to support the assumption that removal of cattle will necessarily result in higher incidence of wildfire. Sheep grazing was eliminated from most of the proposed DWMAs in the early 1990's; on public lands, cattle have grazed only designated allotments for an even longer period. Yet, there is to date no evidence that wildfires are more common in these retired allotment areas than in areas that continued to be grazed. There is no indication that cattle grazing can function as a means of minimizing the incidence of wildfires in the federally listed range of the desert tortoise.

Response 60-17: Comment 21. A Stoddard to Johnson Valley Connector Route will replace the Stoddard to Johnson Valley Competitive Event Corridor. Competitive events will no longer be allowed to use this route. A description of the function and purpose of a connector route has been added to Section 2.2.6.5.

Response 60-18: Comment 22. Should the Mohave ground squirrel be found in the Ord Mountain Allotment area, there could be additional measures applied to grazing within that allotment. These might include, for example, new utilization levels applied to cattle consumption of winterfat and spiny hopsage. Any additional measures would require an amendment of the BLM's CDCA plan through a formal public process and NEPA document.

Response 60-19: Comment 23. We recognize that bighorn sheep utilize the Ord Mountains (noted on Draft EIR/S page 3-168), and BLM has verified sightings from several sources. No threats from cattle grazing are described in the Draft EIR/S. The species account discusses use of water sources by bighorn and cattle, noting that in most cases the animals occupy different terrain. We do not know what would happen to the water sources if the commentator were no longer present. The BLM would remain the land steward of public lands in the Ord Mountain area.

Response 60-20: Comment 24. Comment noted.

Response 60-21: Comment 25. With regards to the Ord Mountain Allotment, there would be no foreseeable management conflicts between the newly established Ord-Rodman DWMA and tortoise critical habitat. All portions of the Ord Mountain Allotment that occur on 1994-designated critical habitat are proposed for DWMA status. As such, there should be no "residual critical habitat" outside the DWMA and within the allotment.

Response 60-22: Comment 27 & 28. For reasons given in the Draft EIR/S (p. 4-30 & 4-31) the analysis showed that the *exclusion area* concept would have both benefits and risks. If the program is appropriately implemented and its effectiveness rigorously monitored and studied,

the approach could be fine tuned or dropped if proven ineffective. In this manner, BLM would commit itself to determining as quickly as possible if this approach is working as intended or not. A component of this would be an Avery-like study (prescription LG-19), which the Draft EIR/S indicated was important to determining the likely effectiveness of the 230-pound threshold for ephemeral forage production. In any event, BLM's staff is of the opinion that the Ord Mountain Allotment rarely has production years that would be low enough to trigger cattle exclusion and other measures implemented when the 230-pound threshold is met. The "Avery" study would be performed on those portions of the Ord Mountain Allotment where competition is most likely to occur in lieu of implementing the ephemeral forage threshold. During the course of the multi-year study, applicable BLM staff would meet with the lessee to determine if exclusion areas are to be used, and/or other identified measures implemented to minimize competition between tortoises and cattle.

Response 60-23: Comment 29 & 30. Comment noted.

Response 60-24: Comment 31. The statement on page 4-100 of the Draft EIR/S regarding the exclusion areas has been corrected in the Final EIR/S.

Response 60-25: Comment 33. Grazing lessees and permittees are long time, traditional users of the public land. If another use of the public land were proposed that could conflict with grazing operations, BLM is obligated to consult, coordinate and cooperate with the operator prior to the authorization of any conflicting use and afforded any appeal rights allowed under the regulations. Therefore, it is not necessary for the West Mojave Plan to include any additional or new consultation guidelines.

Response 60-26: Comment 34. A full analysis of the legal distinction between "public" and "federal" lands is beyond the scope of this NEPA and CEQA analysis. West Mojave Plan prescriptions, however, are within the scope of actions that could be implemented pursuant to the Federal Land Policy and Management Act, and are consistent with the type of decisions currently applicable to the western Mojave Desert under the BLM's California Desert Conservation Area Plan. They have been reviewed to ensure that they do not exceed BLM's statutory and regulatory mandates.

6.3.4 Letter 61: City of Lancaster

Response 61-1: Comment 1. The boundaries of the Alkali Mariposa Lily Conservation Area have been revised to include lands along the southern boundary of Edwards Air Force Base and to include the remaining natural drainage course of Amargosa Creek. The interim conservation areas have been deleted to provide certainty to the local jurisdictions. The new proposed boundary is illustrated on a new map, Map 2-12a.

Response 61-2: Comment 2. Hoover's woolly-star was delisted by USFWS on October 7, 2003. The revised Conservation Area boundary for alkali mariposa lily includes at least three known locations for Hoover's woolly-star and thousands of acres of suitable habitat, which is in generally the same places as that of alkali mariposa lily.

6.3.5 Letter 65: County of San Bernardino, Department of Public Works

Response 65-1: Barstow Landfill. The Ord-Rodman DWMA was not intended to include the Barstow landfill. The text and mapped boundary have been clarified to indicate that this is the case.

6.3.6 Letter 126: Kern County Wool Growers Association

Response 126-1: Monitoring (page 1). Monitoring of the covered species will be more intense and directed than monitoring of the species addressed by the Plan but not covered by incidental take permits. Fifty-nine species were proposed as covered species. In response to comments on the Draft EIR/S, several species have been dropped. Others may be dropped after review of the permit issuance criteria by the Wildlife Agencies.

Species monitoring varies and includes both evaluations of habitat and population counts. We have revised the monitoring protocol for several species. The revised goals, objectives, monitoring and adaptive management proposals are presented in Table 2-26.

Response 126-2: Voluntary relinquishment (page 2). The voluntary relinquishment discussion has been revised to incorporate the steps necessary to comply with BLM's grazing regulations, including separate planning and grazing decisions, as well as protest and appeal rights.

Response 126-3: Prescription LG-20 (page 2). The plant species identified in Table 2-18 have been determined, through research, as important browse species for Mohave ground squirrel (MGS). Sheep often utilize these same species, if available when ephemeral forage dries out. To ensure that most of the current years' growth is available for MGS, sheep would be removed from the area if utilization levels listed in Table 2-19 are reached. The utilization of these shrubs would be measured by BLM in cooperation with the lessee. Several methods can be used to measure the utilization levels on individual plants. The Cole Browse Method, or the Extensive Browse Method are commonly used to determine utilization on shrub species.

Response 126-4: Consultation with sheep grazers (page 2). The biological goal of the West Mojave Plan is to conserve sensitive species, including MGS and the desert tortoise. Desert uses, such as sheep grazing, would be limited only to the degree necessary to meet that goal. Where no conflicts exist, no additional measures would be necessary. Although sheep grazing would not be permitted within most of the desert tortoise DWMAs, sheep grazing could occur within the MGS conservation areas, subject to the conditions set forth in the West Mojave Plan. Sheep grazers have been consulted during the development of this process, and will continue to be consulted prior to the issuance of the BLM's record of decision.

Response 126-5: MGS Conservation Area (page 3). It is the responsibility of the West Mojave Plan and the Draft EIR/S to determine how the Mohave ground squirrel may be conserved given its current State of California status as threatened. It is outside the scope of the plan to determine whether the MGS is endangered or not. The West Mojave planning team obtained and analyzed the best scientific information available including, when available, data

that are empirical, field tested, and peer reviewed. Many empirical data exist as a result of the studies of Dr. Phil Leitner, Barbara Leitner, Dr. Anthony Recht, Dr. Anthony Krzysik, Dr. Matthew Brooks, and others. Results of these studies were used throughout the Draft EIR/S, and in many cases, the researchers were contacted for additional information. For the most part these are not peer-reviewed journal articles; they are mostly consultant's reports, and in one case, a Ph.D. thesis.

The applicability of research conducted by Dr. Phil Leitner in the Coso Region of the West Mojave to the remainder of the West Mojave is somewhat limited, as is more completely described in the Draft Evaluation Report for Mohave Ground Squirrel distributed by the BLM in September 2000. Evaluators found that dissimilar habitat type, significant latitudinal differences, and the location of Dr. Leitner's studies in the northern extreme of the range all detract from direct application of Coso results to the remainder of the range.

Dr. Letiner's studies are, however, the most long-termed studies performed on the Mohave ground squirrel to date. Having started in the late 1980's as a form of mitigation for impacts associated with a geothermal facility in the Coso Range, the Leitner's studies were more or less continuous until 2000. Even through 2002 there have been some reference-type studies performed on the Leitner's Coso plots. As reported in the 2000 Draft Biological Evaluation, other studies have not exceeded more than five or six consecutive years. Both short-term and long-term studies were reviewed for the Draft EIR/S.

Response 126-6: MGS range, population trends and threats (page 3). As urged by the commentator, the Draft EIR/S provided the best available information on the known and historic ranges of the species (p. 3-141 & 3-142); the most recent population estimates and trends (p. 3-143); and threats to the species (p. 3-154 thru 3-164).

6.3.7 Letter 127: Sierra Club, Mojave Group

Response 127-1: Mojave River (page 1). Neither BLM nor the local governments have authority to regulate groundwater use in the Mojave Basin. The Mojave River adjudication placed restrictions on water use, including a rampdown of use and the free production allowance of those with water rights. Part of the adjudication was preparation of a habitat enhancement plan by CDFG that is directed towards maintaining and improving the riparian habitat.

The West Mojave Plan would direct mitigation fees towards removal of invasive riparian plant species in the Mojave River, which will save water and improve habitat for the ten covered species in this area.

Response 127-2: Recreation (pages 1 & 2). Prescription DT-10 limits the shooting of guns to minimize conflicts and resource impacts, and emphasizes the need to comply with State and local laws. Within tortoise DWMAs, this measure further limits firearms discharges to the pursuit of game during hunting season, and target practice using retrievable targets only. Commentators are encouraged to report injuries and abuses of firearms laws to local law enforcement.

Response 127-3: Authorized Take (page 3). Surveys for burrowing owls would take place on all parcels where tortoise clearance surveys are conducted. The educational brochure provided to development interests would most likely result in specific surveys of development sites. Information provided by the public on burrowing owl locations will be utilized to track loss of habitat in urbanizing areas and to protect burrowing owls in these areas by avoidance and minimization measures. Surveys would be required in the DWMAs. The monitoring program includes surveys in the Antelope Valley and along the Mojave River. Additional reconnaissance surveys of native grassland habitat on public lands will be conducted.

6.3.8 Letter 128: Mr. Billy Mitchell

Response 128-1: Prescription LG-1 (page 1). The utilization of native forage species is one of several attributes monitored to evaluate the impacts of livestock on native plant communities. Lowering the utilization levels on key forage species is one of a number of management actions intended to maintain the health of those populations. Although this proposed action might negatively affect some grazing operations in the short term, healthy rangelands benefit both livestock and wildlife in the long term.

Response 128-2: Prescription LG-3 (page 1). See Response 60-26.

Response 128-3: Ten year permits (page 1). Comment noted.

Response 128-4: Prescription LG-5 (page 2). This prescription has been revised to provide a more flexible timeframe to obtain approval from BLM for cross-country travel to remove carcasses.

Response 128-5: Prescription LG-9 (pages 2 & 3). The timeframe has been revised in the Final EIR/S. The health assessments are now to be completed within three years of approval of the West Mojave Plan (expected in mid-2004). The assessments of rangeland health are a key component in determining future range management strategies by allotment. Due to their importance, the health assessments process needs ample time for final determinations; however, their importance demands a firm commitment to a completion date.

Response 128-6: Prescription LG-10 (page 3). The West Mojave Plan includes a provision that allows a grazing permittee or licensee to voluntarily relinquish its grazing preference (see Draft EIR/S, page 123, prescription LG-29). We agree with the commentator that this is properly referred to as a relinquishment provision, rather than a retirement mechanism. This provision amends a land use plan. It does not amend a federal statute (such as the Taylor Grazing Act or FLPMA). Nothing precludes the possibility that at some time in the future, in however unlikely a scenario, the CDCA plan could be amended again to allow livestock grazing to resume in these areas (subject to compliance with other applicable federal statutes and regulations, including FESA). An "irreversible" decision simply cannot be made through the BLM's land use planning process.

6.3.9 Letter 129: Ms. Jenny Wilder

Response 129-1: Economic stimulus (page 3). The commentator stresses the importance of encouraging infill development of disturbed desert lands within the Victor Valley and Palmdale-Lancaster areas, rather than simply providing an economic stimulus to growth. The West Mojave Plan's three-tiered mitigation fee structure sets the lowest fees (the 0.5:1 zone) for disturbed habitat areas, primarily infill sites within cities. This should encourage development of these areas. In fact, under the West Mojave Plan, approximately 88 percent of all new growth is expected to occur within these locales (see Draft EIR/S page 4-87).

Response 129-2: Groundwater criterion (pages 1 & 2). BLM does not have any authority over the Mojave Basin adjudication. This authority rests with the designated Watermaster, the Mojave Water Agency.

Response 129-3: Acreage valuation (page 2). The methodology by which the average value of land within the Habitat Conservation Area was determined is described in the DEIR/S at section 3.4.1.5.2, on page 3-205. It is anticipated that procedures for making any necessary adjustments of that value will be specified in the Implementing Agreement.

Response 129-4: Route designation (page 5). The BLM's CDCA Plan does not forbid routes less than 4 feet in width. The CDCA Plan defines an existing route as one "with a minimum width of two feet, showing significant surface evidence of prior vehicle use or, for washes, history of prior use" (amended CDCA Plan at page 77).

Response 129-5: Hiking and equestrian trailheads (page 5). During the fall 2003 field surveys of the Juniper subregion, BLM identified the location of trailheads and staging areas throughout the area. When BLM redesigned the Juniper motorized vehicle access network in late fall 2003, applying the decision tree methodology, it carefully considered the best means of providing motorized access to trailheads and staging areas. We are confident that open vehicle routes can access all major trailheads. We encourage the commentator to work closely with the BLM Barstow Field Office during the implementation of the Juniper network to ensure that adequate access to trailheads is maintained.

6.3.10 Letter 134: Quail Unlimited, Chapter 457

Response 134-1: Road closures (pages 2 & 3). Each route was evaluated in the context of several statutes and their guidelines. A decision tree approach was applied that considered both a route's its individual characteristics as well as how it interfaced collectively or cumulatively with the surrounding network of routes. The characteristics evaluated by this Route Designation Decision Tree generally fell into one of five categories. The fourth category included an evaluation of "the special qualities of a route, including safety concerns, recreational qualities and user conflicts" (see Draft EIR/S, page 2-138). It was at this stage of the process that the concerns raised by the commentators concerning recreational destinations "such as a scenic area, a recreational area, a hunting area, or a guzzler or spring" were evaluated. Access to a spring or guzzler is also encompassed by the first category, "legal easements and rights-of-way" in the context of administrative access needs and by the third category, "other

environmental issues". Best available information was applied to this evaluation of routes including how routes are being used, their condition, where they go, what uses they serve and various other attributes.

No predetermined percentage of routes that should be closed or remain open has been or will be used. Each route was independently evaluated without regard to quotas or percentages.

Response 134-2: ACECs (page 3). New ACECs are designated to protect a natural or cultural resource. Only those measures that are necessary to safeguard that resource are included in the ACEC management plan. These could include route closures, but only if such closure would contribute to the BLM's ability to conserve the resource for which the ACEC was established. While it is true that a road may already impact an area, the ground disturbance caused by this impact can be restored. The West Mojave Plan includes a program to rehabilitate closed routes and thereby eliminate the existing impact (see Draft EIR/S at pages 2-144 to 147).

Response 134-3: Guzzlers (page 3). Routes serving springs and guzzlers afford both recreational opportunities and provide administrative access that can ease the means by which those water sources can be maintained for wildlife. In some cases, however, motorized vehicle access to springs and guzzlers could lead to environmental impacts to the water source, and may also impact the wildlife the spring or guzzler it serves. Where such conflicts exist, routes serving these facilities were typically opened for use on a limited basis, such as administrative access to maintain the spring or guzzler. The maintenance of guzzlers or springs by designated members of Quail Unlimited in accordance with the agreements established with CDFG would not be restricted by a "limited" access designation; in fact, a limited designation would be made specifically to allow such activities to continue.

Response 134-4: Wilderness (pages 3 & 4). The commentator referred to Mohave ground squirrel protection in wilderness areas (Black Mountain, Owens Peak, Golden Valley, and Bright Star), Death Valley National Park, Red Rock Canyon State Park, and China Lakes Naval Air Weapons Station. In addition to the other areas listed, Edwards Air Force Base management also benefits the MGS, as do eight wilderness areas not listed, several State Parks (such as Saddleback Butte), and the fenced Desert Tortoise Research Natural Area. The Bright Star Wilderness Area and Death Valley National Park are outside the known range of the squirrel. Comprehensive information is summarized on pages 3-164 and 3-165 in volume 1 of the Draft EIR/S and in Appendix M in volume 2 of the Draft EIR/S (esp. Table M-4 on wilderness).

For the most part, these current protection areas are situated in the northern and western parts of the species' range and in the southern portion of the range on Edwards AFB and at Saddleback Butte. Wilderness and military bases do not protect those areas to the east and southeast that are at the leading edge of urbanization and expansion of desert cities such as Barstow and those in the Victor Valley. The eastern boundary of the Mohave ground squirrel's range is in direct contact with the western boundary of the round-tailed ground squirrel range. Since neither wilderness nor military protection applies to these areas, the main land base would occur on non-wilderness, public lands managed by the BLM. Conservation would be applied on

public lands managed by the BLM, and facilitated by local government ordinances, land use planning, and participation in implementing the Plan.

There are limits to the conservation values provided for the Mohave ground squirrel in wilderness areas and particularly on military installations. As with tortoises (see Table 3-28 on page 3-135), not all portions of wilderness areas are ideally suited for the Mohave ground squirrel. Given slope, elevation, location, and other characteristics, the Grass Valley and Golden Valley wilderness areas are likely to provide relatively more conservation value than most other wilderness areas. The Darwin Falls, El Paso Mountains, Argus Range, and Owens Peak wilderness areas, in contrast, are comprised of rocky slopes that are not ideal for resident animals, although they may still be important to dispersing, young squirrels. As reported in the Draft EIR/S at Table M-4, 352 mi^2 within seven wilderness areas are outside the known range, and therefore offer no conservation value to Mohave ground squirrels.

Current management at Edwards Air Force Base, China Lake Naval Air Weapons Station, and Goldstone Deep Space Communications Complex benefits both desert tortoise and Mohave ground squirrel conservation. Environmental managers at the installations have indicated that conservation is interrelated with the current missions on the bases, which may change, and that existing regulations do not allow for mitigation on installations to offset impacts occurring off base. Additionally the Mohave ground squirrel is not federally listed, and therefore has less regulatory protection than the tortoise, for example, which *is* federally listed. Therefore, there are inherent weaknesses associated with squirrel conservation on the installations.

The Proposed Action is intended, in part, to provide for Mohave ground squirrel conservation outside wilderness areas and military installations where development of private lands and multiple uses on public lands managed by the BLM are most likely to occur. As currently occupied and historically occupied habitats are irretrievably converted to urban development, the BLM and counties would provide for protections in portions of the Mohave Ground Squirrel Conservation Area not included in wilderness or on installations. As such, conservation responsibilities are shared among both private and federal jurisdictions, and not just BLM management in wilderness and military management in habitat protection areas.

Response 134-5: Mohave ground squirrel (page 5). We concur with the comments that a scientific approach is needed, and that a baseline population for the Mohave ground squirrel has not been established. Scientists may never be able to estimate baseline population numbers or carrying capacities for this species in a given region. Unlike the long-lived tortoise, the squirrel is relatively short-lived, and has a reproductive strategy closely dependent on the timing and amount of rainfall (tortoises generally lay at least one clutch per year, including periods of drought). These and other life history characteristics do not lend themselves to identifying milestones, such as a targeted population density. A persisting population is more likely to be indicative of successful, long-term conservation rather than the number of animals trapped in a given year. As such, the conservation strategy focuses on protecting suitable habitats and continuing scientific studies to ascertain the best management for the species. We do not concur that the Plan fails to take a scientific approach to Mohave ground squirrel conservation. Scientific studies, monitoring, and adaptive management are all parts of the Plan that support the conclusion that a scientific approach *is* being used for this species.

The greatest enemy affecting the Mohave ground squirrel is not the lack of rainfall. In fact, the Leitner's research at the Coso Range reveals that the squirrel has a reproductive strategy that minimizes the impact of drought on the population by foregoing reproduction in dry years when young squirrels are not likely to survive. Instead, existing adult squirrels facilitate their own survival by building up energetic fat reserves that will enable them to survive dry periods and reproduce in subsequent seasons when climatic variables are more favorable. Guzzlers are not part of the answer, as suggested. It is not the rainfall, itself, that is important to squirrel survival from year to year; rather, it is the annual plant growth following the rain that is important to reproducing squirrels. As such, supplemental water (i.e., providing guzzlers) would not result in increased squirrel forage.

The failure of Quail Unlimited members to see Mohave ground squirrels in areas where roads have been identified for closure attests more to the difficulty of seeing the species than an argument for why roads should or should not be closed. Mohave ground squirrels are difficult to detect due to their secretive nature, camouflage coloring, short period of aboveground activity, and annual population fluctuations. Whether road closures function or not to minimize impacts to habitat, difficulties will persist with censusing the population to determine the efficacy of this and other management actions. It may be that long-term persistence of the population is the best (if not only) means of judging the ultimate success of the conservation strategy.

Response 134-6: Antelope Valley ground squirrel (page 6). There are differences in the life histories of the Mohave ground squirrel and the white-tailed antelope squirrel that help to answer the commentator's question, "Why is the Antelope Valley Ground Squirrel having no difficulty surviving in areas with vehicular access?" Most of the following information is taken from Zeiner et al. 1990. Mohave ground squirrels may remain in hibernation eight months out of the year, whereas antelope squirrels are active throughout the year. It appears that antelope squirrels have a higher metabolic rate, which either requires them to forage year round or precludes them from entering hibernation, or both. There is no indication that antelope squirrels forego reproduction in dry years. They may have multiple litters in a given year, whereas Mohave ground squirrels typically have only one litter per season. Antelope squirrels have an average of nine young per litter, compared to six Mohave ground squirrels per litter. It is suspected that antelope squirrels are more carnivorous than Mohave ground squirrels, and documented that arthropods make up 30 to 35% of their diet in the autumn. This reliance on arthropods would allow antelope squirrels to reproduce and persist during dry years when annual plants are unavailable and limit both reproduction and survivability of Mohave ground squirrels. Though no data exist, it is plausible that the slow-moving Mohave ground squirrel is more susceptible to being crushed by vehicles than are the fast-moving antelope squirrels.

In addition, it is not necessarily correct to conclude that antelope ground squirrels are "…having no difficulty surviving in areas with vehicular access." It is well documented that antelope squirrels are invariably caught during Mohave ground squirrel trapping efforts, which does not necessarily signify increasing or stable antelope squirrel populations. It may indicate, for example, that antelope squirrels are more easily captured than Mohave ground squirrels. They are also relatively more visible with their white, flashing tail, quick movements, and yearlong activity period, compared to the Mohave ground squirrel, which tends to move slowly or remain motionless to avoid detection.

In the West Mojave, antelope squirrels no longer occur in heavily urbanized areas, active agricultural fields, and places where the vegetation has been mechanically removed. Such impacts, and an active rodenticide program implemented in the Antelope Valley, have resulted in localized areas where both Mohave ground squirrels and antelope squirrels have been extirpated. It is typical for the California ground squirrels to colonize such areas. The appearance, habits, and geographic proximity of the San Joaquin antelope squirrel (*Ammospermophilus nelsoni*) in the southern San Joaquin Valley suggest a common ancestor for that squirrel and the white-tailed antelope squirrel (*Ammospermophilus leucurus*). It is likely that populations of the common ancestor became geographically isolated and ultimately evolved to become separate species. The San Joaquin antelope squirrel is State listed as threatened. Loss of habitat to cultivation and the effects of rodenticides have been implicated as major causes for population decline (Zeiner et al. 1990).

6.3.11 Letter 155: Mr. Lee Turrini

Response 155-1: Tortoise decline data (point 7). The West Mojave Plan relies on the best available scientific information, including both published and unpublished information. Available scientific information generally includes both peer-reviewed journal articles (i.e., *published* literature) and non-peer-reviewed materials, often referred to as "gray literature" (i.e., *unpublished* literature). A critical difference between the two types of information is that published literature is peer-reviewed and there is the potential for the article to be rejected or substantially modified with input from a scientific review team. Unpublished literature often lacks meaningful peer review, and there may be no opportunity for poor quality information to be rejected.

The recently formed Desert Tortoise Recovery Plan Assessment Committee (DTRPAC) summarized about 1,400 documents in their possession. They concluded that there has been a decrease in gray literature and an increase in published literature since the publication of the recovery plan in 1994. The Draft EIR/S includes 176 specific references that include both published and unpublished literature. It is noteworthy that 95% of the available tortoise trend data were collected prior to 1994. Most of the trend data for tortoise populations were collected between the mid-1970's and early 1990's by Dr. Kristin Berry when she worked for the BLM and USGS. She has regularly summarized trend plot information in memoranda and other government documents that remain unpublished. It is wrong to asume that all unpublished data were poorly collected and therefore useless, or conversely, that all published information is somehow more accurate and therefore more useful.

6.3.12 Letter 165: Ms. Carol Wiley

Response 165-1: Round Mountain grazing allotment (page 4). The Round Mountain Allotment is already limited to winter grazing by the lease that authorizes grazing use. The season of use is December 1 through March 31. The West Mojave Plan does not propose to extend grazing use beyond the authorized season.

During the winter months all native grasses and most shrubs are dormant. The high density of fiddleneck on the allotment is a result of the Willow Fire and the subsequent bare open

ground available for seed germination. There is adequate perennial ground cover to protect against accelerated erosion. There is little ephemeral forage in winter. Riparian vegetation is also dormant during the winter and, because the weather is cold and wet, there is very little concentration of cattle in the riparian areas.

6.3.13 Letter 170: Mr. Jeff Leonard

Response 170-1: York Rock rake (page 5). The York Rock rake typically will not be used to maintain existing routes. Its purpose is to assist the rehabilitation of closed routes. Challenging routes would not be degraded.

6.3.14 Letter 172: U. S. Borax, Inc.

Response 172-1: North Edwards Conservation Area. Based on the information that you provided, we have removed the lands in Sections 29 and 30 from the North Edwards Conservation Area.

6.3.15 Letter 173: Ms. Cathey Smith, Harper Lake Allotment

Response 173-1: Prescription LG-1. The proposed changes in utilization thresholds are based on both range condition and season of use. If an allotment were in good range condition, a 40% utilization threshold would apply for most range types. If an allotment is in desert tortoise habitat this utilization cap is the same maximum utilization threshold presently required under the current biological opinion; no change is proposed.

Only those allotments in poor to fair range condition would be affected. Lowered utilization thresholds for those allotments may affect livestock operations, but changes to range management certainly are needed to improve rangeland health in such cases.

Response 173-2: Biological opinion. This term and condition is contained in the biological opinion issued on June 17, 2002 (1-8-01-F16). This prescription may greatly affect any given grazing operation where rangeland health standards are not being achieved. USFWS has concluded, however, that when health standards are not being met this protective measure is necessary for the improvement of tortoise habitat.

Response 173-3: Prescription LG-5. This prescription has been revised to provide a more flexible timeframe to obtain approval from BLM for cross-country travel to remove carcasses.

Response 173-4: Prescription LG-6. The 230 pounds per acre annual forage production figure was derived from research completed by Dr. Hal Avery in the early 1990's on a cattle allotment in the Ivanpah Valley, in the East Mojave Desert. Dr. Avery found that there was competition for limited annual forage between cattle and tortoises during particularly dry years when as little as 230 pounds annual forage was available. He found that there was sufficient forage for both cattle and tortoises to avoid competition when the annual production was

determined to be 700+ pounds per acre. As such, the actual threshold for that particular cattle allotment was somewhere between 230 and 700+ pounds per acre.

BLM would conduct production studies when dry spring conditions warrant such studies and make a determination that the threshold had or had not been met in cooperation with the lessee.

Response 173-5: Prescription LG-7. All cattleguards authorized through a cooperative agreement would be modified by BLM. Necessary modifications of any cattleguards authorized under a Range Improvement Permit (Section 4) would be the responsibility of the lessee.

Response 173-6: Prescription LG-10. The primary objective of the tortoise DWMAs is the conservation and recovery of the desert tortoise. Tortoises consume ephemeral forage, and it has been the practice not to issue formal authorizations for ephemeral forage in tortoise critical habitat. This policy is consistent with USFWS biological opinions issued for the California Desert Conservation Area over the past decade.

Response 173-7: Prescription LG-13. The proposed prescription (LG-13) that would require 230 lbs/acre of **ephemeral** forage before perennially based grazing could occur is based upon the nutritional needs of the desert tortoise. Avery (1998) concluded that production levels below this threshold (230 lbs/acre) resulted in competition occurring between cattle and tortoises for green ephemeral forage. Although cattle are authorized under a perennial grazing lease they will and do consume ephemeral forage if available.

BLM staff would determine production using standard methodologies. Production would be measured periodically throughout the spring, during the early season, in mid-season and finally in late season.

The West Mojave Plan does not propose to eliminate ephemeral/perennial permits. The plan does propose that there be no ephemeral authorizations within tortoise DWMAs (see prescription LG-10).

BLM sought to meet with lessees and permittees during the development of the West Mojave Plan. All were provided with copies of the Draft EIR/S and the Final EIR/S. In addition, we would be more than willing to meet with you prior to the final decision, and will contact you again before any such decision is made.

Response 173-8: Prescription LG-18. Prescription LG-18's timeframe has been revised in the Final EIR/S. The assessments of rangeland health are a key component in determining future range management strategies by allotment. Due to their importance, the health assessments process needs ample time for final determinations; however, their importance demands a firm commitment to a completion date.

Response 173-9: Comment 2-118 Map 2-13. The Harper Lake Allotment is not entirely within a DWMA as stated. A northern and a southern portion of the allotment are within the proposed Superior-Cronese DWMA, but the central portion of the allotment is not. The exclusion area depicted on Map 2-13 (p. 2-118) corresponds to the northern portion that is within

the proposed DWMA. The intent of the exclusion area, in part, is to identify areas where cattle grazing would be suspended when the 230 pounds threshold was not met to prevent competition between cattle and tortoises. As such, the north part of the allotment was designated as an exclusion area because it is within the proposed DWMA, and comprises an important region in which to minimize competition for limited forage in dry years.

There are no data available to support the assertion that the northern exclusion area is "…capable of containing both cattle and other wildlife without incurring harm to the plant or animal health." In the absence of such data, the 230 pounds threshold would be applied as the means of preventing forage competition. As such, if there were not 230 pounds of ephemeral forage available within the exclusion area in a given spring, cattle would be removed from the exclusion area. They would be placed south of a new exclusion area fence until the 230 pounds threshold was attained.

For reasons given in the Draft EIR/S (p. 4-30 & 4-31) the analysis showed that the *exclusion area* concept would have both benefits and risks. The Draft EIR/S notes that establishment of exclusion areas could result in the concentration of cattle in other "suitable habitats." This could include the one-mile wide strip of the Superior-Cronese DWMA found in the southern portion of the Harper Lake Allotment, an important connector between habitats east and west of the allotment. If the program is appropriately implemented (including fencing, where warranted) and its effectiveness rigorously monitored and studied, the approach could be fine tuned or dropped if proven ineffective. In this manner, BLM would commit itself to determining as quickly as possible if this approach is working as intended or not.

Response 173-10: Comment 4-29 & 4-30 Table 4-20. The competition threshold between tortoises and cattle was based on the studies of Dr. Hal Avery in the early 1990's in the East Mojave; see Response 173-4 (above).

There is no clear means to compare the impacts of herding cattle to exclusion areas with impacts that would occur if cattle were left to graze the allotment. Herding would take several days or more and result in concentrating impacts along the driveline. Alternatively cattle would be left in place to graze for many weeks or months, and there would continue to be adverse impacts to habitat and tortoises at focal points, such as corrals, water sources, and feeding areas. Given relative distributions, intensities of impacts, and time frames, it is suspected that more habitat would be adversely affected with continued grazing than would occur as a result of herding.

Response 173-11: Tortoise trampling. The following empirical evidence documents that cattle do trample tortoises and/or their burrows.

- Avery and Neibergs (1997): "Our preliminary findings from spring 1993 suggest that cattle grazing during winter may destroy large percentages of active tortoise burrows. We found evidence that range cattle avoid trampling tortoise burrows, but it is apparent that a significant percentage of burrows are still trampled by cattle. Increased risk of mortality, increased energetic costs, and changes in activity time budgets (caused by

additional time required to build new burrows) may occur for tortoises whose home ranges (burrows) are located in areas of heavy cattle grazing."

- U.S. Fish and Wildlife Service (1994): The tortoise recovery plan stated, "Trampling of live desert tortoises by cattle has been observed in the eastern Mojave Desert (M. Coffeen, pers. comm., Tim Duck, pers. comm.) and juvenile desert tortoises have been trampled in the western Mojave Desert (Berry 1978a, Berry and Shields *et al.* 1986, Nicholson and Humphreys 1981, Craig Knowles, BLM field notes for Stoddard Valley)...Juvenile desert tortoise burrows are particularly vulnerable to trampling because of their locations and the shallow soil covering protecting the tunnels."

Response 173-12: Page 3, last two paragraphs. Comments noted.

6.3.16 Letter 176: Los Angeles County, Department of Regional Planning

Response 176-1: Los Angeles County's Role on the Implementing Team. It will be up to each city and county to choose how to use the West Mojave Plan within their jurisdiction and manage the program to satisfy the requirements of a programmatic federal Section 10(a) Permit and state Section 2081 Permit. The Plan is being developed as a tool to streamline endangered species compliance -- and CEQA compliance with regards to biological impacts -- throughout the plan area while providing regional habitat protection for the covered species in the Plan.

Further discussions by staff from participating jurisdictions since the release of the Draft EIR/S has lend to a preference for a joint powers authority (JPA) as the administrative structure for local governance over the Plan. The alternate administrative format would be similar to that described in Section 2.2.2.1 of the Draft EIR/S, which would most likely be formed through the use of a master memorandum of understanding between all participating entities setting out the roles and responsibilities of the various parties. The elected officials of the participating Counties and Cities will ultimately determine the final structure, in collaboration with the participating federal and state agencies. Either structure would use the advisory committees as described in the Draft EIR/S. In either case, it is anticipated that the administrative overhead and support would be funded by the Plan. As such, little direct support from the participating local governments is anticipated other than the appropriate level of representation at the respective governing board or implementation team meetings. The JPA or Governing Board or Implementation Team staff would manage preparation of budgets, work programs and performing project activities.

Response 176-2: Mitigation Fee Approved by Los Angeles County Board of Supervisors. Comment noted. The basic fee structure is described in Section 2.2.2, Compensation Framework, beginning on page 2-31 of the Draft EIR/S. The mitigation fee structure, with its three levels of compensation, i.e. 0.5:1; 1:1 and 5:1 are described by the Draft EIR/S on page 2-32. A description of how the fee would be applied is found on Draft EIR/S page 2-34 and the various exemptions to the fees are listed on page 2-35. The amount of the fee is proposed to be $770 per acre, adjusted by the compensation levels for the three geographically mapped "fee areas" shown on Map 2-8. The derivation of the fee is presented in Section 3.4.1.5.2, Habitat Conservation Area Valuation, Draft EIR/S page 3-205 and in Appendix N.

Each participating county and city needs to adopt the West Mojave Plan and fee structure through individual action as dictated by each jurisdictions procedures.

Response 176-3: How will the Fee Compensation Map be updated and distributed? The most current fee compensation maps is included in this Final EIR/S. Large-scale mapping is available in the West Mojave Plan database. Mapping appropriate to each jurisdiction will be provided upon completion of the Plan. Once Section 10(a) and Section 2081 incidental take permits have been issued, the Implementing Authority, with the concurrence of CDFG and USFWS, could make adjustments to this map should new information or circumstances so require.

Response 176-4: Significant ecological areas, last paragraph. Thank you for your clarification of the consultant's zoning recommendation. We have revised the Final EIR/S to exclude the language of "proposed zoning".

Response 176-5: Administrative implementation of mitigation fee: It would be appropriate to involve the Los Angeles County Department of Public Works and have it write an ordinance. Since each jurisdiction administers and collects fees in a different manner, each jurisdiction will need to set up mechanisms to collect these fees in a manner that fits its procedures. The West Mojave Team expects that each jurisdictional representative will work within their respective organization to prepare their own individual ordinances and procedures to facilitate implementation of the program within their jurisdictions. Since the County of San Bernardino is the co-lead agency for CEQA purposes, has been actively involved in the entire West Mojave planning process, and it has the largest geographical area within the western Mojave Desert, it is anticipated to take the first action by a local jurisdiction on the Plan. If San Bernardino County approves the Plan, it can provide a sample ordinance that may be of use to your agency for adaptation to fit the County of Los Angeles needs.

6.3.17 Letter 180: Kern County Waste Management Department

Response 180-1: Effects on the expansion of existing facilities, potential DWMA boundary changes and the renewal of Solid Waste Facilities Permit (page 3). Existing landfill operations have been considered in the delineation of the DWMAs and every effort has been made to provide adequate land to allow continued operation of legally permitted landfills. Potential future expansions have also been taken into account to the extent that the West Mojave Planning Team was made aware of them. Existing landfills will need to go through standard permitting processes to be expanded, which include public notice and project impact evaluation and disclosure pursuant to CEQA compliance. Potential conflicts of future expansions, if any, with DWMAs should be evaluated at that time based on the specific project details known at that time. New facilities located within the West Mojave planning area will be subject to the provisions of the plan and would presumably be located within the more urbanizing areas that are subject to 0.5:1 or 1:1 mitigation requirements.

Response 180-2: Raven Measure DT-30 (page 4). Dr. William Boarman, of the United States Geological Survey, Biological Resources Division, has observed that daily activities at landfills operated by San Bernardino County appear to be effective in reducing available refuse

for ravens. During August and September 2003, environmental managers at the four large military installations in the West Mojave reported that landfill management was generally effective in reducing the amount of refuse available to ravens. Dr. Boarman's latest analysis of extensive data collected between 1995 and 2000 indicate a significant decrease (60%) in raven abundance at the EAFB landfill following implementation of fairly aggressive refuse management methods, similar to those recommended by Alternative A. These results should be released in a draft report early in 2004.

Available studies at San Bernardino County landfills and on military installations are cited in the references in Section in 5.8 (p. 5-26) of the Draft. Dr. Boarman's Edwards Air Force Base raven study included extensive surveys for ravens at Boron and Mojave landfills, both operated by KDWMD. The results show large numbers of ravens were regularly found at both landfills (Mojave LF avg = 31.4 per 5-min visit, Boron LF avg = 14.7 per 5-min visit). These data will be in the draft report to be released in early 2004.

KCWMD is accurate is stating that regional raven reductions may constitute a significant impact under CEQA/NEPA, that there is no baseline for raven population estimates in the Mojave, and that no post-reduction raven population numbers have been identified. However, three possible baseline values exist. USGS surveys of ravens at reference sites 2 km from anthropogenic attractions in the western Mojave indicated an average of 0.6 ravens were counted per 5-min point count. Camp et al. (1993) counted an average of 4.6 ravens per 100 km of walked transects in remote sections of Joshua Tree National Park. Knight and Kawashima (1993) counted an average of 6.6 ravens per 100 km of aerial transects flown away from roads and powerlines throughout the Mojave Desert. Whereas these values do not necessarily provide a "before human presence" estimate of raven abundance, they do give a current indication of how low raven abundance is within "open desert."

The raven control measures identified in the Draft (p. 2-66 through 2-70) are taken from a document by Dr. Boarman entitled, *Proposed Program to Reduce Predation on Desert Tortoises by Common Ravens in the Mojave and Colorado Deserts*. On the first page of that document, Dr. Boarman provides the following statement. "The plan provides a framework for initiating a multi-agency program that, in concert with actions reducing other causes of mortality, ill health, and lowered reproductive output, should aid in the long-term recovery of desert tortoise populations." As such, it is more a reference document than a specific program that must be fully implemented as currently drafted.

The above interpretation of the intent of Dr. Boarman's proposal is clarified by measure DT-38 (p. 2-70), which calls for the establishment of two working groups to oversee implementation and progress of a final raven management plan. The Interagency Task Force would coordinate implementation of the plan, and the "technical and policy oversight team" would evaluate the plan's progress. The Interagency Task Force would presumably include KCWMD and/or other waste management districts to ensure that concerns such as those expressed in the comment letter are adequately addressed.

During 2003, State and federal regulatory agencies formed a Raven Management Team that has met five or six times in the past 10 months (Becky Jones, pers. comm., 17 November

2003). Ray Bransfield (USFWS) leads this team. Other participating agencies have included USGS, BLM, NPS, USDA/APHIS Wildlife Service, Department of Defense (Fort Irwin, Edwards Air Force Base, 29 Palms Marine Corps Base), CDFG, Caltrans, Southern California Edison, and University of Redlands. When asked about the relationship between this new group and the two groups identified in the Draft, CDFG biologist, Becky Jones indicated that the Raven Management Team has goals and objectives that are applicable to both groups. The team is currently working on an Environmental Assessment and compliance with applicable laws (CEQA, NEPA, etc.). Jones indicated that, thus far, there have been no waste management representatives on the Raven Management Team

The West Mojave Draft and Final EIR/S serves as a "Program EIR" for participating county and city governments, meaning in part that it presents general programs that will require additional planning and regulatory compliance as specific programs are developed and implemented (see p. 1-3). It is more appropriate to refer to the raven control measures given in the Draft (p. 2-66 through 2-70) as *guidelines* that would be used as the final management plan is devised. Given the above information, the following changes have been made to the raven section found at the bottom of Draft EIR/S page 2-66: *Strike the sentence, "The following action items would be implemented throughout the western Mojave Desert," and replace it with, "The following raven management guidelines should be considered in developing a raven control program in the West Mojave."*

Response 180-3: Covering the working face (page 5). Available information shows that common raven populations may have increased by as much as 1500 percent in parts of the Mojave Desert since the late 1960's. This population explosion has been attributed, in part, to increased availability of food and water sources associated with human development. Landfills, in particular, have been identified as a supplemental food (and water) source that gives ravens an advantage in successfully rearing their young. Dr. Boarman's research at Edwards Air Force Base clearly demonstrates that covering landfill refuse (and packing it up in bundles) has reduced the availability of this food source to ravens. However, there are no data to suggest that there are fewer ravens, or that tortoise predation has decreased, in response to these landfill management practices.

It is not clear what the commentor means by "…regulatory relief already exists to control excessive bird numbers." The Migratory Bird Treaty Act currently protects the common raven. Previous eradication efforts by the BLM in the late 1980's were met with significant resistance from the Society for Prevention of Cruelty to Animals and other members of the public. Plan implementation would result in issuance of salvage permits to various utility companies, which would entail a new regulatory action. However, landfill management is a persisting concern, and covering refuse with soil is one of the many tools available to reduce the amount of food available to ravens.

Response 180-4: Coyote-proof fencing (page 5). Coyotes are agile predators that have been observed both digging under and climbing over fences. Tortoise-proof mesh attached to the bottom of chain-link fences, and usually buried between 8 and 12 inches, is effective in precluding tortoises from an area, but there is no evidence that it would preclude coyotes from the area. No specifications or studies were found to indicate how such a fence should be

designed or how effective it may be. There is no firm plan at this time to install coyote-proof fences at landfills. Should the Raven Management Team or other official entity desire to implement such a requirement, it would be essential, as the commentator states, that engineering specifications are provided before such fences would be installed.

Response 180-5: Truck cleaning areas (page 5). There are some landfills where refuse haul trucks are frequently washed on-site. "Truck cleaning areas" are more likely to result in persisting pools of standing water than a means of introducing more food materials to ravens. The intent is to minimize any food or water sources that may be associated with standard management practices, which may include truck-cleaning areas. This reference would not apply to Kern County if landfill practices do not include rinsing refuse out of dump trucks at their landfill sites.

This comment also calls for clarification on what comprises "organic wastes" versus "green material." The last sentence in the first paragraph at the top of page 2-67 in the Draft EIR/S has been changed as follows; changes are italicized. "…(iv) keep truck cleaning areas and temporary storage facilities clean and free from *standing water and organic wastes (e.g., food material, biosolids, mixed solid waste, and other materials that may be consumed by common ravens and not including "green material" as defined in Section 17852 by the California Integrated Waste Management Board)*."

Response 180-6: Measure DT-31: Ravens (page 6). Comment noted. The County's current procedures are in compliance with DT-31. Measure DT-31 is intended to minimize the availability of refuse *outside of landfills*, and therefore may not directly apply to Kern County Waste Management Department. Whereas the types of management practices identified by the county are important at landfills, transfer stations, etc., it is equally important to minimize availability of refuse at commercial locations or illegal dumps, which is the main consideration of measure DT-31.

Response 180-7: Lands Acquired through Western Mojave Land Tenure Adjustment Project (page 7). Table 2-8, page 2-35 of the Draft EIR/S, indicates that development on private land that has already obtained required permits from the CDFG and/or USFWS are exempt from mitigation fees under the West Mojave Plan.

6.3.18 Letter 181: Mr. Gerald E. Hillier, Public Land Users Services

Response 181-1: No net loss in assessed valuation (page 1). A policy of maintaining "no net loss in assessed value" has been added to prescription HCA-36 (land acquisition within the HCA). The Plan will be implemented to ensure that the result in the future change in assessed value for all lands within the West Mojave planning area will be a net positive increase.

The Draft EIR/S contained a provision realigning the Western Mojave Land Tenure Adjustment project zones; see section 2.2.1.2.7 and Map 2-6. The maps indicated the location of a land "disposal zone." The text has been modified to include an explicit reference to the disposal zone.

Response 181-2: PILT Discussion Errors (page 2).Comment noted. Tables 4-41 and 4-94 and corresponding text have been corrected.

Response 181-3: Page 2, second paragraph. Please see Response 181-1.

Response 181-4: Expand ½:1 compensation area (page 2). The West Mojave planning team has worked very closely with San Bernardino County staff to re-examine the 0.5:1 compensation areas. As a result, several areas have been enlarged based on further evaluation of the degraded condition of many intervening areas that existed between clusters of peripheral development groupings.

Response 181-5: Elimination of BTAs (page 2). Based on the strong objections the participating Counties, San Bernardino and Kern in particular, the Biological Transition Areas have been eliminated. The counties were concerned that the BTA concept was highly complex, would be very difficult to implement and offered little in the way of additional conservation for desert tortoises. As result of the concerns expressed, the West Mojave Team re-evaluated each BTA on an individual basis to determine the values that each area was anticipated to provide. Those areas with important conservation values were included within the tortoise DWMAs and those areas that were judged to have minimal contribution to the overall conservation design were deleted (see revised section 2.2.1.1.6), and the text has been changed where appropriate. Please see revised Map 2-1.

Response 181-6: Tortoise Recovery Plan Review Status (page 2). The following summary of the current review of the 1994 Recovery Plan is provided. The source of this summary is a memo, dated May 8, 2003, from Bob Williams, Nevada Field Supervisor of the USFWS to interested parties. Earlier in 2003, the USFWS impaneled a committee of eight scientists to review and assess the Recovery Plan. This panel is referred to as the Desert Tortoise Recovery Plan Assessment Committee (DTRPAC), which is tasked with reviewing and assessing new research and information on tortoise ecology, threats, conservation biology, monitoring, and recovery actions. The DTRPAC met on numerous occasions during 2003 with tortoise biologists and others to assemble the best scientific information available. A summary of each meeting was to be posted on a University of Nevada, Reno website within two weeks following the meeting.

The second phase of the review would result in a "…newly established recovery team of scientists, agency resource specialists, and stakeholders," and eventually, a revised recovery plan. Members of the new recovery team have not been made public at this time. The DTRPAC completed a working draft of their review and recommendations on March 15, 2004.

USFWS is overseeing the DTRPAC assessment and eventual completion of the new Recovery Plan. USFWS is also responsible for issuing incidental take authorization to federal, State, and local governments participating in the West Mojave Plan. It is the responsibility of the USFWS rather than participating jurisdictions to see that the "…West Mojave HCP would be revisited and revised accordingly" to compliment the revised recovery plan. There is no requirement that the West Mojave Plan automatically be revised to reflect new recovery plan recommendations.

If significant new findings published in the new recovery plan are clearly in conflict with West Mojave Plan management or otherwise require revisions to the Plan, adaptive management and existing regulatory mechanisms are available to revise the Plan as needed. On the federal side, the USFWS may reinitiate formal consultation with the BLM or other federal agency receiving a biological opinion on the Plan. The public also has the right to request that the CDCA Plan be amended should critical new information become available. On the private side, there are existing mechanisms allowing participating jurisdictions to amend the Section 10(a) and Section 2081 take authorizations if there are unforeseen events and/or critical new information that warrants permit revision. It is through these avenues, rather than an obligatory commitment by participating jurisdictions to revisit the Paln once the new recovery plan is issued, that take authorizations may be amended.

Response 181-7: Brisbane Valley Special Review Area (page 2). The management objectives for the Brisbane Valley Special Management Area have been re-evaluated. The Plan now reflects a change eliminating the proposal to translocate tortoises from other sites within the West Mojave planning area to the Brisbane Valley.

The West Mojave Team reviewed past meeting notes of the Supergroup and Task Groups regarding the intent of the special conditions of Brisbane Valley. The notes reveal that there was recognition that this area was not suitable for long-term conservation purposes and in spite of the substantial number of tortoises present. There was the recognition that the area is isolated from DWMAs and separated by current and proposed development as well as significant physical barriers such as the I-15 Freeway. To address the existing tortoise presence, the area was designated, in part, to provide for relocation of tortoises from any site that might be approved for development. The primary purpose of establishing a Special Review Area was to provide protection for the Mojave monkeyflower.

Response 181-8: Implementation Costs (page 3). Additional information regarding the costs to implement the West Mojave Plan, including projections of available funding, have been incorporated into Appendix C's Implementation Tasks, Priorities and Costs Table.

Response 181-9: Alternative E (page 3). The critical tortoise management question that Alternative E seeks to answer is whether the desert tortoise can be conserved and recovered if only a single DWMA is established. Allowing some additional recreation use of lands outside of that proposed DWMA is not necessarily in conflict with this conservation strategy. The increased recreation opportunities that would be provided under this alternative would be located outside of the boundaries of the single DWMA, and would be consistent with the management guidance set by the CDCA Plan, its elements and multiple use classes, for public lands not included within areas bearing special wildlife management designations. Management of lands within the single DWMA, by contrast, would be guided by the need to conserve and recover tortoise populations resident within this DWMA. Please note that the boundaries of the single DWMA have been selected to include most of the remaining significant public land tortoise populations (if not all of the significant potential and historic tortoise habitat) found to the north and west of Interstate 15 within the western Mojave Desert.

Response 181-10: Specific Comment 1. Each of the seven alternatives was analyzed using the assumptions given in Tables 4-1 and 4-2 of the Draft (p. 4-1 through 4-4). Each alternative was given similar attention in the analysis, and none was considered a "straw-man." Local governments, in particular, wanted an alternative analyzed that encompassed a single DWMA with the Recovery Plan's minimum size requirement of 1,000 square miles. At 247,080 acres (386 mi^2), the Ord-Rodman DWMA was only a third of the requisite size. Nor was there an opportunity to expand the DWMA due to adjacent land uses (i.e., Marine Corps base to the east, BLM vehicle open areas to the south and west, and Interstate 40 and unsuitable habitats to the north). As such, Ord-Rodman failed to meet the requisite characteristics of this alternative.

Response 181-11: Specific Comment 2. All alternatives were given equal consideration in the Draft EIR/S. Alternative A, the Proposed Action, is necessarily more detailed because many of the measures first identified there also pertain to the other six alternatives. Each of the other alternatives is preceded by the phrase, "All aspects of this alternative's conservation strategy would be as described for Alternative A, except as specifically described below." This precluded the need to restate duplicate text.

Chapter 4 is where each alternative is more fully described and analyzed for both beneficial and residual impacts. The analysis of Alternative F includes over 23 pages (p. 4-217 through 4-240) of materials examining the effectiveness of that alternative's proactive tortoise programs for addressing diseased animals, predator reduction and other issues. This is comparable to the level of analysis presented for Alternative A's tortoise program (32 pages, much of which is incorporated by reference into Alternative F's discussion and, thus, not repeated there).

Response 181-12: Specific Comment 5. Research by Dr. Morafka and others has shown that tortoises in the West Mojave are genetically similar to one another. Moving animals into DWMAs from adjacent areas would not promote genetic diversity at the population level. Such manipulation has mostly been discouraged to minimize spread of contagious diseases. Best Management Practices identified in Alternative A would allow for movement of clinically-tested disease-free animals into DWMAs from impact areas that are within a mile.

Response 181-13: Specific Comment 7, paragraph 1. Alternative A proposes population monitoring and the tracking of plan implementation. CESA Section 2081(b) requires "…monitoring compliance with, and effectiveness of, those measures." If this issuance criterion is not met, CDFG could withdraw its take authorization. The Implementation Team would be responsible to ensure appropriate monitoring programs are applied, and to judge the efficacy of the conservation program. It is unlikely that limited funds would be spent on studying the efficacy of already completed programs.

Response 181-14: Specific Comment 7, paragraph 2. Several commenters have pointed to the need for better monitoring for a variety of reasons, primarily to determine the efficacy of the plan and to provide a foundation for adaptive management. The Stakeholders (Super) Group and the Steering Committee that assisted in the preparation of the plan recognized the importance of this activity. Changes have been made the section referenced in your comment to address the importance and priority of this activity. Additionally, a priority, or importance rating, has been

added to the implementation actions in Appendix C to illustrate the varying priorities of implementing activities. This clarification indicates a high priority for monitoring.

Response 181-15: Specific Comment 7, paragraph 3. The monitoring and adaptive management sections have been revised, and the cross-reference you referred to has been corrected. See Table 2-26.

Response 181-16: Specific Comment 7, paragraph 4. The commentator is concerned that West Mojave planning team survey data have not been used to determine a baseline population estimate for tortoises in the West Mojave and elsewhere. Additionally, "…the West Mojave Team introduced their own techniques for [censusing the] population that appear to not correlate with either old data or new line distance sampling data." First, planning team data was collected using the same survey methodology (sign counts) that the BLM has used throughout the desert since the 1970's, so no new techniques were introduced. Results of these surveys have been used to determine relative population distribution and the location of higher and lower density areas. The statement is correct that these data have not been used to estimate tortoise populations in the western Mojave Desert. Historically the same type of data has been used to estimate absolute population densities, which has been widely criticized for valid reasons. There have now been three consecutive years of distance sampling surveys in the West Mojave. With two more years of surveys, the USFWS will have sufficient data to make a relatively accurate estimate of tortoise numbers in the planning area. Using sign count data for this purpose is inappropriate, and using existing distance sampling data is premature.

Response 181-17: Specific Comment 7, paragraph 5. The statement on page 2-161 in the Draft EIR/S means that distance sampling would continue to be used to estimate tortoise densities. However, the methodology for studying BLM trend plots should be modified to collect other important information, but not to estimate densities.

Response 181-18: Specific Comment 7, paragraph 6. The statement, "…meanwhile the team launched surveys using new methodology that is not correlatable with either old data or the new line distance data" is incorrect. As per Response 181-16, the long-established methodology of sign count surveys was used, not any new methods. The Draft EIR/S explains this on page 3-78: "Dr. Berry coordinated most of the earliest surveys in the mid-1970's until late 1980's; LaRue coordinated the *same-method* [emphasis added] surveys between 1998 and 2002." The footnote at the bottom of the page states, "Methodologies used between 1975 and 2002 were essentially the same."

The statement that sign count data is "not correlatable" with either old data or new distance data is incorrect, as explained in numerous places in the Draft EIR/S. For example, the statement on page 3-76, "…the pattern of decline recorded at Dr. Berry's study plots [old data] mirrors the findings of the regional field surveys [new data]," attests to how well the old and new data are correlated (see also 3-115). There are numerous places throughout Chapter 3 where the similarities between West Mojave planning team sign count data and distance-sampling data are described as "noteworthy" and "remarkably similar" (e.g., p. 3-72, 3-79, 3-82, 3-102, 3-109, 3-120, etc.). Perhaps the best example is in Appendix L, volume 2, Table L-5, which compares sign count and distance sampling results. The conclusion is made following the table,

"…relative occurrence of these four factors were strikingly similar for sign count and distance sampling: 51% vs, 52% for Mammalian Predation, 27% vs. 32% for Vehicle Crushing, and 9% vs. 7% for Raven Predation."

Response 181-19: Specific Comment 8. The BLM is committed to implementing Guiding Principle 6, and to ensure that no groups will "disproportionately bear the burden" of plan implementation. That is why the West Mojave Plan specifically allows the continuance of grazing in the western Mojave Desert. Section 2.2.5 of the Draft EIR/S presented a detailed grazing program that is designed to allow grazing in a manner that is compatible with sensitive species management. BLM has discussed this program with livestock operators, and has made numerous adjustments in response to comments to ensure that it is a realistic and pragmatic grazing strategy.

Response 181-20: Specific Comment 9. Prescription HCA-36, which addresses HCA land acquisition, has been clarified to incorporate a "no net loss of value" policy.

Response 181-21: Specific Comment 10. Objectives 4.1, 4.2 and 4.3 have been structured to be generic enough to allow for differing proactive management strategies to be examined that will attain each objective. Thus Alternative A identifies proactive management programs for both ravens (p. 2-66 through 2-70) and disease (p. 2-62 and 2-63). These and other programs are described in Section 2.2.4.2.3, which is entitled "Proactive Tortoise Management Programs," as well as a detailed education program, all of which present strategies consistent with the intent of Objectives 4.1, 4.2 and 4.3. The other alternatives also present strategies that may be often quite different from one another but which present different approaches to attaining each objective.

Response 181-22: Specific Comment 12. The Special Review Area does not create "…an additional conservation area outside the DWMAs." All lands within SRAs are slated for incidental take, unlike in DWMAs where the Plan would authorize the disturbance of only 1% of the conservation area. The function of the SRA would be to provide for a relatively higher level of county review when proposed projects were developed in SRAs. Impacts at the time of development would be minimized by implementing Best Management Practices that are relatively more protective, which is similar to DWMAs. Otherwise, SRAs are not associated with higher compensation rates, the requirement for both presence-absence and clearance surveys, and other conservation measures that are applicable only to DWMAs.

Translocating tortoises into DWMAs from adjacent impact areas is identified as a next-to-last-resort in the Handling Guidelines section on page 2-61. The practice of moving displaced tortoises into conservation areas should be avoided. There are foreseeable problems of introducing diseased tortoises from urbanizing areas into the conservation area. Even if not diseased, displaced tortoises may negatively interact with resident animals. The *Fort Irwin Blue Ribbon Panel Report* (LaRue 2000) emphasized that translocation sites should not be within or adjacent to conservation areas.

Response 181-23: Specific Comment 13. These relationships currently exist and are fully functioning. Implementation of the Plan will provide for the continued contact with the BLM's California Desert District Advisory Council as well as other forums such as the Desert Managers Group. With regards to the County Boards of Supervisors, it is the intent of the proposed administrative structure to have a representative from each Board participate in either a JPA or Governing Board for overseeing implementation of the Plan. Appropriate City Council representatives from the participating cities will also be invited to participate on the decision-making body of the West Mojave Plan.

Response 181-24: Specific Comment 14. Comment noted. This issue would be appropriate to discuss with the wildlife agencies at the time the Implementing Agreement is drafted.

Response 181-25: Specific Comment 15. Section 2.2.3.1 has been clarified to indicate that permits "would" be issued under Alternative A.

Response 181-26: Lane Mountain milk vetch (specific comment 16). Existing mining operations would be allowed to continue, subject to their Plan of Operations. For valid existing mining claims, avoidance of occupied habitat would be required if a Plan of Operation is filed prior to the mineral withdrawal. Measure P-30 on Draft EIR/S page 2-99 specifies that claimholders with valid existing rights would be compensated at the time of mineral withdrawal.

Response 181-27: Mojave monkeyflower (specific comment 17). We will change the Draft EIR/S page 2-46 wording from "private land" to "non-federal land."

Response 181-28: Specific Comment 18, Roads. The West Mojave Plan would cover only those newly paved roads within DWMAs that are listed on Table 2-12 (p. 2-52). The Plan does not preclude the construction of other new paved roads within DWMAs, it simply requires a "separate consultation" for those projects with CDFG and USFWS. The suggestion to discuss an improved highway to Fort Irwin is not necessary, as this is an existing paved road, and the measure pertains only to new paved roads.

Response 181-29: Specific Comment 18, Air Quality. The commentator's point that an air quality issue may exist is consistent with a similar conclusion reached by the Draft EIR/S at Table 4.3, page 4-6.

Response 181-30: Specific Comment 19. Comment noted.

Response 181-31: Specific Comment 22. Claimholders within the Coolgardie Mesa and West Paradise conservation areas may be compensated in two primary ways: 1) an offer can be made for the claim, or 2) a validity determination will be conducted. If the claim is validated, a mineral appraisal is made, and an offer is tendered based on the appraisal.

Funding for compensation of claimholders may come from the Army's mitigation funds for the Fort Irwin expansion, from appropriated funds to BLM for implementation of the West Mojave Plan, or from funds available to the Implementing Authority.

Response 181-32: Specific Comment 23. A copy of the 1994 sheep grazing biological opinion has been placed in Appendix 0.

Response 181-33: Specific Comment 25. Between August and October 2003, LaRue visited offices of the BLM, NPS, USFWS, and military installations to gather data on the effectiveness of implemented measures to recover tortoises. At that time, BLM specialists in both the Barstow and Ridgecrest field offices indicated that no data are yet available to show positive (or negative) habitat response or tortoise population response to the 1990 removal of sheep.

One indicator of tortoise population recovery would be the presence of subadult tortoises. Map 3-9 in the Draft EIR/S (p. 3-88) depicts adult and subadult tortoises observed during West Mojave planning team surveys. One can see that most adult tortoises were found in Higher Density Sign Count Areas, and that all but a few subadult tortoises were observed in these concentration areas. There are hundreds of square miles east of Highway 395 and north of Highway 58, corresponding to sheep removal areas, where neither adult nor subadult tortoises were detected. This may suggest that recovery is either not happening or is sufficiently slight as to be undetectable. It is compelling that all subadult tortoises found west of Highway 395 and north of Highway 58, which is still mostly grazed by sheep, were inside or within one mile of the fenced Desert Tortoise Natural Area. These data are cited as evidence that there has been recent reproduction and survivorship of tortoises within the fenced DTNA. This may be the only example of tortoise recovery, albeit on a local level, within the listed range.

Response 181-34: Specific Comment 26. The BLM's establishment of a network of designated motorized vehicle access routes does not preclude the rights of a local government to assert RS 2477 rights within its jurisdiction. In fact, the West Mojave planning team has made every effort to work with county highway departments to ensure that routes of interest to local government are a component of the designated access network as well. In the event that a future assertion of an RS 2477 right results in the need to modify the route network, BLM's land use amendment process provides an administrative process to accomplish this.

Response 181-35: Specific Comment 27. The commentator questions whether BLM has determined if the 50-foot stopping and parking limitation proposed by prescription MV-5 "is truly a practical and safe distance". The commentator asks whether these distances are safe and practical.

Fifty feet would provide a safe and practical distance for parking adjacent to an open motorized route. It provides sufficient space for vehicles to be left in safety, and in locations that would not present a hazard to traffic using the route. The 50-foot parking belt is compatible with the provision allowing camping in previously disturbed areas adjacent to open routes. It would also allow cars to be parked safely for "walk-in camping" (i.e. where camping supplies are manually carried away from the vehicle to a location away from the vehicle) or "backpacking" (i.e. camping supplies are carried via a backpack over distances typically greater than a couple hundred feet).

Response 181-36: Specific Comment 29. For reasons given above (Response 181-22), mass translocations of tortoises into DWMAs are inadvisable. The Fort Irwin Blue Ribbon Panel (LaRue 2000) identified Brisbane Valley as a potential translocation site. That panel recommended that a translocation site have the following characteristics. It (i) should be fenced; (ii) have conflicting land uses eliminated; (iii) occur on public lands even if that means purchasing private lands; (iv) be isolated from and not contiguous to reserve areas; and (v) receive only healthy tortoises that test negative for upper respiratory tract disease. That is why Alternative D (only) is considering Brisbane Valley as a receptacle for translocation

Translocation areas and conservation areas have very different functions. Translocation areas would function as a repository for tortoises displaced from authorized impact areas. The LSTS site at Jean, Nevada was established to receive tortoises translocated out of Clark County, particularly Las Vegas Valley, under authority of a regional Section 10(a) permit the county received from the USFWS. It is situated at Jean, in part, to ensure that it is not adjacent to tortoise conservation areas. It is a "terminal repository," in that there is no intent to move these animals back into a conservation area. Conservation areas should function to protect resident tortoises and habitat; it would be a threat to the resident population to mass translocate tortoises from impact areas into it.

Response 181-37: Specific Comment 30. The wording on page 2-194 has been changed to: "The DTNA would remain as the only *area exclusively designated for tortoise management in the West Mojave*."

Response 181-38: Specific Comment 31. Table 3-2 is correct. Table 2-30 has been modified. Please note that the Class C acreage for the No Action alternative is not the same as the Wilderness acreage: discrepancies between Class C and wilderness boundaries resulted from the 1994 wilderness designations. Alternative A proposes boundary corrections to rectify this.

Response 181-39: Specific Comment 32. Findings reported on Draft EIR/S pages 3-86 and 3-87 characterize tortoise concentration areas and make no comparisons to disturbance data. As reported on page 3-96 of the Draft EIR/S, statistical comparisons between abundance of tortoise sign and human disturbances have shown weak associations. These are not necessarily inconsistencies, as tortoises may disappear for many reasons that are not related to the presence or absence of observable impacts. Thus, disease and/or drought may decimate a population in a wilderness area without leaving any observable evidence except carcasses.

Response 181-40: Specific Comment 33. The track measurements and numbers of event participants reported *are* among the results of follow-up surveys. The information that is reported by the Draft EIR/S on pages 3-131 through 3-133 summarizes the specific impacts that are documented in the references given. None of these documents reported tortoise mortalities attributable to the events. Although pre- and post-event sweeps were completed for these studies, they would have been insufficient to assess tortoise population levels before and after the event.

Response 181-41: Specific Comment 34. It is important to consider the context in which variable elevation cut-offs are identified. For example, in its survey protocols of 1992, the USFWS required that tortoise surveys be performed on all sites in potential habitat up to 5,000 feet. The 4,000-foot elevation analyzed in the text was convenient as a tool to assess survey efforts and findings both above and below this elevation. In other places, 4,500 feet is identified as a demarcation between suitable and somewhat less suitable habitat in terms of elevation. In general, tortoises are typically absent from areas above 5,000 feet elevation, and nearly so at 4,500 feet (p. 3-91).

Response 181-42: Barstow woolly sunflower (specific comment 35). The Barstow woolly sunflower is not known from the Johnson Valley Open Area. The species account noted that off-road vehicle travel was a threat to this species.

Response 181-43: Desert cymopterus (specific comment 36). The affects of grazing on desert cymopterus were discussed extensively in the species account prepared by botanist Mark Bagley. The following excerpt from this account answers your question:

> Current threats to desert cymopterus are not obvious. The California Native Plant Society indicates that this species is threatened by sheep grazing, vehicles, and urbanization (Skinner and Pavlik, 1994). In addition, the Cuddeback Lake sites are located within the BLM Pilot Knob grazing allotment and cattle grazing has been reported as a threat to these populations (CDFG, 1997), however the Pilot Knob allotment is being retired from grazing.
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> There is no hard evidence about the affects of sheep or cattle grazing on desert cymopterus populations. Sheep grazing in sandy Mojave Desert soils typically results in extensive trampling and disturbance of the top several inches of the soil and the removal of the above ground parts of almost all herbaceous plants in the area grazed (pers. obs.). However, at the current time livestock grazing is not a factor over most of the range of desert cymopterus. Sheep grazing has been eliminated from BLM lands east of Highway 395 because of its impacts to the listed desert tortoise (Glen Harris, BLM Ridgecrest, pers. com.). Grazing is not permitted on Edwards AFB, although some sheep trespass has occurred on some desert cymopterus habitat on base. Additionally, cattle grazing is not currently occurring on the Pilot Knob allotment. The Desert Tortoise Preserve Committee and the Wildlands Conservancy have purchased the core property for that allotment and requested a permanent reservation from grazing which could be granted through the West Mojave Plan. The desert cymopterus populations on private land in the vicinity of Boron and Kramer Junction may be subject to sheep grazing and the site in Peerless Valley was grazed and trampled by sheep at least in 1991 and 1996 (pers. obs.). As long as grazing is not permitted on Edwards AFB, the Pilot Knob allotment, and east of Highway 395, grazing will potentially impact only a small portion of the known range of desert cymopterus.
>
> In addition to potential grazing impacts, high levels of leaf predation in desert cymopterus have been observed in two studies on Edwards AFB in areas not grazed by livestock (Bagley, 1995; Charlton, 1993). More limited observations of high predation have been recorded off Base (pers. obs.; CDFG, 1997). This predation is presumably by native mammals (such as rabbits, hares, ground squirrels, mice, and kangaroo rats), insects (caterpillars and beetles), and desert tortoise. This predation may limit the reproductive potential and vigor of the plants, and contribute to the low density, dispersed nature of most of the reported desert cymopterus populations.

Response 181-44: Mojave monkeyflower (specific comment 37). Inbreeding, genetic bottlenecks and lack of sufficient pollinators are sometimes threats characteristics of plant species with a limited range (local endemics). Management that sustains a large population or sufficiently large area of occurrence can reduce or prevent these threats. The statement on Draft

EIR/S page 3-187 was taken from the species account, which considered all potential threats, including biological factors not normally addressed by land management.

Response 181-45: Specific Comment 38. The importance of the mining industry is recognized throughout the text; see especially the discussions of mineral potential and development (Draft EIR/S section 3.4.3), and the discussion of the importance of mineral development to southern California in Appendix P. It is not anticipated that the West Mojave Plan will have any significant effect on the cultural or life style values of the western Mojave Desert, as livestock grazing, mining, and other uses of the public lands, as well as military activities and suburban lifestyles in the cities and towns, are expected to continue.

Response 181-46: Specific Comment 39. The 5:1 mitigation fee generally corresponds to the current level of compensation required by the desert tortoise management oversight group formula. That formula requires compensation values ranging from 4:1 to 6:1, depending upon the location of a proposed project. It is a value that incorporates a wide variety of biological and habitat considerations into its derivation. The 5:1 fee, moreover, contributes to a mitigation fee stream that is just sufficient to pay for the conservation strategy proposed by the West Mojave Plan and that is projected to be necessary to conserve and recover this species.

The comparison to Clark County must be considered in the context of the fees to be applied throughout the western Mojave Desert. The Clark County fee mentioned by the commentator is the fee that is applied within urbanizaing regions of Las Vegas, where most of the Clark County growth will occur, rather than the Nevada DWMAs. Approximately 88 percent of all growth within the western Mojave Desert during the 30-year term of the plan is also projected to be located either within city jurisdictions or as infill within currently urbanized areas of the counties. The majority of those lands are within the 0.5:1 mitigation fee zone, due to the currently disturbed nature of the habitat in these areas. Assuming the $770 valuation of lands within the HCA is adopted, therefore, the great majority of development within the West Mojave would pay a fee of $385 per acre, which is lower than the comparable Clark County figure.

Response 181-47: Specific Comment 40. Comment noted.

Responses 181-48, 49 and 50: Specific Comment 41 (Barstow, Landers and Victorville landfills). Comment noted. Corrections have been made to the text.

Response 181-51: Specific Comment 42. The Draft EIR/S at page 4-5 (table 4-3) notes that the slight emissions increase due to the West Mojave Plan would be short-term, and that other factors would tend to drive development more in the long term.

Response 181-52: Specific Comment 43. The use of paving is specified in the SIP and rules when traffic flow increases, there is a commercial use or the use exceeds certain thresholds. If paving were not allowed then less effective mitigation would have to be used. As noted, this is a slight increase.

Responses 181-53 and 54: Specific Comment 44, first and second paragraphs. Table 4-6, page 4-15 has been reviewed and modified where appropriate in response to your suggestions. Please note that the habitat rehabilitation credits provide for "refunds" of AGD acreage; note also provisions to address temporary disturbance associated with mineral development in prescription HCA-37.

Response 181-55: Specific Comment 44, first bullet. The text has been clarified to indicate that the state endowment fee would no longer be applied.

Response 181-56: Specific Comment 44, second bullet. The text has been modified to reflect the fact that ACEC designation and establishment of the DWMAs represents an evolutionary improvement in management, building upon the CDCA Plan's crucial habitat and Category I and II habitat designations, and USFWS critical habitat by providing the additional protections of ACEC status and the West Mojave Plan's tortoise management program.

Studies have shown that the BLM and other federal agencies are doing a good job at minimizing impacts of site-specific projects at the time of facility construction or pipe installation, for example (LaRue and Dougherty 1998). Such studies are not available to document either success or failure with regards to conservation actions applied at the regional level (i.e., removal of sheep in 1990). Available data do suggest that fencing the DTNA was a regionally applied measure that has functioned to facilitate repatriation of tortoises inside the fence.

Response 181-57: Specific Comment 44, third bullet. Appendix C has been revised to include additional information concerning the costs of implementing the West Mojave Plan, and likely sources of funding to pay for plan implementation. An underlying assumption is that BLM funding will remain at present levels for the foreseeable future: neither significant increases nor decreases are expected. The West Mojave implementation strategy has been developed assuming this scenario occurs. It is not anticipated that funds will be diverted to or from the NECO and NEMO implementation programs.

Response 181-58: Specific Comment 44, fourth bullet. The text has been clarified to stress that Class M is not a "giveaway to conflicting land uses".

Response 181-59: Specific Comment 44, sixth bullet. See Response 181-20.

Response 181-60: Specific Comment 46. The Draft EIR/S included a disease management trust fund as a component of Alternative A; please see Chapter 2, Table 2-14. A little more information concerning the trust fund is provided following Table 4-14 (see Draft EIR/S page 4-25). This trust fund concept is unique to this alternative, which would focus on disease management. Aside from general programs (i.e., research, education, handling restrictions, etc.), there have been no specific disease management actions identified. The trust fund would ensure that money is earmarked and readily available should there be a breakthrough in disease management.

Response 181-61: Specific Comment 47. There have been no studies, nor are any planned, to selectively remove sick animals from the wild population. Dr. Kristin Berry has developed a salvage protocol to remove sick tortoises in the interest of research, but not as a means to stop spread of disease. The intent, presumably, would be to reduce the spread of disease by removing those tortoises that clinically test positive for URTD. One problem with this is that the ELIZA test will only indicate if the tortoise has been exposed to a specific pathogen, which is referred to as an ELIZA-positive result. ELIZA-positive animals may have developed an immunity that would actually benefit the population if they were left in place. There is also the problem of false positives, in which case you would remove a healthy animal; and false negatives, in which case you would not remove a sick animal. Finally, the current ELIZA test is pathogen-specific for *Mycoplasma agassizii*. It would not detect herpesviruses and unknown pathogens, and may not detect related species, such as *Mycoplasma cheloniae*, which was recently discovered in northern Lucerne Valley.

Response 181-62: Specific Comment 48 and 49. One of the impact assessment assumptions given in Table 4-5 on DEIR/S page 4-12 is that, "benefits are those environmental consequences that promote, facilitate, and enhance tortoise conservation, recovery, and achieving minimization and mitigation standards," while residual impacts are defined in Table 4-5 as "…environmental consequences that detract from, undermine, and hinder tortoise conservation, recovery, and the achievement of minimization and mitigation standards." Effects of the conservation program on the miner or claim holder are discussed elsewhere; see for example section 4.2.3.4.

Response 181-63: Specific Comment 50. Table 4-20 focuses on the effects of the proposed livestock grazing program on desert tortoise conservation. A complete discussion of the effects this program may have on the livestock grazing industry was presented in the Draft EIR/S at page 4-95, and pages 4-98-103. Most of the commentator's concerns are addressed in these latter discussions.

Response 181-64: Specific Comment 51. See Responses to 60-22, 173-9 and 173-10 for discussion on the 230 pounds ephemeral forage production threshold.

Response 181-65: Specific Comment 52. Response 173-11 cited two specific examples of cattle trampling of tortoises in the East Mojave. The comment is accurate that there are no data to show the prevalence of this impact on a regional level.

Response 181-66: Specific Comment 53. As described above (Response 181-39), the current prevalence of tortoises in a given area is not necessarily indicative of the health of the population, unless, of course, the population has been extirpated. Distance sampling data support the conclusion that tortoises in the Ord Mountains are encountered at a higher rate than elsewhere in the West Mojave. They do not support the conclusions that the population is healthy, unhealthy, stable, or declining. In addition, most of the tortoise concentration areas in the Ords are adjacent to the cattle allotment, not within it.

Response 181-67: Specific Comment 54. As the commentator states, the County of San Bernardino has already compensated for the Barstow Landfill land transaction. Boundaries of the Ord-Rodman DWMA have been drawn to exclude the landfill. Maps have been clarified to ensure that this boundary is correctly portrayed.

Response 181-68: Specific Comment 55. The language in Table 4-31 mentions a possible, through unlikely, impact. Table 4-29 and the associated discussion indicate that the raven management program, taken as a whole, should contribute in a positive direction toward reducing raven populations.

Response 181-69: Specific Comment 56. Prescription HCA 35 states that "in general" there would be "no new paved highways in DWMAs" except for CalTrans projects listed in Table 2-12. The prescription does not preclude other paved road projects, including county road department projects, but it does indicate that the West Mojave Plan would not cover these projects (i.e. separate consultations with CDFG and USFWS would be necessary). That is why Table 4-31 concludes that Alternative A does not regulate new road construction "by county road departments."

Response 181-70: Specific Comment 58. Text on page 4-45 has been clarified as requested.

Responses 181-71 and 72: Specific Comment 59 and 60. The PILT discussion in Section 4.2.3.1.2, including Table 4-41, has been revised where necessary.

Response 181-73: Specific Comments 63 & 64. This is not intended to imply that each DWMA is a distinct population segment. However, it does reiterate the rationale given in the Recovery Plan (page F-28) for the establishment of four separate DWMAs. DWMAs were identified to provide for conservation of representative habitats in the three different vegetation types (or "bio-regional areas") occurring in the West Mojave Recovery Unit. This is not a legal issue so much as a statement of current biological knowledge, which compliments (rather then exceeds) Recovery Plan recommendations.

Response 181-74: Specific Comment 65. The text of Draft EIR/S page 4-235 has been modified to indicate that although DWMAs would not be designated, the current public land Category 1 and 2 habitat designation, as well as existing BLM programs, would be retained, as would critical habitat. Much of current management, such as commercial filming on BLM lands and fighting wildfires, were judged sufficient. It is important to note, however, that Category 1 and 2, as well as existing CDCA Plan programs, apply only to about two-thirds of the lands within the areas proposed for DWMA status by Alternative A, much of which occurs in a checkerboard land ownership pattern. Current management, moreover, has failed to address a number of issues and threats that can be better addressed if conservation areas are established. From the perspective of tortoise conservation, this is a significant shortfall when compared to the benefits of the establishment of a conservation area applicable to all lands within its outer boundaries.

Response 181-75: Specific Comment 66. The raven impact on tortoises is described in Chapter 3 of the Draft EIR/S on pages 3-101 through 3-105. Importantly, it shows that a management strategy focused solely on raven control would fail to minimize other impacts to adult tortoises, particularly females, which are essential to tortoise recovery.

Response 181-76: Specific Comment 67. A substantive program recommending proactive measures to address disease was presented in Chapter 2 at Table 2-14, and was assigned "the highest priority" by Alternative F; see prescription AF-18.

The analysis of this program is based on what is available relative to disease management. Its limits reflect the incomplete nature of current knowledge of disease on the part of the scientific community, and the lack of established and proven methods to manage it. At present, the Management Oversight Group has formed Technical Review Teams and has conducted several workshops on disease. These efforts have yet to identify key disease management actions that can be applied on a regional level.

6.3.19 Letter 182: Center for Biological Diversity

Response 182-1: Acquisition funding (page 2). A revised funding and implementation plan has been included in Appendix C. Available funds are projected to be sufficient to ensure full implementation of the West Mojave Plan, including land acquisitions. Acquisition of compensation lands from willing sellers has proven to be an effective means of obtaining such lands during the decade since the desert tortoise was listed as threatened. It has never been necessary to employ coercive measures to obtain compensation lands. Accordingly, such methods need not, and will not, be adopted as part of the West Mojave Plan's conservation strategy.

Response 182-2: Conservation area overlap (page 3). The mitigation fee program is one component of a funding and implementation plan that has been designed to ensure full implementation of all conservation programs set forth in the West Mojave Plan. This includes conservation strategies applicable for all conservation areas, including those that overlap one another.

The conservation acreage figures that are presented in the Draft EIR/S do not "double-count" lands that are located where two or more conservation areas overlap.

Response 182-3: DWMAs and current ACECs (page 3). The prescription HCA-1 language referred to by the commentator applies only in the event that a component of an existing "included" ACEC conflicts with a provision of Alternative A. In such cases, the existing ACEC management plan would be amended to conform to the West Mojave Plan's conservation strategy. Appendix D presents all proposed modifications of existing ACEC plans. The text has been clarified by including a cross-reference to Appendix D within prescription HCA-1.

Response 182-4: OHV open routes in Category I habitat (page 3). A network of open routes within desert tortoise DWMAs is consistent with the recommendations of the Desert

Tortoise (Mojave Population) Recovery Plan. The Recovery Plan concluded: "limited speed travel on designated, sighed roads and maintenance of these roads" is "compatible with tortoise recovery and may be allowed in DWMAs" (Recovery Plan, page 57).

Response 182-5: Fully mitigate (page 3). Commentator states that "this provision stating that the Plan is intended as full mitigation impermissibly restricts the discretion of agencies under CEQA and NEPA." "Fully mitigate" refers to a statutory requirement that must be met prior to the issuance of a California Endangered Species Act incidental take permit. It is a CESA compliance issue, and does not limit agency discretion under either CEQA or NEPA.

Response 182-6: Acres of take versus conservation (page 4, first bullet). Please see Table 2-33, which compares the acres conserved and acres authorized for take for each species to be covered by the West Mojave Plan. This table demonstrates that conserved acreage significantly exceeds take.

Response 182-7: Mitigation ratio (page 4, second bullet). The mitigation fee program has been designed to generate the moneys necessary to fund the implementation of the West Mojave conservation strategy. Additional information concerning the application of the funds is presented in Appendix C's revised Implementation Tasks Priorities and Costs table.

Moreover, the commentator is incorrect in stating that acres authorized for take "far outweigh" the acres actually to be conserved. Table 2-33 presents a summary of acres conserved and authorized take. Overall the Habitat Conservation Area would include more than 2.2 million acres of special status species habitat, while acres of new ground disturbance during the 30-year term of the West Mojave Plan is not projected to exceed 95,000 (see Appendix C).

Response 182-8: Multiplied ratios (page 4, third bullet). The 5:1 mitigation ratio extends to the entire habitat conservation area; it is not limited to a "few specified" areas. We believe that pooling mitigation fees and setting implementation priorities, adjusted annually by the Implementing Authority, is a more effective means of ensuring that fees are effectively applied to multi-species conservation than a relatively inflexible and narrowly-focused provision for "in-kind" mitigation could ever be. Statutory and regulatory mandates would ensure appropriate application of funds to a variety of species, such as CESA's "rough proportionality" requirement.

Response 182-9: Edge effects (page 4). Configuration of the conservation areas is intended to minimize edge effects. Protected areas of adequate size will be able to withstand a low degree of harmful edge effects, and minimization of the perimeter to area ratio serves the same purpose. Most of the conservation areas are not adjacent to urbanized land uses. In most cases, any effects on conservation of covered species will have to be determined by monitoring and addressed by adaptive management. For example, if unauthorized vehicle intrusion into an ACEC is detected, fencing of access points may be necessary.

Response 182-10: Biological transition areas (page 4). The Biological Transition Areas (BTA) concept has been the subject of a great deal of focus with regards to their function and purpose. After reviewing the comments submitted on the Draft EIR/S and conducting further

study of these areas, proposed BTAs have been eliminated or incorporated into the adjacent DWMAs. This determination has been based on a specific review of each individual BTA in light of the conservation criteria of the Habitat Conservation Areas. Appendix X contains the analysis of each BTA and their final disposition. This approach will fully protect the transition areas that are appropriate for conservation and eliminate the areas that do not provide meaningful conservation for the covered species within the Plan that may be present within the adjacent DWMAs.

Response 182-11: Habitat fragmentation (page 5). One of the primary motivations for preparing the West Mojave Plan is to address fragmentation of habitat. This fragmentation often results from the pattern of private and public lands, which is not in discrete patches subject to unified land management. The Plan addresses impacts of fragmentation in Section 4.2.7, Cumulative Impacts.

The creation of large DWMAs with a 1% cap on allowable ground disturbance establishes unified conservation management for large blocks of habitat containing many of the covered species. Additional management prescriptions serve to reduce fragmentation within the DWMAs. The designation of a route network, with the concomitant obliteration and restoration of closed routes of travel is a primary measure to consolidate habitat. The remainder of the HCA embodies these principles to the extent feasible. For example, the Carbonate Endemic Plants Research Natural Area ACEC consolidates the remaining unfragmented BLM lands with these rare plants, and lies adjacent to the proposed Forest Service Research Natural Area.

We do not believe that the Plan allows or encourages increased fragmentation of habitat.

The mitigation fee amount ratio is constructed to encourage urban growth in and near the cities on disturbed lands and discourage development in outlying habitat. Acquisition of private lands within the Habitat Conservation Area would serve to improve management by placing it under a single responsible entity.

For a few species, existing habitat is irrevocably fragmented, at least in large portions of the range. In these cases, which include the alkali mariposa lily and short-joint beavertail cactus, the Plan seeks to consolidate the remaining open lands without structures and residences and to provide conservation management.

Response 182-12: Domestic animal predation (page 5). Impacts of predation by domestic and feral cats and dogs are addressed for each alternative in Chapter 4; see, for example, Draft EIR/S at page 4-28. The following supplemental information is provided relative to harmful effects of pets and feral animals on the desert tortoise and Mohave ground squirrel. First, there are no data available to determine either the distribution or the severity of the impact by feral and pet dogs or cats. As such, there is nothing to substantiate the comment identifying "…feral cats and dogs as major threats…" to either tortoises or Mohave ground squirrels. Given the little that is known, one would expect that impacts by pets would be more proximate to residential communities, and that the impacts of feral dogs would extend further into the desert. There is a problem here in that there is no clear way, through incidental observation, to differentiate between feral animals, which basically "live off the land" and pets, which

presumably receive food from their owners. Both may affect tortoises, but the extent is unknown.

Another variable is the spatial location of tortoises and Mohave ground squirrels, which obviously cannot be impacted in regions where they do not occur. The eastern and southeastern portions of the planning area are outside the squirrel's range, and tortoises have been extirpated from much of the Antelope Valley, Victor Valley, and other heavily urbanized communities. As such, although the local pet and feral dog populations may increase, they are most likely to increase in areas where the targeted species no longer occur. This is clearly not true for some areas, such as Barstow and the unincorporated community of Silver Lakes, where tortoises are regularly detected immediately adjacent to developed areas.

In the absence of the Plan, these impacts would continue to affect tortoises, even if no additional development was authorized or occurred. With the Plan, there is an opportunity, through education and increased law enforcement, to inform desert residents and visitors that dogs are a threat to sensitive wildlife species and to suggest ways this impact can be avoided. This would target the source of the problem, but there is no guarantee that increased awareness will significantly minimize the feral dog population. Accordingly, protective measure DT-22, which calls for establishment of a working group with the Silver Lakes Association to curb OHV impacts through fencing or increased awareness, has been modified so that it also minimizes impacts by pets and feral dogs originating from that community.

The Plan would result in new prohibitions against free-roaming pets in DWMAs, which is a new form of protection not likely to occur without the Plan. The Feral Dog Management Plan would target feral dogs in DWMAs. Based on the poor humane-trap results at 29 Palms Marine Corps Base, it is likely that either lethal (i.e., shooting) or non-lethal (i.e., capture by animal control) measures would be used. These measures are more likely to have a direct impact on the problem than increased awareness. Installation of fences along Highway 395 and elsewhere will predictably reduce the impact of pets that are temporarily released into the desert by passing motorists. Increased law enforcement could be an effective means of both identifying the extent of the problem and removing feral dogs.

The protective measures identified in the two preceding paragraphs are new measures that should more than offset impacts associated with any increase in the number of pets and feral dogs that occurs with development.

Response 182-13: Roads (pages 5 and 6). The commentator states that vehicles release a variety of pollutants. It is unclear if the commentator is referring to on highway or off highway vehicle use, but some of the information presented in not accurate in either case. The oil, gas and nitrogen oxides are all ozone precursors. Carbon dioxide is not a criteria pollutant although it is classified as a green house gas. Most of the pollutants listed are gases and are generally dispersed quickly and don't concentrate onsite. The example of lead pollution is poorly chosen as lead has been banned from gasoline for many years and motor vehicles are no longer considered an important source of lead pollution (ARB 1991, 2003c, SCAQMD 1993b, USEPA 2003i and j). USEPA notes that the estimated lead concentrations have decreased 94% since 1981. The South Coast Air Quality Management District does not include lead in its emission factors for light duty vehicles (under 6000 Lbs.) any more. It doesn't include zinc or cadmium

as emissions from vehicle use either. Lead uptake by some plants is possible, although uptake only would occur when lead is mobile in the soils. Lead becomes soluble and mobile with acidic soils, not the alkaline desert soils.

Response 182-14: Caltrans road improvements (Page 6). Table 2-12 presents Caltrans' best available estimate of the acreage to be affected by foreseeable projects, including an estimate of the direct impact to habitat within the Habitat Conservation Area. These are the only road improvements identified in the Plan that would be covered by the Plan. Measure HCA-35 (p. 2-51) states that any additional proposals for paved roads within DWMAs (including "…additional roads accompanying newly approved development…") are NOT covered by this Plan, and proponents would need to obtain separate take authorization.

Relative to impacts, Table 2-12 clearly identifies the level of direct impact anticipated by road improvement activities (i.e., 1,833 acres). Reconstruction of the Highway 395/58 interchange would account for 96% of this total. This acreage would be subject to the 5:1 mitigation fee amount ratio. None of these projects are in the interior of any DWMA or Conservation Area, and all are subject to the survey, avoidance and minimization provisions of the Plan. These projects are generally widenings, passing lanes, and minor improvements, not accurately described as "massive". Additional roads serving new developments will be constructed within the Incidental Take Area and are generally unlikely to impact covered species since these areas are within already urbanized regions.

It is noteworthy that these acres are adjacent to roadways in habitats that studies have shown are substantially degraded and often devoid of tortoises due to the sink effect associate with roads (LaRue 1992, Nicholson 1978). Additionally, HCA-35 sets a limit as to how much of the Habitat Conservation Area may be directly impacted by Caltrans' activities over the next 30 years. Discussions of general impacts are given in Section 3.3.2.5 of the Draft EIR/S and elsewhere (Boarman 2002; see Appendix J). The loss of 1,833 acres to direct impacts is less likely to effect tortoises and other covered species than would be the indirect impacts that follow. Residual impacts that occur after the roads are improved may include crushing both covered species and common species, which then may be consumed by ravens. Passing motorists dump refuse along roadways, collect tortoises, exercise their pets in tortoise habitats, among other indirect impacts. Such impacts have historically occurred and will continue to occur along roads whether they are improved or not.

There is no evidence to suggest the authorized road improvements would result in more indirect impacts than are already occurring along these roads. The new road alignments would involve widening existing roads within and alongside existing easements. The improvements are proposed to accommodate an anticipated increase in through traffic that would not be attributable to Plan adoption. In fact, due to Caltrans' involvement in the Plan, many indirect impacts would actually be significantly reduced or completely avoided. By specifying approved acreages and projects, the large amount of new habitat fragmentation that could occur if new roadways were developed outside existing rights-of-way would be avoided. As such, implementation of these measures would provide for more conservation value to covered species than would be lost because of road improvements. Importantly, many of the roads listed in Table 2-12 are already fenced, including portions of Highways 14, 58, and 395 and portions of Interstates 15 and 40. Fences would be installed alongside the remaining stretches of these and other roadways as they

are developed. Numerous measures given on pages 2-63 through 2-65 are intended to coordinate roadway development and minimize both direct and indirect impacts. Additional measures on page 2-55 would minimize impacts associated with highway maintenance.

Response 182-15: Adequate funding (pages 6 to 8). The Implementation Tasks, Priorities and Costs table in Appendix C has been augmented with additional data concerning funding needs and sources for West Mojave Plan implementation.

Response 182-16: Soils (page 9). Even though soil surveys have been completed by United States Department of Agriculture on less than half of the planning area, other soil analysis and information was available and considered. Soil resources were analyzed in detail in the California Desert Conservation Area (CDCA) Plan Alternatives and Draft Environmental Impact Statement (CDCA DEIS), February 1980, and subsequent CDCA Final Impact Statement and Proposed Plan (CDCA FEIS), September 1980. Tiering of these documents were inadvertently not referenced in the Draft EIR/S for the West Mojave Plan (2003).

Detailed analysis for soils information can be found in the following: 1) Soils analysis in the CDCA DEIS can be found in the Inventory and Analysis section. Studies were conducted using LANDSAT imagery and field investigations of soil and landform types. 2) Soil compaction, its susceptibility to wind erosion and impacts of human activities were studied through BLM field investigation and contracts. 3) CDCA FEIS Resources and Use section identifies soil impacts of proposed plan and comparative analysis (page E-50). Soil sensitivity to surface disturbance (Map 3) can also found in the CDCA FEIS.

Response 182-17: Air quality (page 9). Air quality jurisdiction lies with the USEPA, and state and local air districts. The jurisdiction and authorities are spelled out in the state and federal clean air acts and other related laws and various rules (ARB 1992, ARB 1993a, Paxton 1993, DeSalvio 2003, Calkins 1994 and Ono 2000). These authorities have established monitoring protocols and have certified various instruments to conduct the monitoring. The protocols are extensive and are generally pollutant specific. The protocols include hardware, meteorological data needs and collection protocol, collection criteria, and certification of results. The USEPA, state and local air districts collect this data (ARB 2003e). The data is used by the various air quality entities to classify areas, study problems, monitor conditions and verify estimates. Monitoring data is also used to verify attainment and nonattainment.

The nature of air quality is such that it is normally a regional issue rather than a local issue due to air movement. The exception is around point sources such as industrial and transportation facilities that develop hot spots. For the most part, emission sources on public lands are from mobile or area sources which contribute to the regional air quality (MDAQMD 1993, 1994, 1995, 1996, 1997 and 2003, SCAQMD 1993a and 1993b, USEPA 1999, 2001, 2002a, 2002b, 2003a, 2003c and 2003e and Zelden 1993).

The regional monitoring is conducted by the various air agencies. The results of the monitoring are summarized on page 3-50 which states that the monitoring shows attainment for PM_{10} and only a few exceedances for ozone in recent years for most sites. One exception is the Owens Valley PM_{10} Planning Area, which is projected to achieve attainment in 2006

(GBUAPCD 2003). The analysis of effects of the West Mojave Plan on air quality follows standard protocol and is obtained by comparing the plan activities to existing work and from an analysis of literature such as air district inventories, regional transportation plans, air quality management plans, PM_{10} plans and the state implementation plan and modeling (ARB 1991, 1993a, 1996, 2000, 2001a, 2001b, 2003a, 2003b, 2003d and 2003e, GBUAPCD et all 1991, GBUAPCD 2003, KCAPCD 1993, MDAQMD 1993, 1994, 1995, 1996, 1997 and 2003, SCAQMD 1993a and 1993b, SCAG 2002, U.S. Bureau of Land Management 1999, 2000, 2001 and 2003, USEPA 1997, 1999, 2003D, 2003d, 2003f and 2003h). These documents have already addressed air quality in the planning area in terms of quantity, sources, concentrations, projected future trends and rules to reduce emissions. The analysis of emissions from various plan alternatives is in a great degree derived from a comparison of the various activities and their activity levels in the plan alternatives to those in the existing air quality plans.

Response 182-18: Burrowing Owl (pages 9 and 10). Surveys for burrowing owls would take place in the remnant native grasslands within the Plan area, which meets the native habitat profile for this species. Most of these are in the Antelope Valley. Surveys would also be conducted along the Mojave River near agricultural lands where burrowing is suspected to be present. The timing and funding of these surveys is provided in the revised funding table included in Appendix C.

Response 182-19: Mojave fringe-toed lizard (page 10). BLM has records of fringe-toed lizards from several locations, most of which are proposed as conservation areas. Other sites, where genetic differentiation is suspected, are on private lands or on military lands. BLM has no take authorization for any population of Mojave fringe-toed lizard. Take of the Mojave fringe-toed lizard, if a distinct population segment were to become listed by the USFWS, is not anticipated at any of the conserved sites.

Response 182-20: Desert cympoterus (page 10). BLM does not know the exact acreage of habitat or numbers of desert cymopterus on public land. The majority of known locations are within the DWMA or the North Edwards Conservation Area, where survey requirements would be in place. Additional information will depend on future surveys, monitoring and incidental sightings.

Response 182-21: Desert tortoise (page 10). The West Mojave planning team surveyed nearly 4,000 square miles of potential tortoise habitat. Surveys were conducted on approximately ¾ of the lands within Johnson Valley, Stoddard Valley, and Spangler Hills open areas (see DEIR/S, page 3-125). These are the BLM open areas that are completely within the range of the tortoise and that are adjacent to proposed conservation areas. The two open areas that were not surveyed included Olancha, which is 10 miles north of the tortoise's range, and Jawbone, located west of the range of the tortoise (it's eastern boundary generally coincides with the western boundary of the range).

Response 182-22: Alternative C (page 11). The Recovery Plan states, "Recovery plans delineate reasonable actions which are believed to be required to recover and/or protect listed species" (Disclaimer Page). Further, "A recovery plan is not self-implementing, but presents a set of recommendations endorsed by an approving official representing the Department of the

Interior" (p. 1). It is an advisory document to the USFWS, providing then-available information and a considered approach to recovery by a qualified Recovery Team.

During the development of the West Mojave Plan, stakeholders asked that a Recovery Plan alternative be analyzed. This has been accomplished by including the Recovery Plan's conservation recommendations as Alternative C. The Draft EIR/S presents an analysis of the effectiveness of this alternative, allowing for comparison with Alternative A, the proposed action. Given that the recovery plan was prepared more than a decade ago, upon the basis of information available at that time, it is understandable that the Draft EIR/S concluded that it would be a less effective means of recovering the desert tortoise than Alternative A's conservation strategy, a more widely applicable approach based upon current data and research (see analysis throughout Chapter 4 and in the Executive Summary).

Response 182-23: Alternative D (page 11). Comment noted.

Response 182-24: Proposed alternative (page 11). Comments noted. The reasons for eliminating the Interim Management Alternative from detailed consideration were presented in the Draft EIR/S at page 2-198. The 1 percent threshold would apply to all HCA lands; it is not limited to tortoise DWMAs (see Draft EIR/S, page 2-28). Please note that only fiscally viable mitigation measures have been proposed; see Appendix C.

Response 182-25: Range of alternatives (pages 11 and 12). The seven alternatives examined in detail by the Draft EIR/S examined a wide range of differing approaches to conserving sensitive species. They incorporated concepts raised by agencies, stakeholders and other interested parties over many years, and represent a range of reasonable alternatives, including a No Action alternative, and a discussion of alternatives evaluated but eliminated from detailed consideration. The commentator offered no conservation strategies or concepts that were outside the scope of those addressed by the Draft EIR/S.

Response 182-26: Lane Mountain milk vetch (page 12). We do not expect substantial indirect impacts to Lane Mountain milkvetch because of the relatively remote locations of its occurrences. Indirect impacts could come from deposition of dust, or loss of pollinators or their habitat, for example. The Plan would not authorize incidental take of Lane Mountain milkvetch. In addition, the Plan provides measures to prevent any loss of this species, except where a regulatory taking of property may occur.

The Army has provided conservation measures for Lane Mountain milkvetch off the Fort Irwin expansion lands that are compatible with the goals and objectives in the West Mojave Plan. The Plan calls for reserve level protection for this species. The Final EIR/S recommends that several additional routes of travel be closed within the West Paradise and Coolgardie Mesa Conservation Areas in order to better protect this species.

Response 182-27: Mojave fringe-toed lizard (page 12). The habitat on private lands along the Mojave River is not threatened, and much of it is within the floodplain where development is infeasible. Some existing private lands are in agricultural production, fragmenting the contiguous habitat to a minor extent. The retention of the riverbed and adjacent

blowsand deposits within the floodplain as open space will create a connecting corridor that can be used for dispersal of this species. Additional survey work in the future is needed to determine the efficacy of the river connector. This is a monitoring measure of the Plan.

Response 182-28: Noise (page 13). Issues related to noise and its effects on desert wildlife are addressed in the DEIR/S. For example, see Appendix J at page 41 (referenced at DEIR/S page 3-93), discussions of noise levels of off highway vehicles included in Chapter 3, and references in Chapter 4 (for example, pages 4-35, 4-51 and 4-56). Pursuant to your suggestion, additional materials have been added to the discussion in Chapters 3 and 4 of the Final EIR/S, including materials also appearing in Appendix J.

Response 182-29: Air quality standards (page 13). The Draft EIR/S assessed those pollutants that have the potential to be emitted and will change as a result of the proposed action in relation to the existing situation. USEPA guidance discusses the need to address both direct and indirect emissions of pollutants or their precursors that are caused by a federal action, are reasonably foreseeable and can practicably be controlled by the Federal agency through its continuing program responsibilities. In addition there are exceptions for actions with emissions below specified de minimus levels and certain other actions that are exempt or presumed to conform (USEPA 1993). The EIR/S does not attempt to model and calculate absolute emissions for all pollutants. There is no requirement or need to conduct that level of analysis in this EIR/S.

The implementation of air quality standards is accomplished through a series of processes carried out by the USEPA, the state Air Resources Board and the air districts. These processes include promulgation of rules and regulations, assignment of authorities and the development of state implementation plans (SIPs). Local air districts prepare the SIP sections for inclusion in the overall SIP. The local district also develops rules to implement the SIP. The SIP and accompanying rules must be approved by the state and the USEPA (ARB 1993a, 2001a, GBUAPCD 2003, Paxton 1993, DeSalvio 2003, Calkins 1994 and Ono 2000). The SIP and accompanying rules spell out the details of how air issues will be managed and what must be done to comply. Many of these rules spell out actions that must be taken rather than targets. As an example, businesses may be required to pave or seal parking lots if they had more than 5 vehicles per day, acquire permits to operate certain types of equipment or apply reasonably available control measures (RACM) to various classes of activities (KCAPCD 1993, MDAQMD 1993, 1994, 1995, 1996 and 2003, SCAQMD 1993a, U.S. Bureau of Land Management 1999, 2001 and 2003). The issue of compliance is addressed by the USEPA in a Federal Register notice (USEPA 1993) which states "The Clean Air (Act) requires the EPA to promulgate rules to ensure that Federal actions conform to the appropriate State implementation plan (SIP). Conformity to a SIP is defined in the Act as amended in 1990 as meaning conformity to a SIP's purpose of eliminating or reducing the severity and number of violations of national ambient air quality standards (NAAQS) and achieving expeditious attainment of such standards. The Federal agency responsible for the action is required to determine if its actions conform to the applicable SIP." This analysis was provided in the Draft EIR/S and a conformity statement was made for each alternative.

Response 182-30: Air quality and growth (page 13). The section that the commentator cites (Draft EIR/S Vol. 1 at 3-53) is a portion of the affected environment, not the impact analysis. The air quality analysis may be found beginning at DEIR/S page 4-4. The comment attacks the adequacy of the analysis conducted for "planning area development growth, as well as from increased OHV open routes."

The Southern California Association of Governments (SCAG) is charged with developing projections on regional trends in population dynamics, work trends, transportation needs and expected emissions (SCAG 2002). They also prepare the federal conformity statement for the emissions related to those issues. These are all the result of extensive research and computer modeling. The results are summarized in their Regional Transportation Improvement Program (RTIP) publications, which are revised regularly and are approved by the state ARB and the USEPA. The 2002 technical appendix contains a regional emission analysis that includes expected population growth data along with the expected growth in infrastructure and emission trends. This document was consulted because it has an approved air quality analysis for regional growth over the next 25 years. The RTIP demonstrates air conformity with the increased population projections. Projections for ozone precursor emissions show a 32% decline in NOx emissions and a 69% decline in ROG (VOC) emissions between 2000 and 2025. These two components along with heat and sunshine result in ozone so there would be a decline over time in ozone levels not an increase. These declines are the result of the implementation of SIP provisions and the mandatory reductions required by the USEPA. The SCAG RTIP plan projected higher growth rates than those projected as a result of the West Mojave Plan. For that reason, additional analysis on the affects of growth is not necessary because the RTIP analysis demonstrates conformity, even assuming that higher growth rates occur than predicted by the Draft EIR/S.

Guidance on air quality analyses indicates the use of the current situation or 1990 (date of Clean Air Act amendments) base line data as a basis for analysis (SCAQMD 1993b, Paxton 1993, DeSalvio 2003, Calkins 1994 and Ono 2000). The current situation was used as a basis for the Draft EIR/S analysis of vehicle route impacts. This analysis accepts that there is an existing motorized vehicle access network, but that it has not been fully implemented and that many vehicle routes that are not included in the existing network continue to be used by motorized vehicles. Each of the proposed actions is compared to that situation. Under that basis, all of the alternatives except Alternative E result in fewer miles of vehicle routes used than at present, and less resultant bare ground. Bare disturbed soil in vehicle routes is one source of PM_{10} emissions that changes as a result of the plan. This is the reason there would be reductions in PM_{10} emissions as a result all but one of the plan alternatives. The analysis of alternative E reflects that there would be increased PM_{10} emissions and that it would not pass conformity.

The analysis reflects that there would be declines in both PM_{10} and ozone and therefore extensive analyses are not necessary.

Response 182-31: $PM_{2.5}$ emissions (page 13). The status of $PM_{2.5}$ regulations and attainment/violations remains in a state of flux. The USEPA has not designated the nonattainment areas nor issued guidance on compliance. According to USEPA guidance issued April 1, 2003 (USEPA 2003h), the following time line will apply for $PM_{2.5}$:

TIME LINE FOR $PM_{2.5}$ IMPLEMENTATION PROGRAM (FROM USEPA)	
Date	Item
September 2003	USEPA issues proposed $PM_{2.5}$ implementation rule
February 15, 2004	State and tribal recommendations due for $PM_{2.5}$ designations -Recommendations can be based on 2000-2002 data
July 2004	USEPA notifies States and Tribes concerning any modifications to their recommendations.
September 2004	USEPA issues final $PM_{2.5}$ implementation rule
December 15, 2004	USEPA issues final $PM_{2.5}$ designations
December 2007	State Implementation plans are due for $PM_{2.5}$ nonattainment areas (3 years after designation)
December 2009-2014	Date for attaining $PM_{2.5}$ standards (5 years after designation date). An extension of up to five years is possible with an adequate demonstration.

The April 1, 2003 guidance also indicated that the USEPA will likely designate entire counties as attainment / nonattainment areas.

$PM_{2.5}$ is a regional rather than a hotspot type of pollutant. The primary source of $PM_{2.5}$ in the atmosphere is combustion products and is likely to be found in the same areas as ozone. It forms from both direct sources and secondarily from the chemical transform of precursor emissions in the atmosphere. Many of the precursor emissions are from combustion sources also. Some of these precursor emissions include SO_2 and NOx. The USEPA estimates that secondary $PM_{2.5}$ accounts for 50% of the ambient $PM_{2.5}$ in many areas.

Characterization work by the USEPA and others have developed an understanding of the sources of $PM_{2.5}$ for a number of areas. Work done by Heloemmen and others (in USEPA 1997) in Phoenix, Arizona found that 57% of the $PM_{2.5}$ was from direct combustion sources. They also found that unpaved road travel accounted for 1% of the emissions. Work by the Desert Research Institute in the San Joaquin Valley found that unpaved roads accounted for >1% of the $PM_{2.5}$ and that soil accounted for around 7% of the $PM_{2.5}$. They found that most of the soil $PM_{2.5}$ came from construction and agricultural fields.

Major sources for $PM_{2.5}$ are diesel engines, power plants, boilers and such (USEAP 1997). Control strategies for $PM_{2.5}$ have targeted diesel engines that are now being regulated and which are targeted in new South Coast Air Quality Management District proposals (Gladstein 2003). $PM_{2.5}$ emissions from BLM lands are likely to be very small and have very little impact on any possible attainment / nonattainment designations. The projections from air regulators indicate a reduction in $PM_{2.5}$ levels as the regulations take effect and the required technology advances are implemented. Any areas that are classified as nonattainment areas by the USEPA would have to reduce the ambient $PM_{2.5}$ levels.

Response 182-32: Law enforcement (page 14). Funding for law enforcement personnel, as well as field contact and maintenance employees, is presented in Appendix C's implementation and funding chart. The Chapter 2 and Appendix C text has been revised to clarify the inconsistent language raised by the commentator. BLM could provide 25% of the funding to implement prescriptions DT-28 and DT-29; the Implementing Authority would provide the remaining 75% of the personnel and funding.

Response 182-33: Visual resources (page 14). Alternative A would not result in significant impacts to visual resources, contrary to the assertions of the commentator.

The acreage of lands disturbed by off highway vehicle routes would decrease as implementation of the motorized vehicle access network proceeds. The West Mojave Plan's route network implementation strategy, described more fully by the Draft EIR/S at section 2.2.6.8, includes a new route restoration program that would be applied to rehabilitate closed routes. Within the redesign area, 3,604 miles of existing vehicle routes were identified during field surveys conducted in 2001 and 2002. Approximately 40 percent of these existing routes would be closed, portions restored and the remainder allowed to naturally revegetate. As a result, the landscape of the redesign area would see a gradual transformation towards one with substantially less ground disturbance than at present. Assuming the average tread width of these closed routes is approximately 6 feet (that is, assuming 50% are 2 track routes of 8 feet width and 50% are single track routes of 4 feet width) the total footprint of these closed routes represents approximately 1,700 acres. Restoring these acres would be a significant enhancement of the planning area's visual resources.

In addition, the West Mojave Plan proposes to narrow the belt of land adjacent to open routes within tortoise DWMAs that would be available for stopping and parking. Currently that belt is 600 feet wide; under Alternative A it would be narrowed to 100 feet. This would result in significantly less land being subject to any impacts, including visual, that would result from stopping and parking activities than was the case in the past, both prior to and after the adoption of the June 30, 2003 route network. The text of the Final EIR/S has been clarified to make this point, and to add more discussion of visual resources.

A dramatically changed natural landscape is unlikely to result from adoption of streamlined incidental take permit procedures. Most of the projected population and housing growth (88 percent, in fact) is expected to take place within the incorporated cities, and it is highly unlikely that any significant amount of land would be developed within the HCA boundaries (see Draft EIR/S at page 4-87). To the degree that the mitigation fee and streamlined procedures has an effect on development patterns, it will be to make it relatively less expensive than under the No Action alternative to develop parcels within disturbed habitat, including tortoise "No Survey" areas, and relatively more expensive within conservation areas (see Draft EIR/S at page 4-83). Encouragement of "infill" development should result in less alteration of the natural landscape than would result under current procedures. The text of the Final EIR/S has been clarified to emphasize this point.

Responses 182-34: Water resources (page 14), paragraphs 1 and 2. In response to your suggestion, additional discussion of the effects of growth on water quality and groundwater levels has been added to Section 4.2.1.3.

Response 182-35: Grazing and water quality (page 14). In response to your suggestion, additional discussion of the effects of grazing on the planning area's water quality and groundwater basins has been added to Section 4.2.1.3 (Water Quality).

Response 182-36: Older vehicles (page 15). The commentator cites statistics from the California Air Resources Board (CARB) website pointing out that the emissions produced by a 2 stroke engine are greater than that produced by a 1997 passenger car and states that the Draft EIR/S "nowhere suggests placing any restrictions on the use of vehicles built prior to 1997." Enforcement of State of California emissions standards is the responsibility of the California Air Resources Board, overseen by the federal Environmental Protection Agency. Neither the BLM nor local jurisdictions are authorized to impose additional restrictions on vehicle emissions.

Response 182-37: Post-1997 vehicles (page 15). See Response 182-36.

Response 182-38: OHV traffic regulation (page 15). The commentator incorrectly asserts that the Draft EIR/S "does not suggest regulating OHV traffic in any of the Plan's alternatives." In fact, Alternative D includes such a program. Prescription AD-33 proposes that only street-legal vehicles be permitted within the biologically sensitive motorized access zones listed by Table 2-29.

Response 182-39: Geology and soils (page 15). See Response 182-16.

Response 182-40: Cumulative impacts (page 16). Additional materials have been added to the cumulative impacts discussion in response to your comments. Please note that the Chapter 4 impact analysis assumes that Fort Irwin expansion lands will be used for military training purposes; see Table 4-1, under Long-term Regional Trends. In fact, Chapter 4 presents extensive cumulative analysis of how the Fort Irwin expansion and the West Mojave Plan's conservation strategy will affect species covered by the HCP.

The concentration levels of criteria pollutants are detected at air quality monitoring stations. These monitoring stations measure the cumulative effect of the regional activities on air quality. Any changes in ozone pollution that result from the West Mojave Plan will be very small in relation to the regional activity. This is reflected in the regional planning by SCAG (2002) showing a 43% decline in ozone precursor emissions as a result of controls being implemented in the region. At the same time the population is projected to increase 51%. As noted in responses 182-28 and 182-29, the regional pollution levels will decline rather than increase. This is the reason for the lack of a discussion of the impacts of increased pollutants.

Response 182-41: Mitigation fee (page 17). See Response 182-6.

Response 182-42: Lane Mountain milk vetch mitigation (page 17). The full sentence which is referenced reads: "Additional measures may be required by the terms and conditions imposed by USFWS in Biological Opinion[s] on the Fort Irwin expansion operations plan and the West Mojave Plan." This statement recognizes that the USFWS may recommend reasonable and prudent measures to avoid take of a listed species and impose terms and conditions in addition to the mitigation measures included in the Plan. It does not defer mitigation; these measures would be implemented by Army and BLM. The Final West Mojave Plan EIR/S recommends that additional routes of travel be closed within Lane Mountain milkvetch occupied and suitable habitat in response to other commentators. These additional route designations will serve to consolidate the habitat into large unfragmented blocks and provide additional protection for this species.

Response 182-43: PM_{10} emissions (page 17). The only federal nonattainment areas designated by the USEPA are for PM_{10} and ozone, and these do not cover the entire planning area (ARB 1996; see Draft EIR/S at 3-50 & 51). Neither sulfates nor hydrogen sulfide have federal National Ambient Air Quality Standards (NAAQS).

The basis for the Draft EIR/S conclusion that PM_{10} emissions will decrease is discussed by responses 182-28, 182-29 and 182-38. The commentator's assertion that this conclusion has no basis in science is incorrect. The USEPA and the air districts have issued guidance to use the USEPA emission factors in publication AP-42 (USEPA 2003d, SCAQMD 1993b). That document notes that the area of disturbance is one of the main variables in the calculation of PM_{10} emissions and that over time the emissions will reduce to near zero if there has been no new disturbance because the fine material will be blown away. The analysis in the Draft EIR/S followed that guidance in examining the effect of reductions in open routes of travel and other actions that result in continued disturbance. As noted above, the existing motorized vehicle access network has not been fully implemented and motorized vehicles continue to use routes that have yet to be signed or mapped closed, or rehabilitated. Implementation of Alternative A, including signing, maintenance of open routes, disguise of prominent closed routes and route rehabilitation will result in a net reduction in the mileage of unpaved routes that are utilized by motorized vehicles compared to the present situation. It is not expected that the number of vehicle miles traveled will change as a result of the West Mojave Plan. Moreover, the West Mojave Plan significantly decreases the acreage of lands within tortoise DWMAs and adjacent to open routes that would be available for stopping and parking, reducing a 600-foot wide stopping and parking belt to 100 feet. Camping in tortoise DWMAs would also be limited to previously disturbed areas adjacent to open routes, rather than anywhere within 300 feet of the centerline of the route. These measures will substantially reduce new ground disturbance. Finally, the West Mojave Plan commits BLM to an aggressive program of closed route rehabilitation. The conclusion follows that emissions from this source will decrease. The text of the Final EIR/S has been clarified, however, to ensure that this point is clearly made.

In fact, there are a number of sources of PM_{10} emissions in the planning area. The various PM_{10} implementation plan components contain inventories of sources and their estimated volumes that can be referenced for further information. As an example, the Mojave Desert Air Quality Management District (MDAQMD) PM_{10} plan inventory summary lists some 46 sources (MDAQMD 1995). Only a few of the sources are on public lands. These include disturbed

areas, unpaved road travel, wind erosion from unpaved roads and livestock grazing. The West Mojave Plan primarily effects the wind erosion from unpaved roads and disturbed areas and livestock grazing. Full implementation of a motorized vehicle access network that leads to the actual closure of vehicle routes, reductions in livestock grazing, restrictions on camping and rehabilitation of disturbed areas will result in reductions in PM_{10} emissions due to a reduction in the amount of disturbed area in all but Alternative E.

The small increase in ozone precursor emissions as a result of development would be a minor effect on a regional scale and would be very short term. Even assuming a rate of population growth as high as SCAG projections (an increase of up to 51% in the region over the term of the plan), the precursor emissions would decrease because of increased emission controls resulting in lower ozone levels (SCAG 2002). The projection is for attainment of the ozone standard by 2010. Moreover, it is not a violation of the Clean Air Act to have increases in emissions if the emissions are addressed in the SIP budgets and the SIP provisions and air district rules are followed. In this case, all of the SIP budgets and provisions are met and the rules are followed.

Regulations promulgated by the USEPA identify those factors that need to be addressed in a conformity process (USEPA 1993). The BLM 10 step process is consistent with the USEPA regulations. The process was developed with input from the USEPA (U.S. Bureau of Land Management 1999, 2000, 2001 and 2003) and has been used a large number of times in both BLM and other agency documents which have passed USEPA review. It is neither incorrect nor illegal for BLM to utilize a procedure that is consistent with federal regulation.

One additional correction has been made to the text. The Draft EIR/S at page 3-47 included a reference to carbon monoxide. This reference has been removed as that designation is actually outside of the plan area.

Response 182-44: State Historic Preservation Officer consultation (page 18). BLM and the State Office of Historic Preservation are developing, through consultation, a programmatic agreement for routes of travel that will govern the resolution of adverse effects that may result from route designation. Consultation has consisted of many meetings, phone conversations, and correspondence. One appropriate use of programmatic agreements is when effects on historic properties cannot be fully determined prior to approval of an undertaking. The programmatic agreement covers identification of historic properties, assessment of adverse effects, and resolution of adverse effects.

If you are using "full inventory" to mean 100% pedestrian inventory or survey of routes of travel, that level of inventory is not required by federal regulation. Appropriate identification efforts may include background research, consultation, oral history interviews, sample field investigation, and field survey. The agency shall take into account past planning, research and studies, the magnitude and nature of the undertaking and the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effects. (Reference Advisory Council on Historic Preservation, Section 106 Regulations, Sec. 800.4 (b) 1.) The level of identification will be

specified in the programmatic agreement developed by BLM and the State Office of Historic Preservation.

Response 182-45: Native American consultation (pages 18 and 19). BLM made a reasonable and good faith effort to identify Indian tribes that might attach religious and cultural significance to historic properties in the area of potential effect and invite them to be consulting parties. In June 2000, BLM invited tribes to join BLM and other governmental groups in developing the plan. The letter to tribes described the location of the planning area, the purpose and effects of the plan, and the planning process. BLM received responses from three tribes. In May 2001, BLM again invited tribes to participate in planning, described the plan and vehicle route network, requested questions and comments regarding the vehicle access network, and offered to make presentations to the councils. In July 2001, BLM made phone contact with tribal offices. During these phone conversations, several tribes requested additional information about the plan, and BLM sent information packages to those tribes. One tribe requested a briefing, and BLM presented a briefing. With one exception, tribes did not request a briefing from or meeting with BLM. In April 2003, BLM sent copies of the plan amendment for the vehicle designation project to tribes and requested comments on the effect the vehicle access network might have on religious and cultural concerns, referencing prior contacts with the tribes regarding the route network. And in June 2003 BLM sent copies of the Draft West Mojave EIR/S to tribes and requested comments.

Response 182-46: Route network and desert tortoise habitat (pages 19 and 20). The West Mojave Plan significantly reduces the DWMA acreage susceptible to disturbance by off highway vehicle use by narrowing the stopping and parking corridor from within 300 feet of the centerline of open routes to 50 feet of the centerline, and by limiting camping to previously disturbed sites adjacent to open routes. Acreage within the driving, stopping and parking corridor would be reduced within the Fremont-Kramer, Superior-Cronese and Newberry-Rodman DWMAs follows:

- Fremont-Kramer DWMA: from 52,361 acres to 10,138 acres
- Superior-Cronese DWMA: from 54,499 acres to 9,833 acres
- Ord-Rodman DWMA: from 17,512 acres to 3,146 acres

By establishing and funding an aggressive route rehabilitation program, the West Mojave Plan will ensure that affirmative and effective steps are taken to prevent route proliferation. Both of these steps represent significant improvements over the existing situation.

On June 30, 2003, the CDCA Plan was amended to incorporate the route network described by Draft EIR/S Alternative A. That network now constitutes the "No Action" alternative. The portion of the network that lies within the tortoise DWMAs was redesigned in a manner that closed relatively more routes in biologically sensitive areas, while opening routes in less sensitive mountainous terrain favored by recreationists (see Draft EIR/S at page 4-118 and elsewhere). The network adopted on June 30, 2003, together with the closed route rehabilitation and the new stopping, parking and camping restrictions, should address the resource protection and route proliferation concerns raised by the commentator.

Additional route mileage and acreage comparisons have been added to the text of the Final EIR/S.

Response 182-47: Lane Mountain milk vetch (Pages 20 and 21). We do not expect substantial indirect impacts to Lane Mountain milkvetch because of the relatively remote locations of its occurrences. Indirect impacts could come from deposition of dust, or loss of pollinators or their habitat, for example. We have never seen evidence of these plants damaged or destroyed by vehicles, but recognize that the potential exists for off-road travel to do so. We have recommended additional routes of travel for closure within Lane Mountain milkvetch occupied and suitable habitat in response to other commentators. These additional route designations will serve to consolidate the habitat into large unfragmented blocks and provide additional protection for this species. We do not believe that any actions are allowed that would jeopardize this species because the measures provided are designed to avoid all loss of plants and disturbance to occupied habitat.

Response 182-48: Carbonate endemic plants (page 21). The Plan does not designate open routes within occupied and critical habitat of the carbonate endemic plant species. All routes within the proposed ACEC are designated as limited, with access provided only to claimholders. The boundary route for the ACEC is designated as open. These provisions are described in Appendix D. Maps 70 and 73 have been corrected to show the new designations.

The sentence referenced on page 3-182 of the Draft EIR/S states: "Vehicle travel on occupied habitat is a minor threat and travel off roads could adversely modify designated critical habitat" (emphasis added). This refers to vehicles that might leave the roadbed and damage plants or their habitat. The steep terrain in the carbonate habitat makes travel off designated routes highly unlikely. BLM does not make a determination of adverse modification. The Plan noted that off road travel *could* (i.e. might, or creates the possibility for) lead to adverse modification. The designation of the routes of travel within occupied habitat as limited and closed reduces the potential for this to occur to near zero.

Response 182-49: Desert Tortoise Recovery Plan (pages 21 and 22). Alternative A's conservation strategy had its origin in the recommendations of the Desert Tortoise Recovery Plan. Agency and academic biologists, working with local jurisdictions and stakeholders, applied the results of a decade's worth of research and new field surveys to refine those recommendations into a more effective recovery strategy, Alternative A, which is applicable to private as well as public lands. Alternative A includes management measures addressing feral dogs (including the preparation of a feral dog management plan), the discharge of firearms, and a 1 percent new ground disturbance threshold that the Recovery Plan entirely lacks. Motorized vehicle use is limited to designated routes, contrary to the commentator's assertions. Many additional examples could be cited. The Draft EIR/S documents the reasons why Alternative A attains biological goals and objectives more effectively than the Recovery Plan; see, for example, Draft EIR/S, at page 4-162-3, and the Executive Summary.

Response 182-50: State listed species (pages 22 and 23). Explanations of how and why the conservation strategies developed for each of the species to be covered by the HCP fully mitigate take were presented throughout Chapter 4 of the Draft EIR/S. We have reviewed those

discussions, however, and clarified text where necessary to provide additional text that explains why the "fully mitigated" standard would be met for a given species. Please see discussions of each species presented in Chapter 4 of the Final EIR/S, as well as summary tables included in Chapter 2 and in the Executive Summary.

Response 182-51: Economic objectives (page 23). The West Mojave Plan does not, and may not, replace CESA and FESA permit issuance criteria with a "balancing that gives equal or greater consideration to the applicant's economic objectives." No provision of the plan calls for such a balancing.

Response 182-52: Surveys (pages 23 and 24). The planning team used the best survey information available for all covered species. For some species, such as desert tortoise and Lane Mountain milkvetch, extensive new survey efforts were initiated. Unknown attributes for many species are an inherent aspect of any multiple species Habitat Conservation Plan. These include data gaps for distribution, life history, ecological processes and threats. In response to comment letters, several species have been dropped from the list proposed for incidental take permit coverage based on insufficient information. The CDFG will evaluate adequacy of the available survey information in making its determination of which species area adequately conserved and afforded proper mitigation.

Response 182-53: Take of unlisted species (page 24). The commentator is correct. The explanation of CDFG procedures has been clarified.

Response 182-54: Regulatory assurances (page 25). Section 2.2.3.2 has been clarified to address your concerns.

Response 182-55: Fish and Game Code Section 3503.5 (page 25). The Plan does not authorize any take of eggs or occupied nests of birds of prey. It does not authorize any mortality of the birds. We have added clarification of this Fish and Game Code provision in Section 2.2.4.7.

Response 182-56: Public trust (pages 25 and 26). Comment noted.

Response 182-57: Route designation alternatives (pages 26 and 27). See Response to Topical Comment 6d.

Response 182-56: Wilderness (pages 27 and 28). Most of the lands adjacent to Joshua Tree National Park are within the proposed Pinto Mountains tortoise DWMA and ACEC. Management of this conservation area would complement adjacent National Park management and would not result in spillover effects on the wilderness.

6.3.20 Letter 183: American Motorcyclist Association, et al

Response 183-1: DWMA boundaries (page 4). The boundaries of the tortoise DWMAs that were presented in the Draft EIR/S are essentially the same as those that were presented and discussed at Supergroup and Task Group meetings. Minor boundary adjustments collectively changed the acreage included within the tortoise DWMAs by less than one percent.

The tortoise DWMAs constitute about 60 percent of the habitat conservation area. The West Mojave Plan also proposes conservation areas for other species, such as the Mohave ground squirrel, and for sensitive habitat areas, such as Big Rock Creek and Middle Knob. All conservation areas, however, were presented to and discussed with the Supergroup and Task Groups.

Response 183-2: Dual sport events (page 4). Dual Sport events are treated somewhat differently from the lone dual sport motorcycle rider who travels the same route because of the number of participants. The BLM issues a special event or special use permit for organized events. The reason for this requirement is that activities or special events that involve larger number of participants can typically result in significantly larger environmental impacts and demand greater services from limited BLM resources. The special use permit, with its restrictions, is required in an effort to reduce those impacts to both the environment and BLM's limited resources (e.g. law enforcement, resource protection, traffic control, maintenance and clean-up).

Response 183-3: Land classifications (page 4). Lands that would be changed from Class M to Class L are listed in Table 2-4. These changes include two that were called for more than a decade ago in ACEC management plans (Rand Mountain and Afton Canyon), and portions of five conservation areas (Bendires thrasher, Mohave ground squirrel, Carbonate Endemic Plants ACEC, Pisgah Crater ACEC, Mojave monkeyflower and MGS). In each case, the change was made because the policies that guide Class L management conform more closely to the proposed management of these conservation areas than Class M guidelines. No changes or new restrictions have been adopted into the class guidelines themselves.

Response 183-4: Route classifications (page 4). The commentator may be confusing the concept of open, limited and closed *route designations* with open, limited and closed *area designations*. The CDCA Plan includes a third "open, limited and closed" classification scheme, one that is often confused with the multiple use classes and the designation of specific routes as open, limited or closed. This is the "Area Designations" concept: some regions are closed (such as wilderness areas and a few lakebeds); some are open (including the off highway vehicle open areas and other lakebeds); and remaining lands are "limited". These "limited areas" include most (but not all) Class L and M lands, and some Class I lands. Designation of routes as open, closed or limited occurs on lands with a "limited area" classification. Please see the CDCA Plan (as amended), pages 76 to 79.

BLM has not proposed to redefine the term "limited".

BLM planning policy provides guidance for the designation of both areas and individual routes and additional guidance on the proper use of designation terminology. The designation term of "Limited" is common to both area and route designations, but has different meanings based upon the application. A "Limited" area designation is an area in which motorized travel by the public is restrained or "limited" to existing or designated routes only; it does not allow for cross-country or "off-trail, -route or –road" travel. This restriction is utilized as a means to further protection of sensitive resources. By comparison, an individual route designated "Limited" is one in which motorized travel is "limited" or restricted in some fashion. For example, motorized use of the route can by limited by season, by vehicle type (e.g. two-track vs. single-track, non-motorized/mechanized or non-motorized/non-mechanized), or by type of use (e.g. public recreation, commercial, administrative).

Response 183-5: Areas of Critical Environmental Concern (page 5). ACECs are proposed where special management attention is necessary to protect and prevent irreparable damage to, among other values, wildlife resources and natural processes. ACECs do not impose wilderness level management on lands within their borders. As the commentator states, those activities that do not conflict with the steps necessary to apply "special management attention" may be allowed within the ACEC, including motorized vehicle access.

Response 183-6: Financial implications, part two (page 6). Appendix C's Implementation Tasks Priorities and Costs table has been revised to address your concerns. Please see the revised table in Appendix C.

The Draft EIR/S addressed the contribution of recreation users to residents of the planning area and the surrounding region. Please see Table 3-55 (beginning on page 3-244), the discussion of recreation-related employment in Chapter 4 on pagers 4-96 and 4-97, and materials in Appendix N, beginning on page 49.

Response 183-7: Parallel routes (page 6). A systematic evaluation of each route was conducted that assessed both the general and specific uses of the route (including recreational, private property and commercial access) and the biological values of the lands it crossed. The Draft EIR/S described this process on page 2-128. Known specific environmental conflicts along each route were considered. These assessments were based upon the best scientific information available. In many cases, parallel routes that might appear to provide access to the same recreation or commercial venue actually served different purposes: one route might provide a more challenging recreation experience or more interesting views than another located nearby. In such cases, both routes may have been left open.

Routes were considered to be "duplicate" when two or more routes, located in close proximity, provided access to the same sites or offered essentially identical riding and touring experiences. In such cases, one or more of the routes may have been closed, thereby reducing the acreage of habitat disturbance. This would allow a duplicate route to be rehabilitated, not only enhancing wildlife habitat but improving the scenic quality of an area for users of the remaining route. Although the level of use might increase on the open route, the net impact on species and habitat would be less than if all duplicate routes were left open: more ground cover would be established, there would be less opportunity for dust and a lower probability of the

establishment and spread of exotics on the disturbed ground. And, in the event a route was "incapacitated" by a natural calamity, BLM retains the authority to provide temporary emergency access as necessary.

Response 183-8: Parallel route recommendations (page 7). See preceding response.

Response 183-9: Route survey (page 7). See Topical Response 5a.

Response 183-10: Best data (page 8). See previous response.

Response 183-11: Completion of survey (page 8). BLM may conduct field surveys at any time they are needed to address new issues, and may amend its land use plans to incorporate the findings of those surveys. Because the authority to do so already exists, no new system or process is necessary. The ten "un-surveyed" areas referred to by the commentator were, in fact, surveyed in the 1980s, and a route network was designated in those areas and closures approved at that time. This network was retained by the BLM's decision record for the Western Mojave Desert Off Road Vehicle Designation Project, dated June 30, 2003, except as specifically modified by that document.

Response 183-12: RS 2477 (page 9). Comment noted.

Response 183-13: Competitive events outside open areas (page 9). Section 202(a) of FLPLA directs the Secretary of the Interior to prepare land use plans that provide for the use of public lands. Section 601 of FLPMA directed that the use of California desert resources be provided for in a "multiple use and sustained yield management plan … including the use, where appropriate, of off-road recreational vehicles." A California Desert Conservation Area Plan was prepared and adopted in 1980. It includes a Recreation Element, which specifies where and when organized competitive vehicle events are allowed. The Recreation Element provides for a Johnson Valley to Parker Competitive Event Corridor and a Barstow to Vegas Race Course. Neither was specifically designated in FLPMA. The Recreation Element may be modified by a plan amendment; in fact, the Barstow to Vegas Race Course was incorporated into the CDCA Plan by an amendment to the Plan that was adopted in 1982. Congressional action is not necessary to make such changes.

Response 183-14: NEMO provision (page 9). The BLM's Northern and Eastern Mojave Plan identified the future management of Organized Competitive Vehicle Events as a "major issue", but it did not suggest that BLM "must develop a comprehensive plan toward OHV recreation and competitive events in the Mojave Desert." The NEMO plan specifically acknowledged that such a plan already exists: the CDCA Plan (see Final NEMO EIS, page 1-15). NEMO simply examined certain aspects of the existing program, and adopted a limited number of amendments to it (such as the elimination of that portion of the Barstow to Vegas Race Course located within the NEMO planning area).

Response 183-15: Barstow to Vegas (page 9). Comment noted.

Response 183-16: CFR 2930 (page 10). The commentator correctly observes that some non-speed and non-timed touring events may have relatively little impact on wildlife. However, the number of participants, the type of vehicles (e.g. performance characteristics and capabilities), the specific course of travel, and time of year can vary considerably. Unforeseeable circumstances (such as weather) may significantly modify the degree of impact. In the future, species could be listed as threatened or endangered, currently listed species could face greater threats than at present, and new information not currently available could identify additional impacts of such events. As a result, these events cannot be classified programmatically as "events of no consequence" to wildlife and habitat.

These diverse social and environmental circumstances, as well as unforeseeable future conditions, support the continuation of case-by-case permitting for organized touring events. The unique features and likely impacts of each event argue against adoption of a cost ceiling on such permits: the needs of the event will determine the costs to be recovered.

Response 183-17: Tortoise population data (page 11). The referenced study by Bury and Corn (23(1):41-47) was published in 1995, and therefore did not report findings at Joshua Tree National Park between 1991 and 1996, as stated. The Bury-Corn paper was a summary of the quality of data used to list the tortoise.

There are NO data showing tortoise populations are on the increase. Dr. Berry demonstrated, using scientific methods and repetitive sampling of BLM trend plots between the 1970's and 1990's that tortoise numbers declined on all such plots. The declines were from as little as 5% at Stoddard Valley up to 93% at Fremont Peak (see Draft EIR/S Tables 3-12 and 3-13). West Mojave planning team surveys completed between 1998 and 2002 showed a correlation between the declines observed by Dr. Berry and recent locations of tortoise sign, tortoises, and carcasses. In fact, the most recent data suggest that the only potential increase in tortoises may be at the Desert Tortoise Research Natural Area, as evidenced by the concentration of subadult tortoises (Draft EIR/S, p. 3-89). Available information of tortoise population declines is given in the Draft EIR/S on pages 3-75 and 3-93.

Response 183-18: Other species (page 11). The commentator refers to the more than 100 special status species addressed by the West Mojave Plan. These have been assigned a variety of special statuses and designations. The USFWS maintains a list of threatened and endangered species; it dropped the "sensitive" designation (i.e., Category 2) in the late 1990's. CDFG lists both threatened and endangered species and those that are considered California Species of Special Concern. BLM also maintains a list of "BLM-sensitive species." The California Native Plant Society maintains a list of rare plant species. A "recovery plan" arises from a provision in the federal endangered species act, and is prepared for species listed by USFWS as threatened or endangered (only). The West Mojave Plan, as a habitat conservation plan, has a broader purpose, and is intended to mitigate impacts and risks to each of the more than 100 special status species. As an HCP, it is the appropriate venue to do so. Best available data has been applied to accomplish this.

Most of the 123 species addressed by the West Mojave Plan are termed "sensitive"; a word generally used to describe species that are naturally rare, believed to have declining

populations, or is particularly susceptible to human disturbance. Fifty-nine of these species were identified as needing additional protection through the West Mojave Plan.

Recovery Plans have been prepared for 7 West Mojave species listed by the federal government as threatened or endangered draft EIR/S page 3-29. The Recovery Plan for the southwestern willow flycatcher is now final. Draft Recovery Plans have been prepared for an additional five species (carbonate plants and least Bell's vireo). These plans were used to formulate conservation plans for each of these listed species.

Species accounts prepared by subject matter experts were prepared for the other covered species, most of which are not state or federally listed. These accounts summarized the scientific literature and presented an overview on the natural history, local distribution and threats to each species. The conservation plans utilized these reports as a basis, followed by discussions with the Wildlife Agencies, which led to the Evaluation Report. Stakeholders reviewed the tentative plans at many meetings to identify conservation measures that were feasible and desirable for each species.

Response 183-19: Section 1.2 (page 11-12). See prior response.

Response 183-20: Database (page 12-13). The BLM has provided all its recent tortoise data to the University of Redlands, and assisted that institution in compiling existing materials. GIS records have been exchanged. The West Mojave planning team and the University worked closely together during the preparation of the Draft EIR/S. The University digitized the 1985-87 motorized vehicle route network, and provided much of the funding for the GIS analytical work that was the basis for Chapter 4's impact analysis.

BLM and Dr. Boarman at USGS maintain a library that contains all references listed in the Draft EIR/S with regards to tortoises, much of it peer-reviewed. BLM has an extensive library of references cited for the remaining species and other information. All species accounts prepared for the West Mojave planning team were peer-reviewed, as was Dr. Boarman's tortoise threats analysis. All literature reviewed to derive conclusions in the Draft is cited and available for independent review.

Much of the information used to prepare the Draft EIR/S is based on studies performed specifically for the plan, and are the latest information on tortoise distribution and relative occurrence. Seventeen experienced desert tortoise biologists collected the desert tortoise data and conducted field surveys. Standard methods were used that have been field tested since the mid-1970's. The information has been invaluable in completing the Draft; it is the basis for much of the information given in Chapter 3. In addition, the conclusions are now before scientists and the public who have an opportunity to identify problems with methods, results, and interpretation.

The relative importance of the threats to the desert tortoise can be ascertained by reviewing Dr. Boarman's threats analysis, in EIR/S Appendix J. Although a "top ten" ranking is not provided, the analysis clearly indicates how, why and to what degree each of 22 factors affects the tortoise.

Response 183-21: Past monitoring (page 13). Military bases are not the only agencies to complete on-the-ground monitoring, or to implement mitigation actions. The BLM permanent trend plot studies summarized in DEIR/S Table 3-12 were one form of monitoring that has occurred. Both the BLM Barstow and Ridgecrest Field Offices participated in Tortoise and Burrow (TAB) studies. The National Park Service has completed population-monitoring studies at Joshua Tree National Park. Numerous federal agencies have consulted with the USFWS to minimize or avoid impacts of projects that are funded, authorized, or carried out by a federal agency. Some include Federal Highway Administration, Army Corps of Engineers, Department of Education, and Environmental Protection Agency. Even so, it is accurate to say that much of the available information has come from the Department of Defense.

Response 183-22: Monitoring recommendation (page 13). Data are currently being collected by the distance sampling methodology that has been endorsed by the federal Management Oversight Group as the way to estimate populations, called for in the Recovery Plan. Distance sampling data have been collected for years 2001, 2002, 2003 and are funded for 2004 in the West Mojave. Once surveys are completed in 2005, the USFWS will be able to provide an estimate of the population. Still, other studies and monitoring will be required to continue to assess impacts. Some of these would be provided for in the Plan.

Response 183-23: Database (page 14). The University of Redlands received separate funding to examine scientific aspects of the desert tortoise populations throughout the range. BLM provided the University with its data from the West Mojave. The University acquires additional survey and other data on a continuous basis. We know of no additional data used for the West Mojave Plan that is contained solely in the University of Redlands database.

Response 183-24: Species populations (page 14). The 123 species addressed by the Plan qualified based on status lists maintained by state, federal and non-profit agencies. These "sensitive species" lists are based on population and distribution information available to these agencies. We agree that many species show a pattern of increase or decline. This pattern can be due to natural causes or to man-caused factors.

The list of species was reviewed in 1998 after preparation of the species accounts. A large number of species were dropped from special conservation measures because they were judged to be too common, peripheral to the West Mojave, or of accidental occurrence. During the course of Plan preparation, the status of some species was updated to indicate greater populations or extent of the range than previously believed. These species, including Lucy's warbler and pygmy poppy, for example, were dropped from the special conservation measures in the Plan. As a result of public and agency comment on the draft Plan and EIR/S, several species have been dropped due to insufficient information, including four bats and two plants. We believe that the final list of covered species reflects those that are properly addressed by additional conservation measures.

Response 183-25: Tortoise populations since 1971 (page 14). There are no data to support the statement that "…populations of Desert Tortoise are higher today than in 1971." First, there are no data available to determine population levels in 1971, as the earliest trend plot data were collected in 1979 at three plots at the DTNA (see Table 3-12, page 3-75). As reported

in Table 3-13 of the Draft (page 3-76), the Stoddard Valley study plot was the only one of the nine in the West Mojave that showed a marginal decrease of 5 percent. Percent declines at other plots ranged from 30 percent at Lucerne Valley up to 93 percent at Fremont Peak. None of these plots demonstrated increasing tortoise populations. The Draft EIR/S (page 3-76) concludes that West Mojave Plan data collected between 1998 and 2001 corroborated Dr. Berry's trend plot observations. Importantly, it appears that the magnitude of tortoise declines observed on the nine one-square mile plots in the West Mojave is reflected in the 1998-2001 density and distribution of tortoise sign.

Since the 1990 federal listing, city and county jurisdictions have required hundreds of focused surveys that were intended to determine presence or absence of tortoises on parcels to be developed. As summarized on page 3-77 of the Draft EIR/S, there are vast regions such as the Antelope Valley and Victor Valley where tortoises have been partially or completely eliminated. There is no evidence that tortoises are repopulating any of these areas. Instead, much of the area continues to be developed and exposed to human uses that deteriorate habitat and prevent repatriation by tortoises from adjacent areas.

There have recently been two appointed committees of experts to judge the status of tortoises in the West Mojave and elsewhere. These groups included the Fort Irwin Blue Ribbon Panel (LaRue 2002) and Desert Tortoise Recovery Plan Assessment Committee (DTRPAC) (Tracy et al. 2004). DTRPAC analyzed available trend plot data for the listed population. They concluded that population trends could only be determined for the West Mojave, where a statistically downward trend was documented.

Response 183-26: Complex issues (page 15). The sentence quoted by commentator, "numerous issues were too complex or controversial to resolve", concludes with the statement: "at a single task group meeting." Moreover, the intent of Section 1.4.6 was to explain how stakeholders collaborated to resolve difficult issues, not that these issues were insoluble.

Data collection and analysis are described in Sections 1.4.4 and 1.4.5. Please note that both Dr. Boarman's analysis of threats to the desert tortoise and species accounts prepared for each of more than 80 special-status plants and animals were peer-reviewed.

Response 183-27: Tortoise fencing (page 15). The Fencing Subcommittee was assembled to consider proposals given in the Recovery Plan and the Biological Evaluation completed for the Plan (BLM 1999 for the tortoise, BLM 2000 for the Mohave ground squirrel). Their contribution was to suggest modifications or accept specific measures identified in the Biological Evaluation. Although based on observations of existing fences, none of the actions identified by this subcommittee have been implemented. They are the basis for the strategies identified in the seven alternatives analyzed in the Draft, and particularly the Proposed Action in Alternative A.

We are not aware of any fencing that concentrated juveniles and resulted in predation. Studies of Dr. David Morafka at Fort Irwin did have instances where pen-reared hatchlings allowed to passively disperse were predated on by ravens. Those considerations are given

relative to headstarting. No studies reviewed for the Draft EIR/S identified young tortoises becoming concentrated along fence lines.

Response 183-28: Other plans (page 15). Cumulative impacts of and interactions among these plans are addressed in several locations by the Draft EIR/S, including but not limited to Section 4.2.7. In response to the comment, however, those discussions have been modified and clarified to specifically address all of the plans and programs mentioned by the commentator.

Response 183-29: Peer-reviewed science (page 16). Commentator's statement is incorrect. Please see Draft EIR/S, at section 1.4.4, which presents an overview of the West Mojave Plan's database.

Response 183-30: Population monitoring (page 16). See response 183-21.

Response 183-31: DWMA design (page 17). Most of these comments question reserve design issues that are discussed extensively at pages 34-36 of the tortoise recovery plan. Recent field survey data reveal that both recent and older die-offs of tortoises have occurred over large regions, particularly to the northwest. They also reveal widespread human impacts, such as motorized cross-country travel, that continue to threaten the stability of the tortoise population, particularly in the Fremont-Kramer and Superior-Cronese DWMAs. In fact, there are no new data to support designating smaller conservation areas than recommended in 1994 in the Recovery Plan.

The planning area is coterminous with the Western Mojave Recovery Unit identified by USFWS in the tortoise recovery plan (Figure 10, p. 42). This existing designation is the basis for the reference to the phrase "across the recovery unit" found in Objective 1.3.

The comment is made, "Since URTD is such a serious threat to the species, the rationale for designating DWMA's in the manner defined in Objective 1.3 is questionable." In fact, establishing DWMAs may be one of the best ways to deal with losses of tortoises to disease, drought, or other causes. If appropriate management of DWMAs were implemented, essential habitats would be protected and available once the tortoise population rebounds. The Desert Tortoise Natural Area is a good example of a protected habitat where tortoise numbers had decreased by 90% between 1979 and 1996, but may be rebounding, as evidenced by the concentration of young tortoises observed since 1998.

Response 183-32: Goal 2 (page 18). West Mojave planning team survey data indicate a decrease in the relative amount of tortoise sign between the early 1980's and present day (see p. 3-84 and 3-85). Extensive regions to the northwest where tortoise sign was relatively common in the late 1970's and early 1980's currently support very little sign; instead, older carcasses are commonly found. If accurate, it is encouraging that tortoises appear to be increasing at Joshua Tree National Park. Park management is designed, in part, to support recommendations given in the tortoise Recovery Plan, and an increasing or stable tortoise population may show that Park management is functioning to recover the population. However, there is no indication that tortoise populations in other parts of the West Mojave are stable or increasing.

A bacterium called, *Mycoplasma agassizii*, was identified in the early 1990's by University of Gainsville, Florida veterinarians as the pathogen that causes URTD. A second bacterium, *Mycoplasma cheloniae*, has been found in the West Mojave in the past several years, although its connection to URTD has not been established. Therefore, the cause has already been determined. It is not prudent to require that a cure for the disease be found within 25 years. With many more years of research, we have yet to find a cure for the common cold in humans.

Response 183-33: Objective 2.2 (page 18). The comment is accurate that the Recovery Plan does not indicate gender specificity for the 10 adult animals given in Objective 2.2 (p. 2-4). Females in a tortoise population are a much better indicator of population viability than the number of males. This is because tortoises are not monogamous: a given male may inseminate many females. Hence, having ten males and ten females results in no more young than having one active male and ten females.

This 10-adult tortoise per square mile density was taken from the following Recovery Plan statements (p. 33). "These analyses of minimal viable populations and population persistence probabilities suggest several things. First, tortoise populations at a minimum densities (10 adults per square miles) require at least 200 to 500 square miles to be genetically viable….if lambdas are slightly below 1.0 but vary over a range of approximately 25%, extremely large reserves (5,000 square miles to support 50,000 adults at minimal density) are necessary to support populations that are relatively resistant to extinction within the next half century." Population modeling on page 33 found that "…a minimum population size of approximately 40,000 to 60,000 adult desert tortoises would be required in order for the population to persist for a 500-year median extinction time."

Draft EIR/S Table 3-12 shows that estimated tortoise densities on BLM trend plots when last surveyed in the early 1990's ranged from as few as 5 to as many as 81 adult tortoises per square mile. Prior to the declines, mostly in the late 1970's, estimated densities ranged from 238 to 69 tortoises per square mile on the same plots. DWMAs are composed of areas where no tortoises would be found (dry lakebeds) and other places where they are relatively common by today's standards. During the WMP survey, no tortoise sign was found on 433 of the 1603 transects (27%) surveyed in DWMAs. This included a contiguous 40-square mile area between Highway 395 and Fremont Peak where no tortoise sign was found on any transects.

If there were an average of 10 adult tortoises per square mile, the four DWMAs in Alternative A, comprising 2,307 square miles, would support a few more than 23,000 adult tortoises. This is about the same as the first population viability analysis (i.e., 20,000 animals for a lambda of 0.985), but well below the 40,000 to 60,000 adults identified in the second analysis. West Mojave planning team survey data suggest a near 1:1 ratio between male and female tortoises (p. 3-82). As such, the stated objective of 10 adult *females* per square mile in the four DWMA alternatives would be about 46,000 adult animals, and more in line with the second analysis. For these reasons, Objective 2.2 has not been changed.

Response 183-34: Objective 2.3 (page 18). Population surveys were completed for the planning area between 1998 and 2002, and distance-sampling surveys were completed during 2001, 2002, and 2003. West Mojave planning team surveys were spread throughout the planning

area, including more than 1,600 transects in DWMAs, which would function as "recovery areas." All distance sampling transects were surveyed in recovery areas. These data have been use to determine both population status and prevalence of human impacts, as reported throughout the Draft EIR/S, and particularly on pages 3-82 through 3-140.

Response 183-35: Goal 3 (page 19). The Draft EIR/S discusses potential problems with maintaining genetic connectivity and the spread of disease through underpasses along Highway 58 (p. 4-238 through 240) and Interstate 40. Pending additional testing of the hypotheses identified in that section, it may be appropriate to block underpasses to curtail the spread of disease, as suggested in the comment. It is too soon to implement this action without further analysis of the data. Highway fencing would still be installed to minimize vehicle impacts to tortoises. The question of open versus closed culverts needs further consideration.

Response 183-36: Goal 4 (page 19-20). There is evidence that ravens have increased in the Mojave Desert by 1,500% since the late 1960's. It is also clear that there have been concomitant increases in urban development, use of roadways, potential nesting sites on transmission structures and other facilities that have provided new sources of food, water, and nesting opportunities for ravens. As noted by the commentator, the relationship between tortoise disease and the health of the habitat is speculation, but offers a working hypothesis for consideration. We agree that predator control and disease management are important and should be encouraged.

Response 183-37: Objective 4.3 (page 20-21). We agree that research and monitoring are needed, that they must be specified and applied, and that they should not take priority over implementing long-overdue recovery actions.

Response 183-38: Delisting (page 21). The Recovery Plan (p. 43) stated, "Desert tortoise populations, which are only capable of very slow growth, have declined substantially throughout much of the Mojave region in the last two decades. Therefore, desired improvement in the status of these populations will necessarily be a very long process, measured in decades or centuries." As per Delisting Criterion 2 (p. 43), "…habitat must be protected within a recovery unit, or the habitat and the desert tortoise populations must be managed intensively enough, to ensure long-term population viability." This information is interpreted to mean that, should the tortoise become de-listed, there would still be a requirement for the "long-term" maintenance of the population. This will likely include some land base, although the size and configuration are unknown.

Although vehicular access would be minimized in DWMAs, these areas would not be closed to access. Mining, oil exploration, recreation, and grazing are all activities that would continue under management identified in Alternative A. If tortoises become delisted within the Western Mojave Recovery Unit, the West Mojave Plan (and the BLM's CDCA Plan) could be amended at that time if management changes were deemed appropriate and compatible with tortoise conservation.

Response 183-39: Habitat designations (page 22). The West Mojave Plan no longer proposes to establish biological transition areas. Special Revie Areas are not habitat designations comparable to DWMAs; they are simply regions where, due to higher tortoise populations, additional project mitigation measures will be required for new ground disturbing activities. Open space corridors are intended to provide connectivity between critical ecological subregions of the western Mojave Desert, such as Big Rock Creek's connection between the Mojave Desert and the San Gabriel Mountains; they are not desert tortoise habitat designations.

Response 183-40: Tortoise habitat conservation and populations (page 22-23). Individual tortoises may die for many reasons, and regional declines (crashes) have been attributed to drought, disease, or a combination of the two. If so, there may be population declines that are not ostensibly associated with observable human impacts, as suggested. However, there is as yet no firm evidence (one way or the other) to support the statement that "…in areas that still have motorized access, populations are holding or increasing."

During the preparation of the Draft EIR/S, the West Mojave planning team analyzed recently collected field data. This analysis reveals that the GAO report inaccurately concluded, "no marked improvements in tortoise populations have been reported" despite the securing of conservation land. As mentioned above (Response 183-17, and Draft EIR/S page 3-89), recruitment and persistence of young tortoises inside the fence at the Desert Tortoise Natural Area is considered a "marked improvement." The recruitment within the fenced area is apparently unique to the region. (The analysis was conducted after preparation of the GAO report and therefore represents new information unavailable to its authors.)

Conservation land has been secured, primarily as compensation for impacts to tortoise habitats through both sections 7 and 10 of the federal Endangered Species Act and through section 2081 of California Endangered Species Act. However, these represent individual transactions as opposed to a consolidated, coordinated and multi-jurisdictional approach to conservation. Securing these habitats, alone, is not expected to result in "…marked improvements in tortoise populations." Rather, the conservation lands must be sufficiently large, well distributed, and managed accordingly before marked improvements would be expected.

Response 183-41: Special Review Areas (page 23-24). See Response 183-39.

Response 183-42: Umbrella species (page 24). Each species will be tracked with respect to allowed incidental take and conservation achieved. Funding will be allocated to different species needs based on the priorities set by the Implementing Authority. The GAO report addressed the desert tortoise only; other species within the range have not necessarily declined in numbers or range.

Response 183-43: Emergency vehicles (page 25). Administrative use of motorized vehicles by agents of BLM or BLM's designees (e.g. law enforcement, fire or other emergency vehicles; facility maintenance or compliance monitoring by CDFG) on public lands is not subject to the specific area and route designations.

Response 183-44: Parking (page 25). Prescriptions MV-5 and MV-6 provide that motorized vehicle stopping and parking would be allowed within 50 feet of the centerline of all routes designated open, and that motorized vehicle based camping would be allowed in previously disturbed camping areas adjacent to routes designated open. A single width was adopted, rather than the two-tiered structure suggested by the commentator, because it would be easier to manage and would preclude continual interpretation issues such as "is the route a single track or a two-track route?"

Response 183-45: Handicapped access (page 25). The access needs of handicapped visitors to the public lands were taken into consideration as part of the criteria and methodology for evaluating and designating routes (see Draft EIR/S Sections 2.2.6.2 and 2.2.6.3 on pages 2-126 through 2-140). These criteria required that a range of recreational opportunities (including recreation for the handicapped) be created through the route designation process. Examples include:

- Take into account the variety of recreational visitors by offering a variety of routes
- In accordance with FLPMA manage lands on the basis of multiple use; provide for a balanced and diverse combination of recreational uses; provide present and future use and enjoyment, particularly outdoor recreation uses…

The route designation methodology required consideration of the special needs of the handicapped public; see Draft EIR/S at pages 2-137-8. Route information and condition was assessed to help determine vehicle type and therefore visitor limitation (e.g. SUV routes are typically more conducive to use by families, people with special needs or less-experienced visitors). Recreation point or destination data, such as campsites, vistas, and staging areas, was assessed and helpful in determining route redundancy. An area with numerous points of interest might be left with a variety of different types of routes leading to it. Areas of higher interest, barring significant environmental concerns would likely be left with a route(s) that could serve a broader segment of the public (e.g. graded dirt road), as well as more technical or special routes (e.g. motorcycle routes). Past, present and future management concerns and issues were considered, including the effect the use of various motorized routes was having on the distribution and types of recreation.

Response 183-46: Miscellaneous access (page 25). See preceding response.

Response 183-47: Disease management (page 25). All of the states, including California, consider disease management to be a high priority, "…have been working on this factor for years…" and have shared the results of that work. Coordination among the states is maintained by, among others, the Management Oversight Group. However, breakthrough disease management has not occurred anywhere within the listed range of the tortoise.

No studies reviewed for the Draft EIR/S indicated "…hydration is the largest factor in vulnerability of the tortoise to disease." It has been suggested that if tortoises are already significantly weakened by disease, they are likely to be more vulnerable to drought, but even this is speculation with no supporting empirical data (Draft EIR/S at p. 3-108 and 3-109). Reactivating guzzlers would not have any appreciable benefit to tortoises. Although individual animals may visit guzzlers, there is no indication that a local or regional population does so. It is

infeasible to provide dietary supplements to tortoises on a population scale. Finally, there are no studies showing that "…tortoises caught soon enough could be salvaged from full-blown URTD." There is evidence that the disease's symptoms can be treated and somewhat alleviated in pet tortoises, but there are no known cures for the disease in either pets or the wild population.

Response 183-48: Removal of diseased tortoises (page 26). There have been no studies, nor are any planned, to selectively remove sick tortoises from the wild population. Dr. Kristin Berry has developed a salvage protocol to remove sick tortoises in the interest of research, but not as a means to stop spread of disease. The intent, presumably, would be to reduce the spread of disease by removing those tortoises that clinically test positive for URTD. One problem with this is that the ELIZA test will only indicate if the tortoise has been exposed to a specific pathogen, which is referred to as an ELIZA-positive result. ELIZA-positive animals may have developed an immunity that would actually benefit the population if they were left in place. There is also the problem of false positives, in which case you would remove a healthy animal; and false negatives, in which case you would not remove a sick animal. Finally, the current ELIZA test is pathogen-specific for *Mycoplasma agassizii*. It would not detect herpesviruses and unknown pathogens, and may not detect related species, such as *Mycoplasma cheloniae*, which was recently discovered in northern Lucerne Valley.

Response 183-49: Quarantine management (page 27). Quarantine management for disease is not mentioned in the Recovery Plan, which states mainly that epidemiological studies be initiated (p. 54). Appendix F of the Recovery Plan presents recommended "Specific Management Actions" and "Recommended Research" for each of the DWMAs. For all DWMAs in the listed range, the Recovery Plan identified a single action relative to disease, which was the possibility of erecting a double fence between the Fremont-Kramer and Superior-Cronese DWMAs to prevent spread of URTD into Superior-Cronese. The proposal to develop a quarantine protocol was first introduced to the West Mojave planning process by Dr. Michael Connor of the Desert Tortoise Preserve Committee in 2002. The proposal did not include any description of the function of such a protocol. Presumably the quarantine area would isolate diseased animals from healthy ones and thereby prevent disease spread.

Importantly, there is no empirical evidence that disease is actually responsible for episodes of regional tortoise mortality, although that is widely suspected (see discussion in Boarman 2002). The approach also implies that the disease spreads along some front that can be effectively identified, and that a fence or other barrier can be placed between the infected and uninfected animals. Given the current lack of knowledge, it is inadvisable that such actions be implemented until more information is available.

Response 183-50: Quarantine triggers (page 27). We are unaware of any research, 2003 or otherwise, that reports the success of quarantine management in wild tortoise populations. Quarantine management practiced in Clark County is very different from the disease management program suggested for the West Mojave. In Nevada, wild and pet tortoises are being transported from Las Vegas construction sites into a study area located near Jean, Nevada. The study area is completely enclosed by fences and natural features, and is therefore effectively quarantined. Incoming animals are screened for disease and those testing positive are not released. The study site was chosen, in part, because it is isolated from tortoise conservation

areas in southern Nevada. The quarantine program suggested for disease management in the West Mojave would theoretically be applied to wild tortoise populations within DWMAs. The intent and function of these two programs are so different that little, if any, translocation information gathered in southern Nevada can realistically be applied to disease management in southern California.

Response 183-51: Quarantine boundaries (page 27). See Response 182-12 regarding feral dogs. Quarantine implies that certain regions can be physically isolated from adjacent areas in an attempt to curtail the spread of disease. The Recovery Plan identified a double-panel fence along the common boundary between Fremont-Kramer and Superior-Cronese DWMAs as a potential means of isolating diseased tortoises in the west from presumably disease-free animals to the east. As discussed in the Draft (3-107 to 3-110) and below, there is too little information available to effectively establish and manage quarantine areas for disease control.

Although the intent of a quarantine program is relatively clear, the pragmatic function of such a program is impractical given current knowledge. First, there is no practical way to assess disease in tortoises on a regional scale. Blood tests used to detect *Mycoplasma* sp., the pathogen for upper respiratory tract disease, indicate if the animal has been previously exposed to *that* pathogen. There are at least two known species, but others may occur. Herpesvirus and other pathogens are not detected by the species-specific assay. It is plausible that an animal testing positive is actually immune to the pathogen, as not all study animals die when exposed, in which case it would be advantageous to leave the animal in place. Secondly, too little is known about the spread of disease, its contribution to tortoise declines, etc. to support intentional habitat fragmentation of conservation areas. Third, as reported in the Draft EIR/S (pages 3-110 to 3-115), it appears that both older and newer regional die-offs have occurred, based on densities of similar-aged carcasses. The causes for these region-specific die-offs are not known.

Response 183-52: Vehicles and weeds (page 28). The Draft EIR/S provides references and discussion indicating that motorized vehicles spread weeds (see p. 3-124). The statement is correct that there are no data to indicate that removal of vehicle routes will alleviate dispersal of weeds. Weeds, particularly non-native grasses are already well established throughout the planning area, and are not likely to disappear in areas where routes are closed.

There is no indication that grazing helps control growth of weeds. In fact, Aschmann (1976) indicated that weeds were introduced into the region by grazing in the late 1800's. Many references indicate that grazing promotes the spread of weeds (Kay, Meyers and Webb 1988; National Ecology Research Center 1990; USFWS 1994), and none were found indicating weed control by grazing.

Response 183-53: Drought (page 28). There are no studies showing "…that tortoise populations vary depending on drought versus wet years." Studies do show that the detectability of tortoises varies with rainfall (p. 3-82, 3-105 through 3-107; Duda, Krzysik, and Freilich 1999). There is no practical way to provide supplemental feeding to the wild tortoise population.

Response 183-54: Fencing (page 29). The statement is accurate that there are no data to show that "…fencing could recover the desert tortoise," but research by Dr. Boarman has shown an 88% reduction in mortality for all vertebrates on fenced versus unfenced highways. These and other observations support the conclusions that fencing will effectively reduce the number of tortoises crushed on roads, which in turn would facilitate recovery.

Response 183-55: Headstarting (page 29). West Mojave planning team survey data indicate that the area between Fremont Peak and Highway 395 presently supports few tortoises. This area corresponds with one of several larger older die-off regions depicted on Map 3-13 (Draft EIR/S p. 3-111). Dr. Berry estimated 70 adult tortoises on the Fremont Peak study plot in 1980 and only 5 tortoises in 1993 (Draft EIR/S p. 3-75). The main advantage of the head-starting program is its potential to reintroduce tortoises into areas where they have been extirpated, which has yet to be demonstrated to be effective. The site is 15 miles north of Highway 58, which is not likely a problem. It is within several miles of Highway 395, but it is suspected that the highway would be fenced by the time head-starting hatchlings began to disperse. The proposed area is ideal in terms of the intended function to reintroduce tortoises; it is less than ideal due to ongoing vehicle impacts, which would need to be curtailed.

Response 183-56: Weed abatement (page 30). None of the alternatives envisions weed abatement by chemical treatments, so there would be no effect.

Response 183-57: Other measures (page 31). Hoover (1995) published the only focused guzzler study available with regards to impacts on tortoises. There were 89 guzzlers sampled, but only 13 of these were in the West Mojave; the remainder was in the East Mojave. All together, the remains of 27 tortoises were found in 18 different guzzlers, with 2 tortoises found in 2 guzzlers in the West Mojave. As such, tortoise remains were found in 20% of the guzzlers sampled. Most of these animals likely died from drowning in the guzzler, rather than being washed into the guzzler or the remains transported there by a predator. There are likely to be substantially more than 18 guzzlers in the West Mojave, but we do not know how many. The study seems warranted, but a relatively low priority.

Response 183-58: Vehicle mortality (page 32). Differing factors affecting vehicle mortality have been identified and tracked. Project proponents are obligated to track tortoise mortality associated with federally authorized projects, so there is a relatively accurate account of impacts associated with construction (LaRue and Dougherty 1998). There is also the requirement to monitor dual sports for tortoise mortality. BLM field offices maintain monitoring reports, and there are no known mortalities associated with dual sports (see also USFWS 2002). Mortality associated with military maneuvers is restricted to the bases, except for isolated cases immediately adjacent to the base (see Table L-5, Appendix L).

West Mojave planning team surveys reported 28 of 104 (27%) carcasses as being crushed by vehicles. Distance sampling found 14 of 44 (32%) carcasses to be crushed by vehicles, which are remarkably similar findings of independent studies. In finding these carcasses, there is no clear way to determine the type of activity that caused the death. The animal may have been crushed on a road, or by cross-country travel, by work-related or recreation-related activities. Scavengers are known to move carcasses from the point of discovery, so that the proximity of a

carcass to a given road is not a definite indication the animal was crushed on that road. These and other circumstances would affect several of the categories listed by the commentator.

Response 183-59: Line distance sampling (page 32-33). Distance sampling methods are widely used to census everything from whales to small plant species. There are numerous such studies in peer-reviewed journals, and one recent one on tortoises. There are now up to five years of annually collected data (in Washignton County, Utah), and four years in the West Mojave. There are problems, such as insufficient sample sizes, but the method has not been dismissed. The Management Oversight Group officially endorsed this method in the late 1990's and continues to do so.

Response 183-60: Peer-reviewed science and recovery plans (page 34). See response 183-18.

Response 183-61: West Mojave as land use plan (page 34). Congress recognized the "California desert environment and its resources, including certain rare and endangered species of wildlife, plants and fishes", and directed that a CDCA plan "conserve these resources for future generations, and … provide present and future use and enjoyment, particularly outdoor recreation uses…" (FLPMA Section 601). This mandate encompasses the adoption of conservation measures, and such measures already constitute a significant part of the CDCA Plan. The West Mojave Plan, as it pertains to public lands, is an amendment to the CDCA Plan and as such also includes conservation measures, as well as providing for resource benefits and the use of the desert by outdoor recreationists.

Response 183-62: Tortoise health (page 34). Existing roads and trails do have an effect on tortoise health that ranges from death by crushing to degradation of habitat that affects tortoise nutrition, burrowing, and thermoregulation. Effects of roads were discussed in the DEIR/S on pages 3-116 through 3-133. In addition to "restoring nature," the intent of closing certain routes is to minimize access and numerous threats that are associated with roads (e.g., poaching, crushing, vandalism).

Response 183-63: Prescription AC-2 (page 34). No changes have been made, as the intent of Alternative C is to analyze the relative effectiveness of implementing the tortoise Recovery Plan, including measure AC-2. Accurately stated, it is part of Alternative C, not part of the proposed action (Alternative A).

Response 183-64: Shooting of tortoises (page 35). The Draft EIR/S presented a detailed tortoise carcass observation analysis, including gunshot mortality, in Appendix L, at Section L5.

Response 183-65: Prescription AC-6 (page 35). Comment noted.

Response 183-66: Prescription AC-8 (page 36). Comment noted. Please note that your suggestion is a component of the proposed action (Alternative A).

Response 183-67: Dog owner education (page 36). This is a part of the education program identified for several alternatives.

Response 183-68: Prescription AC-9 (page 36). Comment noted.

Response 183-69: Prescription AC-14 (page 37-38). See Response 183-35.

Response 183-70: Prescription AC-15 (page 37). Agree on all points.

Response 183-71: Prescription AC-19 (land acquisition) (page 35). Assuming that a species recovers, any lands acquired as part of the recovery program would be conserved, used or disposed of in a manner to be determined by the landowning entity at that time, subject to any statutory or regulatory requirements then applicable.

Response 183-72: Tax base loss (page 38). Prescription HCA-36, which addresses HCA land acquisition, has been clarified to incorporate a "no net loss of value" policy.

Response 183-73: Funding (page 38). The Draft EIR/S addressed financial aspects of implementation in Appendix C. That discussion has been modified and clarified; please see revised Appendix C in this Final EIR/S.

Response 183-74: Funding (page 39). Please see revised Appendix C for a complete breakdown of implementation costs.

Response 183-75: Disease (page 40). This point was addressed by the Draft EIR/S on pages 4-238 through 4-240. Although mycoplasma has been found in birds and mammals, there is no support for the statement that the disease pathogen could be transmitted from other animals to tortoises in the wild.

Response 183-76: Number of DWMAs and disease (page 40). The tortoise was listed in 1990 due to precipitous declines, resulting from loss of habitat, tortoise collection, and "…loss of desert tortoises from disease" (Recovery Plan, p. 2). As such, disease was considered when size and numbers of DWMAs were recommended in the tortoise Recovery Plan.

Response 183-77: Higher tortoise population densities (page 40). There is no indication that tortoise populations are increasing in BLM open areas. No further restrictions have been identified for vehicle use in BLM open areas. None of the alternatives proposes a reduction in the size of any BLM open areas.

Response 183-78: Mark and release of tortoises (page 40). No tortoises were handled or marked during the West Mojave planning team surveys. Tortoises were handled during distance sampling surveys, and were historically handled on the BLM study plots at about four-year intervals. All researchers were required to follow handling protocols specifically designed to avoid transmitting disease. There have been some tortoises first handled in the 1970's that were still alive when last seen in the late 1990's (pers. comm. Peter Woodman), and are presumably still alive. There are also varying levels of decline, ranging from 5% at Stoddard Valley up to 93% at the DTNA. These observations tend to support the conclusion that scientific manipulation was not responsible for the spread of disease.

Response 183-79: Tortoise health survey (page 41). Monitoring the health of tortoises is discussed in the Draft EIR/S on pages 2-160 through 2-165.

Response 183-80: Indirect mortality (page 42). On analyzing mortality associated with federally authorized projects, LaRue and Dougherty (1998) found that most tortoise deaths occurred during construction along linear rights-of-way. Although none were reported for maintenance activities, impacts are more likely than for maintenance at a fixed site. Management prescriptions were considered for all threats, including maintenance.

Response 183-81: Chocolate Mountain Range (page 42). The Marine Corps has used the Chocolate Mountains Gunnery Range for bombing practice for many years. There are some areas where relatively few impact6b7s have occurred and others where ordnance and impact craters are extremely common. There has been very significant human activity in some of these latter areas.

Response 183-82: Causes of tortoise decline (page 43). Urbanization and ground disturbance from Lucerne Valley to Antelope Valley is in fact the main contributor to the outright loss of tortoise habitat. Disease is suspected to be a major causal factor for the tortoise decline; little is known about predators. Common ravens are most often implicated as tortoise predators. Given available information, there is no clear way to determine conclusively the prevalence of raven predation (see Draft EIR/S at p. 4-235 through 4-237). There is even less information available for canid predators, such as coyotes, kit foxes, and feral dogs.

Response 183-83: Mortality factor study (page 43). The recommendation to perform annual surveys and determine causes of mortality is given in the Draft EIR/S at the top of page 4-219.

Response 183-84: Handicapped access (page 45). Regarding handicapped access please see Response 183-45.

As discussed on pages 4-134,135 of the Draft EIR/S the cumulative effects of establishing the proposed route system on shifts in visitor use patterns are not expected to be significant. The loss of motorized access to some areas due to route closures may lead to an increase in motorized use in the open areas. Absorption of some excess demand by the open areas was deemed an acceptable trade-off for a heightened ability to protect sensitive habitat in DWMA subregions. The Draft EIR/S on page 4-121 acknowledged that this shift in use would occur.

As discussed on page 2-142 of the DEIS competitive and organized events are would continue to use the Johnson Valley to Parker competitive event corridor. Although it would no longer be available for competitive use, the Johnson Valley to Stoddard Valley connector route would allow participants in organized events held in the two open areas to traverse intervening the DWMA lands in a manner compatible with tortoise conservation.

Response 183-85: Tortoise population trends (page 45). As shown in Draft EIR/S Table 3-12 (p. 3-75), population numbers were highest on all BLM trend plots on the first and/or second surveys (in the early 1980s), and they all decreased from there. It is entirely possible that the tortoise population has been declining for many years, and that study plot estimates would have been higher had they been surveyed in the 1970's or 1920's. The point is we have little information available prior to 1970 on the distribution and density of tortoises.

Response 183-86: Vehicle crushing (page 46). See Response 183-58.

Response 183-87: Vehicle depressions (page 46). The problem is often the types of plant that grows within the depression, which are in many cases non-native grasses. It is true that depressions (i.e., pitting, scarification, imprinting) are used on pipeline rights-of-way and other disturbed habitats to promote re-establishment of vegetation. However, this technique is not comparable to the creation of vehicle depressions on previously undisturbed habitat. The former attempts to reclaim habitat, the latter is an impact to intact habitat. Agencies are *not* using depressions created by cross-country travel to facilitate habitat restoration.

Response 183-88: Competitive events (page 46). There are advantages and disadvantages to designating a single route for competitive events, as described by the commentator. The American Motorcyclists Association event of 1994 on the Stoddard-to-Johnson Corridor is an example where the original course would have put tortoises in harm's way. The proposed route was surveyed and an alternate route chosen that avoided impacts (LaRue 1994). There is no evidence to suggest that spreading the impact out to more routes would be more or less impacting than maintaining the event on a single route. Impacts by spectators are often significant, and would be more dispersed if multiple routes were used. In this instance, it may be better to concentrate the event on a single route.

Response 183-89: DWMA location (page 47). The 1994 designation of critical habitat for the tortoise approximates the location of the proposed DWMAs in Alternative A. These are habitats that the USFWS has designated as essential to the survival of the species (see *Federal Register* 59 FR 5820). West Mojave planning team survey data show widespread regions in which tortoises have recently died and other information that argues for making the DWMAs as large as possible. Smaller sized DWMAs and a No DWMA alternative are represented in Alternatives E and F, respectively. The requested analysis is in Chapter 4.

Response 183-90: Time periods (pages 47 - 48). The commentator is confusing two different concepts. The "25 years" refers to the first of the tortoise Recovery Plan's five delisting criteria, all of which must be met before the tortoise can be delisted. This criterion requires that a recovery unit (such as the West Mojave) "exhibit a statistically significant upward [population] trend or remain stationary for at least 25 years." The "30 years" refers to the proposed term of incidental take permits that would be issued to cities and counties by CDFG and USFWS, during which streamlined FESA and CESA permitting procedures would remain in place.

Response 183-91: Reductions to benefit tortoise (page 49). Federal regulations (43 CFR 8342.1 (a) and (b)) direct that routes be closed where necessary to "minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats [and to]"minimize damage to soil, watershed, vegetation, air or other resources of the public lands."

The route network was designed to be compatible with the conservation needs of a number of sensitive species, including but not limited to the desert tortoise. Although special consideration was provided to tortoise DWMAs, sensitive habitat outside of this area was also considered during the designation process.

Response 183-92: Physiological stress (page 50). The work of Dr. Kenneth Nagy addresses issues relative to physiological stresses and water balance. Work by Lovich and Avery show that tortoises may still lay eggs during drought, but that there were fewer second clutches. Size of the female was positively correlated with clutch size.

Response 183-93: Interagency cooperation (page 51). Cooperation among jurisdictions could be provided for through a memorandum of understanding, as suggested by the Draft EIR/S. The desired effect of predator control is to reduce the impact resulting from human-related threats. There is no desire to control natural predators. Feral dogs and ravens are predators that have increased in response to human development. Measures are identified to minimize the available resources, such as water and food, to help reduce the incidence of raven predation on subadult tortoises.

Response 183-94: Causes of death (page 52). Available information is provided in the Draft. Map 3-12 shows the distribution of carcasses where the cause of death was identified and documented in field notes. Additional information is provided in Appendix L, Section 1.5.

Response 183-95: Vehicle use patterns (page 53). The observation that most recreation use occurs in or proximate to areas with variable terrain, including mountainous regions, was based on communications with various segments of the recreational community during the scoping process, data collected and field observations made during the route survey, and the experience and professional judgment of BLM recreation specialists. The Draft EIR/S on page 2-128 discusses possible reasons why these areas may be more attractive to recreational visitors.

The exceptions to this general pattern include recreational uses with a primary focus on speed, such as motorcycle racing, and those that can only occur in flatter terrain, such as land sailing. Due to resource concerns, such speed events are generally restricted to or at least encouraged to use open areas and dry lake beds.

Response 183-96: Range of alternatives (page 54). See Response 182-55.

Response 183-97: Case-by-case designations (page 55). The route network that was adopted on June 30, 2003 did determine the routes that needed to be closed on a case by case basis, including those portions of the network that are located in higher density tortoise population areas and ACECs. Reasons for each determination are presented in Appendix R.

Response 183-98: No Action alternative (page 55). See Topical Response 5b and Specific Responses 182-55 and 183-9.

Response 183-99: Depth of treatment of alternatives (pages 55–56). The Draft EIR/S provided the analysis requested by commentator. An explanation of the methodology and analysis used to determine whether routes should be open or closed was presented in the Draft EIR/S on pages 2-124 to 2-140, and Appendix R section R.4. The location and identification of each route proposed for closure and the reasons for that decision were presented in Appendix R section R.5 (Route Designation Tables). Analyses of the effectiveness of the network, in terms of providing motorized access, meeting recreation needs, and compatibility with biological values, was presented throughout Draft EIR/S Chapter 4; for Alternative A examples, please see pages 4-35, 4-111 to 4-121, 4-123 to 4-130, and intermittent discussions between pages 4-51 and 4-80.

Response 183-100: Documentation of route designation rationale (page 56). See preceding response.

Response 183-101: Closed unless posted open (pages 56-58). See Topical Response 5b.

Response 183-102: Wild and Scenic River (page 58). Appendix F presents in more detail the results of the evaluation conducted under the standards of the Wild and Scenic Rivers Act. A small portion of the Mojave River with flowing water crossing public lands qualifies as "recreational" under the terms of the law.

Response 183-103: Ravens on disposal tracts (page 59). Raven management programs adopted by the West Mojave Plan would be applicable to private lands that fall under the jurisdiction of participating agencies as well as public lands. Therefore, it is not expected that transfer of these lands will result in an increased food supply for these birds.

Response 183-104: Allowable ground disturbance (page 59). Comment noted. Please note the many measures provided by the plan to condition new ground disturbing activities in tortoise habitat; see especially sections 2.2.4.2.1 and 2.2.4.2.2 and associated appendices.

Response 183-105: Administrative structure (page 59). Yes, the non-signatory agencies may be admitted to the Implementing Authority Governing Board. The 1992 Memorandum of Understanding's (MOU) purpose was to initiate the West Mojave planning process. A separate Implementing Agreement will be necessary to establish the Implementing Authority. The 1992 MOU does not preclude any jurisdiction from being issued a programmatic incidental take permit or participating as a member of the Implementing Authority.

Response 183-106: Mitigation fee (page 59). The BLM cannot impose mitigation fees on private land, and has no jurisdiction over those lands. Mitigation fees would need to be adopted by the city or county having jurisdiction over those lands.

Response 183-107: Authorized take (page 60). The section is correct as written. The commentator has not identified any specific conflicts between the issuance of incidental take permits and other federal and California statutes, and we are unaware of any that may exist.

Response 183-108: Agriculture (page 60). A discussion of the effects of Agriculture on desert tortoises can be found in Appendix J, at pages 11 and 12.

Response 183-109: Water sources (page 60). See Response 183-47 for a discussion of the inefficacy of providing supplemental water sources.

Response 183-110: Appendix I (page 60). Appendix I is a component of Alternative A; please see Draft EIR/S discussion at page 2-58.

Response 183-111: BLM jurisdiction (page 60). The commentator is correct; BLM has no jurisdiction over private, State, county, city and local agency lands. The West Mojave Plan would be implemented by local jurisdictions and State agencies on lands under their jurisdiction; BLM would implement the Plan on public lands.

Response 183-112: Survey and disposition protocols (page 61). We recognize that tortoises travel long distances (Boarman and Sazaki 1996), are not likely to restrict their movement to DWMAs (hence the relocation guidelines in Section I.1.5 and fencing guidelines in Section I.2.), and are difficult to mark. We agree with the comment that surveys should be conducted on the general population (i.e., proposed distance sampling and study plots) and at authorized construction sites (i.e., hence clearance surveys). Both survey types are provided for in the plan.

Response 183-113: Headstarting (page 61). The University of California at Riverside does not have a head-starting research program. The only known efforts are by Dr. David Morafka at Fort Irwin, and initiation of a new head-starting facility on south central Edwards Air Force Base, which is being conducted by Dr. Ken Nagy.

Response 183-114: Landfills (page 61). The main emphasis with landfill management is relative to control of ravens, not raptors. Golden eagle is the primary raptor that has been reported feeding on tortoises. Dixon (1937) estimated a home range of 35 square miles for golden eagles in southern California. Golden eagles are not known to frequent landfills.

Response 183-115: Livestock grazing (page 62). See Response 183-52.

Response 183-116: Route designation criteria (page 63). The criteria and methodology for designating routes were discussed in the Draft EIS/R on pages 2-126 through 2-139 and in Appendix R.

Response 183-117: Tortoise active and inactive seasons (page 63). The commentator suggests that the route designation process must include the "Desert Tortoise Active and Inactive Season" because "most recreation uses occur when the Desert Tortoise is inactive." In fact, this issue was considered during the designation process. The criteria utilized for route evaluation

and designation are discussed on pages 2-126 through 2-139, and in the decision tree and its footnotes in Appendix R. One of the specific criteria listed on page 2-126 calls for the route designation process to "consider … the intensity and season of use as it relates to impacts to sensitive species or their habitat….". Pursuant to this criterion, temporal recreation use patterns were compared to the ecological needs and behavioral patterns of the desert tortoise, including its habitat preferences and seasonal activity (or inactivity) patterns. The results of this analysis were applied while making route evaluation and designation decisions.

Response 183-118: Topography (page 63). The term "topography" has been deleted. The intended meaning of the sentence was "areas of steeper slopes and more rugged terrain". The text has been clarified.

Response 183-119: Location of surveys (page 63). The 2001-2002 route surveys focused on desert tortoise critical habitat, and most of the redesign area was situated here. Outside of this area the existing (1985-87 and ACEC) route network was retained in most locations.

Response 183-120: Speed limits (page 63). Reduced speed limits are intended to both avoid crushing tortoises and minimize habitat destruction. Seasonal restrictions ostensibly provide the most benefit to the animals when they are aboveground and most likely to be harmed. Although tortoises are typically more active in the spring and fall and less active in the summer and winter, there are numerous accounts of tortoises, particularly juveniles, being active year round. The temporal aspect that makes tortoises somewhat more vulnerable in the spring and fall does not apply to habitat. Habitats may be damaged throughout the year. Habitats are more likely to be damaged by vehicles traveling at higher speeds than at lower speeds, which are more conducive to vehicles staying on the road. Tortoises are known to burrow into roadside berms, and are somewhat more at risk, even in the winter, to vehicles traveling at excessive speeds. Speed limits are often cited as one of the main reasons that dual sport events, which have speed limits, result in fewer impacts compared to races and other competitive events.

Response 183-121: Competitive event corridors (page 64). The desert tortoise recovery plan found competitive events, even on designated routes, to be incompatible with tortoise recovery, and recommended that they be prohibited within tortoise DWMAs. Impacts of competitive events were also discussed in the Draft EIR/S at pages 3-131 to 133, and in Appendix J, pages 43-51. The West Mojave Plan does not preclude the staging of competitive events in open areas, however, and it maintains the Johnson Valley to Parker competitive event corridor, the alignment of which follows the border of a tortoise DWMA. Given the demonstrated conflicts between tortoise recovery and competitive events in critical habitat, however, an increase in the number of competitive event corridors through tortoise DWMAs is not warranted.

Other areas exist which can help meet the increasing demand for OHV events. Within the West Mojave planning area there are several open areas where such events can take place. In addition, dual sport motorcycle events are allowed with proper permitting on existing designated open routes outside of the open areas and competitive event corridors.

Response 183-122: Off-road races (page 64). Organizers of OHV events are required to obtain a permit from the BLM. This permit imposes conditions to ensure participant safety, protection of resources and cost recovery. In desert tortoise habitat, special conditions that are intended to afford greater protection to the tortoise will be attached to the permit. These special conditions may include many of the commentator's suggestions, such as limiting the event to those time periods when the desert tortoise is least active, conducting clearance surveys, flagging active burrows, clearly marking the route to avoid the most sensitive habitat and other practices deemed to enhance the protection of this species.

Response 183-123: El Paso CAPA (page 64). The Draft EIR/S discussion regarding the El Paso Collaborative Access Planning Area (page 2-142, 2-143) describes the factors that led to the creation of this special planning area. These include the following: "…there are a number of private access needs that need to be addressed, including private parcels, commercial operations (such as quarries), and permitted facilities". The discussion goes on to review specific biological and cultural resource criteria that would need to be considered in the evaluation and designation of routes (see page 2-143) in this area. This discussion does not preclude or replace the process discussed on pages 2-126 through 2-139 of the DEIS/R. Instead, it highlights some of the resource criteria that need to be specifically considered for the El Pasos, in addition to the other criteria used in the route evaluation process.

The commentator asserts that the maps for this area have inaccuracies. Field checks and any necessary corrections of the route inventory can occur as part of the El Paso CAPA program. The commentator is encouraged to participate in that process, and is encouraged to submit any specific information that could be applied to ensure the accuracy of the database.

Response 183-124: Guzzlers (page 65). Comment noted.

Response 183-125: Implementation (page 65). The commentator correctly notes that interested private parties maintain many routes in the planning area. Such informal maintenance may include the spontaneous simple transfer of rocks or boulders to repair a washout by a few individuals or the repair of multiple washouts along a lengthy route by an OHV club that happens to be touring that route. Nothing in the West Mojave Plan precludes volunteer efforts to help maintain routes.

The BLM notes and appreciates the commentator's suggestion that BLM and the public jointly conduct formal trail clean up and adopt-a-trail programs. BLM is working with many groups in this manner (e.g. Moose Anderson Days) and will continue to encourage these collaborative efforts.

Response 183-126: Network modification (page 65). The text has been clarified to indicate when, and under what circumstances, the network can be adjusted without the need for a formal plan amendment.

Response 183-127: Education program (page 66). The implementation tasks, priorities and costs table presented in Appendix C has been modified to include additional information on how implementation of this program would be funded.

Response 183-128: Supplementary discussion (page 67). See Response 183-135. Appendix C identifies priorities for these studies. The military cannot be "forced to comply" with the requirements of section 2.2.8.1; however, the programs referred to by the commentator (Lane Mountain milk vetch, Inyo California Towhee and Panamint alligator lizard monitoring studies) are components of a long-standing cooperative effort between BLM and the military, and it is expected that these collaborative programs will continue.

Response 183-129: Alkali wetlands (page 67). Mitigation fees collected by the Implementing Authority would fund the surveys for alkali wetland species. The CDFG has received Section 6 funds from the USFWS for this study, and this funding will be utilized if still available. We will consider your suggestion of investigating site changes due to human development over the last 50 or more years at the time the studies are initiated.

Response 183-130: Little San Bernardino Mountains gilia (page 67). The Final EIR/S has deleted reference to the National Park Service as a participant, and the NPS will not be responsible for gilia surveys. The Implementing Authority will fund the gilia studies using mitigation fees, grants or other sources. Volunteers may assist with the searches for this species. This survey has been assigned a priority of 3, meaning within ten years of Plan adoption.

Response 183-131: Prairie falcon (page 67). The prairie falcon is a native species. It is not known to eat the desert tortoise or to present any danger to the tortoise. The numbers appear to be stable in the California desert. Funding of the nest site survey would come from the Implementing Authority using mitigation fees, grants or other sources.

Response 183-132: Distance sampling (page 68). It is not the purpose of distance sampling to ensure the survival of the population. It is intended to estimate population densities.

Response 183-133: Studies of factors that kill tortoises (page 69). Monitoring studies would likely reveal the mortality factors, which, as stated by the commentator, should be a high priority.

Response 183-134: Adaptive management (page 69). Comment noted. Adaptive management is provided for through monitoring studies that gauge the success or failure of a recovery action to have its desired effect. Monitoring programs are discussed by the Draft EIR/S on pages 2-160 through 2-166.

Response 183-135: Bighorn sheep (pages 69-70). The bighorn sheep has been dropped as a covered species in the Plan. The existing re-introduction programs on military bases and monitoring by the CDFG serve to aide the scattered populations. Ewes with lambs are known to be very sensitive to human disturbance, even if accommodated to human presence. The extent of mountain lion predation in the West Mojave is not known, but is probably relatively minor.

Response 183-136: Alkali wetland plants (page 70). The Plan primarily addresses natural alkali wetlands, not those of recent origin. In certain places where species such as alkali mariposa may be found in ditches adjacent to the railroad, for example, the Plan calls for

conservation to the extent feasible in that location. The Plan does not judge the value of individual plant species, except to identify exotic and invasive species as threats to natural riparian systems. We will not add the suggested text to the adaptive management provisions.

Response 183-137: Raptors (page 70). All species of hawks, falcons, eagles and owls addressed by the Plan are native to California and the West Mojave Desert. The population size of each necessary to keep nature in balance is not known, and has changed due to urbanization and other factors. This change will continue and an optimal population size is unlikely to ever be known. We use as a baseline for golden eagle and prairie falcon the number of nesting territories identified in 1979. No similar baseline exists for the other covered raptor species.

Response 183-138: Mohave ground squirrel (page 70). The commentator may be confusing the Mohave ground squirrel with the California (Beechey) ground squirrel. Although Mohave ground squirrels have been observed in such places as the China Lake golf course and in residential backyards to a limited degree, they do not tend to cluster around structures as described. The Los Angeles County eradication program targeted California ground squirrels. The eradication program has been identified as a contributing factor to the loss of Mohave ground squirrels from agricultural areas, particularly in the Antelope Valley.

Response 183-139: Los Angeles County (page 70). The 1992 Memorandum of Understanding initiated the West Mojave planning process. It did not require its signatory jurisdictions to adopt or enforce the plan, nor does failure to have done so preclude an agency or jurisdiction from adopting the plan once it is completed. A jurisdiction will enforce the West Mojave Plan only if so chooses. That decision has yet to be made, and will not be made until a formal application for an incidental take permit is prepared and submitted to CDFG and USFWS, an implementing agreement is drafted and executed, and a permit is issued to the jurisdiction.

Response 183-140: Alternative B species measures (page 71). BLM and local jurisdictions intend to implement the West Mojave Plan jointly, including its feral dog and raven eradication programs.

Response 183-141: Alternative B adaptive management (page 71). The BLM's existing California Desert District Advisory Council most appropriately fills this function.

Response 183-142: Alternative C species measures (page 73). The enhancement of collaborative relationships among adjacent desert jurisdictions, including the BLM, is a primary goal of the West Mojave planning process.

Response 183-143: Alternative C take avoidance measures (page 73). Comments noted. Alternative C examines the effects of implementing the recommendations of the 1994 desert tortoise recovery plan, without modification or updating. All of these measures were suggested by the recovery plan.

Response 183-144: Tortoise food supply (page 74). Comment noted. It is likely, however, that tortoises feeding on lawns would be at higher risk due to predation by pets and to collection and handling by humans.

Response 183-145: Raven management (page 75). There is no indication that West Nile Virus can be transmitted to tortoises.

Response 183-146: Prescription AC-26, 29, 30 and 31 (page 76). Alternative C is composed of measures presented in the desert tortoise recovery plan. These measures are lifted verbatim from the recovery plan, at page 58. The recovery plan uses the term "restrict".

Response 183-147: Plan permanence (pages 77-78). We concur with the commentator's suggestions. The plan includes provisions to monitor the effectiveness of implementation, an adaptive management program, and a plan amendment process. The Implementation Tasks, Priorities and Costs table (Appendix C) has been revised and clarified to address the commentator's concerns regarding available funding and program priorities.

Response 183-148: Alternative F (pages 78-79). Comments noted.

Response 183-149: Dual sport events (page 79). The existing wording will be retained. Prescription HCA-41 addresses dual sport events only.

Response 183-150: Dual sport and the MGS (page 80). A biological opinion from the USFWS identifies the seasonal restrictions with regards to dual sports for all tortoises, not just those in DWMAs. Therefore, the biological opinion would continue to apply in tortoises and habitats within the MGS Conservation Area. The commentator's proposal could put tortoises at risk if the event was conducted in the spring when tortoises are most active.

Response 183-151: Barstow to Vegas race (page 80). Comment noted. The desert tortoise recovery plan found that competitive events are not compatible with tortoise recovery, and the remaining abbreviated segment of the Barstow to Vegas racecourse lies within the Superior-Cronese DWMA. The racecourse, moreover, is no longer viable given the deletion of the eastern three-fourths of the route by the NEMO Record of Decision.

Response 183-152: Enduros (page 80). The USFWS's Desert Tortoise Recovery Plan recommended that no competitive or organized motorized vehicle events be allowed in tortoise DWMAs. Non-competitive dual sport events are allowed: USFWS's 1991 programmatic biological opinion concluded that dual sport trail events are not likely to jeopardize the continued existence of the tortoise, and would not result in the adverse modification of critical habitat, so long as they are conducted pursuant to the terms and conditions of the biological opinion. Monitoring studies conducted since that time have yielded no new information that refutes the conclusions of the 1991 opinion. Enduros, however, are competitive events. Monitoring data and studies are not available to demonstrate, conclusively, that enduros will not impact tortoise DWMAs. Lacking that data, it is prudent to limit the staging of enduros to the same venues as other competitive events, that is, off highway vehicle open areas and competitive event corridors.

Response 183-153: Recreational event locations (page 80). The current wording accurately reflects the CDCA Plan guidelines and Recreation Element requirements.

Response 183-154: Open routes language (page 80). The designation of a route as open, without more, does not negate the need for any special events that may take place on that route to comply with NEPA. Where necessary, environmental assessments or impact statements will continue to be prepared.

Response 183-155: Speed limits (pages 80-81). The West Mojave Plan does not impose a particular speed limit on the use of open routes. Prescription MV-3 simply provides the BLM and local government with the flexibility to "consider ways" to reduce or avoid any increased tortoise mortality that future studies show are caused by use of unimproved roads.

The 35 mph speed limit referred to by the commentator has been applied only in very limited circumstances, that is, organized recreation events. It was not arbitrarily selected but represents in the professional judgment of BLM Recreation Planners, many of whom are recreational off-road motorcycle participants and/or have witnessed many motorcycle events. It is their professional judgment that 35mph is typically the maximum speed at which an average off-road motorcycle rider can avoid hitting a tortoise on an uneven, unpaved, variable route with limited visibility due to the many other participants.

6.3.21 Letter 184: Sierra Club, San Gorgonio Chapter

Response 184-1: Page 2, comment 2. The implementation tasks, priorities and costs table presented in Appendix C hasbeen modified to include additional information on how implementation of the Plan would be funded, including funding of staff positions.

Response 184-2: Page 2, comment 3. In April 1999, the Department of the Army released a proposal to expand Fort Irwin by 182 square miles, and to use the expansion area for military training. In December 1999, the Department of the Interior and Department of the Army established a tortoise conservation team to identify measures to ensure the long-term survival and recovery of the tortoise, assuming the April 1999 proposal was implemented. This "Blue Ribbon Science Panel" (Panel) met in January and February 2000 to determine how, if at all, the April 1999 proposal could be mitigated. The Panel report (LaRue 2000) identified numerous measures that were intended to offset the expansion. The full Panel concluded, however: "We feel that alternative boundaries could have been recommended that would have substantially reduced the impact of the expansion and perhaps avoided a jeopardy situation."

Shortly after the Panel report, the Army modified the April 1999 proposal to the current configuration, which encompasses approximately 134 square miles of tortoise critical habitat. This is a 50 square mile reduction of the alternative considered by the Panel. There was no follow-up by the Panel to determine how the original recommendations might be modified (or not) relative to the reduced expansion area. The Departments of Interior and Army, however, developed a "Key Elements Report" for Congress in January 2001 that described specific measures to offset expansion impacts. Public Law 106-554 authorized appropriation of 75 million dollars to implement the conservation measures identified in the Key Elements Report.

Given similarities of the measures, it is apparent that many of the Panel's recommendations were incorporated in the Key Elements Report.

The Department of the Army is responsible for ensuring that conservation measures associated with the Fort Irwin proposal are implemented. This may be done in collaboration with, but is not the responsibility of, the participating jurisdictions of the West Mojave Plan. It is the intent of both the Army and the Department of the Interior, however, that the conservation provisions of the expansion proposal and the West Mojave Plan are consistent with and complement each other. The Army is preparing a supplemental environmental impact statement that addresses the current expansion proposal, which will describe the measures to be implemented to offset impacts. The commentator is encouraged to review that document and to participate in that NEPA process.

Response 184-3: Page 2, comment 4. A Mojave Desert Tortoise Science Center is not currently within the scope of the plan. The idea has merit, however, and could be pursued in collaboration with the Implementing Authority and the BLM following adoption of the plan. It also has application beyond the bounds of the western Mojave Desert, and could service the entire listed range of the species. We suggest that the commentator discuss this issue with the Desert Tortoise Management Oversight Group, as well as with the Implementing Authority after its establishment.

Response 184-4: Page 2, comment 5. Appendix C has been revised to include new information within its Implementation Tasks Priorities and Costs table. The table estimates funding needs to implement the plan, funding likely to be available for plan implementation, and the priorities and costs of each discrete component of the plan.

Response 184-5: Plant surveys (page 2, comment 6). Surveys for rare plants are required within the Habitat Conservation Area. Surveys for rare plants outside the HCA will be undertaken in the following manner:

- The Implementing Authority will contract to perform botanical surveys. These include alkali wetland and playa edge species listed on page 2-159 of the Draft EIR/S in Table 2-27 (M-95, M-3), wet year surveys of ephemeral species and directed searches for Little San Bernardino Mountains gilia (M-41).

- A requirement for surveys for triple-ribbed milkvetch is in place for all proposed development sites within five miles of known locations (P-54)

- The local governments have agreed to include all covered plant species in the clearance surveys to be performed in tortoise survey areas.

- Within the Brisbane Valley, the survey incentive area would allow optional botanical searches for Mojave monkeyflower.

- BLM will survey parcels scheduled for disposal under the LTA (M-48).

- BLM will continue surveys on public land identified as potential habitat for Kelso Creek monkeyflower (M-34).

As part of the monitoring and adaptive management program, baseline surveys will be conducted for several species, followed by periodic monitoring. This requirement applies to Mojave tarplant, Red Rock tarplant, and Red Rock poppy. In addition, the monitoring program includes surveys for white-margined beardtongue every three years and a baseline survey of Barstow woolly sunflower within the CDFG's West Mojave Ecological Reserve.

Response 184-6: Page 2, comment 7. Alternative A already applies the 1 percent disturbance cap to all lands within the habitat conservation area. Please see the discussion in the Draft EIR/S at page 2-28.

Response 184-7: Page 2, comment 8. The West Mojave Plan proposes that the terms and conditions contained in the 1994 *Biological Opinion for Ephemeral Sheep Grazing in the California Desert District (1-8-94-F-16)* remain in effect. This biological opinion contains 16 terms and conditions that directly affect sheep grazing in desert tortoise habitat. These protective measures have worked well over the past ten years in minimizing impacts from ephemeral sheep grazing. Since 1991, most ephemeral sheep grazing have been restricted to allotments outside critical habitat for the tortoise, and overlap OHV Open Areas. The Plan proposes that four sheep allotments that are located within DWMAs would no longer be available for grazing, and that those portions of five other allotments that overlap DWMAs would no longer be available for sheep grazing.

Response 184-8: Page 3, comment 9. The West Mojave Plan proposes that the terms and condition contained in the 1994 *Biological Opinion for Cattle grazing on 25 Allotments in the Mojave Desert, Riverside and San Bernardino Counties, California (1-8-94-F-17)*, and the 2002 *Biological Opinion for the California Desert Conservation Area [Desert Tortoise] (1-8-01-F-16)* continue to be implemented to minimize impacts from cattle grazing in desert tortoise habitat. The Plan proposes other protective measures that would ensure that competition between cattle and desert tortoises for limited ephemeral forage would not occur; see, for example, prescriptions LG-4 through LG –19 and the voluntary relinquishment provisions of prescription LG-29.

Response 184-9: Page 3, comment 10. See Response 182-44.

Response 184-10: Page 3, comment 11. The West Mojave Plan commits the BLM to do more than simply designate routes. BLM will be managing a better-designed route network than previously existed, one that is based on ground-truthed field surveys, accurately located recreation venues, and the most recently available sensitive resource data. BLM is committed to an aggressive program to implement the route network, including signing, closed route rehabilitation, public outreach (including the creation of maps, providing interpretive panels, and conducting user education). The zone of influence of motorized routes has decreased significantly, due to the narrowing of the stopping and parking band from within 300 feet of routes to 50 feet (an 84 percent acreage reduction). The federal – local partnership that will be established between BLM and cities and counties following adoption of the habitat conservation

plan would make significant additional funding available for habitat enhancement and plan implementation.

Response 184-11: Page 3, comment 12. For clarification, "off road events of any kind" cited in the comment is assumed synonymous with both competitive events and non-competitive events. Competitive events include poker runs, hare and hound scrambles, and Grand Prix. Non-competitive events refer specifically to dual sports. These are all motorcycle events. Available information indicates that competitive events typically result in relatively more impacts to habitats adjacent to the racecourse, particularly at the start (p. 3-131 and 3-132, p. 4-204 and 4-205), whereas non-competitive events are speed-regulated events, restricted to roads, and therefore less likely to impact adjacent habitats (p. 3-133 and 4-206). The Johnson Valley-to-Stoddard Valley Corridor is a 22-mile competitive event corridor in the Ord Mountain area that connects the two open areas for which the corridor is named. The Johnson Valley-to-Parker Corridor is located along the western boundary of the Ord-Rodman DWMA. There are "yellow flag conditions" implemented in the corridors that effectively eliminate the competitive nature of the race while in the corridor.

Current management restricts competitive events to BLM Open Areas (i.e., Stoddard Valley, El Mirage, Johnson Valley), whereas dual sports are allowed outside designated Open Areas, as regulated by a biological opinion from the USFWS. All authorized car and truck events are restricted to Open Areas. First delineated in the 1980 CDCA Plan, current management allows for the use of the two corridors under yellow flag conditions. The only recent use of these corridors was in 1994, when the American Motorcyclist Association sponsored a +/- 80-mile event that included the Stoddard-to-Johnson corridor (p. 3-132 and 3-133).

General impacts associated with OHV activities and specific impacts associated with competitive events, non-competitive events, and event corridors were described on pages 3-116 to 3-133 of the Draft EIR/S. The commentator's recommendation that no off road events of any kind be allowed in conservation areas is included in Alternatives C (Recovery Plan) and D (Enhanced Ecosystem Protection). The benefits and residual impacts associated with these alternatives are given in Chapter 4. Other environmental benefits would include avoidance of all impacts associated with these events as described by the Draft EIR/S on pages 3-116 through 3-133. For comparison, Alternative A (Proposed Action) prohibits competitive events in DWMAs, but allows dual sports and the use of both corridors. There is no mention of enduro events in Alternative A, indicating that current management would remain unchanged. Impacts associated with enduros were discussed in the Draft EIR/S at page 4-206 for Alternative E.

As such, the information requested in the comment letter is already provided. Prohibition of all road events would result in avoiding general and specific impacts identified in Chapter 3. Environmental benefits are given in Alternatives C and D. Benefits also include avoidance of residual impacts identified in all alternatives. Information given in the Draft EIR/S is considered sufficient to address the comment.

Response 184-12: Page3, comment 13. We agree with the commentator concerning the importance of rehabilitating closed routes. The implementation program included in the EIR/S

proposes measures such as vertical mulching to the visual horizon, signs where their installation would be effective, and other measures.

Response 184-13: Page 3, comments 14 and 15. Existing enforcement mechanisms will be applied to aid plan implementation. Procedures governing law enforcement are set by applicable statutes and regulations, modification of which is outside the scope of those changes that can be made by a federal land use plan or by local government habitat conservation plans. Personnel available will include BLM rangers and other local law enforcement.

Response 184-14: Page 3, comment 16. Statutes and regulations already exist to prevent abuses such as those referred to by the commentator. They cannot be amended or extended by a land use plan, such as the West Mojave Plan. We suggest that commentators bring specific enforcement concerns to the attention of local and federal law enforcement officials, and work with those persons to resolve public safety concerns.

Response 184-15: Page 5, Mojave River. BLM does not have authority over water use in the Mojave Basin, nor do the local government jurisdictions. The Plan participants can assist with water conservation and river restoration for the covered species by removal of invasive riparian plant species. This weed eradication program is one of the conservation strategies for the Mojave River species.

The local jurisdictions are obligated to obey the adjudication of water rights in the Mojave Basin. We assume that the rampdown of use and restoration plan to be developed by the CDFG will be implemented.

Response 184-16: Page 6, Funding. The implementation tasks, priorities and costs table presented in Appendix C has been modified to include additional information on how implementation of the Plan would be funded. One of the most comprehensive tasks identified in this table is the implementation of the motorized vehicle access network. Successful implementation of the network, together with an aggressive education and outreach program, is expected to ensure that motorized vehicles are used in a manner that is compatible with species conservation. Monitoring programs will determine if compliance problems are occurring, and should provide the information necessary for corrective action to be taken in the event problems continue.

6.3.22 Letter 185: Ms. Marie Brashear

Response 185-1: Map data (page 1). The data has been provided as requested.

Response 185-2: Route network maps (page 1). Compact disks displaying the motorized vehicle access network on topographic maps were included in the Draft EIR/S, as well as in the environmental assessment prepared for the Western Mojave Desert Off Road Vehicle Designation Project. All components of the route network were displayed on these maps.

Response 185-3: Predetermined outcomes (pages 1 and 2). The motorized vehicle access network was adopted by the BLM following field survey, task group input that was utilized in the development of the decision tree process, public review, and a protest period. All of this occurred prior to the amendment of the CDCA Plan on June 30, 2003 that adopted the route network. The June 30, 2003 date of the BLM decision was set by the settlement of litigation between BLM and the Center for Biological Diversity et al, but the substance of the decision was developed through the planning process with input from the public. It was by no means pre-determined.

Response 185-4: CDCA segmentation (page 2). BLM is committed to maintaining the regional integrity of the CDCA Plan, and ensuring that it's regional management strategy remains seamless. The NEMO, NECO, Coachella Valley and West Mojave amendments to the CDCA Plan address a specific issue, the conservation of special status species, and do so for specific geographic subregions of the California Desert Conservation Area. Considerable effort has been made to ensure that these amendments are compatible with each other and with the overarching management approach set by the CDCA Plan. All apply the CDCA Plan's multiple use class approach, and all conservation strategies were developed within the sideboards set by the CDCA Plan elements and their goals and objectives. Where new concepts were introduced, such as the establishment of tortoise DWMAs, the same concepts were applied throughout the California Desert Conservation Area. Strategies unique to a given area were adopted to address problems found in that area. An example is the West Mojave Plan's tortoise survey and no-survey areas, which was developed in response to the urban interface issues that are characteristic of the western Mojave Desert.

Response 185-5: DWMA boundaries (page 2). The boundaries of the tortoise DWMAs that were presented in the Draft EIR/S are essentially the same as those that were presented and discussed at Supergroup and Task Group meetings. Minor boundary adjustments collectively changed the acreage included within the tortoise DWMAs by less than one percent. Minor differences between DWMA boundaries and critical habitat reflect findings of field surveys conducted between 1998 and 2001; all such changes were discussed at task group meetings. Proposed tortoise DWMAs are comparable in size to those suggested by the recovery plan; please see the Desert Tortoise Recovery Plan, Page 42 Figure 10 ("Proposed DWMAs in the western Mojave recovery unit").

Response 185-6: Dual sport restrictions (page 2). There are no new restrictions identified in the West Mojave Plan for dual sport events. In fact, future events may be less restrictive and expanded in scope as a result of the plan, as *all* open routes would be available for dual sport events. There is also an ongoing effort by the BLM Ridgecrest field office to establish a new dual sport corridor in the Rand Mountains. Dual sports are already regulated by a biological opinion issued to the BLM for that activity. Although it may be true that a given group can informally get together for a dual sport-like event, BLM necessarily has to assess potential environmental impacts for this and other activities that it authorizes. As such, it is not a matter of calling the activity an "event" that has resulted in previous restrictions. It is because the permitting of this activity is a discretionary decision and must necessarily be authorized (or not) by the BLM. In making that decision, restrictions deemed necessary during BLM's case-by-case review of the event application are imposed as a condition of the permit.

Response 185-7: Land classifications (page 2). The West Mojave Plan does not proposed to change the current definitions of open, limited and closed. Nor does it propose to change the definitions of the multiple use classes. No changes in road classifications from Class M to Class L have been proposed.

Please note that the CDCA Plan includes a third "open, limited and closed" classification scheme, one that is often confused with the multiple use classes and the designation of specific routes as open, limited or closed. This is the "Area Designations" concept: some regions are closed (such as wilderness areas and a few lakebeds); some are open (including the off highway vehicle open areas and other lakebeds); and remaining lands are "limited". These "limited areas" include most (but not all) Class L and M lands, and some Class I lands. Designation of routes as open, closed or limited occurs on lands with a "limited area" classification. Please see the CDCA Plan (as amended), pages 76 to 79.

Response 185-8: ACECs (page 3). Thirty ACECs are currently designated within the western Mojave Desert. The West Mojave Plan would add ten new, relatively small, ACECs, together with the large tortoise DWMA ACECs. All proposed management actions for these ACECs were presented in the Draft EIR/S in Chapter 2 and in Appendix D together with modifications of existing ACEC boundaries and management plan strategies. The intent was to consider all of the proposed changes now, as this would maximize public review opportunities rather than deferring ACEC management changes into the future. The West Mojave Plan would serve as the ACEC management plan for all new ACECs and will include, in one place, all modifications and amendments to existing ACEC plans.

Response 185-9: Parallel routes (page 4). See Response to Topical Comment 5e.

Response 185-10: Survey completion (page 5). Please see Responses 183-9 and 183-11.

Response 185-11: Competitive events (page 5). The BLM has not proposed to "…eliminate cross country endurance races." Prescription HCA-40 would prohibit vehicle speed events within the tortoise DWMAs and the MGS Conservation Area, the remaining segment of the Barstow to Vegas racecourse would be eliminated and the Stoddard Valley to Johnson Valley corridor would be come a "connector route." Competitive events would be allowed in other areas, including all open areas, subject to existing multiple use class limitations.

It is not clear which races have been approved by the USFWS over and over again. The Barstow-to-Vegas race has not been permitted since 1989. In fact, the only race event authorized outside BLM open areas in the last 10 years was the AMA motorcycle event in 1994 that used the Stoddard-to-Johnson corridor. Such race events are regularly authorized by the BLM to occur in designated open areas, which are regulated by existing biological opinions.

The Barstow-to-Vegas race has not been conducted since 1989. There is no new information on tortoise populations that would warrant reversing the BLM's decision to discontinue this event. If anything, available data show the status of the tortoise to be worse now than in 1989. The race event has not been authorized for the past 15 years due to unacceptable

impacts to the environment, and tortoises in particular. Because the remaining segment of the racecourse is located within the Superior-Cronese tortoise DWMA, the retention of the route would conflict with the intent of prescription HCA-40 to preclude vehicle speed events within tortoise DWMAs. To now reauthorize this event would effectively reverse current management, which is inadvisable due to persisting tortoise population declines in the West Mojave.

Response 185-11: Desert tortoise issues (pages 5 and 6). The West Mojave Plan is not based solely on the 1994 recovery plan, as stated. The recovery plan was one of many documents reviewed by the biological evaluation team as the conservation strategy was designed. The comment fails to demonstrate how the West Mojave Plan is based on "…flawed and outdated data and inadequate science…" Survey methodologies followed those of Dr. Berry from the 1970's, and are well suited to determine regional distributions and densities of tortoise sign and observable human disturbances. Nor are these data outdated, as they were collected specifically for the planning effort between 1998 and 2001. In fact, these data were collected because available data as of 1998 were mostly restricted to military installations or were collected prior to 1984, which *were* outdated.

Information sources are lacking to know if the cited figure of $20,000,000 spent on tortoise conservation is accurate. However, there are numerous examples of how there have been positive responses to the expenditure of funds to conserve tortoises. Protective measures implemented between 1990 and 1995 on 171 federally authorized projects in California and Nevada resulted in rescuing 1,455 tortoises out of harm's way (LaRue and Dougherty 1998). Cumulatively, these projects resulted in the deaths of fewer than 60 tortoises, although more than 1,100 tortoises were authorized for incidental mortality. West Mojave Plan data show that there has been recent recruitment of tortoises inside the fence at the DTNA, which was the only recruitment observed in 350 square miles of survey in the region. Dr. Boarman has demonstrated that there was an 88% reduction in the number of road-killed vertebrates along Highway 58 in response to erecting barrier fences. These and other examples demonstrate that many actions implemented on behalf of the tortoise have been quite effective.

The comment is made that more tortoises now occur in Joshua Tree National Park than in 1971, but that the plan unfairly points to tortoise declines elsewhere to justify reducing access to desert areas. The comment fails to note that Joshua Tree National Park has been managed under reserve-level conditions for many years. The Park is a prime example of reduced access, with few paved roads, a minimal numer of dirt roads, and a policy of no cross-country vehicle travel. It is not clear that tortoise populations have increased within the Park in response to this type of management, but it is likely that tortoises are less threatned by human activities within the park because of reserve-level management.

Joshua Tree National Park may be a good example of how "…closing the land and limiting access…" has had a noticeable positive impact on tortoise populations. Recruitment of juvenile tortoises inside the fence at the DTNA is another good example of how limited access may have resulted in incresasing tortoise populations. For clarification, the plan does not propose to "close the desert," rather it proposes to minimize the number of roads that occur in critical tortoise habitats where long-term conservation would be a primary goal. The desert will remain open to hikers, horseback riders, and numerous other forms of non-motorized

transportation. Although there would be a reduction in the number of authorized routes in DWMAs, access would continue to occur along numerous open routes.

6.3.23 Letter 186: California Cattlemen's Association

Response 186-1: BLM management costs (page 1). The commentator raises the issue of increased management costs that might be incurred by the BLM in the event that a grazing permittee no longer utilized an allotment. BLM would incur a slight increase in costs. These costs would be higher if range improvements were retained rather than removed. Existing ranger patrols would continue in these areas but would lack the assistance provided by private citizens working on BLM lands, as the commentator states. The text has been clarified to make this point.

Additional analysis of the impacts of Alternative A (Proposed Action) may be found on pages 4-98 to 4-103 of the Draft EIR/S.

Response 186-2: Grazing leases held for conservation use (page 2). Comment noted.

6.3.24 Letter 187: Defenders of Wildlife

Response 187-1: Length of text (page 1). The CEQ regulations state that final environmental impact statements of unusual complexity "shall *normally* be less than 300 pages" (Section 1502.7, emphasis added). Exceptionally complex projects such as regional land use plans often exceed that limit when greater detail is warranted by large numbers of issues and programs. The commentator, in fact, later requests that *additional* materials be added to the document; see page 2, requesting the inclusion of more baseline data. Every effort has been made to ensure that the EIR/S presents information as concisely and clearly as possible. Where clarifications were necessary they have been incorporated into the text of the Final EIR/S.

Response 187-2: Table of Contents (page 2). The Table of Contents has been corrected for the Final EIR/S.

Response 187-3: Baseline data (page 2). Chapter 3's species descriptions were derived from more than 80 peer-reviewed species accounts prepared for the West Mojave planning effort by leading authorities. Copies of these species accounts were distributed to stakeholders during the planning process, and have been posted on the West Mojave web page for more than three years. In response to your comment, electronic copies of the species accounts have been included on the compact disk attached to the Final EIR/S.

Response 187-4: Description of alternatives (page 3). Only those aspects of each alternative that differ from Alternative A were presented in the description of each alternative. Remaining discussion was incorporated by reference from Alternative A. Please note that the Final EIR/S description of Alternative B (BLM only) has been clarified, and new materials have been added to the description of Alternative G (No Action).

Response 187-5: Acreage overlap (page 3). Many of the acreage figures requested by the commentator are already provided in Chapter 4; see, for example, Tables 4-6, 4-7, 4-8, 4-48, 4-52, 4-55, 4-59 and 4-61. Additional acreage data concerning the overlap between BLM multiple use classes, tortoise critical habitat, tortoise DWMAs, ACECs and the habitat conservation area have been added to Table 2-30.

Response 187-6: Alternative maps (page 3). The full-color maps of each alternative, while generalized due to the scale (1:400,000), are not inaccurate. The correctly portray the location of all pertinent components of each alternative, including conservation areas, political boundaries, new ACECs and other features. A consistent map design was applied to each alternative, making realistic comparisons possible among the alternatives by comparing the maps. In our judgment, these graphics represent the best possible compromise between amount of data to be portrayed and usability.

Response 187-7: Table 4-52 (page 3). Table 4-52 has been corrected.

Response 187-8: Connectivity (page 4). There is no opportunity to modify DWMA boundaries to gain the connectivity among conservation areas that is lacking in all alternatives. While excellent connectivity would result along the common boundary between the Fremont-Kramer and Superior-Cronese DWMAs, both the Ord-Rodman and Pinto Mountain DWMAs are located as such that physical connectivity with the other DWMAs is impossible.

Biological Goal 3 states, "Ensure genetic connectivity among desert tortoise *populations* [emphasis added], both within the West Mojave Recovery Unit, and between this and other recovery units." Importantly, it does not call for connectivity between conservation areas.

North-to-south connectivity is somewhat hampered by residential communities from Yucca Valley to the City of Twentynine Palms. Although tortoises have been extirpated from a few heavily urbanized areas, available data show that tortoises still occur in suburban and rural areas, which continues to provide for connectivity. Should the western part of this connector be developed sufficiently that connectivity is lost there would still be opportunities for north-south movement east of Twentynine Palms. Interstates 15 and 40, and fenced portions of Highways 58 and 14, significantly minimize connectivity between adjacent habitats. However, culverts and bridges along each of these roadways would continue to provide for limited passage (unless closed, as suggested in Alternative F).

In spite of the above observations, the comment suggests a proactive means of facilitating genetic transfer. In response, the following wording has been added to the Final EIR/S as a foreseeable form of adaptive management: "If the impermeable barriers between some DWMAs proves a hinderance to genetic connectivity and research shows that there is truly enough genetic difference among DWMAs, then translocation of individual tortoises should be considered. Actions could include manual transfer of tortoises and/or eggs from one place to another, as dictated by then-available information on translocation and other factors."

Response 187-9: Relative effectiveness of alternatives (page 4). Both beneficial and residual impacts that would be associated with a given conservation strategy are listed for each

alternative in Chapter 4. In addition to the tabulated analyses, there are summary statements following the tables describing the efficacy of the measures relating to each alternative. The ability or inability of alternative strategies to meet biological goals and objectives is suggested by tabulated and summary information. Contrary to the statement, the critical habitat acreage and percent of total critical habitat in DWMAs for each alternative are included in the tables in Chapter 4. For example, Table 4-6 (p. 4-13) shows there would be 2,115 square miles (96%) of critical habitat in the DWMAs identified in Alternative A.

Response 187-10: Tortoise survey data (page 5). The Draft EIR/S is accurate in stating that the West Mojave planning team surveys were essentially the same as those of Berry and Nicholson (1984). More accurately, the methodologies were exactly the same. Prior to initiating the 1998 survey effort, surveyors met with Dr. Kristin Berry to obtain her input on how the survey should be conducted. Peter Woodman, who has performed more of these surveys than anyone else, helped supervise the three new survey efforts (1998, 1999, 2001), and was largely responsible for ensuring consistent data collection. His institutional knowledge of sign count surveys was invaluable. With the exception of making a few changes to the standard data sheet, the methodologies were the same as previous sign count survey efforts.

Sign count surveys are a means of sampling tortoise populations. There were objectives to the surveys (see Draft EIR/S at p. 3-78 and 3-79), however there was no reason to develop a "study design" and formulate "stated hypothesis," which would be required had this been an experiment. The effort did not "…amount to an experimental data collection;" if this were true, there would have been hypothesis to be tested. Sign count surveys are a means to *sample* the population. The results provide relative abundance and distribution of tortoises, not results for hypothesis testing.

All 17 surveyors completed calibration plot surveys during the three-year effort. Each surveyor was obligated to survey six transects on each of three calibration plots, and three of the surveyors (Woodman, Boland, and LaRue) surveyed five calibration plots during four years (including 2000 when regional surveys were not performed). These data were used to compare surveyor's ability to find sign, and in several cases were used as the basis to have surveyors re-survey all six transects on a given calibration plot. In 1999, calibration transects were completed at the beginning (as usual) *and* end (unusual) of the survey effort to see if heavy summer rains had affected the detectability of available sign. Calibration data were not used to estimate tortoise densities, which has been a main reason for completing sign count surveys in the past. Given this information, the reference to Dr. Krzysik's analyses as having "…no statistical validity" is unfounded.

Dr. Krzysik's analyses were important in that they correlated the prevalence of burrows with the prevalence of observed tortoises, thereby addressing previous criticism that sign count density does not reflect tortoise density. It is also significant that the higher concentration areas, which were based on tortoise sign, were a good predictor of where tortoises would most likely be observed. The rationale used to delineate higher concentration areas and other regions such as vehicle impact areas are described in the DEIR/S on page 3-85. It is this rationale, rather than a "…scientifically valid basis…" that was used to delineate higher concentration areas. The comment makes no reference to the validity of the methods used to designate regional polygons.

Response 187-11: DWMA boundaries (page 6). The small triangle referred to by commentator consists of several sections of land within the City of California City that are affected by a complex legal situation concerning their development. The triangle has been added to the DWMA for Altneratives A, B, C and D. Deletion of this triangle on the Alternative C and D maps was an error, and has been corrected.

Response 187-12: Ord-Rodman DWMA boundary (page 6). No ORV recreation area exists in the Brisbane Valley, and no exclusions from a tortoise DWMA were made in this area. South of Camp Rock Road, a small portion of critical habitat was excluded from the Ord Rodman DWMA to establish a more manageable boundary. Deletion of the Camp Rock Road parcel on the Alternative C and D maps was an error, and has been corrected. Please note that these deletions were more than counterbalanced by the inclusion of substantially more acres of lands outside critical habitat in the Iron Mountains and near Harper Lake, lands shown by 1998-2001 field surveys to support substantial tortoise populations.

Response 187-13: Exclusion areas (page 6). Exclusion areas shown on Map 2-13 for Harper Dry Lake and Cronese Lakes are accurately depicted, showing common boundaries between Exclusion Areas and associated DWMAs. In response to the settlement between the BLM and Center for Biological Diversity, the BLM erected a grazing exclosure fence in the Ord Mountain Allotment in 2002. As depicted in Map 2-13, the gray area east of the fence is the Exclusion Area, and cattle would be allowed to graze in the white, non-exclusion area, west of the fence.

Response 187-14: Restriction of vehicles to designated routes (page 7). Prescription MV-1 limits motorized vehicle use to designated routes, except in emergency situations or with the explicit permission of the BLM (see Draft EIR/S at Page 2-141), or within the stopping and parking zone (prescription MV-5). New roads could only be established through the Modification of Route Network process described in Section 2.2.6.9. Prescription MV-5 already limits camping to previously disturbed sites adjacent to designated open routes.

Response 187-15: Hunting (page 7). Prescription DT-10 limits the discharge of firearms within tortoise DWMAs to seasonal upland game hunting, and target practice using retrievable targets. The latter condition is the only difference between the Recovery Plan and Alternative A recommendations, and is not viewed as a significant difference. It is consistent with the approach agreed to in settlement of litigation between BLM and the Center for Biological Diversity, et al, in 2001.

Response 187-16: Competitive event corridors (page 8). Alternative A has been modified to delete the Johnson Valley to Stoddard Valley competitive event corridor, and replace it with a connector route. No competitive events would be allowed to use this route. The Johnson Valley to Parker competitive event corridor does not cross any tortoise DWMAs. It follows the boundary between the Ord-Rodman DWMA and the Marine Corps Air Ground Combat Center. This corridor will be retained.

Response 187-17: Dual sport events (page 8). There are abundant data describing vehicle impacts to tortoises and habitat (see Draft EIR/S at p. 3-116 through 3-133), however the sensitivity of tortoises to impacts by dual sports is questionable. Available data show that dual sports have not resulted in either tortoise mortality or habitat degradation. BLM monitoring reports generally show good compliance with existing protective measures.

Response 187-18: Land acquisition (page 10). See Response 187-37 (below). Appendix C's Implementation Tasks, Priorities and Costs table has been revised to specify how protective conservation measures would be funded and implemented on a timely basis.

Response 187-19: Agriculture (page 10). The West Mojave Plan does not cover new agricultural development. Existing procedures would continue. On public lands, any new development would be approved only after consultation with the USFWS and would require full NEPA and FESA compliance.

Response 187-20: Commercial filming (page 10). Chapter 2 outlines a program for enhanced protection of tortoises on private lands during commercial filming activities. BLM manages filming on public lands, and ensures that either BLM staff or consultants are enlisted to monitor activities to avoid impacts. As described in Draft EIR/S Table 4-12, the benefits are enhanced protection and education, and the remaining impact is potential impact to higher concentration areas. Such is the conclusion for Alternative A, which can be compared with analogous conclusions for the other alternatives.

Response 187-21: Movement of tortoises (page 10). The main purpose of moving tortoises out of harm's way on a construction site is to avoid their deaths. It is not a conservation measure; rather, it is a minimization measure, a way to minimize the overall impact to tortoises by authorized development. The beneficial aspect of such movement is documented (LaRue and Dougherty 1998), reporting that 1,455 tortoises were moved out of harm's way between 1990 and 1995. On those same projects, 58 tortoises reportedly died. The measure was judged effective in reducing direct impacts, but not effective in reducing residual, indirect impacts that occur following construction, when protective measures are no longer in place.

Response 187-22: Disease management (pages 10 and 11). Comment noted.

Response 187-23: Energy and mineral development (page 11). Energy and mineral development impacts would be minimized by several programs described in Alternative A. Impacts would be assessed a compensation fee and the 1% Allowable Ground Disturbance would apply. On-site minimization measures would be implemented, including reclamation and restoration actions, Best Management Practices, protective fencing as applicable, and presence-absence surveys and clearance surveys. State and federal laws that would apply with or without the Plan would regulate hazardous spills occurring during authorized activities. The Habitat Credit Component program provides opportunities for removing hazardous wastes and reclaiming habitats previously impacted by mining and other activities.

New haul roads are a major concern, and have been known to impact more tortoises than the actual mine site (LaRue and Dougherty 1998). Alternative A includes the provision of performing reconnaissance surveys to identify the least-impacting project design, which should include haul roads. In most cases, existing roads are likely to be used. Current protective measures would still be implemented. These include roadside signs, biological monitoring, and vehicle placards, which are effective in increasing awareness. There is also the option to fence the road, with prior agency approval.

Because the West Mojave Plan establishes the goals for protection and recovery of threatened and endangered species, all mineral activities must be in compliance with the provisions of the Plan, as well as specific plans implemented to meet recovery goals in order to be allowed to operate within any tortoise DWMA. All BLM multiple use class L lands will require a plan of operation for all mining law activities other than casual use (activities causing no or negligible surface disturbance). The regulations at 43 CFR 3809.420 (January 2000) require that all pre- and post- mining law operations be in compliance with land use plans. Activities involving surface disturbance or use of contaminants that cannot be mitigated to meet the biological goals of the Plan will be determined to be causing "unnecessary or undue degradation", and cannot be approved. Such mitigation may include avoidance, compensation for loss as established by the Plan, or minimized, limited, or seasonal operations. Other mineral authorizations, such as leasing and material disposals, also must be in compliance with the biological goals of the Plan as the enabling acts and implementing regulations provide the authorized officer considerable discretion to assure compliance with the Plan as well as the federal government's statutory direction to assure access and availability to mineral resources of the United States.

Response 187-24: Guzzlers (page 11). The gamebird guzzlers were installed by the CDFG and are believed to be a minimal threat to the desert tortoise. The Plan would fund a study to determine if any tortoises are drowning in these guzzlers and if tortoise predators utilize them. Using the results of that study, the guzzlers would be retrofitted or removed by the CDFG.

Response 187-25: Mojave ground squirrel (page 11). The 30% of the Mohave ground squirrel range that lies outside of the conservation area and military lands is comprised mostly of consolidated private lands, especially to the south (Victor Valley to Palmdale and Lancaster) and from California City east to Highway 395. Certain management prescriptions would be applied at the county level on private lands. Proactive management options include land purchase or conservation easements. Most conservation management would be applied on public lands managed by the BLM.

The evolutionary history of the MGS management area is well documented in the 2000 Draft Biological Evaluation (p. 3-5 through 3-16). Considerations for reserve size and distribution have been considered since at least 1991 when CDFG (Remple 1991) identified reserve design criteria. MGS "reserves" were identified in 1993 and in 1998 during the initial stages of the West Mojave planning effort. The reasons they were rejected (p. 3-6 and 3-7), and the current configuration (3-9 through 3-19) recommended are given in the Biological Evaluation (BLM 1999). In the final stages of planning, the West Mojave planning team met with CDFG

(John Gustafson) and the MGS TAG (Technical Advisory Group) for final recommendations on the proposed area.

The potential expansion of the then-proposed MGS conservation area to enhance reserve design was specifically considered by the MGS TAG. At that time, the proposed MGS HCA was expanded to include the portion of the range that lies to the northeast of the planning area and consolidated BLM lands around Searles Lake. Previously, 20+ square miles of the private land in the Indian Wells Valley was withdrawn from the proposed conservation area at the request of Ridgecrest, as well as private lands in Inyo County. The MGS TAG did not identify these exclusions as fatal flaws to the conservation of the MGS. The ability to expand the current conservation area is mostly limited by absence of BLM lands that are contiguous and within the range. Region-wide purchase of consolidated private lands is cost-prohibitive. In addition, Alternative A calls for studies (such as the "Kern County Study Area") to determine if the MGS occurs outside the known range. Depending on the findings, the information would be evaluated to see if the conservation area boundary should be modified.

In order to "fully mitigate" the impact, conservation provided through the West Mojave Plan should be consummate with the authorized impact. Such impacts would result from new commercial and residential development and identified uses on public lands that are expressly authorized in various State and federal incidental take permits. The collection of fees and their application to conservation actions identified in the Plan are primary ways to ensure that impacts are fully mitigated. For the MGS, the CDFG has the responsibility to judge the program and change it as necessary to facilitate meeting this and other regulatory standards. Those management actions that effectively protect tortoise habitats would also protect MGS habitat. The primary "specific management action" is establishing the MGS conservation area. Compensation fees would be applied to the conservation program, studies, and monitoring. Effectiveness would be judged by the CDFG, and management changed as needed and regulated.

Response 187-26: Mojave River (page 12). The West Mojave Plan participating jurisdictions do not have authority over maintenance of groundwater levels. The Plan recognizes the adjudication and its provisions to maintain groundwater levels at specified depths at the five monitoring locations. The best scientific information on groundwater levels necessary to support riparian habitat comes from the USGS reports that you reviewed. Any provision of the Preferred Alternative to require higher groundwater levels would be meaningless because water management is not under control of the local governments. We have assumed that if the groundwater levels maintain the riparian habitat specified by the adjudication and supported by the USGS studies then the covered species would continue to thrive. This assumption is based on other known habitat parameters, such as a tall canopy for the summer tanager, a dense understory for the Bell's vireo, or grassy openings ("meadows") and marshes for the Mojave River vole.

The goals and objectives for the ten Mojave River riparian species have been restated. We have used language recommended by CDFG for an objective related to the groundwater levels. Permit coverage is contingent upon maintaining these levels. Maintenance of the groundwater levels is not used as mitigation for take elsewhere in the Plan. No statements on page 4-62 of the Draft EIR/S discussing summer tanager reach this conclusion. The Chapter 4

analysis does assume that the court-ordered judgment will be implemented and relies on the groundwater levels as a baseline.

Table 4-4 reflects the acreage of conservation provided by land use restrictions in Conservation Areas. Most of the Mojave River riparian habitats are not within a conservation area, but this does not mean that this natural community will inevitably be converted to other land uses. Existing restrictions on land uses within the floodplain, combined with the state and federal wetland protection laws, will serve to maintain the habitat as open space. We do not expect any substantial conversion of the riparian habitat to developed uses.

The Plan would provide for an increase in available habitat for the ten riparian species by restoration and enhancement of the habitat via invasive species removal. This will have the effect of conserving water and increasing the available native habitat of cottonwood-willow riparian forest.

Response 187-27: Mojave River vole & Wild and Scenic Rivers (page 13). The discussion on Draft EIR/S page 4-147 concerns Alternative B, the BLM only Alternative. Because all of the riparian area in the Mojave River except Afton Canyon is outside federal ownership, Alternative B could not guarantee restoration or habitat enhancement of any non-federal lands. However, BLM has partnered with CDFG to perform restoration at Camp Cady, and would probably continue to do so.

The local governments do not control the groundwater levels in the Mojave Basin, and the statement that the vole's habitat (as well as the other nine covered species) could be eliminated represents the worst case scenario if implementation of the adjudication fails to maintain the specified levels groundwater depths. This scenario is true for all the alternatives. It is unlikely that the Upper and Lower Narrows would experience drying, because these locations are where bedrock forces groundwater to the surface.

The provisions of the Wild and Scenic Rivers Act, including the interim protections afforded eligible segments, do not apply to the habitat of the Mojave River vole. The only segment of the Mojave River qualifying for "Recreational" status under the Act is the 2.9 mile reach at Afton Canyon where the vole is not known to occur. The state or local governments could designate other non-federal segments of the River as eligible under the Act.

Response 187-28: Conservation measures for covered species (page 13). All covered species have biological goals. Objectives are not needed for every species. However, we have revised the goals and objectives for several of the species of concern in the final EIR/S, based on your comments and those from other commentators.

Response 187-29: Citations (page 13). The Plan includes several supporting documents. The Current Management Situation was released in 1999. This document summarizes the existing situation with respect to conservation management of the covered species by all participating jurisdictions. Peer-reviewed species accounts were prepared by specialists and have been posted on the BLM website and distributed to stakeholders. Each account thoroughly reviews the primary scientific literature for each covered species, with the exception of a few

added later in the process. Section 5.6 of the draft EIR/EIS lists the account authors. The full text of these accounts has been included on the compact disk attached to this Final EIR/S. Sections 1.4.4 through 1.4.7 describe the planning process and its scientific basis. In addition, the Supergroup was presented with a Conservation Biology seminar in 1999, and meetings were held with well-known conservation biologists during the planning process. The conservation plans for each species were developed from a review of the threats and needs by members of the West Mojave Plan team and the Wildlife Agencies. An Evaluation Report summarized the results of these meetings.

Each of these documents was considered by the local jurisdictions and stakeholders representing a wide variety of interests to formulate the final conservation plans for each species.

Response 187-30: Bendire's thrasher (page 14). Incidental take permits are not sought for Bendire's thrasher. BLM will undertake management on public lands to protect this species, including establishment of new Areas of Critical Environmental Concern. Within these ACECs, vegetation harvesting will be prohibited, routes of travel will be reduced, and the 1% cap on allowable ground disturbance will apply. A 5:1 mitigation fee amount ration will also be imposed within the Bendire's Thrasher Conservation Area.

Response 187-31: Burrowing owl (page 14). Surveys would be required for burrowing owls on all parcels within the desert tortoise survey zones.

The West Mojave Plan does not regulate agriculture, including the use of rodenticides in farm operations.

We have reviewed the petition for listing of the burrowing owl and are aware of the state's findings. Very little information was presented to show any kind of population trend in the West Mojave, either up or down. The West Mojave does not support the preferred grassland habitat except in a few small locations.

Response 187-32: LeConte's thrasher (page 14). Conservation of 99% of the DWMAs and other Conservation Areas is considered adequate conservation for LeConte's thrasher.

Response 187-33: Lucy's warbler (page 14). Lucy's warbler has been dropped as a covered species in the Plan. Discussion of this bird was removed from Chapters 2 and 3 in pre-publication drafts, but was inadvertently left in Chapter 4. The discussion on Draft EIR/S page 4-59 notes that maintenance of groundwater is necessary to support mesquite thickets, especially near Camp Cady. The statement that maintenance of groundwater levels "is a primary provision of the West Mojave Plan" is incorrect, since the local governments do not have authority over water usage. The discussion of this species in Chapter 4 has been deleted from the Final EIR/S.

Response 187-34: Mojave fringe-toed lizard (page 15). We consider conservation of the Mojave fringe-toed lizard to be adequate, even without specific protection of six historical locations. The reasons for not conserving these sites are provided in the Draft EIR/.S on page 4-66 and include two sites that are not part of the Plan area and two that have no recent records.

This lizard is found on thirteen sites outside the West Mojave, and BLM or the National Park Service protects several of these sites. The cumulative impact of the potential loss of four sites (excluding military lands, which are outside the Plan area), which are not proven as existing habitat, is insignificant.

Response 187-35: San Diego horned lizard (page 15). The protection of drainages in the San Gabriel and San Bernardino Mountains is a small part of the conservation plan for the San Diego horned lizard. This minimization measure is not a statement that the Plan expressly does not provide adequate protection for this species. The horned lizard would receive additional conservation in other new Conservation Areas and in existing ACECs. The acreage of incidental take is not provided because of the difficulty of determining precise boundaries for its range in the West Mojave.

Response 187-36: Yellow-eared pocket mouse (page 15). Environmental Assessments for rights-of-way, competitive events and mines, for example, would address impacts to this species. The Final EIR/S has incorporated changes reflecting your comments and other commentators that more clearly explain the conservation measures for each species. The species accounts provide the scientific basis for the conservation plans.

Response 187-37: Land acquisition (page 16). The intent of the Plan is to provide general guidance for a land acquisition program and, in a few select areas (such as Rabbit Springs) specifically identify acquisition sites. Alternative A identifies several specific land acquisition targets; see, for example, prescriptions HCA-36, R-4, R-6, P-1, P-2, P-13, P-29, P-40, and P-55, among others. Additional information has been included in Appendix C's Implementation Tasks, Priorities and Costs table.

We feel that flexibility should be left to the Implementing Authority to acquire lands as opportunity for cost-efficient purchases and resource needs direct. Land acquisition is an important tool but the great majority of lands within the conservation areas are already in public ownership. The higher priority for the Plan is the effective management of lands already acquired, and the enhancement of habitat on those lands, rather than the acquisition of additional properties.

Response 187-38: Habitat loss and conservation (page 16). There is no contradiction between the statements referenced. Incidental take areas are primarily areas within the cities and their spheres where the habitat values for covered species no longer exist. Conservation areas provide sufficient space for sustained viability of covered species. Management would limit, by minimization and mitigation, activities within the conservation areas, and in many cases would prohibit incompatible activities. The discussion of activities that might affect the desert tortoise on Draft EIR/S pages 4-22 through 4-27 is framed within the 1% maximum allowable ground disturbance. All other avoidance measures for the DWMAs would apply. For the Mohave ground squirrel, the existing data show that this species no longer is found within the southern portion of its range. Conservation of "only" 1/3 of its range must take this reality into account. In addition, "open to destruction" is tempered by the actual patterns of development projected for the next thirty years within the West Mojave. Very substantial areas away from the Victor

Valley and Antelope Valley will remain undeveloped because they lack infrastructure, water and other features contributing to marker demand.

Response 187-39: Table 4-4 (page 17). The potential loss of natural communities outside the Habitat Conservation Area is shown in Table 4-4. The natural communities with a higher potential for loss are not necessarily threatened with impending development. This includes chamise chaparral, interior live oak woodland and montane meadow. The other natural communities with a high percentage of potential loss are wetland types, which receive protection under state and federal laws. We do not anticipate any actual substantial loss of these habitats during the duration of the Plan. This is because most new ground disturbance is projected to occur as infill within cities, and because of the 1 percent new ground disturbance threshold within the conservation areas.

Response 187-40: Acquisition (page 17). The West Mojave Plan is not primarily an acquisition plan, although acquisition of private land from willing sellers is a component of the conservation strategy. In many cases, the mitigation funds will be used to create larger blocks of undisturbed habitat on public land by reducing disturbance, rehabilitating routes of travel, removal of dump sites, posting signs and eradicating invasive weeds.

Parameters of habitat quality will be assessed for any proposed developments within the Habitat Conservation Area by requiring biological surveys and by avoidance and minimization measures. The Implementing Authority will prioritize management and acquisition needs, and habitat quality as well as overlapping occurrences of covered species will contribute to the determination.

Response 187-41: Restored land as mitigation (page 17). Table 4-23 states that the intended function of the Habitat Credit Component program is "…a secondary means of of mitigating impacts, and would not function to replace the primary compensation structure." The Implementing Authority would ensure that this program functions in a secondary manner.

Draft EIR/S pages 2-37 through 2-40 described the Habitat Credit Component program. Even if attaining a density, frequency and cover of native plants is not easily achievable, many features of this restoration incentive are very beneficial. For example, removal of trash from a site can decrease the abundance of ravens, elimination of mine waste that may include hazardous waste would reduce exposure of wildlife to toxic materials, or converting a source of invasive weeds to native vegetation may limit their spread. Goal 2 on page 2-38 provides other examples of potential benefits. In addition, restoration and obliteration of dirt roads reduces habitat fragmentation by creating larger habitat blocks untraveled by vehicles.

Response 187-42: Mitigation tasks and priorities (page 18). The Final EIR/S contains a revised table showing the goals, objectives, monitoring and adaptive management measures. The monitoring measures have been made more specific. The adaptive management measures follow an "if…then" format so the reader can determine what would be done with a given monitoring result. All measures are funded and assigned priorities, as shown in the revised budget table.

Response 187-43: Funding (page 18). See Response to Topical Comment 1.

Response 187-44: Endowment (page 19). Please see the revised Implementation Tasks, Priorities and Costs table in Appendix C. This table identifies the funding likely to be available to implement the West Mojave Plan, together with the tasks to which that funding would be applied.

Response 187-45: Mitigation fee system (page 19). The West Mojave Plan was prepared with recognition that the implementation fee would not be the sole source of funds to cover expenses. Funding will also be provided through moneys appropriated by Congress to the BLM for public land management, as well as mitigation fees collected in connection with projects on public lands. As Stated in Comment 187-45 a large portion of the land in the DWMA's is already owned by the BLM (See figure…). The locations were selected based on these lands being of high value as habitat and generally low value as real estate. The intent of the plan is to consolidate these areas by offering the current owners a fair price for land that has the best value as habitat. This is a regional solution looking to create large tracts of habitat. The length of time to implement the plan is dependent on how quickly these other forms of revenue are released, and also how quickly development takes place in the plan area.

Response 187-46: Adding species to the permit (page 19). The text has been revised to describe the process by which a species, listed in the future as threatened or endangered, would be added to the permit by CDFG and covered by the Plan.

Response 187-47: BLM and permits for state-listed species (page 20). The commentator is mistaken. Federal agencies are not required to obtain an incidental take permit from CDFG.

Response 187-48: NCCP (page 20). The West Mojave Plan currently is not anticipated to be a Natural Communities Conservation Plan. Accordingly, provisions of the NCCP Act are not applicable.

Response 187-49: Fully protected species (page 21). Golden eagle and bighorn sheep have been dropped from the list of covered species. However, BLM will continue to monitor golden eagle nests within the Plan area. The loss of unoccupied nest sties does not necessarily constitute a "taking" of this species.

6.3.25 Letter 188: Desert Tortoise Preserve Committee, Inc.

Response 188-1: Covered species (page 2). The tables in Chapter 2, such as Table 2-1, and species discussions in Chapter 3 address the covered species. Fifty-nine species were identified in the Draft EIR/S as species to be covered by incidental take permits. As a result of comments on the draft document, several species have been withdrawn as species for which incidental take permits will be sought. The wildlife agencies will make the final determination of which species meet the state and federal regulations for incidental take permit coverage. The EIR/S presents the information necessary for that decision.

In accordance with law and regulation, incidental take permits would only be issued to listed species. The non-listed covered species would be added to the permits at the time of listing, assuming that the conservation program is being achieved.

Response 188-2: Goal 2 (page 2). Comment noted.

Response 188-3: Page 3, first paragraph. Both Alternative A and C identify BLM study plot monitoring as part of tracking the efficacy of plan implementation. Monitoring on BLM study plots is discussed in Section 2.2.8, particularly on Draft EIR/S pages 2-161 through 2-163. The section begins with the statement, "It is important to fund continued studies at specified intervals on pertinent BLM permanent study plots…" DTPC should also consider the information given on page 27, Exhibit C.2, Volume 2. The section reports on implementation of plan prescriptions, and says that a multi-agency group of scientists would convene to consider if study plot sampling is the most effective means of monitoring tortoises. The second paragraph states, "Between Year 2 and Year 30, population monitoring studies shall be implemented in the schedule …". There are two and a half pages of specific discussion concerning the permanent study plots.

Many of the other alternatives, including Alternative C, included permanent study plot monitoring as part of their conservation strategies. The program is incorporated by reference into the alternative descriptions; see Section 2.4.4. An additional reference has been added to the Alternative C description, at section 2.4.8 of the Final EIR/S: "Fund and implement monitoring studies identified for Alternative A, including those on BLM permanent study plots."

Response 188-4: Goal 3 (page 3). The commentator correctly states that there are means other than direct connectivity to facilitate transfer of genetic materials. These may include physically moving tortoises across barriers, and using females from different regions in the headstarting program. However, none of these measures is presently advisable; they should only be implemented when further research and data are available. Until this needed information is available, attaining connectivity called for in Goal 3 may not be achievable. We have, however, added the following wording to the Final EIR/S as a foreseeable form of adaptive management: "If the impermeable barriers between some DWMAs proves a hinderance to genetic connectivity and research shows that there is truly enough genetic difference among DWMAs, then translocation of individual tortoises should be considered. Actions could include manual transfer of tortoises and/or eggs from one place to another, as dictated by then-available information on translocation and other factors" (see Table 2-26).

DTPC also suggested: "…the planning team needs to seek expert input from wildlife epidemiologists and other specialists and incorporate their advice…". The following information is provided relative to this comment. Potential die-off areas were first detected on January 29, 2003. The following epidemiologists, specialists, and other experts were contacted on January 31, 2003: Dr. David Morafka (Cal State Domeniquez Hills), Dr. Kristin Berry (USGS), Dr. Elliott Jacobson (University of Florida at Gainsville), and Dr. Jill Heaton (University of Redlands). LaRue also contacted Phil Medica (USFWS) to obtain latest distance sampling data and Ray Bransfield (USFWS) so that regulatory agencies would be aware.

In response to these contacts, Dr. Jacobson forwarded the maps emailed to him to epidemiologists Dr. Jorge Hernandez and Dr. April Johnson. Dr. April Johnson contacted LaRue on February 3, 2003, and the two discussed the maps and available data. Dr. Johnson indicated that she would have a statistically inclined epidemiologist look at the information and provide feedback.

Please note that the third paragraph on ES-7 states, "If these patterns [of new and older die-off regions] are truly resulting from disease spread (to be determined before the final plan is published), one needs to question the validity of maintaining connectivity among conservation areas."

Response 188-5: Goal 4 (page 3). The intent of the goal would be maintained by the new wording proposed by DTPC. Goal 4 has been changed to "Reduce tortoise mortality resulting from interspecific (e.g. raven predation) and intraspecific (e.g. disease) conflicts that likely result from human-induced changes in the ecosystem processes." Although DTPC's wording did not include ravens and disease as parenthetical examples, they should not be dropped from the goal given the amount of public support for management of disease and ravens.

Response 188 -6: Tortoise life history (page 3). Considerably more than "…scant attention…" was paid to tortoise life history. Every attempt was made to consider and include the latest and most complete information. Of the 316 references given in Section 5.8 of the Draft EIR/S, 176 (56%) of them are directly or indirectly relevant to tortoises. More than a 100 references and personal communications were cited throughout Chapter 3 for the tortoise. Several of the personal communications are from Dr. Connor of DTPC. Studies by Henen, Nagy, and Oftedahl were consulted and are already discussed and referenced in the Draft EIR/S. In fact, the DTPC presents no specific evidence that the materials that were used are deficient to describe the subject matter.

There are also 33 references in the biological opinion for the revised CDCA Plan. We will not dismiss or disregard this wealth of scientific information (including numerous reports and several personal communications by Dr. Berry of the DTPC) simply because it appears in a "controversial" biological opinion.

The commentator's suggestions will be addressed, in part, by changing "2002" to "2002c" in the first paragraph of Section 3.3.2.3. Some of the new references listed by the commentator (Jennings 2001, Rostal et al. 1994, and Wilson et al. 1999) might be useful; however, the commentator did not provide the complete citation, nor does the comment letter provide a list of references.

Response 188-7: Surveys (page 4). The commentator is comparing and confusing "survey methodology" and "data interpretation." Survey methodologies followed those of Berry and Nicholson, as stated. Densities of desert tortoises (i.e., "data interpretation") were not determined for many reasons. These reasons are well documented in the Draft EIR/S (see Section L.L.2 in Volume 2), in the 1999 Biological Evaluation, by Dr. Paul Corn (1994), Dr. Alice Karl (2000, 2002), Dr. Anthony Krzysik (see numerous studies referenced on page 5-38 of the Draft EIR/S), among others.

Calibration surveys were a standard part of every survey conducted between 1998 and 2001. A subset of the calibration data the DTPC requests is given in Table L-3 of Volume 2. All three studies by Dr. Krzysik (see three pages of discussion in Section L.2.2.2 of Volume 2) relied on calibration data. Appendix K, Volume 2 describes "…the relationships between observed sign count and actual tortoise densities for the different observers in the different field seasons." Given that these data are available and were included in the Draft EIR/S we disagree that "…experimental design and survey methodology…" are fatally flawed. In fact, Dr. Krzysik's analysis clearly shows positive statistical relationships between sign counts and presence of tortoises.

Data since 1998 were collected along 1.5-mile belt transects, first described by Dr. Berry and Lori Nicholson in 1974. These data have been used to show distribution and relative densities of tortoise; they have not been used to estimate tortoise densities for reasons given above. There are clear differences between the 1984 range map and the 2002 range map that are based on sound sampling methodologies (see Krzysik 1992). DTPC has failed to demonstrate how these data or the use of them is fatally flawed.

Response 188-8: Krzysik review (page 4). Dr. Krzysik was not asked to use the data to estimate tortoise densities (see Response 188-7). Dr. Krzysik *did* look at the relationship between sighted tortoises and their sign. His conclusion that there are positive relationships between observed tortoises and their sign necessarily relies on comparing sign location to tortoise location. The claim that "…tortoise sign counts are a relatively good estimator of tortoise abundance" is a true statement insofar as the analyses given by Dr. Krzysik and the interpretation given in the Draft EIR/S.

Response 188-9: Survey data (page 4). DTPC makes the following statement, "Because the planning team has not actually identified areas of higher tortoise density…" DTPC is directed toward the following discussions in the Draft EIR/S that identify higher sign count areas and higher tortoise concentrations: (i) Map 3-8 showing higher density sign count areas; (ii) Table 3-15 showing the number of polygons in each DWMA; (iii) Text on pages 3-85 through 3-89; and (iv) Map 3-9 showing the distribution of live tortoises relative to identified concentration areas. It is not clear from DTPC's comments if it is unaware of this information or does not agree with the results and conclusions; if the latter, DTPC has not identified any specific information that must be reconsidered.

Response 188-10: Carcasses (page 4). All 17 surveyors collected calibration data during the three-year survey period. These data include carcasses observed on each of the six transects surveyed on the calibration plots. No one to our knowledge, including Dr. Berry, has ever used these carcass data to calculate "…actual carcass density." Two simple rules were used to identify where carcasses were and were not found. DTPC is correct that cause of death was identified for only about 100 of the 1,000 carcasses found. The many reasons for this are described in eight pages in Section L.5 of Draft EIR/S Volume 2, including an entire page describing the limitations with determining cause of death.

DTPC calls for a "…statistical evaluation of the planning team's characterization of the time since death…" The "time since death" for tortoise carcasses was determined in the field by the 17 experienced surveyors over the three-year period. Surveyors used the key created by Dr. Berry and Peter Woodman to determine time since death. Woodman assisted LaRue in planning for and carrying out the surveys, and for ensuring quality control. Therefore, it is erroneous to state that the planning team characterized this information. More accurately, the planning team summarized this information.

There is no need for all tortoises in a given area to have died of "similar causes" for the analysis to reflect actual field conditions. However, the intent of the analysis was to determine congregations of tortoise carcasses that died "…in a set time period," in this case, "old" and "new" die-off regions. Therefore, the results and conclusions given in Draft EIR/S Section 3.3.2.5.3 are *not* speculation; they are the results of applying two simple rules to the data to help identify regions, if any, where concentrations of similarly aged carcasses are congregated.

Response 188-11: No survey areas (page 5). No Survey Areas are intended to be synonymous with "no habitat areas." The fenced facilities at Kramer Junction and Harper Lake are perfect examples of No Survey Areas adjacent to or within DWMAs that contain no tortoise habitat and therefore need not be surveyed if new development is proposed within those fenced areas. To address DTPC's concern, the planning team visited the No Survey Areas in question in January 2004. Over a three-day period, LaRue collected UTM coordinates throughout No Survey Areas located north of Highway 58 to accurately differentiate areas of habitat and non-habitat. The new No Survey Area boundaries depicted in the Final EIR/S include this updated information.

Response 188-12: Map 2-9 (page 5). The boundaries of the tortoise DWMAs and "No Survey" areas that were presented in the Draft EIR/S are essentially the same as those that were presented and discussed at Supergroup and Task Group meetings. Minor boundary adjustments collectively changed the acreage included within the tortoise DWMAs by less than one percent.

Response 188-13: DWMA and HCA boundaries (page 5). The planning team met with Dr. Connor in January 2004, at which time Dr. Connors provided a map showing lands recently acquired by DTPC. Boundaries were modified to include these DTPC parcels; see revised Map 2-1 in this Final EIR/S.

Response 188-14: Alternatives (page 5). Comment noted. Stakeholders suggested the concepts addressed by the alternatives during task group meetings. Where consensus could not be achieved during those meetings, minority opinions were incorporated into alternatives. This ensured that all reasonable alternatives were rigorously explored and evaluated, both in the document and during the public review of the Draft EIR/S. It is our opinion that this was the most effective way to ensure that ideas discussed during the planning process were neither marginalized nor ignored. We are unaware of any input from the BLM's California Desert District Advisory Council that was in any way "marginalized".

Response 188-15: Ground disturbance (page 6). The cooperation of all jurisdictions in the planning area is very important and that is why the jurisdictions having a larger role in the Plan due to geographic extent have participated on the steering committee and have been part of Super Group and Task Group meetings. Every attempt will be made to have all the participating jurisdictions adopt the plan as soon as possible. This being said, there is the probability of projects being permitted through CDFG and USFWS directly. The participants cannot force its provisions to be adopted by non-participating entities. Those parties, however, will still have to meet all NEPA, CEQA, FESA and/or CESA requirements, and their compliance with these statutory responsibilities will be sought in the context of a West Mojave program that has been adopted and is being implemented in the region.

Response 188-16: Mechanisms (page 6). The Implementing Authority will prioritize acquisitions within the DWMAs. One of the priority factors is the occurrence of multiple species in a single site.

The Plan identifies sensitive areas within the DWMAs by the enclosed Conservation Areas for other species. Injudicious take is prevented by survey, avoidance and minimization measures applicable to these species. Development projections for the DWMAs and the ACECs are very low and threats to these areas from new development are few.

Response 188-17: Habitat credit component (pages 6 - 7). It is not expected that a large area will be restored under the Habitat Credit Provision. Credits will only be given to successful projects, based on existing excepted biological standards. This is not seen as a way to circumvent or deduct rehabilitated land from the 1% cap.

Response 188-18: Grazing program (page 7). The grazing program outlined in the Draft EIR/S represents a compromise that allows livestock grazing to continue, while applying protective measures that include adequate mitigation to make positive progress towards recovery of the tortoise. The heart of the grazing program is the regional standards and guidelines developed specifically for the California Desert Conservation Area and adopted elsewhere in the CDCA by the NEMO and NECO plans.

Response 188-19: Pilot Knob allotment (page 7). The West Mojave Plan includes a provision that allows a grazing permittee or licensee to voluntarily relinquish its grazing preference (see Draft EIR/S, page 123). Please be aware that this provision amends a land use plan. It does not amend a federal statute (such as the Taylor Grazing Act or FLPMA). Nothing precludes the possibility that at some time in the future, in however unlikely a scenario, the CDCA plan could be amended again to allow livestock grazing to resume in these areas (subject to compliance with other applicable federal statutes and regulations, including FESA). An "irreversible" decision simply cannot be made through the BLM's land use planning process.

Response 188-20: Voluntary relinquishment (page 7). The NEMO and NECO plans adopted a voluntary relinquishment program applicable to the allotments specifically identified in those plans. None are located within the western Mojave Desert. The West Mojave EIR/S proposes that the CDCA Plan's voluntary relinquishment program be applied within the West Mojave planning area as well.

Response 188-21: Public and grazing (page 7). Public involvement in the development of the proposed grazing strategy has occurred with the public's review of the Draft EIR/S. Informative materials were provided to the task group prior to preparation of the Draft EIR/S; however, it did not prove possible to discuss the strategy at that time. Members of the public did have the opportunity to provide input during scoping meetings held in June and July 2002. Full public consideration of the grazing proposal has occurred since then, both through the opportunity to submit written comments during the 90-day review of the Draft EIR/S and oral testimony at public hearings.

Response 188-22: Regional forage production differences (page 7). As requested by DTPC's scoping comments, the Draft EIR/S included a discussion of the differences between the east and west Mojave and the application of Avery's results to the West Mojave (see pages 4-30 and 4-31). As DTPC indicates, and the Draft EIR/S reports (page 4-31), application of the ephemeral forage threshold would be problematic if applied in the West Mojave. That is why the West Mojave Plan proposes to conduct an "Avery" study in the West Mojave (prescription LG-19) and, if necessary, adjust grazing practices based upon its findings.

Response 188-23: Letters (page 8). Comment noted.

Response 188-24: Dual sport impacts (page 8). See Responses 187-17 and 188-33.

Response 188-25: Races (page 8). Only two race routes crossed tortoise DWMAs: the Barstow to Vegas racecourse, and the Stoddard Valley to Johnson Valley Competitive Event Corridor. The West Mojave Plan would delete both. The latter would be replaced by a Stoddard Valley to Johnson Valley Connector Route, which is intended to provide a recommended route along designated open routes for competitors in events staged in multiple venues (the Johnson Valley and Stoddard Valley open areas) to traverse the intervening public lands in a controlled-speed, yellow-flag non-competitive manner. The Johnson Valley to Parker competitive event corridor alignment follows the exterior boundary of the Ord Rodman DWMA, but does not cross DWMA lands. Yellow flag, controlled speed conditions would apply to all events utilizing the portion of the corridor that abuts the DWMA, and would be subject to special permit conditions developed when approval of the event by the BLM was considered.

Response 188-26: Dual sport events (page 8). The West Mojave Plan limits dual sport rides to routes designated open. It is the intent of the plan to retain the existing requirement that dual sport events be evaluated on a case-by-case basis, including full NEPA compliance. Prescription HCA-41 (section 2.2.4.1) has been clarified to specifically state that this requirement would be retained.

Response 188-27: Dry lake events (page 8). The commentator is correct. No motor vehicle access changes are proposed for dry lakes. The designated vehicle access for dry lakes would remain as presented in Table 9 of the CDCA Plan (as amended; page 78).

Response 188-28: Shooting (pages 8-9). See Response 187-15.

Response 188-29: Raven management (page 9). The planning team *is* aware of this issue. However closing all quail guzzlers, as recommended by DTPC, may not be the best way to proceed. The suggestion fails to consider the impacts to local quail populations and other animals using the guzzlers that are not tortoise predators. CDFG has used fiberglass mesh materials to retrofit quail guzzlers to avoid entrapping tortoises and other animals. CDFG also found that guzzlers with slick plastic bottoms entrapped a majority of the tortoises, and that very few tortoise carcasses were found in guzzlers with a rough concrete-like surface. Rather than assuming guzzlers are a significant problem and closing all of them, the West Mojave Plan recommends conducting a study to ascertain the problem, and implementing remedial measures as needed (see prescription DT-41). This approach has not been changed, as it seeks information that is currently not available and provides a solution if a problem is identified.

Response 188-30: Other measures (page 9). The following wording has been added to DT-41: "The study should also assess use of quail guzzlers by common ravens, feral dogs, coyotes, and foxes."

Response 188-31: Alternative B (pages 9-10). The Alternative B text has been clarified.

Response 188-32: Current CDFG Mitigation Program (page 10). The West Mojave Plan proposes a mitigation and compensation strategy that would significantly enhance the effectiveness of current CDFG and USFWS private land mitigation programs. This was also the conclusion of CDFG, USFWS and BLM biologists who prepared the West Mojave Evaluation Report. They found that the region lacks a comprehensive and well-funded interagency conservation strategy and, as a result, the current approach is not well coordinated with the conservation programs being implemented by the federal land management agencies. The CDFG has not been able to adequately monitor lands it has received through compensation. In many cases, these mitigation parcels are located in places where regional die-offs have occurred and continue to occur.

There have only been nine federal incidental take permits (most of which required a State 2081 permit) issued since the tortoise was listed. The highest compensation ratio was 1:3. By comparison, under Alternative A, developers of every authorized project within the identified tortoise range would pay mitigation fees. These fees, ranging from 1:0.5 or 1:1 to 5:1 in the habitat conservation area, would be applied programmatically throughout the area.

The West Mojave Plan would generate more conservation revenue and apply it to conservation and habitat enhancement far more effectively than the current CDFG and USFWS mitigation structure allows. The current approach of mitigating on a haphazard, case-by case basis, without an overarching strategy or priorities to guide the use of mitigation fees, would be replaced by a mitigation fund, managed collectively by the participating agencies and applied in the manner best calculated to conserve species. Costs to developers would decline, while funds available to support conservation programs would increase. This would occur because the transaction and delay costs inherent in case-by-case permitting would be eliminated and moneys saved could be applied to conservation.

Response 188-33: Rand Mountains Fremont Valley Management Area (page 11). The commentator is incorrect; no statements were ever made that ACEC plans could not be revisited. In fact, throughout the task group process, ACEC management plan modifications were discussed, and those modifications were presented in the Draft EIR/S in Appendix D. During the task group process it was stated that the motorized vehicle access networks within ACECs would be left as originally designed, and this policy was adhered to. Only minor adjustments were made to ensure that ACEC route networks and surrounding networks designated in 1985-87 or in 2003 formed a single seamless web of connecting routes.

Prescription HCA-41 allows dual sport events to occur within DWMAs, so long as such events conformed to a list of guidelines set forth in this prescription. Dual sport events could take place within the Rand Mountains, which are located within the Fremont Kramer DWMA. This ensures that dual sport management is consistent throughout the four DWMAs. The Draft EIR/S evaluated this prescription, noting that dual sport events have "resulted in no known loss of tortoises" (Table 4-30); see also Draft EIR/S page 3-133, which states "USFWS (2002) concluded that organized, non-speed events, such as dual sports rides in the western Mojave Desert, resulted in minimal habitat disturbance, if any, and that they were unaware of any injuries or mortalities of desert tortoises that have occurred during these events."

Response 188-34: Mojave ground squirrel (page 11). There are numerous discussions in the Draft EIR/S that compare the proposed MGS conservation strategy to current management (see, for example, Tables 4-34 and 4-64). There are substantial differences between the two. As described in the Biological Evaluation for the MGS (2000), there were three previous CDFG conservation proposals for the MGS. All three identified core areas or zones, none of which was connected or representative of available habitats. This was due, in part, to the fragmented and piecemeal nature of the remaining habitat. The current proposal provides a substantially more effective conservation area in terms of size, location, and connectivity than any of the CDFG proposals, and is significantly larger than the CDCA Plan's existing MGS crucial habitat. Although BLM-designated open areas are not specifically identified as wildlife corridors (nor does the term imply any regulatory protection), they are not subject to the type of urban and agricultural development that is known to destroy MGS habitat. It is suspected that under current and foreseeable use, BLM designated open areas will serve has habitat connectors between conservation areas. See also Responses 278-166 to 169.

Response 188-35: Other species (page 11). We have withdrawn certain species from Section 10(a) and Section 2081 permit coverage under the Plan, primarily because of insufficient information to determine the efficacy of the conservation measures. These species include pallid bat, spotted bat, Western mastiff bat, long-legged myotis, flax-like monardella and Reveal's buckwheat. The triple-ribbed milkvetch is so rare, as far as is known, that no incidental take is advisable, and this species may be withdrawn. In addition, the golden eagle and bighorn sheep have been withdrawn because the state cannot issue incidental take permits for fully protected species.

We will let the Wildlife Agencies determine the adequacy of the conservation measures and ability of the Plan to meet permit requirements for the species that you specified. BLM will implement the conservation measures for the two remaining bat species, the Mojave fringe-toed lizard and the yellow-eared pocket mouse regardless of permit coverage for private lands.

The No Action and BLM Only Alternatives would not obtain permit coverage for any species. The other alternatives differ primarily (although not exclusively) in their treatment of conservation actions for the desert tortoise. The permit coverage request for other species would remain the same in each alternative, although the Wildlife Agencies may respond differently in permit issuance for other species in each alternative.

6.3.26 Letter 189: DeathValley.com

Response189-1: May 2, 2003 letter (page 2). BLM considered the suggestions made by the commentator in the May 2, 2003 letter and incorporated several of them into the June 30, 2003 letter. Among these, for example, were routes F 3052 (closed to limited), SU 2017 (closed to open), SU 2024 (closed to open) and SU 2038. These changes were indicated in the June 30, 2003 Decision Record, which was prepared after publication of the Draft EIR/S.

Response189-2: El Mirage subregion MAZ-2 (page 2). Maps have been reviewed and, where necessary, have been corrected.

Response189-3: Fremont subregion MAZ-2 (page 2). All of the routes you mentioned were designated as closed.

Response189-4: Fremont subregion MAZ-5 (page 2). The spur route you mentioned (F3042) is already designated as open.

Response189-5: Juniper subregion (page 3). The Juniper subregion route network has been redesigned. Please see Section 2.2.6.7 and the maps on the compact disk.

Response189-6: Kramer subregion (page 3). Route K2107 is closed; the map has been corrected. Route K3072 is and will remain closed; however, owners of the private parcels accessed by this route will be allowed to access their properties.

Response189-7: Middle Knob subregion (pages 3 and 4). Comments noted. We encourage the commentator to work with the BLM Ridgecrest Field Office during the implementation of the route network to make minor corrections to the network through plan maintenance (see Section 2.2.6.11).

Response189-8: Red Mountain subregion MAZ-3 (page 4). The routes referred to by the commentator were closed primarily due to conflicts with sensitive resources. Route redundancy was one further reason for closure, at least in the case of parallel routes in close proximity to one another, but the primary closure reason involved the resource conflicts.

Response189-9: Red Mountain subregion MAZ-4 (page 4). The missing map has been included in the Final EIR/S. The commentator did not supply a map of the "key, long-standing" route, so we are unable to determine its location. We encourage the commentator to work with the BLM Ridgecrest Field Office during the implementation of the route network in this area.

Response189-10: Superior subregion MAZ-1 (page 4). Comment noted. We have corrected inconsistencies between the tables and the maps. Route SU 2071A is only 1000 feet long, and as such was too short to show up on the maps.

Response189-11: No Action alternative (pages 4 and 5). The Council on Environmental Quality, in its *Forty Most Asked Questions Concerning CEQ's NEPA Regulations* (March 23, 1981), Question 3, specifically defined what comprises a No Action Alternative. CEQ stated as follows:

> The first situation might involve an action such as updating a land management plan…. In these cases, "no action" is *"no change" from current management direction* or level of management intensity. … Therefore, the "no action" alternative may be thought of in terms of continuing with the present course of action until that action is changed. [Emphasis added.]

"Current management direction" for the BLM in the western Mojave Desert includes existing route designations, approved ACEC plans and the CDCA Plan. At the time the Draft EIR/S was published, existing route designations included the 1985 and 1987 network (designated by the BLM in 1985 and 1987), and networks developed for ACECs by management plans approved for those areas. Routes may exist in these areas that have yet to be reclaimed or restored to natural conditions. This does not mean, however, that they are components of an existing network of designated open routes.

The commentator may be confusing the environmental baseline with current BLM management. The former (presented in Chapter 3, Affected Environment) describes routes that exist on the ground, the latter the routes currently designated open. The West Mojave Plan proposes to modify existing route designations. Taking "No Action" means making no modifications to the route network; that is, leaving the existing designations in place.

Response189-12: 1985-87 inventories (page 5). See Respose to Topical Comment 5a.

Response189-13: Route surveys (pages 5 and 6). See Responses 183-9 and 183-11.

Response189-14: Economic contributions (page 6). Comment noted. We have not proposed to make any changes to the existing route network in the vicinity of Panamint Springs. Accordingly, no adverse economic impacts are expected.

6.3.27 Letter 190: California Native Plant Society

Response 190-1: Comment 1. Surveys. Surveys for covered plan species would be required within the DWMAs and other parts of the Habitat Conservation Area (HCA). Outside the HCA, specific survey areas are defined for little-known species, including triple-ribbed milkvetch and Little San Bernardino Mountains gilia. A survey incentive is provided in the

Brisbane Valley for the Mojave monkeyflower, which should lead to better information on the distribution of this West Mojave endemic plant.

Detection of additional occurrences of rare species found at alkaline springs, seeps and meadows is a Plan priority and the monitoring plan requires regional botanical surveys of these sites. In addition, the BLM and local jurisdictions have agreed to perform wet year surveys for all covered ephemeral plant species as a high-priority monitoring task.

Within the Incidental Take Area, generalized biological clearance surveys will be performed in the desert tortoise survey areas. In addition to examining a proposed development site for tortoises, biologists will search for sign of burrowing owls and will record all plant and animal species detected. Any covered species found will be reported to the Implementing Authority, which will record and report the species on its annual summary of species conservation and incidental take.

Response 190-2: Comment 2. Vegetation Map. A vegetation map based on the California Gap Analysis project, field checks by planning team biologists and information provided by the military has been prepared and provided to the CNPS. This map has been included on the compact disk attached to this final EIR/S. It uses the vegetation community descriptions defined by Holland (1986, California Department of Fish and Game). Definition of vegetation at the series level, as defined by Sawyer and Keeler-Wolf (1995, California Native Plant Society) is too complex a mapping task for such a large area as the West Mojave Plan. BLM has very specific information on the vegetation communities of selected areas, including Middle Knob and the southern Sierra Nevada Mountains of Kern County, at many of the ACECs, and at alkali springs. The Army has conducted focused surveys for Lane Mountain milkvetch over a wide area north of Barstow where dominant perennial species were recorded. In addition, BLM performed vegetation transects at several Mohave ground squirrel study sites throughout the West Mojave. The Implementing Authority will use this information when evaluating development proposals, if any, at these sites. The vegetation map can be refined and made more accurate over time as information is gathered and compiled.

The EIR/S provides information on potential impacts to natural communities for each alternative in Chapter 4, as in Tables 4-4, 4-47, 4-51, 4-55,4-58 and the discussions for Alternatives F and G in Sections 4.7.2.1 and 4.8.2.1.

Response 190-3: Comment 3. Success criteria. Success of the conservation program for each species is achieving the biological goals and implementing the biological objectives. These are presented in Table 2-1. In response to comments made by the commentator and others, the Draft EIR/S discussion of monitoring and adaptive management actions has been clarified: a revised Table 2-26 lists the goals and objectives for each species, as well as monitoring and adaptive management options.

Response 190-4: Comment 4. Multiple species occurrences. Few threats from discretionary permits exist within the DWMAs. In addition, new allowable ground disturbance would be limited to 1% of the land area for each local jurisdiction and for BLM. For those

developments that might be approved in the DWMAs, surveys for rare plants and other species would be required, take avoidance measures imposed and mitigation fees collected.

The Implementing Authority will prioritize acquisition and management actions based on specified criteria. The preliminary acquisition criteria were provided in the Draft EIR/S on page 2-51. These include a criterion that sites with more than one species, such as tortoises and rare plants, have a higher priority. Priorities for management actions are provided in the final EIR/S in the revised monitoring and adaptive management table in Section 2.2.8 (Table 2-26). Species with the most restricted ranges, such as the rare plants, and identifiable threats, are expected to have high priorities for acquisition or management. The Implementing Authority will track the conservation and incidental take of each species, and will assure that these two features remain in rough proportionality. This requirement of CESA means that no one species, such as a rare plant, will be lost out of proportion with its conservation measures.

Response 190-5: Comment 5. Directed mitigation. We believe that pooling mitigation fees and setting priorities is the most effective method of achieving the equitable compensation of species. Our concern is that directed acquisition could not be employed because it would be difficult to make this work equitably. If mitigation fees from a developing area were dedicated towards species found solely in that area, the remaining species in more remote locations would never benefit.

Pooling of fees and setting of priorities will accomplish the acquisition of more expensive lands for mitigation and conservation. We anticipate that the amount of fees generated will be far greater than at present, and will include fees from lands that no longer support a particular covered species. The broader land base for mitigation fees results in a greater amount of funds available for acquisition or management. Prioritization can utilize these funds to purchase lands from willing sellers that may be located near urbanizing areas and which have a higher value.

Mitigation fees are not the sole funding source for the acquisition and management actions of the West Mojave Plan. State and federal grants, cooperation with non-profit organizations, land dedications or easements resulting from the entitlement process and other sources will all contribute to conservation in the West Mojave.

Response 190-6: Comment 6. Site-specific mitigation ratios. The Plan recognizes the dependence of rare plants on specific geologic substrates, soil types, hydrological conditions or landforms. Examples include the carbonate endemic plants, the Kern buckwheat, Lane Mountain milkvetch, a suite of alkali wetland species and sand dune or sand sheet species. We believe that far greater than 50% of these species fall within the Habitat Conservation Area, which includes the DWMAs, ACECs, new Conservation Areas and the Mohave Ground Squirrel Conservation Area. Site-specific measures are proposed for many of the rare plants, as with the carbonate endemic plants, the Mojave monkeyflower, the Little San Bernardino Mountains gilia, the alkali wetland plants and the survey and avoidance requirements for plants within the DWMAs. The mitigation ratios are a global feature of the Plan and it would be impractical to change to address each occurrence of a rare plant species.

Response 190-7: Comment 7. Conservation Areas. A separate Conservation Area is not necessary for each covered plant species. In many cases, prescriptions applied within the DWMA or Mohave Ground Squirrel Conservation Area can address the needs of the rare plants. For example, route designation designed to protect the tortoise within a DWMA can also be designed to avoid occurrences of rare plants and their habitats.

Response 190-8: Comment 8. 1% Development Cap. Alternative A already applies the 1 percent disturbance cap to all lands within the habitat conservation area. Please see the discussion in the Draft EIR/S at page 2-28.

Response 190-9: Comment 9. Opting out. The Plan as it currently stands and as it was proposed in the Draft EIR/S does not provide for opting out by species. There is the potential for a jurisdiction to decide not to participate in the Plan, but there is no provision for choosing which species to obtain coverage for and those for which they may not seek coverage. This would be very problematic in managing the overall program and complying with standard permit requirements of the USFWS and CDFG in accounting for the amount of take and the amount of conservation that is achieved as the program is implemented.

Response 190-10: Comment 10. Specialized habitats. The specific hydrological and substrate requirements of covered species are provided in the species accounts (now included on the compact disk attached to this Final EIR/S) and in Chapter 3 of the Draft EIR/S.

Response 190-11: Comment 11. Water Associated Unusual Plant Assemblages. The CDCA Plan identified plant communities associated with water as unusual plant assemblages, and categorized these areas in Group IIIB. Within this group are 1) mesquite thickets, 2) salt and brackish water marshes, 3) seeps and springs, 4) palm oases, and 5) riparian and river bottomland. In the West Mojave, the primary UPAs under this designation are seeps and springs and riparian and river bottomlands. A small acreage of mesquite thickets is also present.

The Plan has several measures to address Proper Functioning Conditioning of riparian areas, particularly where these are within grazing allotments. The new table summarizing goals, objectives, monitoring and adaptive management states where these assessments would take place and how they would apply to covered species.

The CDCA prescriptions for Unusual Plant Assemblages would still apply under the West Mojave Plan amendment. These prescriptions include placing a high priority on non-functioning and functioning at risk riparian systems. We cannot commit to an annual PFC determination for riparian areas within grazing allotments because of the uncertainty of the annual federal appropriations, but the corrective measures taken when these assessments are made are intended to last into the future.

Response 190-12: Comment 12. Saltcedar control. The Final EIR/S has added removal of invasive exotic riparian plant species as an objective for several Mojave River species.

Response 190-13: Comment 13. Rare plant fencing. Fencing is an implementation measure in management and adaptive management for several plant species. We have added fencing as an adaptive management measure for additional plant species in response to your specific comments below.

Response 190-14: Comment 14. Scientific names. We will include in the glossary a listing of the scientific names for each covered species, but the main document will continue to use common names for ease of use by the general public.

Response 190-15: Comment 15. Grazing exclosures. We agree that exclosures would assist with monitoring potential impacts from grazing to rare plants. We do not have a design for a "statistically viable" sampling program at this point, but believe that enclosing a sufficiently large reference population of the species of concern for use in comparing with a grazed population will serve the purpose. We will have included the criteria for monitoring of rare plant populations in grazing allotments in the final Plan and EIR/EIS, and this includes the establishment of exclosures.

Response 190-16: Comment 16. Another draft Plan and EIR/EIS. Revised maps, tables, program measures and monitoring and adaptive management measures are provided in the Final EIR/S. A new draft is not necessary for providing this information.

Response 190-17: Table ES-6. The Table ES-6 units are acres. This table compares acres of land conserved and acres of land subject to incidental take for each covered species in each alternative.

Response 190-18: Typographical error. "Brown-crested r" is brown-crested flycatcher, a riparian bird species. The error has been corrected.

Response 190-19: Table 1-1. Table 1-1 acreage figures have been corrected.

Response 190-20: Equitable Precepts. The equitable precept applies to desert users, that is, human users. The flora and fauna that may benefit under the Plan do not fit the definition of "user" in this precept. The conservation program of the West Mojave Plan, however, will certainly benefit the covered species and habitats on which they depend.

Response 190-21: ACEC Management. The four ACECs not included in Appendix D are the DWMAs. Management of the DWMAs is presented in Chapter 2, which specifies all the conservation measures to be undertaken for each alternative.

Response 190-22: Biological Goals and Objectives. The final EIR/S contains a revised table of goals and objectives for covered plant species. The conservation plans for each species have followed the principles of conservation biology that are cited to the maximum extent practicable. These plans were developed in consultation with CDFG and USFWS through the Evaluation Report process. Two plants, the flax-like monardella and Reveal's buckwheat, are no longer included as covered species because too little is known to assess the effectiveness of any conservation measures.

Response 190-23: Overlapping conservation areas. The compensation ratio within Conservation Areas is 5:1. Where two Conservation Areas overlap, prescriptions of each area apply, but the compensation ration remains 5:1. In Alternative D, the ratios would be partially additive as explained on pages 2-182 and 2-183 of the Draft EIR/S.

Response 190-24: Table 2-4. The MUC for isolated public lands containing habitat for the Little San Bernardino Mountains gilia would be changed to Class M to allow the government to transfer title of these lands in the future to a local jurisdiction or non-profit organization for conservation management if the opportunity arose. Class L does not allow such transfer. Class M fits better into the proposed management scenario for the gilia, which would designate a conservation easement on occupied habitat in dry washes to be held by the San Bernardino County Flood Control District or a conservation group that it designates

Response 190-25: Table 2-4. The MUC for isolated public lands in the San Gabriel Mountains foothills would be changed from U to M to allow for transfer of the title to the Los Angeles County Department of Regional Parks, which has expressed an interest in managing these lands for conservation and recreation. Class L would not allow this use.

Response 190-26: Table 2-4. The MUC for isolated public lands in the SEAs would be changed from U to M to indicate a long-term intent to retain the lands for conservation, but also to allow for transfer of the title to the Los Angeles County Department of Regional Parks, which has expressed an interest in managing these lands for conservation and recreation. Class L would not allow this transfer.

Response 190-27: Table 2-4. In the North Edwards Conservation Area, BLM would change the MUC from U to M to indicate a long-term intent to retain the lands for conservation. BLM can manage Class M lands for conservation. These lands could be transferred to Kern County or a non-profit agency for conservation management in the future, depending on the ultimate configuration of the North Edwards Conservation Area.

Response 190-28: Allowable ground disturbance. Alternative A already applies the 1 percent disturbance cap to all lands within the habitat conservation area. The AGD would be apportioned to each jurisdiction and is totaled over the entire Habitat Conservation Area, not to each Conservation Area individually. Please see the discussion in the Draft EIR/S at page 2-28.

Response 190-29: Non-participating agencies. Your comment is noted. The participating agencies and jurisdictions, however, have no authority over non-participating entities. The wildlife agencies with permitting authority over this plan and general wildlife resources will have access to your comment via this document and can consider your position.

Response 190-30: Periodic review. The specific time frame for monitoring and reporting on plan implementation will be a requirement of the Section 10(a) and 2081 permits. It is entirely likely that annual reporting on various activities will be required by the wildlife resource agencies. Additionally, the program management and budgeting process that is anticipated with this program will undoubtedly require discrete accounting of implementing activities.

Plan Amendment. The federal land use plan can be amended at any time upon the initiative of the BLM or by request to the BLM. Any amendment would undergo NEPA review. The HCP and 2081 permits could be amended to include additional species or change portions of the conservation program. The precise method for amending the Plan and permits will be subject to preparation of the Implementing Agreeement (IA) that will be a follow-on activity involving local government and the FWS and DFG. The IA functions essentially as a contract between the local government "permittees" and the two permiting wildlife agencies regarding implementation of plan, including provisions for amending the Plan and permits.

Response 190-31: Mitigation fees. Few development threats exist within the Habitat Conservation Area, particularly the DWMAs where overlapping species distributions coincide. Survey procedures are in place to detect species occurrences within the HCA. Avoidance measures are required to the maximum extent practicable. Acquisitions within the HCA would be prioritized, with species hotspots receiving a higher priority than areas with single species occurrences. We do not believe that the threat of eliminating a species hotspot is realistic. Additive mitigation could result in ratios of 20:1 or even higher, which is outside the boundaries of accepted practice.

Response 190-32: HCA-30. Inclusion of the Survey Incentive Area within the Mojave Monkeyflower Conservation Area would remove the incentive to do surveys because the compensation ratio is higher (5:1) within the Conservation Area. The incentive is provided to allow additional conservation of the Mojave monkeyflower, whether by a mitigation bank, a satellite conserved occurrence or addition to the Conservation Area.

Response 190-33: Degraded habitats. The Implementing Authority would determine what properties constitute degraded habitat. This would generally refer to lands with excessive ground disturbance, an abundance of parallel roads, a high proportion of invasive exotic plant species, trash dumping or other disturbance features that reduce its value for conservation.

Response 190-34: Partial credit. Removal of structures, pits and debris, scarification, reseeding and plant salvage are significant measures not properly characterized as "trying". The Implementing Authority would apply the success criteria on a site-specific basis following the procedures described on Draft EIR/S pages 2-39 and 2-40.

Response 190-35: Surveys. The Final EIR/S has been modified. All species will be included in the clearance surveys to be conducted for desert tortoise and burrowing owl in tortoise survey areas (see prescription DT-13a). This will include any covered plants detected, and these other species will be reported to the Implementing Authority and accounted for in the periodic reporting of conservation and incidental take.

Response 190-36: Mining Exploration Access. A Plan of Operations would govern access for mine exploration (see HCA 37, page 2-52). Reclamation of these routes would be addressed in that plan. Exploratory access will be monitored to insure the least disturbance to perennial vegetation. BLM and the Implementing Authority would have the discretion to judge access disturbance as permanent or temporary.

The Plan has been changed to include "temporary" disturbance in the 1% cap on AGD until such time as the disturbance meets established rehabilitation standards.

Response 190-37: Monitoring. The monitoring table has been made more specific with respect to time schedules in the Final EIR/S.

Response 190-38: Monitoring. The Plan provides generally for reporting of monitoring efforts and for tracking of conservation and incidental take. It is anticipated that BLM will maintain the reports for public land projects, and that the Implementing Authority will be responsible for private lands.

The precise details of the monitoring procedures and reporting mechanisms will be the subject of a future Implementing Agreement associated with the Section 10(a) and 2081 permits. However, as part of the administrative structure of the plan, we are anticipating that a scientific advisory committee will be established to provide advice on monitoring procedures and appropriate time frames. We anticipate that strict accounting of take and conservation will be required by the terms of the Section 10(a) and 2081 permits. Monitoring results as well as reports on take and conservation will be available to the public. Additionally, this information would be available to the advisory committees established as part of plan administration.

Response 190-39: Adaptive Management. Reduction in the route network and rehabilitation and restoration of roads would eliminate the cause of disturbance to covered species. BLM could reduce impacts due to grazing, mining and public access by applying fencing and barriers where necessary. This is why fencing and barriers are proposed as adaptive management measures if grazing, mining or access are shown to adversely impact the covered species.

Response 190-40: Table 2-28. The salvage and relocation of short-joint beavertail cactus plants is a measure only to be used when approved development would impact this species. It is not a conservation measure, and would only be enacted in areas that are already irrevocably fragmented by urban development or that have existing entitlements.

Response 190-41: Adaptive Management and CA Boundary Adjustments. Boundary adjustments that result in a reduction of the size of a Conservation Area would take place after protocol surveys determined that the covered species was absent. We recognize that the distribution of many plant species is not well known. The boundaries of the North Edwards Conservation Area and the Daggett Ridge portion of the Mojave Monkeyflower Conservation Area were drawn on the best information available now. However, the plants may not occupy all of these relatively large Conservation Areas, and the boundaries could include far more land than is needed for their survival and recovery. We have received survey results from U. S. Borax showing that desert cymopterus and Barstow woolly sunflower do not occur in portions of the North Edwards Conservation Area (Letter 172). In addition, this area has been approved for expansion of their facilities, and will be removed from the Conservation Area.

The process of adjusting these Conservation Areas by making them larger or smaller based on survey results is adaptive. The principles of conservation biology addressing edge effects, perimeter to area ratio, essential habitat for pollinators or ecosystem processes and other factors will be taken into account when the adjustments are made.

Response 190-42: Alkali mariposa lily. Development is not "guaranteed" in any area, and depends on many factors aside from occurrence of a species, including zoning, available infrastructure and market demand.

The occupied habitat at Green Springs is shown as a 9.0-acre polygon on the CNDDB records, though the reporting botanist noted that a 60-acre area appeared to be suitable habitat. At playas 28-32 the occupied habitat was estimated at 5 acres. At Turner Springs, the habitat was measured as 31.7 acres in four separate patches.

Response 190-43: Alkali mariposa lily. The Conservation Area for alkali mariposa lily has been reconfigured after consultation with the City of Lancaster, Kern County and other agencies. No interim conservation areas will be established, and the permanent conservation area has been enlarged. See the new map in the Final EIR/S.

Botanical surveys for monitoring purposes will conform to the CDFG *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*, as noted in the Draft EIR/S on page 2-153 in Section 2.2.8. This publication recognizes the need for botanical surveys in wet rainfall years.

Response 190-44: Alkali mariposa lily. The strategy is as presented in the Draft EIR/S. A conservation area will be established for the alkali mariposa lily, and mitigation fees will be utilized for acquisition from willing sellers according to priorities set by the Implementing Authority. Private lands within city limits and lands irrevocably fragmented by existing and approved development will be designated as incidental take areas. Los Angeles County will consider this species in project review of the Significant Ecological Areas, if they expand to include potential and occupied habitat. The primary Conservation Area has changed from the draft proposal. The intent to acquire isolated seeps, springs and meadows containing this species remains. A regional survey of alkali wetlands will be funded as part of the research and monitoring program.

Response 190-45: Alkali mariposa lily. The City of Lancaster will impose the same mitigation ratios as the rest of the Plan area; that is, 5:1 within Conservation Areas, 1:1 outside the HCA on undisturbed lands and 0.5:1 on disturbed lands.

Response 190-46: Alkali mariposa lily. The Conservation Area boundaries have been adjusted to include the remaining unmodified portions of Amargosa Creek, which drains to Rosamond Lake. Sheet flooding is a function of local precipitation and not water rights. In addition, the local governments do not have jurisdiction over well use or water rights. Although groundwater appears to support alkali mariposa lilies at the isolated seeps, springs and meadows, it is not clear if groundwater maintains populations at the playa edge of Rosamond Basin. These occurrences are most likely dependent on local recharge from annual precipitation, which is

subject to sheet flooding and ponding on the flat terrain. Groundwater is not normally available at the depth of the bulbs (6-12").

In the event that high groundwater levels are essential or important for alkali mariposa lily, groundwater recharge from the treatment ponds and future agricultural areas of the Los Angeles County Sanitation Districts may benefit this species. The revised Conservation Area boundaries are adjacent to these existing and planned facilities. Monitoring and adaptive management will determine this potential benefit.

Response 190-47: Alkali mariposa lily. There is no conservation conflict with the existing management of Edwards Air Force Base for the alkali mariposa lily. The Plan recognizes the existing management, but does not depend on it. All areas where this species can be feasibly conserved have been addressed by the Plan. A single site, near Paradise Springs, is found on public lands. A Plan cannot guarantee the success of an acquisition, but can only state the objective and provide a means of raising the funds for purchase. We have no information on occurrences adjacent to Cuddeback Lake. The black and white maps provided with the Evaluation Report are in error. We will add Cuddeback Lake to Table 2-26, which specifies sites to be inventoried for alkali wetland plant species. We will also remove from this table those sites found on military lands.

Response 190-48: Alkali mariposa lily. We agree that grazing management might assist in maintaining or increasing the population at Green Springs. However, the West Mojave Plan does not regulate agriculture on private land.

Response 190-49: Alkali mariposa lily. The nature of existing and approved development and disturbed lands in Lancaster and unincorporated Los Angeles County restricts the opportunities for conservation of large contiguous blocks of land for alkali mariposa lily.

Response 190-50: Alkali mariposa lily. Fees collected over a larger area, where no funds are collected now, will be pooled and utilized for acquisition of higher value lands where alkali mariposa lily is found. The global compensation fees of the Plan will generate more revenue than is currently collected for mitigation, even with a higher mitigation ratio for a particular project. In addition, mitigation fees are not the only source of funding for the West Mojave Plan. Funds will be obtained from state and federal grants, partnerships with non-profit organizations and other sources. This type of financial program is in place with the other regional Habitat Conservation Plans in California.

The mitigation fees will be spent based on priorities established by the Implementing Authority. Directed mitigation does not work for most species because few impacts will take place on private lands in remote areas. Rare plants in those areas would never or rarely benefit from directed mitigation fees.

Response 190-51: Barstow woolly sunflower. Comment noted. Thank you for your support.

Response 190-52: Barstow woolly sunflower. The occurrences within the transmission line corridor are not included in the proposed ACEC because the corridor is two miles wide. Separate measures (P-17, page 2-95) address minimization measures within the corridors. Map 38, showing the motorized vehicle access network for this area, is incorrect for the ownership of the ACEC, and has been corrected for the Final EIR/S.

Response 190-53: Barstow woolly sunflower. The occurrences at Harper Lake Road are several miles southeast and are judged to be too far away for inclusion in the proposed ACEC.

Response 190-54: Barstow woolly sunflower. We cannot locate any state lands within these sections and are uncertain which township is referenced. In R4W, T11N are occurrences plotted on private land in Sections 2, 3 and 4. We cannot verify the authenticity of these occurrences.

Response 190-55: Barstow woolly sunflower. Responses concerning each of the routes mentioned by the commentator follow.

a. F2053 We will designate this route as closed.
b. F2046 This route will remain open.
c. F2042 This route is an important connector and will remain open.
d. F2005 This route is one of the few long single track routes in this area and will remain open.
e. F2004 This route is one of the few long single track routes in this area and will remain open.
f. F2037 This route will remain open.
g. F2028 This route will remain open.
h. F2046B This route will remain open because it serves as a connector between open routes.
i. F2065 This route will remain open.
j. F2081 (partial) This route will remain open.
k. F5008 and 5020 (partial) These routes will remain open.
l. F5106 or F5016 Route F5016 will remain open because it is a highly-used major connector route.

Response 190-56: Barstow woolly sunflower. The occurrences reported from the Waterman Hills, Lane Mountain, Harper Lake Road, North Harper Lake, Cuddeback, Highway 395 S, and Transmission Line are protected within the Fremont-Kramer and Superior-Cronese DWMAs. These occurrences are somewhat scattered and isolated and do not form a core reserve. Many of the tortoise protection measures, including route reduction and restoration, will benefit the Barstow woolly sunflower. Proponents of development in these areas would conduct botanical surveys and employ avoidance measures. Designation of separate conservation areas is not necessary.

Response 190-57: Barstow woolly sunflower. We cannot provide a precise estimate of incidental take for Barstow woolly sunflower, because we do not know the location or extent of future ground disturbing actions. Potential threats within the conserved habitat are low, and the

development projections in areas outside the HCA do not indicate a high demand within the range of the Barstow woolly sunflower. We have provided the parameters for incidental take, such as a small acreage within the utility corridors and the City of Barstow, if any extant occurrences remain in that area.

Table 2-33 shows that 50 acres of incidental take would be authorized, while 50,548+ acres of conservation would be enacted. This take limitation is an error, and has been corrected in the Final EIR/S. The local governments prefer a higher, but unspecified, take limit to accommodate potential growth in the California City area. Take would be tracked by the Implementing Authority and not allowed to exceed the acreage protected by conservation actions.

Reponse 190-58: Barstow woolly sunflower. See response #57 above. We do not anticipate any loss of habitat or occurrences in the ACEC or the outlying locations and minimal loss in the utility corridor. The most likely areas where occupied habitat may be converted to other land uses are in California City or near Highway 395 if it is re-aligned or widened.

Response 190-59: Barstow woolly sunflower. Utilities that may locate new facilities within the CDCA utility corridors would conduct surveys and avoid occurrences to the maximum extent practicable, as they have done in the past. For electrical transmission lines, placement of towers and access roads can be adjusted to achieve avoidance. For pipelines, fiber-optic cables and other linear facilities placed underground, the options are fewer for avoidance but construction staging areas and access roads can minimize adverse effects. A precise acreage figure cannot be provided, and we know of no utility projects proposed for the corridors within the range of the Barstow woolly sunflower.

Response 190-60: Barstow woolly sunflower. The potential incidental take of Barstow woolly sunflower was based on the criteria discussed in responses #57-59 above.

Response 190-61: Barstow woolly sunflower. According to Table 2-33, 50,548+ acres of conservation would be provided.

Response 190-62: Barstow woolly sunflower. Two records are available for the Pilot Knob allotment. One is on DOD land and the other is located two miles west on public land. The latter record cannot be verified, as it consists of a location only, without a date or collector.

Response 190-63: Barstow woolly sunflower. The records comprising cluster 1 were obtained from Caltrans prior to the widening of the I-15/SR58 interchange. We do not know if these occurrences still remain. The area within the Barstow city limits is designated for incidental take of this species. Creation of a Conservation Area in this location is not feasible. It is possible that additional surveys will detect this species between Barstow and the Waterman Hills at the southeastern portion of the known range.

Response 190-64: Barstow woolly sunflower. We will close route F2077. We will close the southern portion of route F2079 that runs east west along the section line. Route 2079 will terminate at the northern corner of Sections 25 and 30 where it intersects with route F2003.

Response 190-65: Barstow woolly sunflower. Most of the range of Barstow woolly sunflower is flat terrain where fencing along routes is ineffective. Exclosure fencing, as in the existing ACEC, could serve to prevent habitat damage. We will add fencing as an adaptive management measure for Barstow woolly sunflower to be implemented if monitoring shows the need. Fencing of occupied habitat for Lane Mountain milkvetch is a conservation measure (P-28, page 2-98) for that species which may also serve to protect some occurrences of Barstow woolly sunflower.

Response 190-66: Charlotte's phacelia. We do not have figures for the acreage of occupied habitat for Charlotte's phacelia. Most of the occurrences are shown as point locations.

Response 190-67: Charlotte's phacelia. The 50 acres of authorized incidental take is a maximum limit for the duration of the Plan. Very few threats from covered activities (development) are present within the range of this species. We do not know the percentage of occupied habitat that 50 acres of incidental take would represent. However, the species account describes a range of approximately 500 square miles, in a linear strip 50 miles long and 10 miles wide.

Response 190-68: Charlotte's phacelia. The discussion on Draft EIR/S page 3-183 of grazing notes that although grazing may be a threat, no documentation of population declines in response to grazing exists. This statement was taken from the species account. The statement on Draft EIR/S page 4-71 states that the grazing program may improve habitat for Charlotte's phacelia on the slopes of the eastern Sierra Nevada Mountains. The Plan would provide rangeland health assessments that would consider the impact of grazing on this species. This is a first step towards determining the management necessary, if any, to provide additional conservation of this species.

Response 190-69: Charlotte's phacelia. The rangeland health assessment requirement is a component of the West Mojave Plan that would be funded by Congressional appropriations to BLM's grazing program. It is not anticipated that fees collected to mitigate private land projects would fund the assessments.

Response 190-70: Charlotte's phacelia. We will add fencing as an adaptive management measure if monitoring shows the need.

Response 190-71: Crucifixion thorn. Comment noted. Thank you for your support.

Response 190-72: Crucifixion thorn. The two "populations" in the West Mojave are south of Fort Irwin on public land and east of the Lavic railroad siding on public land. Eight other locations consist of one to ten isolated plants. Of the ten locations, two are on private land. One of these is the single plant near Newberry Springs. The other location consists of four plants near the Hector Mine at Pisgah Crater. The reference on Draft EIR/S page 4-72 will be changed to "eight of the ten sites occur within the proposed Superior-Cronese DWMA and Pisgah Crater ACEC." The boundaries of the proposed Pisgah Crater ACEC have been revised to exclude the Hector Mine and to include the Lavic site. None of the sites are slated for potential

development, but the Newberry Springs and Hector Mine sites are locations of allowable incidental take.

Three additional single plant sites are located outside, but within one mile of, the boundary of the West Mojave planning area. These are on public land.

Response 190-73: Crucifixion thorn. No threats to crucifixion thorn are evident. Proponents of development within the DWMA would conduct surveys and avid any plants to the maximum extent practicable.

Response 190-74: Desert cymopterus. Comment noted. Please note that at present, existing survey requirements are variable among jurisdictions and no Conservation Area restrictions are in place, including the 1% AGD cap.

Response 190-75: Desert cymopterus. The acreage of habitat has not been calculated. Nineteen extant localities are known outside Edwards Air Force Base, and 13 of these are point locations. One additional location is within the Army's Fort Irwin expansion area.

The Plan Area polygon locations are:

- Kramer Junction – 305 acres
- Harper Lake Road – 72 acres
- E of Cuddeback Lake – 13 acres.
- NE of Cuddeback Lake – 10? Acres
- NE of Cuddeback Lake #2 – 10 acres
- NE of Cuddeback Lake #3 – 10 acres

Response 190-76: Desert cymopterus. We cannot estimate a percentage for the allowable incidental take. All polygon locations, totaling 420 acres, are within the HCA. One of the thirteen point locations is outside the HCA.

Response 190-77: Desert cymopterus. The 50 acres of incidental take would only be allowed within the HCA after all avoidance efforts were deemed to be impracticable. The incidental take limit is 50 acres total.

Response 190-78: Desert cymopterus. The text requiring avoidance is on Draft EIR/S page 2-97. No change is needed in the summary table.

Response 190-79: Desert cymopterus. If cymopterus plants were lost under the 1% cap in the North Edwards Conservation Area, they would be counted as part of the 50 acres of incidental take.

Response 190-80: Desert cymopterus. We will alter the text of the Chapter 4 discussion of desert cymopterus to indicate the take limit is 50 acres.

Response 190-81: Desert cymopterus. We have added two provisions to the conservation plan for desert cymopterus. The first is a botanical survey of all known sites and of identified suitable habitat in order to establish a baseline for the number of plants and acreage of occupied habitat outside the military bases. The second is a periodic monitoring of these sites, proposed as every three years. The monitoring frequency could change depending on the winter rainfall and the detectability. We invite cooperative participation with the California Native Plant Society on these monitoring surveys.

Response 190-82: Desert cymopterus. Sufficient information will be presented in the Final EIR/S to evaluate the conservation program for desert cymopterus. The responses above, such as #75 and #76, summarize the data available. The conservation program puts all except one point location within the HCA. Incidental take is limited to 50 acres. The XXX and YYY "place holders" were a typographic error, and have been corrected in the Final EIR/S.

Response 190-83: Desert cymopterus. CDFG will make the final determination as to whether the "fully mitigate" standard is met. The conservation described in the Plan and the responses above led to the statement in Chapter 4 that the incidental take would be fully mitigated.

Response 190-84: Desert cymopterus. We do not have sufficient information on population centers for desert cymopterus to designate a separate Conservation Area.

Response 190-85: Desert cymopterus. Comment noted. The desert cymopterus conservation strategy has been modified as discussed above, and in Response 190-86 below. We have received the listing petition from you. Thank you for your offer to continue to share available information. We will continue to share our data with you, as we have done in the past.

Response 190-86: Desert cymopterus. We have included fencing as an adaptive management measure to be utilized if monitoring determines the need.

Response 190-87: Flax-like monardella. This species is known from a single point occurrence within the planning area.

Response 190-88: Flax-like monardella. One population occurs within the planning area.

Response 190-89: Flax-like monardella. We cannot estimate the percentage of take for this species, but because of its remote location, no take is anticipated.

Response 190-90: Flax-like monardella will be dropped as a covered species in the Plan due to insufficient information, and incidental take permits will not be sought. No Conservation Area will be established, but a conservation program will be implemented on public lands. The BLM's proposed Middle Knob ACEC will have survey and avoidance requirements. This language will be added to Appendix D.

Response 190-91: Kelso Creek monkeyflower. We have added language on Kelso Creek monkeyflower to Chapter 2 in the Final EIR/S.

Response 190-92: Kelso Creek monkeyflower. The Kelso Creek monkeyflower Conservation Area is shown on Map 2-1, not 2-7. Additional information on the Conservation Area is provided in Appendix D, under changes to the Jawbone-Butterbredt ACEC. The Final EIR/S provides additional information on the conservation provisions for this species.

Response 190-93: Kelso Creek monkeyflower. Grazing will be monitored and managed to direct cattle away from occupied habitat. Monitoring will include surveys of potential habitat. If the species is discovered, special grazing management provisions will apply to these areas as well.

Response 190-94: Kelso Creek monkeyflower. The routes within the Jawbone-Butterbredt ACEC have not been changed with the West Mojave route designation effort.

Response 190-95: Kelso Creek monkeyflower. We agree that reserve level management is appropriate for this narrow endemic species. BLM will perform this protective management within the constraints of the existing multiple uses in the area.

Response 190-96: Kern buckwheat. "Very minimal" is estimated at 0.1 acre; please see Table 2-32.

Response 190-97: Kern buckwheat. The potential exists for fencing to impact some plants by the placement of the fence posts or stringing of the wire. Rehabilitation of the vehicle turnaround at the non-motorized section of the Pacific Crest Trail may result in the loss of some plants.

Response 190-98: Kern buckwheat. The intent of the Plan is to avoid take and to restore disturbed areas so they can be re-occupied by Kern buckwheat. Loss of plants and the ground surface would not exceed 0.1 acres.

Response 190-99: Kern buckwheat. The Ridgecrest Field Office will plan the restoration and redesign of the dead end road in a manner that minimizes impact to Kern buckwheat. This may involve closure of a portion of the road and creation of a turnaround or parking area a short distance away.

Response 190-100: Kern buckwheat. We are aware of motorcycle damage to one of the Kern buckwheat sites. Inclusion of off-road travel as a threat is sufficient for the summary in Chapter 3. This site is proposed for fencing or other barriers to prevent vehicle access to the habitat.

Response 190-101: Kern buckwheat. You are correct that route MK0010 adjoins one population and will bisect another.

Response 190-102: Kern buckwheat. BLM will perform the fencing and barriers, restoration projects and place signing to protect the Kern buckwheat habitat. Continued monitoring will indicate if these measures are sufficient. If monitoring shows that the habitat is damaged by wet weather off-road travel, the access road will be closed during wet periods or during the rainy season, at the discretion of BLM's Ridgecrest Field Office. This measure has been added to the adaptive management section for this species.

Response 190-103: Kern buckwheat. The West Mojave Plan provides a new mandate to BLM and local governments to incorporate conservation of this species in their actions. These actions may be pro-active or in response to discretionary permit applications. We believe that the Implementing Authority would recognize the significance of the localized and endemic Kern buckwheat populations and assign their protection a high priority.

Response 190-104: Lane Mountain milkvetch. We agree that recent DOD surveys have provided extensive and specific distribution information for Lane Mountain milkvetch. We will delete this sentence in the Final EIR/S.

Thank you for your support. The Fort Irwin training operations in the expansion area are not yet approved, but the Army's Biological Assessment states that 25-31% of the known Lane Mountain milkvetch occupied habitat would be directly impacted.

Response 190-105: Lane Mountain milkvetch. Section 32 does not contain occupied habitat for Lane Mountain milkvetch. It is within the tortoise DWMA and will receive sufficient protection from that designation and its associated conservation measures.

Response 190-106: Lane Mountain milkvetch. We will accept this suggestion to close and rehabilitate route SU 5023. Route SU 5024 was closed by the BLM's June 30, 2003 decision record.

Response 190-107: Lane Mountain milkvetch. A portion of Section 10 is within the Conservation Area. All the other lands specified do not contain occupied habitat for Lane Mountain milkvetch. They are within the tortoise DWMA and will receive sufficient protection from that designation and its associated conservation measures. The DWMA designation is sufficient to provide the connectivity between the two blocks of occupied habitat.

Response 190-108: Lane Mountain milkvetch. We recognize the need to reduce fragmentation and have designated many roads in the Williams Well area as closed. If private lands in this area are acquired, as proposed by the Fort Irwin expansion land use proposal, the route designations may change. Our response to your specific suggestions is given below. Many of the reasons given are taken from the results of the decision tree process provided in Appendix R of the draft Plan and EIR/EIS.

- SU 5005 Keep as open because this route provides access to mines on state land.
- SU 5004 Keep as open because this long, good dirt road provides connectivity within the route network.
- SU 5034 This route was closed by the June 30, 2003 BLM decision record.

- SU 5058 Keep as open because this route provides connectivity and access to private land.
- SU 5061 This route will be closed.
- SU 5048 This route will be closed.
- SU 5022 Keep as open because this route is the only access to private land.
- SU 5002 Keep as open because this road offers arterial access to the network.
- SU 5042 This route will be closed.
- SU 5055 This road is already designated as closed in Appendix R. It was incorrectly shown as open on Map 33, which has been corrected.
- SU 5089 Keep open because this route provides connectivity and access to a well.
- SU 5081 This route is part of an access loop route and will remain open.
- SU 5061 This route is part of an access loop route and will remain open.
- SU 5119 This route was closed by the June 30, 2003 BLM decision record.

Response 190-109: Lane Mountain milkvetch. The lands specified do not contain occupied habitat for Lane Mountain milkvetch. They are within the tortoise DWMA and will receive sufficient protection from that designation and its associated conservation measures. The DWMA designation is sufficient to provide the connectivity between the two blocks of occupied habitat.

Response 190-110: Lane Mountain milkvetch. We recognize the need to reduce fragmentation and have designated many roads in the Williams Well area as closed. If private lands in this area are acquired, as proposed by the Fort Irwin expansion land use proposal, the route designations may change. Our response to your specific suggestions is given below. Many of the reasons given are taken from the results of the decision tree process provided in Appendix R of the draft Plan and EIR/EIS.

- SU 5200. This route will be closed.
- SU 5200A. This route will be closed.
- SU 5073. Keep open to maintain connectivity. We will close route 5073A.
- SU 5074. Keep open to maintain connectivity.
- SU 5072. Keep open to maintain connectivity.
- SU 5076 and 5076A. These routes will be closed.
- SU 5071. We will designate as closed the half of this route that is in Section 22 and partially within Section 19; the closed half will be designated route 5071(a).
- SU 5077. This route will be closed.
- SU 5279. We have no route SU 5279. Route 5079 will remain open because it provides connectivity to the route network.
- SU 5113. This route will remain open because it is a key connector route.
- SU 4014. This route will stay open because it is a graded road and a good connector.
- SU 5120, SU 5122, SU 5121 and SU 5123. These routes will remain open.
- SU 5007. This route will remain open because it is a good dirt road that maintains connectivity of the network and provides access to Lane Well.

Response 190-111: Lane Mountain milkvetch. Our responses on the routes within the Lane Mountain milkvetch Conservation Area are provided below.

- SU 5005. This road will remain open because it is a well-used good dirt road that provides connectivity of the network.
- SU 5229. This route will remain open because it is a major intraregional connector.
- SU 5119. This is the route to Noble Well, which provides an alternate public access around private land in Section 33. It could be closed if that private land were acquired. Route SU 5119 will remain open until that time.
- SU 5022. This route will remain open because it is a long route providing access to private land and to other routes in the network.
- SU 5097. This route will remain open because it provides connectivity to the network.
- SU 3082. This route will remain open because it is part of the California Back Country Discovery Trail proposal and leads to Williams Well.
- SU 5094. This route was closed on June 30, 2003 by the BLM decision record.
- SU 5096. We will close this route because other access to private land is available.
- SU 5003. This route will remain open because it is a good dirt road and an important part of the network.
- SU 5006. This route will remain open because it is a primary route of the network and offers access to the communication site on Lane Mountain.
- SU 5129. This route will remain open because it provides access to the communications site on Lane Mountain. The route is gated below the grade up Lane Mountain.
- SU 5143. This route will remain open because it is a connector to the network and provides access to private land. It could be closed if the private parcel is acquired.
- SU 5229. Answered above. This route is a major regional connector.
- SU 5138. This route is a major connector and will remain open.
- SU 5139. This route will remain open because it provides mine access and a recreational loop opportunity.
- SU 4020. This route will remain open because it is a primary route.
- SU 3084. This route will remain open because it provides access to a communications site. It was designated as open in the Rainbow Basin Natural Area Management Plan. The routes in this area were carefully reviewed in the West Mojave Route Designation Project and several routes were designated as closed to protect the Lane Mountain milkvetch.
- SU 3107. This route will remain open because it is an important connector to the network. Map 40 does not show a designation for parts of this route, and will be corrected.
- SU 3084A. We will designate this route as closed.
- SU 3039. This route will remain open. It serves access to the Coolgardie Camp mining and camping area.
- SU 3139, SU 3082, SU 3004, SU 3003, SU 3010, SU 3103 and SU 3102. These routes were closed on June 30, 2003 by the BLM decision record

Response 190-112: Lane Mountain milkvetch. Route SU 5114 will remain closed. The route network in this area may change considerably if the private land in Section 33 is acquired. At this time, we cannot accept utilizing SU 5114 as the only access to this parcel, for this reasons given above for routes 5006, 5119 and 5229. Closing the regional connectors would cause a number of other changes to the network. After the regional private land acquisition, if it is implemented, the network within the Lane Mountain milkvetch Conservation Area can be re-evaluated.

Response 190-113: Little San Bernardino Mountains gilia. The conserved habitat consists of specified dry washes and their banks out to 100 feet on either side in the Yucca Valley and Joshua Tree area. These washes overlapped extensively with the tortoise Special Review Area near Copper Mountain, so the boundaries of the Special Review Area were revised to incorporate the habitat of Little San Bernardino Mountains gilia. In addition, the name better fits the prescriptions for this species. No conservation measures have been removed.

Response 190-114: Little San Bernardino Mountains gilia. The Special Review Area, shown on Map 2-1, was revised from earlier versions to include the occurrence northeast of Coyote Lake. This record cannot be verified.

Response 190-115: Little San Bernardino Mountains gilia. All washes within the Coyote watershed are within the Special Review Area. The Rattlesnake Canyon occurrence is within Wilderness. Special provisions apply to Big Morongo, Little Morongo and Dry Morongo creeks. These areas take in all known occurrences in the Plan area. Other occurrences are found within the Coachella Valley and Joshua Tree National Park.

Response 190-116: Little San Bernardino Mountains gilia. We do not expect any loss of habitat from using the cap of 50 acres for incidental take of this species. Avoidance within the washes and along the banks out to 100 feet is the primary conservation measure. Incidental take might occur within ¼ mile of Highway 62 or in areas outside the 100-foot floodplain limit. We know of no occurrences outside this limit.

Response 190-117: Little San Bernardino Mountains gilia. We do not have an acreage figure for occupied habitat, but the plant is known from ten separate washes. Other tributaries and distributaries of these washes are potential habitat for this species.

Response 190-118: Little San Bernardino Mountains gilia. The San Berandino County land division review and approval process as well as the building permit issuance provide for setbacks from desert washes to ensure proper drainage function and for flood protection of structures. These requirements are recorded on tract maps and parcel maps during the subdivision process and are referred to by the building department as part of building permit issuance. Prospective building sites are field checked prior to actual ground disturbance and property corners and drainage setbacks are marked for inspector verification. This process provides adequate assurance and enforcement from a land development perspective. Furthermore, the area where this plan provision applies contains minimum parcel sizes from 2.5 acres to 5 acres and larger, which in turns provide adequate space to accommodate the required setbacks.

Response 190-119: Little San Bernardino Mountains gilia. Weed invasion, OHV disturbance, and other human-caused ground disturbance will be monitored and controlled by adaptive management. In most areas, the development potential is low.

Response 190-120: Little San Bernardino Mountains gilia. Avoidance of occupied habitat, maintenance of surface hydrology and land dedication as a conservation easement is considered adequate mitigation. Additional protections, such as walls or fencing on easement lands adjacent to development, weed control, or restrictions on hiking and biking will become an obligation of the Implementing Authority. Off-road vehicle travel is currently prohibited on these private lands, and unauthorized use will require local enforcement.

Response 190-121: Little San Bernardino Mountains gilia. Monitoring is summarized in the Draft EIR/S on pages 2-155 and 2-159, and in this Final EIR/S in revised Table 2-26. Measure M-41 states: "Conduct presence-absence surveys on BLM parcels near Joshua Tree, and north of Yucca Valley near Rattlesnake Canyon." We have deleted the Draft EIR/S reference to Joshua Tree National Park because the National Park Service is not a signatory to the MOU or Plan. These surveys would be prioritized and performed by the Implementing Authority, with the goal of better determining the range and habitat requirements of this species. If new occurrences are located in additional drainages on private land, these will be added to the Plan database and the development restrictions would be applied to those drainages. BLM will conduct surveys for this species on public lands as funds become available.

Response 190-122: Little San Bernardino Mountains gilia. Adaptive management measures are provided in this Final EIR/S in Table 2-26. Using the results of monitoring, adaptive management will determine the threats to occupied habitat and take appropriate protective actions, which may include fencing, barriers to vehicle access or weed eradication. Adaptive management will also use the tracking of conservation of known and new occurrences and of incidental take, if any, to adjust the take limit as appropriate.

Response 190-123: Little San Bernardino Mountains gilia. In T 1N, R7E Section 14, we will designate as closed all routes except for those on the section lines. In Section 13, we will designate as closed all routes except two that lead from the western section line to the private parcels. In T1N, R8E Section 6 we will designate as closed the two short spur routes that lead to the unnamed playa. We will also designate as closed the route in the southwest quarter that runs northwest to southeast. In T1N, R8E Section 7 we will designate as closed one of the two parallel routes. The routes in these two sections may require additional on-the-ground inspection to determine the best means of providing access to private land and mines and for habitat protection.

Response 190-124: Little San Bernardino Mountains gilia. South of Highway 62, the route within Section 5 T 1S, R7E was designated closed from the beginning of the wash to the Joshua Tree National Park boundary as part of the Western Mojave Desert Off Road Vehicle Designation Project. The remainder of this route and the two short spurs do not follow washes. These routes are in poor condition and receive very little use.

Response 190-125: Little San Bernardino Mountains gilia. The routes within Section 18, T 1S, R7E provide access to private land and may be used by the local owners. We will designate as closed the route within the northwest quarter. We will close the short segment crossing Quail Wash after consultation with the adjacent landowners. BLM does not maintain this route.

Response 190-126: Little San Bernardino Mountains gilia. The conservation strategy is avoidance of the species and its habitat. This will protect the existing occurrences of this little-known species better than allowing incidental take and charging mitigation fees. Because the gilia is a narrow endemic, conservation, monitoring and management actions are expected to receive a high priority from the Implementing Authority. San Bernardino County does not plan structural flood control for the desert washes that comprise the occupied habitat, and the development near the habitat will be rural residential. The special review undertaken by San Bernardino County will assure compatibility of development with habitat conservation.

Response 190-127: Mojave monkeyflower. The Implementing Authority will track the take of this species and its habitat. Incidental take will be maintained in rough proportionality with conservation. Development pressure within the known range is low. We cannot provide acreage of take because the limits of the range are not well known. The conservation strategy can be evaluated on the basis of the Conservation Areas and management measures.

Response 190-128: Mojave monkeyflower. We believe that the size of the Brisbane Valley Conservation Area is sufficient for long-term conservation of Mojave monkeyflower in this area. The incentives for avoidance and preservation of new occurrences on private land may add to the Conservation Area. BLM will not be seeking to re-acquire lands it has disposed of in exchange for tortoise habitat under the Land Tenure Adjustment Program. If any of these lands become available from willing sellers, the Implementing Authority will consider their acquisition.

Response 190-129: Mojave monkeyflower. The primary focus of the West Mojave Plan is better management to protect species rather than acquisition of private land. The funding stream from mitigation fees and other sources would be more effectively applied to habitat enhancement than acquisition. The conceptual map of 4/11/2002 was prepared prior to discussions with the mining industry, the BLM's Barstow Field Office, San Bernardino County staff and others about the practicability of designating Conservation Area lands in the Brisbane Valley.

Within T7N, R4W, the north half of Section 4 is now within the Mojave Fishhook Cactus ACEC. The south half is within the proposed Mojave monkeyflower Conservation Area. Sections 1, 9, 13, 16, 21, 25, 29 and 36 are within the survey incentive area, which could result in avoidance or additions to the Conservation Area. Section 33 could become part of a mitigation bank for additional mining activity to the southeast.

Within S7N, R3W, Sections 7, 18, 19 and 30 are wholly or partially public land designated for exchange under the Land Tenure Adjustment program. Loss of these exchange lands would substantially reduce the exchange base available for acquisition of habitat within the

DWMAs. Section 6 has already been exchanged under the LTA program. Section 31 is private land adjacent to Interstate 15 and is within the utility corridor. Land use will be managed according to the prescriptions for these corridors, which require surveys and avoidance to the maximum extent practicable.

Within T6N, R3W, Section 6 is within the utility corridor and contains a major transmission line. Public lands within the northwest quarter are available for exchange under the LTA program. Land use in this section will be managed as described above.

Within T6N, R4W, Section 1 is public land within the utility corridor and is available for exchange under the LTA program. Land use in this section will be managed as described above.

Response 190-130: Mojave monkeyflower. The referenced sentence was inserted to address situation where only one or a very few plants were found on a parcel, leading to uncertainty on the mitigation ration to be applied. The planning staff of San Bernardino County would make a determination of the significance and acreage of occupied habitat. The procedure has been amended to add the provision that the County will consult with the Scientific Advisory Committee is determining a "significant population".

Response 190-131: Mojave monkeyflower. Implementing Authority biologists will develop significance criteria.

Response 190-132: Mojave monkeyflower. We appreciate your suggestions for route designations in the Brisbane Valley. Some of the areas where you suggest closed designations are on public lands designated for exchange under the LTA program. We will strive to protect the Mojave monkeyflower from vehicle damage until such time as these lands are exchanged or added to the Conservation Area. In some cases, the designation may become limited, if mining claim access is required. Our responses to your specific route suggestions are as follows:

a. This route is within the Conservation Area and will be designated as closed.
b. This route is within the Conservation Area and will be designated as closed.
c. This route is within the Conservation Area and will be designated as closed.
d. This route is within the Conservation Area and will be designated as closed.
e. This route is within the Conservation Area and will be designated as closed.
f. This route is within the Conservation Area and will be designated as closed.
g. This route will remain open.
h. This route will remain open.
i. This route is outside the Conservation Area and will be designated as closed.
j. This route is outside the Conservation Area and will be designated as closed.
k. This route is outside the Conservation Area and will be designated as closed.

Response 190-133: Mojave monkeyflower. Of the unnumbered routes where you make suggestions for closed designations in the Daggett Ridge unit of the Mojave Monkeyflower Conservation Area, our responses are:

- This route will remain open (T8N, R1W, Section 6)

- We will designate this route as closed (T9N, R1W, Section 28)
- We will designate these routes as closed (T8N, R1W, Sections 2 and 3)
- We will designate this portion of the loop as closed (T8N, R1W, Section 2)
- This route will remain open (T9N, R1E Section 32)
- The spur routes near the Azucar Mine are adjacent to occupied habitat of the Mojave monkeyflower. We will add closure and rehabilitation of these routes as a Plan conservation measure for this species. Access to the mine will remain open on the best established route (NR 1006 and one spur to the mine).

Response 190-134: Mojave monkeyflower. This route will remain open.

Response 190-135: Mojave monkeyflower. We will designate this route as closed.

Response 190-136: Mojave monkeyflower. This route is designated as limited to maintain rancher access.

Response 190-137: Mojave monkeyflower. The Waterman Hills site is an outlying occurrence within a DWMA and a separate Conservation Area is not needed. This site has been subject to trash dumping and requires cleanup.

Response 190-138: Mojave monkeyflower. The multiple species occurrences in the Waterman Hills area will factor into the acquisition priorities set by the Implementing Authority. If multiple species sites within the HCA are proposed for development, they could be considered for immediate acquisition.

Response 190-139: Mojave monkeyflower. We will add fencing as an adaptive management measure for the Mojave monkeyflower in all areas, not just the Stoddard Valley (see revised Table 2-26).

Response 190-140: Mojave monkeyflower. Mitigation for this species is a program of activities with priorities set by the Implementing Authority. Most mitigation measures will take place on the same site as where the potential impact occurs, such as within the utility corridor, or the Brisbane Valley mining area. Acquisition of private land will be based on many factors, and one may be the proximity of impacts within a Conservation Area.

Response 190-141: Mojave monkeyflower. Conservation of "new" populations will be implemented according to the prescriptions of the Plan.

Response 190-142: No comment number 142 was provided.

Response 190-143: Mojave tarplant. We will add the language to Table 2-11 that 50% of newly detected populations must be conserved.

Response 190-144: Ninemile Canyon phacelia. We do not have acreage for the area of currently occupied habitat. However, the general range, as described in the species account, occupies a 40-50 square mile (25,000-32,000 acres) area.

Response 190-145: Ninemile Canyon phacelia. Without a more precise knowledge of the species range and occupied habitat, we cannot estimate the percentage of take represented by 50 acres. However, the potential incidental take is 0.2% of the generalized range of this species.

Response 190-146: Ninemile Canyon phacelia. The Plan does prescribe a rangeland health assessment. The results of this assessment and species monitoring would lead to any necessary changes in grazing practices.

Response 190-147: Ninemile Canyon phacelia. Incidental take only applies to actions on private land. We will clarify this in Table 2-11.

Response 190-148: Ninemile Canyon phacelia. We will add the language to Table 2-11 that 50% of newly detected populations must be conserved.

Response 190-148a: Parish's alkali grass, Parish's popcorn flower and Salt Springs checkerbloom. We will add a requirement that any acquisitions for these species must include water rights.

Response 190-149: Parish's phacelia. Thank you for your support.

Response 190-150: Parish's phacelia. It is possible that additional surveys near Yermo, Troy Lake or Lucerne Dry Lake and Rabbit Dry Lake will detect extant populations of this ephemeral species. The 1% cap on new allowable ground disturbance applies to the Parish's Phacelia Conservation Area, though the cap is summed for all of the HCA by jurisdiction. Threats are few in this remote area, and we do not believe that a 50-acre limit on incidental take will substantially impair the survival of this disjunct population, even if it is the only site remaining in California. The survey records for this site indicated that hundreds of thousands, or even millions, of plants were present during a wet year.

Response 190-151: Parish's phacelia. We will include fencing as an adaptive management measure for this species. However, fencing around a playa at this remote location may not be effective as signing and enforcement.

Response 190-152: Red Rock poppy and Red Rock tarplant. We will add the 50% limitation on incidental take of newly detected occurrences for this species.

Response 190-153: Reveals buckwheat. We agree, and have dropped this species from the request for incidental take coverage in the HCP. As additional information is gathered in the future, a conservation plan could be developed and the species could be amended into the Plan. New information on this species will be tracked and compiled by the Implementing Authority.

Response 190-154: Short-joint beavertail cactus. We cannot provide the acreage of occupied habitat for this species, as most locations are points within the range. The generalized range is a band from 3000-6000 feet elevation in the foothills of the San Gabriel Mountains about 75 miles long and five miles wide.

Response 190-155: Short-joint beavertail cactus. The proposed Big Rock Creek Conservation Area is 10,785 acres (Table 2-3).

Response 190-156: Short-joint beavertail cactus. Los Angeles County would implement both the West Mojave Plan and the Significant Ecological Area zoning overlay. The County would charge the 5:1 mitigation fee within the Conservation Area and implement any other required measures.

Response 190-157: Short-joint beavertail cactus. The current SEA designation is smaller than the Conservation Area and is likely to be effective because it lies within the Big Rock Creek floodplain where development is infeasible. The development pattern in the Big Rock Creek and Mescal Creek areas is rural residential, with single-family homes on larger lots.

Response 190-158: Short-joint beavertail cactus. We have been unable to identify a sufficiently large block of undeveloped land within San Bernardino County to serve as a Conservation Area. In Cajon Pass and to the east, the beavertail cactus plants appear to be hybrids rather than the unique short-joint variety, so a Conservation Area was not proposed in this region. The Forest Service lands in San Bernardino County serve to protect this species on federal land. One adaptive management measure (Final EIR/S Table 2-26) would establish smaller reserves in the western portion of the range, if this was determined to be feasible based on monitoring and gathering of additional information.

Response 190-159: Short-joint beavertail cactus. Most of the development in the foothill areas will come from single-family dwellings on existing lots where discretionary permits are not required. See also response #158 above. San Bernardino County would determine the appropriate avoidance, minimization, or mitigation measures to enact within the range of short-joint beavertail cactus.

Response 190-160: Short-joint beavertail cactus. Designated washes are Banneret Canyon, La Montan Creek, Puzzle Canyon, Jesus Canyon, and Mescal Creek in Los Angeles County. In San Bernardino County these drainages include Sheep Creek, Horse Canyon, Manzanita Wash, Oro Grande Wash and twelve unnamed tributaries between the Los Angeles County line and Interstate 15.

Response 190-161: Triple-ribbed milkvetch. Table 2-33 indicates that no take is anticipated for triple-ribbed milkvetch, and this species may be dropped from the list of species for which incidental take is requested. The exclusion of this species in Table 2-11 was an oversight. The known location within Big Morongo Canyon ACEC is conserved, and the occurrence in Dry Morongo Canyon would be conserved by avoidance measures.

Response 190-162: Triple-ribbed milkvetch. The known information on this species was provided in the Draft EIR/S on pages 3-191-2 and in the species account.

Responses 190-163 and 164: Triple-ribbed milkvetch. The goal is for no incidental take of this species.

Response 190-165: Triple-ribbed milkvetch. With no incidental take and conservation of the watersheds in which it occurs, there would be no cumulative impacts from the West Mojave Plan.

Response 190-166: Triple-ribbed milkvetch. The protection of washes and their watersheds on either side of the West Mojave-Coachella Valley HCP boundary will enable the species to survive. Several of the occurrences are within the San Gorgonio Wilderness on either side of the boundary. Others are within Joshua Tree National Park.

Response 190-167: Triple-ribbed milkvetch. We will designate the three tiny route segments on public lands in Sections 31 and 32 as closed, and will designate the portion of Canyon House Road on public lands as limited.

Response 190-168: White-margined beardtongue. We do not have the current area of occupied habitat. The white-margined beardtongue is found along two large washes draining the Cady Mountains and near the Lavic railroad siding. The polygons we have for the occurrence records have not been digitized, nor has the acreage been estimated.

Response 190-169: White-margined beardtongue. The species account provides more detailed information on the extent of occupied habitat (see attached compact disk). It includes records from Nevada and Arizona.

Response 190-170: White-margined beardtongue. Thank you for your support.

Response 190-171: White-margined beardtongue. The proposed ACEC boundary for the Pisgah area has been revised to extend north of Interstate 40 and include all of the known occurrences of white-margined beardtongue. The new boundary includes all of the sections you specified.

Response 190-172: White-margined beardtongue. Our responses to your suggestions for closed route designations are provided below. Information regarding the use of these routes is found in Appendix R.

- NR 3052. This route is an established easement and will remain open.
- NR 3049 or 3021. Route 3049 is a railroad easement and will remain open. Route 3021 is a graded, well-used route serving as a principal subregion connector and will remain open.
- NR 3064. This route will be designated as closed.
- NR 3062C. This route will be designated as closed.
- NR 3062. This route will remain open.
- NR 3062A. This route will remain open.
- NR 3083 (one side of loop). This route will remain open.
- NR 3028. This route will remain open.
- NR 3079. This route will remain open.
- NR 3052. Answered above. This route is an established easement and will remain open.
- NR 3054. This route is an established easement and will remain open.

- NR 3066. This route will remain open.
- NR 3049B. This route is a railroad easement and will remain open.
- NR 3058. This route will remain open. Map 62 will be corrected to exclude the portion within the Twentynine Palms Marine Corps base.
- NR 3066A. This route will remain open.
- NR 3066. Answered above. This route will remain open.
- NR 3068A . This route will remain open.
- NR 3021. Answered above. Route 3021 is a graded, well-used route serving as a principal subregion connector and will remain open.
- NR 3030 (portions). This route will remain open, because it is an important rockhounding route.
- Cutoff route. We will designate as closed the eastern link between Interstate 40 and the pipeline road.

Response 190-173: White-margined beardtongue. The Johnson Valley to Parker event will be monitored to assure that the vehicles do not impact the occurrences of white-margined beardtongue.

Response 190-174: White-margined beardtongue. We will add fencing as an adaptive management tool for this species.

Response 190-175: Shockley's rockcress. Although Shockley's rockcress was not specified in the carbonate habitat Management Strategy, it will benefit from the conservation measures. The Carbonate Endemic Plants Research Natural Area ACEC will provide substantial additional protection for Shockley's rockcress.

Response 190-176: Shockley's rockcress. Draft EIR/S page 3-190 discussed the occurrences of Shockley's rockcress in the planning area. Draft EIR/S page 4-79 noted that all known locations would be protected within the ACEC.

Response 190-177: Carbonate Habitat Management Strategy. The Carbonate Habitat Management Strategy was prepared to obtain a Biological Opinion on the long-term plans for mining and protection of listed species in the carbonate region of the San Bernardino Mountains. It is not necessary to undergo a NEPA and CEQA review on a strategy. Actions taken by the agencies to implement the strategy will be reviewed under appropriate state and federal environmental laws. The creation of a new ACEC, potential land exchange, revegetation standards and new route designations are implementing actions that are included as part of the West Mojave Plan.

Response 190-178: Reveal's buckwheat. This species has been dropped as a covered species in the Plan.

Response 190-179: Carbonate Habitat Management Strategy. See Response 177.

Response 190-180: Appendix D. Appendix D describes places in the existing ACEC management plans where changes are necessary. The Final EIR/S has revisions to Appendix that provide a more standard formatting.

Response 190-181: Comment noted.

6.3.28 Letter 191: Lucerne Valley Economic Development Association

Response 191-1: Summary (page 1). The Executive Summary and the Comparison of Alternatives at the end of Chapter 2 have been augmented with additional descriptive materials.

Response 191-2: Rail spur land exchange (page 1). Environmental review of the land exchange of lands adjoining the rail spur for habitat lands east of Highway 18 would be accomplished with the Final EIR/S for the West Mojave Plan. Implementing the exchange requires a landowner to make application to the BLM. Under the CHMS, it would not be necessary to wait for new mining in order to receive mitigation credits; i.e. the credits can be "banked".

Response 191-3: North Slope aggregate (pages 1 and 2). The West Mojave Plan recognizes this concern regarding access and availability to aggregate resources in order to meet local and regional market needs, and attempts to balance community needs for aggregate resources by limiting closures and limitations on access to known deposits (WMP 3-219 and 3-230). The Plan allows for access and availability to resources within the region, and development of resources from this area of the CDCA is expected to meet the community needs of the region within the life of the plan. Inventories completed in the CDCA for aggregate resources show economic deposits within the area of the north slope of the San Bernardino Mountains. Alternative A does not impose any limitations on mineral development of these resources; however, surface operations must be in compliance with the goals of the Plan, and surface mining operations may be mitigated, and some denied if upon analysis the activity would not be consistent with the Plan's recovery goals and cannot be mitigated under Plan protocols.

Response 191-4: Mining in DWMAs (page 2). Consistent with the recognition that development of mineral resources is vital to the economic well being of the region and local economies, the West Mojave Plan makes no recommendation to withdraw any DWMA from entry or location under the United States mining or mineral leasing laws (other than certain lands within the Rand Mountains and the Lane Mountain milk vetch conservation area). The Plan provides the framework for both protection of plant and animal species and recovery of threatened and endangered species, while assuring access and availability to mineral resources necessary to local and regional economies. While mineral operations must be consistent with planning goals established in the Plan for each DWMA in order to be allowed under the FLPMA's unnecessary or undue degradation requirement, the Plan allows significant latitude to mitigate activities to bring then into compliance with the plan.

Since 1981, estimated total surface disturbance associated with all mineral activity CDCA-wide is approximately 24,000 acres. Thirty six percent is associated with a few large gold mines and industrial minerals operations, and the remainder represents exploration and

small mining activity. This total is less than 0.09 percent of the surface area of the CDCA. We do not foresee that there will be significant impacts to mineral resources by implementing the 1 percent limitation on new acreage in DWMA's. In addition, we do not foresee that future mineral development activity will have any impact on biologic resources in the planning area, adversely affecting the recovery efforts of the plan.

Response 191-5: Fees, point a (pages 2 and 3). Timing of fee for "lot spits". After further review and consideration of your comments, the Plan has been changed to provide that for tentative parcel maps that involve the creation of four or less parcels, the point of exaction of the fee (timing for fee payment) will be at the time of grading or building permits. If grading, therefore land disturbance, is required to record a final parcel map, the fee will be required with the grading permit. This procedure will be in keeping with the approach that the FWS has used with regards to actual physical impacts to tortoise or tortoise habitat, i.e. that the subdivision process, in the absence of land disturbance, causes no physical harm to endangered species.

Response 191-6: Fees, point b (page 3). Exemption for Lucerne Valley Corridor. We agree with your points regarding tortoise impacts, however, the impact fee has been developed to compensate for the loss of a variety of species and the habitats that the species rely on. The decisions and implementation procedures for the Lucerne Valley Corridor Plan were made by local government, but may not have been endorsed by the wildlife agencies from which all local governments must now seek a permit in order to implement the Plan. It is unlikely that these agencies would recognize the distinction for the narrow band along the corridor when similar areas throughout the more intensely developed cities are subject to the mitigation fee. One of the important advantages of the Plan to private landowners and local government is the benefits of streamlined endangered species permitting and streamlined CEQA compliance. The use of a mitigation fee to compensate for impacts to species and loss of habitat create a mechanism for local government to achieve that streamlining objective. The regional approach to a uniform fee procedure also recognizes the nexus of the impact of individual private development with the broader, larger scale impacts of regional infrastructure that each an every person and property owner benefit from and require to enjoy an adequate quality of life in the West Mojave region. Based on this assessment, compensation at the lowest of the three levels appears warranted.

Response 191-7: Fees, point c (page 3). As given in the comment, there are no data to characterize current or historic tortoise populations in the Lucerne Valley. We know that a few tortoses still occur in the southern part of the valley, along the lower slopes of the San Bernardino Mountains (LaRue, personal observation). They are relatively common in the northern portions of the valley, in the southern part of the proposed Ord-Rodman DWMA. Tortoises still occur to the east out through Johnson Valley, but are not likely to occur to the west in the southern and central parts of the Victor Valley. These observations are sufficient to conclude that tortoises likely occurred throughout Lucerne Valley, although there is no way to determine how common they were.

There are natural features such as dry lakebeds that lack the requisite components to be suitable tortoise habitat. It also appears that elevation and latitude may be natural limiting factors to tortoise distribution and density. Caliche, however, is not known to significantly

restrict tortoise populations on a regional level. In fact, throughout its range, tortoises frequently use claiche caves along washes for burrowing and denning.

The collection of impact fees to be applied to regionwide species conservation is an integral part of this and other habitat conservation plans. Fees would be collected in places where tortoises may or may not presently occur in order to protect them in DWMAs where they are more likely to occur. Although tortoises may not be directly affected by the development of a vacant lot in central Lucerne Valley, for example, there are likely to be indirect impacts associated with the residents who eventually move into the house. Cumulatively, residential areas are invariably associated with increased levels of dumping, incidence of feral and pet dog predation on tortoises, collection for pets, off-highway vehicle use, sheep grazing, and other activities. These impacts result in habitat deterioration of adjacent, undeveloped lands. As such, on an individual level, there may be few or no impacts associated with a given project. However, on a population or regional level, every town and city results in the loss of habitat to development and the degradation of habitats in adjacent areas.

Response 191-8: Fees, point d (pages 3 and 4). Will fee be required for construction in previously disturbed areas? The mitigation fee is not intended to apply to disturbance of existing disturbed or developed land. While the strict definition and application of this principle may be difficult to determine for the potentially infinite variety of circumstances that may arise in the future, the general principle will guide case by case determinations that will be made by the local jurisdiction with land use authority which holds the programmatic take permits associated with this Plan.

Response 191-9: Fees, point e (page 4). Is $385/acre a significant economic impact? In the absence of relevant data to support your assertion, the significance of the added $385 per acre caused by the proposed mitigation fee is impossible to assess. The request to have a focused economic impact analysis on the impact of the proposed fee for the area of Lucerne Valley is beyond the level of detail that is capable or appropriate for this type of program to undertake. A good faith economic analysis of the consequences of this Plan on the West Mojave Plan area as a whole was provided in the Draft EIR/S.

Response 191-10: Conversion of private land to public (page 4). Prescription HCA-36, which addresses HCA land acquisition, has been clarified to incorporate a "no net loss of value" policy.

Response 191-11: Incentives to protect habitat (pages 4 and 5). See Response 60-11.

Response 191-12: Riparian/springs (page 5). Although the West Mojave Plan identifies the springs near Lucerne Valley as having high biological value for several covered species, no provisions of the Plan add to the existing environmental restrictions and regulations. The Alquist-Priolo setback, Clean Water Act requirements, state riparian protection laws and zoning would not change with passage of the Plan. If the landowners are willing sellers, the Implementing Authority will make an acquisition offer and attempt to reach acceptable terms.

We anticipate support from the CDFG for purchase of the biologically important springs. The Department has made no specific commitment of funds to date to assist with acquisitions.

Response 191-13: Implementation plan (page 5). We can appreciate the desire of LVEDA to see every detail involved in carrying out the proposed conservation program. However, a number of factors are driving the need to complete the Plan and certify the EIR in the near term. Yet even these two actions would not necessarily lock the County into any irreversible decisions. The issuance of a Section 10(a) permit from the USFWS and a Section 2081 permit from CDFG will require an HCP that satisfies USFWS regulations and CDFG's concurrence requirements as well as a detailed and legally binding Implementing Agreement (IA). We anticipate that this will take another 12 months to complete. We believe that it is the later action involving approving the IA that would actually bind the County and other local governments who may be signatory to the Plan. The County would not adopt any changes to its General Plan and Development Code until such time as the Board of Supervisors approved the IA. By approving the overall conservation strategy (program) and certifying the Program EIR, the Board can essentially declare their intent to proceed with the Plan subject to their acceptance of the final HCP and IA. The Board will then be in a position to accept or decline approval of the final implementing details. We would encourage LVEDA to reconsider its position in light of this approach.

Response 191-14: Botanical surveys outside preserves (page 6). Botanical surveys outside conservation areas would only be required for a few species that are poorly known. These are triple-ribbed milkvetch in the Morongo Valley area and Little San Bernardino Mountains gilia in or adjacent to specified drainages near Joshua Tree. Other species of plants would be recorded during the clearance surveys conducted in tortoise survey areas. This will verify the amount of incidental take for plants.

The Implementing Authority will initiate surveys for alkali wetland plants, Little San Bernardino Montains gilia, and Kelso Creek monkeyflower. These narrow endemics are relatively unknown and additional information will contribute to conservation by adaptive management. These are not surveys required of applicants for discretionary development.

Response 191-15: Bighorn linkage (page 6). Bighorn sheep has been dropped as a covered species in the Plan, and the potential corridor between the San Bernardino Mountains and Granite Mountains has been eliminated as a conservation measure of the Plan.

Response 191-16: Choices (page 6). We agree with option for developer to go directly to USFWS.

Response 191-17: Utility rights of ways (page 6). The Draft EIR/S found that "long, linear projects (transmission lines and piplines) were responsible for most of the harassment and mortality take of tortoises in California … 88% of harassment take … and 85% of mortality take" (Page 3-34). Lands disturbed by transmission line construction include tower pads and access roads, and this land would be permanently dedicated to the facilities and roads installed. Pipeline construction rights-of-way create a long linear band of disturbed habitat that requires years to return to pre-disturbance conditions. There is no compelling reason to provide this type

of project with a fee reduction not available to other land disturbing activities. In any event, the 5:1 compensation ratio to be applied in tortoise DWMAs is comparable to current compensation required of utilities in desert tortoise critical habitat.

Response 191-18: Habitat rehabilitation credits (page 6). The replacement of Joshua trees is not a necessary component of restored habitat for the desert tortoise. The reference (page 2-28) to establishing Joshua trees at a density on disturbed sites similar to that on undisturbed sites was meant to be an example only. We recognize the low success rate of some salvage efforts for Joshua trees, especially large specimens. The Implementing Authority will determine the precise standards that must be met in order to Habitat Rehailitation Credits, using the goals and principles described in the Plan.

Response 191-19: Conversion of agriculture (pages 6 and 7). While many different approaches were considered in addressing agriculture and other land uses within the compensation framework, the process selected appears to have greatest acceptance and parity while being workable and defensible. Existing agricultural uses, specifically cultivated or previously cultivated lands were consider as a disturbed area/degraded habitat condition in the criteria defined in Table 2-7, Criteria Used to Delineate Disturbed (0.5:1) Areas on page 2-32 of the Draft EIR/S. The mapped depicition of the disturbed lands assessment using these criteria are presented on the ajoining page labeled as Map 2-8, Fee Compensation Areas.

The West Mojave Team has reviewed the assessment following receipt of the comments on the Draft EIR/S to re-evaluate the adequacy and accuracy of the first assessment completed for preparation of the Draft document. Our second review resulted in some addition of areas to the scattered 0.5:1 areas in the Oak Hills/Baldy Mesa area of San Bernardino County that reflects some of the more recent development that was not picked in the first assessment. The Team also considered ag lands that may have been overlooked as well. The Team concluded that known agricultural areas were adequately recognized in the 0.5:1 delineated fee area. Please review the fee area maps, it appears that all detectable rrag areas were included in the 0.5:1 delineation as reflected in Lucerne Valley, along the Mojave River in the incorporated and unicorporated areas extending northerly through the communities of Oro Grande and Helendale, in the Yermo, Daggett and Newberry Springs communities and the Harper Dry Lake area were previous ag development has taken place.

The evaluation of existing agricultural land and fallow agricultural land on a parcel-by-parcel basis was unworkable during the preparation of the Plan. Even though reasonably precise survey assessments of disturbed areas were completed as part of the Plan, small, non-contiguous ag lands, particularly fallow lands, that could qualify for incorporation into 0.5:1 designation may have been overlooked. To respond to this possibility, local government intends to include an "oversight review procedure" in the administrative process of the Implementing Agreement (IA) that will be prepared as a follow-on activity with the FWS and DFG in order to obtain a 10(a) and 2081 permit. A concept that local government will continue to address with the two wildlife agencies during the preparation of the IA will be the appropriateness of recognizing that existing and past agricultural cultivation has removed most, if not all, of the habitat value and therefore should be assessed at a 0.5:1 mitigation fee even if the site is within a 1:1 designated fee area.

Response 191-20: Plan buy-in (page 7). Can other self-governed entities join in later? This issue has not been fully evaluated at this time. It is an issue that must be discussed with the wildlife agencies in structuring the final HCP and Implementing Agreement. The decision-making bodies of the currently participating local governments must consider this.

Response 191-21: Maps (page 7). We have prepared reference maps for several specific areas of San Bernardino County showing the areas subject to the different fee amount ratios. These are also available for tortoise survey and no-survey areas. These will be available for your use. The revisions to the Biological Transition Area are shown on the new Map 2-1 and in Appendix X included with the Final EIR/S.

Response 191-22: Highway 247 tortoise fencing (page 7). There is no proposal to install a tortoise barrier fence along Highway 247. Rather, a three-strand wire fence would be installed along the eastern side of this road to reduce the heightened level of cross-country vehicle travel emanating from the Stoddard Valley Open Area. As such, we agree that there is no compelling reason to install a tortoise barrier fence along Highway 247.

Response 191-23: Johnson Valley boundary fence (page 7). The source of funding for the western boundary fence will be considered during the review of the allotment management plan, rather than through the West Mojave planning process.

Response 191-24: Current management (page 8). The Draft EIR/S discusses current practices. Please see Chapter 3, section 3.1, Planning and Regulatory Framework (pages 3-1 to 3-42). In addition, the commentator may wish to review the document published by the West Mojave planning team in 1998 titled *Current Management Situation of Special Status Species in the West Mojave Planning Area*. This document is available on the West Mojave web site.

6.3.29 Letter 192: Mojave Desert Resource Conservation District

Response 192-1: Comment 3. It is not clear from the comment letter as to what is meant by raven relocation. There is no such proposal in any of the alternatives. With regards to reclassification, there are advantages and disadvantages to removing protections afforded ravens under the Migratory Bird Treaty Act. Although the reclassification would ostensibly make it easier to hunt ravens, it would be necessary to coordinate that effort rather than rely on random hunting to have any meaningful conservation value. Such a coordinated effort could be accomplished without reclassification, so long as appropriate salvage permits are obtained. The reclassification would presumably allow utility companies to remove raven nests from their facilities without the need for a salvage permit, which may have the advantage of expediting timeframes to obtain salvage permits. This assumes that reclassification could be accomplished in a timely manner, which is unknown. Although salvage activities may occur under reclassification, concerned groups may still seek other means of protecting ravens. Therefore, although reclassification could have positive effects, there are existing avenues available to accomplish most of the measures (including salvage) outlined in the draft raven management plan. As such, the plan would not seek to reclassfy the raven as non-migratory.

Response 192-2: Comment 6, paragraph 1. As suggested, it is appropriate to have the Mojave Desert Resource Conservation District participate in all weed management meetings. In fact, the MDRCD is specifically listed as a cooperating agency in weed abatement measure DT-40 (page 2-70 of the Draft EIR/S).

Response 192-3: Comment 6, paragraphs 2 and 3. Avoidance of nesting areas of listed species, including least Bell's vireo and southwestern willow flycatcher, is standard practice for most construction projects and for most weed control efforts. The other covered bird species (vermilion flycatcher, summer tanager, yellow warbler, yellow-breasted chat) are normally found in the same habitat. However, there certainly are specific sites within the riparian zone not occupied by the vireo and willow flycatcher where weed control operations could proceed without affecting listed species.

We will make the change you have suggested in the Final EIR/S, but final adoption of the language will have to be determined by discussions with the Wildlife Agencies to see if this condition will satisfy the conservation program for unlisted species which would lead to issuance of incidental take permits for these species.

Response 192-4: Comment 8, paragraph 1. Fallow Land is defined by the plan in Table 2-7 and is delineated as disturbed land and subject to the guidelines of the 0.5 to 1 compensation areas.

Response 192-5: Comment 8, paragraph 2. Currently the guidelines for development within the planning area are fairly rigid and ideas that are "outside the box" don't fit within this structure. The implementation team however has some leeway in the actual implementation of the plan. If a new innovative idea that ensured the preservation of endangered species was brought to them, it could be considered at that time.

Response 192-6: Comment 9. A set mitigation fee should not interfere with market incentives. In fact, as demonstrated by Table 4-35, costs of developing land should decline under the Plan's streamlined mitigation program, thereby enhancing the market for West Mojave parcels. In addition, it is likely that the creation of a single repository of mitigation fee funds overseen by a broad-based and publicly advised Implementing Authority would result in a broader and fairer spread of conservation land purchases throughout the planning area than the system currently in place.

Response 192-7: Comment 10. Please see responses 191-1 and 191-24.

Response 192-8: Comment 12. It is not necessary to be a signatory to be covered by the West Moajve Plan.

6.3.30 Letter 208: Mr. Marion Ely

Response 208-1: Authors (page 4). The Draft EIR/S provided a list of preparers. Please see section 5.6 (pages 5-6 to 5-8).

Response 208-2: Index (page 4). An index was provided in the Draft EIR/S. It is located at the very end of Volume 1.

Response 208-3: Reversal of tortoise declines (page 4). There is no guarantee that the West Mojave Plan will reverse tortoise declines and recover tortoises. However, it is certain that in the absence of the plan, or some other regionwide effort, declines will likely continue and recovery will not occur. The federal Endangered Species Act, NEPA, FLPMA and federal regulation mandate the BLM to manage public lands, in part, for the conservation of threatened and endangered species. The USFWS, in its biological opinion, will judge the efficacy of the West Mojave Plan (not the BLM) to facilitate tortoise recovery. The plan is designed based on the best available information, with substantial public participation, to devise a core strategy with measureable biological goals. Monitoring and adaptive management are the means by which the Plan can be modified to address unforeseen events or failiure of protective measures to recover the species. Taken together, the plan is more likely to contribute to tortoise recovery than to detract from it.

Response 208-4: CDFG and USFWS (page 4). CDFG and USFWS will not issue programmatic incidental take permits and approve a streamlined process unless and until the agencies and jurisdictions seeking the permits demonstrate that the conservation strategies provided in the habitat conservation plan satisfy the permit issuance criteria of CESA and FESA and will conserve special status species. To make this showing, a substantial amount of baseline data must be gathered, field surveys conducted where appropriate, and time invested with stakeholders to ensure that the conservation strategy is one that can be implemented in the real world. This effort requires a significant investment of both time and money. The potential rewards of a successful process, both in economic and biological terms, warrant the amount of work necessary to develop such a complex and comprehensive regional program.

Aside from incidental take permits for private land, the West Mojave Plan's conservation strategy can be adopted and implemented on public lands without the need to obtain the approval of CDFG, following completion of the Section 7 consultation with USFWS.

Response 208-5: What if strategy fails to meet goals (page 4)? In the event that a component of the conservation strategy fails to achieve the biological goals and objectives set by the plan, adaptive management and amendment procedures would be in place to ensure that the conservation strategy can respond to changing situations and incorporate new and better approaches to attaining goals and objectives. A flexible plan that can adapt to evolving situations is the most efficient means of ensuring that public funds, compensation fees and mitigation are expended in a cost effective manner. Measurable goals and objectives also ensure that agencies and jurisdictions can be held accountable for the degree of success they attain as the program is implemented.

Response 208-6: Land release procedures (page 4). The plan has provisions for modifying the plan if parts of the plan are clearly not working. Monitoring is a major part of the plan strategy and modifications to the plan can be made based on results from this monitoring effort.

Response 208-7: Page 3-79 statement (pages 4 and 5). The statement given in the Draft EIR/S on page 3-79 (i.e., that Krzysik showed a positive correlation between tortoises and tortoise sign) is accurate. One can see in Appendix K, page 26 of Krzysik's first report that "…there is a highly significant correlation ($P<0.01$) of live tortoises with burrows, scats, and TCS." This conclusion is given in numerous other places throughout Appendix K. Krzysik also concluded that burrows, compared to scat or TCS, were the best predictor of tortoise occurrence. However, that does not preclude the separate conclusion that all sign also has predictive value.

Response 208-8: Page 3-84 statement (page 5). The comment on page 5 questions the value of using scat and TCS as predictors of tortoise occurrence, when burrows were identified as the best predictor. The importance of different types of tortoise sign depends on the question being asked. In the case of presence-absence surveys where the county wants to know if tortoises occur on a proposed development site, scat are perhaps the most important type of sign because it is diagnostic and the most abundant type of sign. For the West Mojave Plan, higher TCS values were used to identify areas of concentrated tortoise sign, including scat and burrows. Later when these areas were compared to tortoise occurrence, we found that most of the tortoises occurred in the higher sign count areas. None of these uses or interpretations contradicts Dr. Krzysik's conclusions.

Response 208-9: Page 3-85 statement (page 5). See Responses 208-7 and 208-8.

Response 208-10: Boarman points (pages 5 and 6). Information provided by Dr. Boarman was used extensively throughout the planning and drafting stages of the plan. Even if not specifically mentioned, the information included in the comment is incorporated by reference and available to the reviewer. All points made in the comment are consistent with what is given in various places in chapter 3 of the Draft EIR/S. There are no specific contradictions between the Draft EIR/S and Dr. Boarman's citations identified in the comment letter.

6.3.31 Letter 209: City of Ridgecrest

Response 209-1: USFWS and CDFG (page 2). The USFWS has issued a biological opinion for the portion of the West Mojave Plan that would be implemented through an amendment to the BLM's CDCA Plan. CDFG has submitted comments; see letter 278 (reprinted on the attached compact disk) and responses to letter 278, below.

Response 209-2: No net loss policy (page 3). Prescription HCA-36, which addresses HCA land acquisition, has been clarified to incorporate a "no net loss of value" policy.

Response 209-3: Desert Tortoise Natural Area (page 4, top). In the comment letter, 80% declines observed at the DTNA are equated with failure of management to protect tortoises. However, the comment fails to recognize that most of the decline occurred prior to the listing of the tortoise and publication of the recovery plan. As such, declines cannot be attributed to poor land management. In addition, it appears that there may be repatriation of tortoises within the fenced area, to a significantly greater degree than on surrounding lands. This may indicate that management at the DTNA has succeeded rather than failed.

Response 209-4: Route designation project (page 4). The motorized vehicle access network has been designed to meet public recreation needs. In fact, the route network "largely meets public recreational and commercial motorized access needs" (Draft EIR/S at page 4-111). The redesigned network accesses popular recreation sites more effectively than the previously existing 1985-87 network. We have tried to ensure that the access network can access recreation venues identified by the 2002 route field survey. In fact, the great majority of inventoried venues are within 100 feet of designated open routes, including: 931 of 1,369 campsites; 272 of 379 scenic views; 77 of 100 staging areas; and 28 of 37 trailheads. These figures have been incorporated into the FEIR/S analysis. Economic impacts related to public lands recreation are discussed in the Draft EIR/S in Chapter 4, on pages 4-96 to 4-97, and in Appendix N at pages 66 to 68.

Response 209-5: El Paso CAPA sideboards (pages 4 and 5). The "sideboards" for route designation are similar to those used for route designation in the remainder of the West Mojave. The decision tree process considered the biological resource data in making route decisions. This biological information has been made more specific for the El Paso Mountains, which are known to support prairie falcon and golden eagle nests, several occurrences of the Red Rock tarplant and Red Rock poppy and have high potential for significant roosts of Townsened's big-eared bat. These non-listed species may not ultimately be covered by incidental take permits, which apply to private land, and they are not part of the Section 7 consultation on the West Mojave Plan, which addresses federally listed species. However, BLM must manage its lands for biological health and sustainability, and these resources should be considered in route planning.

It is unlikely that protection of these resources via use as "sideboards" will inevitably lead to route closures preventing public access for recreation. An access network can be designed that allows visitation of destinations and a quality off-highway experience without adversely impacting important biological sites. Class L guidelines now restrict vehicles to existing routes of travel. The rare plants are not found on the traveled routes. Protection of raptor nests from vehicle disturbance is based on a case-by-case analysis of the line of sight between the traveler and the nest. In most cases, nests proximate to the routes are high on cliffs and not in sight of the vehicles and are not threatened by recreational traffic. A route network using protective criteria for biological and cultural resources is more legally defensible than one designed without these environmental "sideboards".

6.3.32 Letter 215: Mr. Tom and Ms. Jeanne Wetterman

Response 215-1: Utilization levels (page 2). The proposed changes in utilization thresholds are based on both range condition and season of use. If an allotment were in good range condition, a 40% utilization threshold would apply for most range types. If an allotment is in desert tortoise habitat this utilization cap is the same maximum utilization threshold presently required under the current biological opinion; thus, no change. Only those allotments considered that were in poor to fair range condition would be affected. Lowered utilization thresholds for those allotments may affect those operations, however changes to range management are needed to improve rangeland health.

Response 215-2: Range condition (page 2). Rangeland health assessments were conducted on the Cady Mountain and Cronese Lake Allotments in 1999 and 2000. The assessment concluded that all of the Cronese Lake and most of the Cady Mountain Allotment were achieving fallback standards. A re-assessment of these allotments using a new national protocol, and using the proposed regional standards contained in the DEIR/S is necessary to determine the current rangeland health.

Response 215-3: Basis for production thresholds (page 3). The current requirement is 200 lbs/acre. The DEIR/S proposes a slight increase to 230 lbs/acre. This increase is based on recent field studies conducted by Dr. Hal Avery of the United States Geologic Survey, Biological Research Division. Dr. Avery's work (concluded in 1998) indicated that forage competition occurs between cattle and tortoises in those dry years when less than 230lbs/acre of forage is available. BLM would conduct production studies when dry spring conditions warrant studies and make a determination that the threshold had or had not been met in cooperation with the lessee.

Response 215-4: East and West Mojave (page 3). The studies by Dr. Avery were conducted in the East Mojave on an allotment in the Ivanpah Valley. Although there are differences in climatic patterns between the east and west Mojave Desert these studies represent the only empirical data to date on cattle and desert tortoise foraging research. The West Mojave Plan proposes that similar research be conducted in the West Mojave (see prescription LG-19).

Response 215-5: Tortoise numbers (page 4). The current status of desert tortoise populations in the West Mojave is discussed by the Draft EIR/S beginning in Chapter 3, at page 3-67. The studies and surveys discussed in Chapter 3 are not allotment specific, but rather regionally within the West Mojave. They do indicate areas of higher and lower tortoise densities, location of die-offs, and other information gathered during recent on-the-ground field surveys.

6.3.33 Letter 219: Mr. Pedro Indacochea

Response 219-1: DWMA boundary (page 1). The current policy of allowing grazing between the DWMA boundary and Shadow Mountain Road, subject to conditions set forth in the 1994 and 2002 USFWS biological opinions, will be retained. DWMA boundary changes are not necessary.

6.3.34 Letter 225: Ms. Jaqueline Campo, Victorville Industrial Minerals, Inc.

Response 225-1: Comment 2. We appreciate your assistance in defining the existing disturbed lands in the Oro Grande area by submitting your Plan of Operations. We have used this document to prepare reference maps of existing disturbance, which help define the areas containing different fee amount ratios. The VIM site is depicted as disturbed.

Response 225-2: Comment 3. The rainy year requirement for rare annual plants is used to bring the best scientific information forward into the conservation strategies. Surveys in a dry year, and sometimes in an average year, depending on the timing of rainfall, can result in substantial underestimates of numbers of plants or acres of occupied habitat.

In the scenario that you describe, a discretionary project could always proceed outside a conservation area by paying the mitigation fees. Surveys for tortoises and burrowing owls may be necessary. In the Brisbane Valley, where your mine is located, the "survey incentive" area applies, and the mitigation fee amount ratio is different. A mine expansion could always proceed by paying the 2:1 or 0.5:1 mitigation fees. However, a survey could result in no fees or a lower fee amount ratio. To qualify for the reduced fees or no fees, the survey would have to be completed in a rainy year.

The BLM will census the acreage and numbers of plants within the Mojave Monkeyflower Conservation Area over time (M-49) by performing botanical surveys in rainy years. Results from surveys within the Conservation Areas are likely to provide additional information on habitat preferences, population stability and occupied acreage. The Implementing Authority will compile the results of other botanical surveys in the survey incentive area, in the OHV open area (M-47) and on BLM Land Tenure Adjustment exchange lands (M-48). These findings may lead to changes in the conservation area boundaries via adaptive management (AM-45). Within the mining area, establishment of a mitigation bank could lead to the elimination of requirements for surveys (AM-47).

Response 225-3: Comment 4. Thank you for your clarifications and explanation. We will accept the revised language by deleting the word "minor" in the second sentence and the words "with additional disturbance" from the third sentence.

6.3.35 Letter 228: United States Marine Corps, Marine Corps Air Ground Combat Center

Response 228-1: Pisgah Crater (page 1). The boundary of the Pisgah ACEC has been modified so that it conforms more closely to the location of the biological resources that the ACEC has been proposed to protect. The western third of the lands proposed for ACEC status in the Draft EIR/S would not be included in the ACEC, while additional lands to the northeast would be added. This would reduce the length of the boundary between the ACEC and the MAGTFTC by half, a modification that should resolve MAGTFTC's concerns.

Response 228-2: Cleghorn Lakes (pages 1 and 2). A conservation area for bighorn sheep adjacent to MACTFTC is not a component of the West Mojave Plan's conservation strategy.

Response 228-3: Open routes (page 2). The route network adjacent to the base has been reconsidered. The designation of many of the routes you refer to would be changed to limited.

6.3.36 Letter 231: San Diego Gas and Electric

Response 231-1: Mitigation fees, paragraph 1 (page 1). Utility maintenance activities are already defined by Table 2-8 as exempt activities and uses from fees; see the fifth bullet in that table; please see also language in prescription DT-11, regarding utility construction and maintenance. The text has been revised to indicate the plan's application to all utility maintenance rather than "SCE" activities.

Response 231-2: Mitigation fees, paragraph "a" (page 2). See Response 231-1.

Response 231-3: Existing biological opinions (page 2). The existing biological opinions would remain in effect except where specifically overridden by provisions of the West Mojave Plan. The primary measure in the West Mojave Plan that overrides existing biological opinions is use of the mitigation fee amount ratio, which would replace the Management Oversight Group formula for areas of new disturbance within desert tortoise habitat.

Potential conflicts between existing take authorization and new authorization given under the West Mojave Plan are more likely to occur with existing biological opinions than with Section 10(a) permits. This is because there are hundreds of biological opinions and only a dozen Section 10(a) permits. Additionally, most projects authorized under Section 10(a) are already developed, so terms and conditions governing project construction are no longer applicable.

Most biological opinions were relevant to a single action within a specific timeframe. These actions, such as installation of a pipeline, were governed by terms and conditions that are no longer applicable now that the pipe is installed. Other terms and conditions apply to routine maintenance, emergency spills, and other post-construction activities. These terms and conditions would not be affected by new measures identified in the West Mojave Plan. It is not likely that the USFWS will issue memoranda programmatically changing existing opinions. It *is* likely that the USFWS would make necessary changes as existing opinions are amended. The BLM may also need to revise existing stipulations as projects and uses (i.e., grazing) are reauthorized. Existing opinions may allow for annual take of tortoises, which is in addition to and separate from take authorized under the plan.

Response 231-4: MAZ Utility Access (page 2). The decision tree considered the needs of utilities, as well as administrative and other concerns. Where commercial access needs were identified, such access was provided except in the case of direct conflicts with sensitive resources.

Response 231-5: Impacts adjacent to established roads (page 2). Comment noted.

Response 231-6: Desert tortoise take-avoidance measures (page 3). To address this concern, the following wording has been added to Section 2.2.4.2.1. "Revegetation is customarily applied to those portions of a given right-of-way that are not within the designated access road. Revegetation is typically applied to those portions of a newly disturbed right-of-way that are adjacent to the official access road. Access for maintenance and normal operating

procedures is generally provided for along the access road, not in adjacent areas where revegetation would be appropriate."

Response 231-7: Homeland security (page 3). The suggested language has been added to the text of Chapter 1, at Section 1.5.2.

6.3.37 Letter 236: County Sanitation Districts of Los Angeles County

Response 236-1: Point 1 (pages 1 and 2). We have revised the boundaries of the Alkali Mariposa Lily Conservation Area and deleted the interim conservation areas. We do not agree that mitigation requirements for impacts to biological resources constitute a significant impact to health and human services.

Response 236-2: Point 2 (page 2). The current process in the 0.5 to 1 areas that you are referring to requires you to obtain CDFG clearances for the land before development can take place. This can take considerable time and the investment of relatively large sums of money. The West Mojave Plan replaces this with procedures that are intended to reduce the typical time and fees associated with this type of clearance. Table 4-35 compares current and proposed costs. One of the key benefits to the plan is to reduce costs imposed by current procedures in those areas that have relatively small occurrences of endangered species.

Response 236-3: Point 3 (page 2). The Implementing Authority will acquire private lands within conservation areas from willing sellers using accumulated mitigation fees and other funds that become available. The interim conservation areas for alkali mariposa lily have been eliminated from the West Mojave Plan. Boundaries of many of the conservation areas are subject to adjustment, either expansion or contraction, based on monitoring and adaptive management. Discretionary development is allowed within a conservation area subject to payment of 5:1 mitigation fees and the 1% limitation on allowable ground disturbance within the Habitat Conservation Area by jurisdiction.

Response 236-4: Point 4 (page 2). It is not the intent of the West Mojave Plan to limit access to existing utilities and their associated corridors. Utility easements that involve ground disturbance are allowed within conservation areas subject to payment of 5:1 mitigation fees and the 1% limitation on allowable ground disturbance within the Habitat Conservation Area by jurisdiction. Your comment will be passed on to the GIS staff to verify your corridors have been properly located on utility maps. While maintenance of utilities is allowed, we hope the County Sanitation District educates their employees as to the proper procedures for working within these conservation areas. We will also pass these comments on to the Implementation Committee so that working relationships can be formed with the utility companies located with in the plan boundaries.

We do not have procedures for recreation easements, but BLM has designated open routes of travel on public lands within many of the conservation areas. For conservation areas entirely on private lands, a public access plan for hiking trails or roads could be developed after sufficient land is acquired to manage the area effectively.

Operation and maintenance of facilities within utility easements would be subject to the management plan for each conservation area. The primary measure is avoidance and minimization of impacts to the species that the conservation area serves to protect. Establishment of additional utility easements would be based on allowable ground disturbance, as described above.

Response 236-5: District 14 facilities plan (page 2). Thank you for sending us the District 14 2020 Facilities Plan and EIR and for meeting with us to discuss the land use issues. The mitigation fees are based on an average price of land within the Habitat Conservation Area. Therefore, even assuming your project required 1,105 acres of new ground disturbance within a conservation area, the mitigation fee would be substantially less than $22.1 million. We have revised the boundaries of the alkali mariposa lily conservation area and believe that the new boundaries are more compatible with your expansion plans. We also understand that the expansion project will begin acquisition and construction prior to adoption of the West Mojave Plan and HCP.

Response 236-6: Undisturbed habitat islands (pages 2 and 3). Although isolated populations of rare species often result in extirpation within habitat "islands", this is not the case with alkali mariposa lily in most areas in and near Lancaster. The undisturbed lands remaining within the urbanizing area is designated as an incidental take area for alkali mariposa lily.

Response 236-7: Existing conditions within AML conservation areas (page 3). We used the botanical survey data that you provided to revise the boundaries of the alkali mariposa lily conservation area. Many of the plant locations you detected were within the area we had previously designated. Removal of the interim conservation areas recognizes the difficulties of establishing protection for rare plants within the urbanizing and fragmented lands in Lancaster.

We will use the result of monitoring to adaptively manage the Alkali Mariposa Lily Conservation Area. This includes adjustment of the boundaries, either by expansion or contraction. A relatively precise boundary is needed now in order for the wildlife agencies to evaluate the effectiveness of the conservation strategy for this species.

Response 236-8: Establishment and management of AML conservation area (page 3). See Response 236-1.

Response 236-9: Allowed land uses within conservation areas (page 3). See Response 236-4.

Response 236-10: Impacts on facility operation (page 3). The West Mojave Plan is not intended to analyze impacts to specific facilities, but to assess potential impacts of the conservation program overall. The Plan would have no limitations on operations or maintenance of existing facilities, such as for access to Piute Ponds. We assume that operations and maintenance of the pipeline facilities and travel among the facilities does not normally involve ground disturbance on lands now proposed as a conservation area.

6.3.38 Letter 237: City of Los Angeles, Los Angeles World Airports

Response 237-1: Comment 1 (page 1). The West Mojave Plan recognizes the Significant Ecological Areas established by Los Angeles County, including Little Rock Wash and its amended boundaries. The Plan has no independent authority over land use within the SEAs, which is solely the repsobnsibility of Los Angeles County. At the time the Board of Supervisors considers adoption of the conservation measures in the Plan, different mitigation measures may be adopted from what is required now. We have not proposed any changes for Little Rock Wash.

Response 237-2: Comment 2 (page 1). Table 2-7 lists criteria that were applied to identify disturbed habitat area, the lands for which to lowest mitigation fee ratio would apply. Please note that prescription HCA-34 (Draft EIR/S page 2-50) exempts the conversion of habitat to agricultural uses from the payment of the mitigation fee.

Response 237-3: Comment 3 (page 2). See Response 181-46.

Response 237-4: Comment 4 (page 2). The discussion of disturbed acreage and average land value in Section 2.2.2.2 has been clarified. Please also see Chapter 3, Section 3.4.1.5, Study Area Property Valuation.

Response 237-5: Comment 5 (page 2). Comment noted.

6.3.39 Letter 238: Mr. Paul Condon

Response 238-1: Easements (page 2). RM 3004 was designated as open. It is not closed. Route RM 3008, the active waterline right of way, was changed from closed to limited by the BLM's June 30, 2003 Decision Record.

Response 238-2: Minimum requirements (page 2). BLM will provide private landowners with reasonable means to access private properties when the only access available is obtained by crossing public land. Where an "open" route is not available, administrative permission to cross public lands may be obtained from the appropriate BLM field office. Access will be provided only if public resources and lands will not be unduly damaged by such access. We have found that there is usually little problem allowing landowners to cross public lands to reach these properties, and encourage the commentator to work with the BLM field office to ensure that such access is available.

Response 238-3: El Paso CAPA bullet one (page 2). Protection of raptor nests will be determined on a case-by-case basis during the El Paso Collaborative Access planning process. Seasonal closure is not necessary in cases where the nesting raptors are out of the line-of-sight of vehicle travel or are located safely away from vehicular disturbance, such as high on a cliff face. In some locations seasonal closures may be utilized as a protective measure.

Response 238-4: El Paso CAPA bullet (page 2). The bulleted statement on Draft EIR/S page 2-143 was intended to indicate the use of the "limited" designation for routes of travel. For the water sources, including guzzlers, vehicle access would be limited to authorized users for maintenance, surveys, enhancement or other activities requiring a vehicle to park at the water source. The collaborative process will result in discussions and guidelines on how the use of the limited route designation would be applied. We will change the bullet describing this designation to the following: "Protection of riparian habitat at water sources, both natural springs and artificial water sources (guzzlers) by use of the limited designation for routes of travel."

Response 238-5: Section 2.2.6 bullet one (pages 2 and 3). Comment noted. It is not the responsibility of the federal government to sign private lands. BLM is willing to work with private landowners, however, to resolve specific concerns and to minimize trespass on private lands. Please work with the appropriate BLM field office to address any such issues.

Response 238-6: Section 2.2.6.9, paragraph 2 (page 3). The route modification language has been changed to incorporate your suggestions.

Response 238-7: Appendix C, Red Mountain (page 3). The tabular error referred to by the commentator was corrected for the Draft EIR/S. Please see the appropriate tables in Appendix R.

Response 238-8: Minor modifications (pages 3 to 5). The "one mile" route maintenance limitation has been eliminated from this section. We encourage you to work with BLM Ridgecrest Field Office staff to make any minor corrections in the network during the implementation of the route network in the Middle Knob subregion.

Response 238-9: Inconsistencies (pages 3 to 5). We have reviewed the tables and maps and have attempted to correct inconsistencies.

Response 238-10: Financial implications (pages 5 and 6). The Implementation Tasks, Priorities and Costs table in Appendix C has been revised to include additional information concerning funding and implementation schedules.

Response 238-11: 1985-87 routes (page 6). See Respose to Topical Comment 5a.

Response 238-12: Access to unpatented mining claims (page 6). The BLM's Ridgecrest Field Office has developed a procedure that addresses access issues for mineral development and exploration. To assist both the BLM Rangers and mining claimants, this office issues "route letters" to qualified claimants. These letters approve access on closed routes, on a need-to-enter basis. This procedure does not require a land use planning decision to be implemented; therefore, no change in the CDCA Plan or modification of the proposed West Mojave Plan is necessary.

Response 238-13: Best science (page 7). Every effort was made to include the latest available information in all assessments for the plan. Dr. William Boarman served as scientific advisor to the planning team. In many instances, he recommended additional materials for

review as the Draft EIR/S was being developed. Dr. Boarman also developed the threats analysis that became an important part of the planning process. Much of Chapter 3 is devoted to reporting the latest available information, including the spatial distribution of threats (i.e., OHV impact areas, older and newer die-off regions, grazing areas) on threats to tortoises. In its earliest draft, Dr. Boarman's threats analysis did rank threats, but this ranking was dropped from later versions of the analysis. The University of Redlands has made the most recent attempts to show spatial distributions of threats, but they have not ranked them in order of severity. Most recently, the Desert Tortoise Recovery Plan Assessment Committee (DTRPAC) concluded that the synergistic effects among various threats makes it difficult to determine a cause-and-effect relationship for any one threat.

Peer reviewed information was only one source of available data that was useful to the planning process. The best available tortoise biologists collected sign count data. Ed LaRue and Peter Woodman led survey crews during each of the three years, using standard methods to consistently collect data on tortoise occurrence and human disturbances. There have been hundreds of focused desert tortoise surveys performed as per the USFWS protocol issued in 1992. These data were essential in determining the general occurrence and distribution of tortoises throughout the urbanizing portions of the planning area. They were used to update the current range of the desert tortoise based on the best available information. Though not peer reviewed, these data sources are collected according to specific methodologies and protocols, and are important in determining the current statuses of tortoises and human impacts. Finally, these materials are used in addition to peer-reviewed information, which is also discussed in the document.

Response 238-14: Mitigation fee (page 7). See Response 60-11.

6.3.40 Letter 239: United States Environmental Protection Agency

Response 239-1: Comment 1. The language referred to by the commentator (on page4-188 of the Draft EIR/S) has been clarified to indicate that the statement refers to new water developments, and established water developments that lend themselves to re-design or re-location. The language has also been added to the analysis of Alternative A.

Mitigation measures are developed at the conclusion of the rangeland health assessment process (an implementing action), and are tailored to specific situations unique to that allotment or areas within the allotment. Such measures will be developed when rangeland health assessments are completed.

Response 239-2: Comment 2. Prescription DT-26 establishes a head-starting program, with an initial site adjacent to the BLM's Fremont Peak permanent study plot. If this proves successful, a larger-scale program could be pursued.

Race corridors would not be located within tortoise DWMAs, and seasonal restrictions would be applied to other events. Prescription HCA-40 states that no vehicle speed events would be allowed within tortoise DWMAs. The West Mojave Plan proposes to eliminate the remaining segment of the Barstow to Vegas race course that was not eliminated by the BLM's NEMO plan,

a segment located within the Superior-Cronese tortoise DWMA. Alternative A has been modified for the Final EIR/S to change the designation of the Johnson Valley to Stoddard Valley competitive event corridor to a "connector route." Competitive events and races would no longer be allowed to use this corridor, which crosses the Ord-Rodman tortoise DWMA. Prescription HCA-41 imposes seasonal restrictions on dual sport recreational events.

6.3.41 Letter 244: Lounsbery Ferguson Altona & Peak LLP

Response 244-1: Database (page 3). The Desert Tortoise Management Oversight Group has established Technical Review Teams to discuss disease management. Desert Tortoise Council (Dr. Kristin Berry) and CDFG (Becky Jones) assembled pertinent experts on disease at the Soda Springs workshop included in references 71 through 84 given in the comment letter. LaRue, who was responsible for writing most of the discussion on diseases in the Draft EIR/S, attended this three-day workshop. Similarly, LaRue attended all of the DTC Symposia, which are cited throughout the comment letter, where disease issues were discussed.

It *is* imperative that a well-formulated disease management plan be implemented. Final development of such a plan would require assembling national and international experts. The West Mojave Implementing Authority could contribute funding for the completion of a regional disease management plan by pertinent experts. The effort would focus on tortoises in the West Mojave, and be coordinated through the USFWS, and perhaps the Management Oversight Group. The panel of experts would be responsible to determine immediate research and monitoring needs, which would be funded by the Plan.

Response 244-2: Relationship to other plans (page 3). The discussion of cumulative impacts in Chapter 4 has been modified to include an overview of other regional plans.

Response 244-3: Alternative A (page 4). Economic impacts related to public lands recreation are discussed in the Draft EIR/S in Chapter 4, on pages 4-96 to 4-97, and in Appendix N at pages 66 to 68. No significant adverse impacts on desert tourism or its economic contribution to local communities were identified.

The motorized vehicle access network has been designed to meet public recreation needs. In fact, the route network "largely meets public recreational and commercial motorized access needs" (Draft EIR/S at page 4-111). The redesigned network accesses popular recreation sites more effectively than the previously existing 1985-87 network. We have tried to ensure that the access network can access recreation venues identified by the 2002 route field survey. In fact, the great majority of inventoried venues are within 100 feet of designated open routes, including: 931 of 1,369 campsites; 272 of 379 scenic views; 77 of 100 staging areas; and 28 of 37 trailheads. These figures have been incorporated into the FEIR/S analysis.

Response 244-4: New ACECs (page 4). The 14 new ACECs are proposed to protect a variety of listed and unlisted species. The reasons for their establishment are summarized in Chapter 2, as on Draft EIR/S page 2-9. The ACECs are established on public lands, and follow the goals and objectives for species protection given in Table 2-1. These goals and objectives were formulated after reviewing the Current Management Situation, a separate supporting

document published in 1999. The species accounts, also published separately, reviewed the threats to each species and provided biological standards that would provide adequate conservation. These two reference documents are summarized in Chapter 3 of the Draft EIR/S for each species.

The review of species conservation needs with the Wildlife Agencies resulted in the publication of the Evaluation Report, a document describing management and conservation recommendations that would secure and enhance survival and recovery of each of the covered species. The Supergroup and Task Groups reviewed and modified these recommendations to come up with the final recommended actions contained in the West Mojave Plan. The 14 new ACECs and the modifications to four existing ACECs were a result of these reviews.

Response 244-5: Biological transition areas (page 4). The Biological Transition Areas (BTA) concept has been the subject of a great deal of focus with regards to their function and purpose. After reviewing the comments submitted on the Draft EIR/S and conducting further study of these areas, proposed BTAs have been eliminated or incorporated into the adjacent DWMAs. This determination has been based on a specific review of each individual BTA in light of the conservation criteria of the Habitat Conservation Areas. Appendix X contains the analysis of each BTA and their final disposition. This approach will fully protect the transition areas that are appropriate for conservation and eliminate the areas that do not provide meaningful conservation for the covered species within the Plan that may be present within the adjacent DWMAs.

Response 244-6: Desert tortoise component of HCA (page 4). The BLM's habitat categories are not based on habitat quality, as stated, they are based on various management goals. It is BLM's current goal to manage Category I Habitat to maintain stable, viable tortoise populations, to help increase populations, and to protect existing habitat. Altogether, the management prescriptions of the West Mojave Plan are intended to protect habitat values and thereby provide a healthy environment for tortoises throughout DWMAs. As such, it is accurate to say that DWMAs are to be managed to achieve the goals for BLM Category I Habitat.

Response 244-7: Redesignation of Owens Lake (page 4). This area represents a large block of BLM multiple use class M lands that are in close proximity to sensitive MGS populations in the Coso Hot Springs area. We believe that the management policies of Class L are more compatible with the recognized importance of this area to MGS conservation than those that guide Class M lands. In addition, Class L lands, unlike Class M, are not available for disposal, a status for these lands that also is more compatible with the long-term use of this area for MGS research.

Response 244-8: Special review areas (pages 4 and 5). Two SRAs were proposed relative to tortoises, one in Brisbane Valley and one at Copper Mountain Mesa. These "pockets of habitat" are subject to development pressures and multiple human uses. Brisbane Valley is heavily impacted by OHV traffic and sheep grazing; habitat conditions continue to deteriorate; and land ownership patterns are not conducive to conservation management. Copper Mountain Mesa is dotted with small "homestead" buildings, and is slowly being developed for residential purposes. Here, tortoise populations are exposed to urbanizing pressures that will ultimately

extirpate regional populations. Although the SRAs are physically isolated from conservation areas, they are very much exposed to the types of human uses that may spread disease (i.e., where captive animals escape) or eliminate habitats (i.e., new residential development).

Response 244-9: Rand Mountains (page 5). The following supplemental information is provided to show how the four amendments to the CDCA Plan would benefit tortoise conservation. The first, second, and fourth amendments would result in designations that carry inherent protections that would benefit resident tortoises in the western Rand Mountains. The ACEC would be managed for the desert tortoise and other rare biological resources. Class L carries protections relative to OHV events, designation of routes, and restrictions on certain types of developments that serve to protect habitats essential to the tortoise. As given above to comment 244-6, BLM's goal would be to maintain stable, viable populations within Category I Habitat areas. Restricting vehicle travel to existing, designated open routes is consistent with conservation goals to minimize the impacts to tortoise populations that are directly attributable to vehicle access.

The statement is accurate that disease may undermine the efficacy of other protective measures to conserve the tortoise. However, it does not justify abandoning other proactive management programs that protect habitats or help repatriate decimated populations. Reducing human impacts to tortoise habitats would serve to provide future tortoise generations with sufficient habitat in which they could recover. The Desert Tortoise Natural Area is a good example of where disease (or some other factor) decimated the population in the 1980's and early 1990's. Yet, West Mojave Plan data from the late 1990's and early 2000's show that tortoises are being recruited within the DTNA perimeter fence, where habitats have been relatively protected from human uses (i.e., OHV activity and sheep grazing). Even assuming that disease is the direct cause of most tortoise declines, habitat protection is the best solution to insure that future tortoise generations (which may even be disease resistant) have suitable habitat available for recruitment. Habitat protection is a necessary component of headstarting. It would be a waste of effort and money to repatriate tortoises into areas that continue to be heavily impacted by human uses, such as OHV activity, sheep grazing, military maneuver areas.

Response 244-10: Afton Canyon (page 6). The Environmental Assessment prepared for the Afton Canyon Natural Area Management Plan in 1989 addressed the resource and recreation issues that you raise. The West Mojave Plan implements the 1989 Management Plan approved alternative by amending the CDCA Plan so that the activity-level plan is in conformance with the CDCA Plan and the Federal Land Policy and Management Act.

Response 244-11: Species conservation measures (page 6). Protection of habitat for the desert tortoise and Mohave ground squirrel would result in relatively large areas of conservation management for these two species. Included within the boundaries of the new ACECs for these species are the ranges of several other covered species. Management measures benefiting the tortoise and Mohave ground squirrel also benefit the other species covered by the habitat "umbrella".

Criteria for an animal to function as an umbrella species were not developed. Protection of the tortoise and Mohave ground squirrel was a primary goal of the West Mojave Plan. After their habitat was defined and Conservation Areas developed, the other species falling within the protected habitat were assessed to determine if they were covered by the umbrella. In cases where they were not, the conserved lands were expanded to fit the other covered species needs, or additional Conservation Areas were proposed to provide species protection.

Response 244-12: Dual Sport events (page 6). Dual sporting events on BLM-managed lands are currently regulated by a biological opinion issued by the USFWS to the BLM. Therein are speed restrictions in critical habitat, clear statements prohibiting cross-country travel, and seasonal restrictions, among others. We contend that dual sport events result in minimal impacts to the desert tortoise and critical habitat *because* these restrictions are already in place and functioning. If these events were suddenly not regulated so that they occurred in the spring, with no speed limits through critical habitat, or any requirement to remain on the route, it is likely that the events would result in significant environmental impacts.

Response 244-13: Proactive tortoise management programs (page 7). See Response 244-1.

Response 244-14: Fencing, culverts, and disease transmission (page 7). See Response 271-4. There are no data to suggest that closing OHV trails will eliminate barriers to disease and thereby promote the spread of disease. Tortoises are encountered in even the most heavily used military maneuver corridors, which are not absolute barriers to tortoise movement. Closing roads will result in fewer known threats (i.e., crushing, poaching, vandalism, collecting, shooting) to tortoises. Stress related to noise, vibration, and human encounters would be minimized in those areas where roads are closed. Closing roads will not promote spread of disease.

Response 244-15: Landfills (page 7). Dr. William Boarman based the five-mile distance from landfills on observations made during his raven studies at Edwards Air Force Base and elsewhere. Ravens can certainly fly more than five miles over time. Ric Wiliams (pers. comm. to LaRue 2003) recalled ravens tagged at Edwards being observed in the Tehachapi area. The five-mile distance, in concert with better refuse cover and handling (i.e., transfer stations) would, collectively, minimize raven subsidization at landfills.

Response 244-16: Raven control measures (page 7). There are numerous non-lethal measures given in Dr. Boarman's raven management plan. Measures DT-30 through DT-35 (pages 267-2-68) are all aimed at minimizing the amount of food and water available to ravens. Dr. Boarman referred to these as "habitat alteration measures," which would not employ lethal measures. In the last year, the USFWS has taken the lead in planning for raven management in the West Mojave and elsewhere. CDFG (Becky Jones) and USGS (Dr. Boarman) have assisted this effort.

Response 244-17: Take-avoidance of MGS (page 7). Specific threats to the Mohave ground squirrel are discussed at length in the September 2000 Biological Evaluation, which was drafted in support of the West Mojave Plan. Specific threats to the Mohave ground squirrel are

discussed on 10 pages in Section 3.3.3.5 (Draft EIR/S pages 3-154 through 3-163). Habitat protection is considered the number one priority in Mohave ground squirrel conservation. The many habitat protection measures identified for tortoise conservation in DWMAs would provide direct benefits to Mohave ground squirrel, as well.

Response 244-18: Bats and washes (page 8). The species account for California leaf-nosed bat, which is included on a compact disk attached to this Final EIR/S, indicates that this bat forages in desert washes within three miles of a roost.

Stakeholders in Task Group 1 discussed protection of desert wash vegetation within three miles of significant roosts for California leaf-nosed bats on March 6, 2002. It was decided that a field review of open routes involving OHV interests, CDFG staff, and BLM staff would be conducted, and determinations of substantial damage would be made at that time. Routes could be closed, limited, or re-routed to avoid desert wash vegetation. This measure would be applied adaptively to foraging areas near newly detected roosts. No damage to desert wash vegetation near existing significant roosts for California leaf-nosed bat are known. The Final EIR/S text has been clarified to indicate that this review would occur.

Response 244-19: Prairie falcon (page 8). Through an agreement with CDFG, the specific locations of prairie falcon nests are not revealed in order to protect the nest sites. The species accout for prairie falcon reviews threats to this bird and studies of human disturbances and noise and the resulting recommendations for a protective zone around the nest sites.

The route designation process utilizing the decision tree incorporated information on prairie falcon nest sites. The recommended route network does not cause excessive disturbance to the known nests. Most falcon nests are within designated Wilderness or are located on steep cliff faces in relatively remote mountainous regions and are not subject to disturbance by human activities, including OHV use. Very few routes were closed because of the potential for disturbance to known falcon aeries.

Response 244-20: Mojave fringe-toed lizard (page 8). The Mojave fringe-toed lizard is found in generally discrete populations separated from each other. Several of these are relatively small and are threatened by human disturbance. The West Mojave Plan would strive to protect these populations so that this species does not become threatened like the related Coachella Valley fringe-toed lizard. Protection measures for that species have cost millions of dollars. The Current Management Situation document indicates that few areas now exist to provide adequate protection for the Mojave fringe-toed lizard.

This lizard is a vehicle-sensitive species, as indicated on Draft EIR/S page 3-178. Some of the dune areas it inhabits are BLM Open Areas, such as the Dumont Dunes and the Rasor Open Area. The West Mojave Plan would limit vehicle use on the remaining conserved habitat. The MUC changes from U to L are proposed so that the BLM lands will be retained in federal ownership and the routes of travel will be limited to designated open routes. The prohibition of vehicle travel in occupied habitat does not represent a dramatic reduction in public use. Impacts to recreational users of the route designations, which take into account the fringe-toed lizasrd habitat, are provided in Section 4.2.4.

Response 244-21: Barstow woolly sunflower (page 8). The Barstow woolly sunflower is a narrow endemic plant whose entire range lies within the West Mojave Plan area. Roads have fragmented its habitat, and off-road travel is a threat, as noted in the Draft EIR/S on page 3-182. The proposed new ACEC, or core reserve for this species, contains many open routes that are part of the proposed network in the Fremont and Kramer subregions. Travel through this area to the popular destinations is maintained.

Response 244-22: Parish's phacelia (page 8). The Parish's phacelia grows on the playas southwest of Coyote Dry Lake and would be crushed by vehicle travel during the spring. Travel at other times, especially wet periods would damage the playa habitat. Potential impacts to recreation are discussed in Section 4.2.4 of the Draft EIR/S and in the discussion of the Coyote subregion, as in Tables 4-44 and 4-45.

Response 244-23: White-margined beardtongue (pages 8 and 9). The limited range of this plant in the West Mojave mandates conservation measures for the washes and settling basin where it occurs near Pisgah. Restriction of vehicle travel in the occupied habitat does not limit access to the region, which has many utility roads and other open routes. Map 55 illustrates open routes in this area. Only three very short spur routes were designated closed to protect white-margined beardtongue.

Response 244-24: Threats to tortoise in study plots (page 9). Comment noted.

Response 244-25: Alternative F (page 9). The Draft EIR/S presented a detailed analysis of Alternative F. Please see pages 4-216 to 4-245 of that document.

Response 244-26: Tortoise density declines – reasons (page 11). The percentages given at the bottom of Draft EIR/S page 3-117 can be summarized as follows. Three earlier studies have reported as little as 2.9% of the planning area to be disturbed by OHVs (Chambers Group, Inc. 1990) and as much as 70% (Dodd 1986). West Mojave Plan data collected in the Fremont-Kramer and Superior-Cronese DWMAs showed that cross-country tracks were encountered on 53% of 1,572 transects surveyed. OHV tracks were found on 95% of the sites surveyed for tortoises in 78 urban areas (see Table 3-19 on Draft EIR/S page 3-97). During vegetation/human disturbance surveys in 1998 (see Draft EIR/S pages 3-154 and 3-155), 47% of 310 transects encountered OHV tracks. As such, recent data show that about 50% of the study areas in proposed tortoise and MGS conservation areas had been impacted by cross country travel, not 2.9%.

One can also see (Table 3-26, Draft EIR/S page 3-128) that there were 591 square miles of vehicle impacts attributed to open areas, 213 square miles outside open areas, and 107 square miles attributed to residential vehicle impacts. Cumulatively, 988 square miles of *above average* vehicle impacts was observed, and most of this is attributed to vehicle impacts in BLM open areas, around California City, Edwards Bowl, and east Sierra slopes.

The Desert Tortoise Recovery Plan Assessment Committee (DTRPAC) recently published its draft assessment, which discussed the cause-and-effect relationship between a given impact and resulting declines. They concluded that synergistic effects among threats make it

very difficult to determine why individual tortoises or populations have died. The comment is not correct in stating that URTD is known to be responsible for declines in the Rand Mountain and California City areas. The health of animals is often dependent on the health of their environment. It is plausible that motorcycle and sheep grazing damage in the area contributed to the declines in concert with or in addition to the occurrence of URTD (or other factors). In either case, these impacts continue to occur in a place where no juvenile recruitment was noted. The only recruitment was observed inside the DTNA fence line, where motorcycle traffic and sheep grazing have been largely excluded.

Response 244-27: Baseline data (bottom of page 11 and top of page 12). All available data support the following generalizations. (1) Tortoises have been mostly extirpated from urban and agricultural regions such as the Victor Valley and Antelope Valley, respectively. (2) Dr. Berry's data in the West Mojave show declines in tortoise numbers on nine study plots continuously between 1979 and 1986. (3) As reported in the Draft EIR/S (page 3-76), the most recent data support the conclusion that these declines were regional, differentially affecting the northwest (California City/Rand Mountains) area, where the most substantial declines were documented. (4) If URTD or some other unknown factor eliminates animals but does not affect habitats, there is potential for future generations to repopulate protected landscapes. Recent West Mojave Plan and distance sampling data reveal that 13 of 14 subadult tortoises found in a 350-square mile survey region, west of Highway 395 and north of Highway 58, were inside the DTNA fence. The only other subadult tortoise was observed within one mile of the DTNA fence line.

Response 244-28: Sign count surveys (page 12 bullets). The commentator is directed to Section L.5, Appendix L, Volume 2 where there are nine pages of data and other information given relative to the percentage figures cited in the comment letter. One can see that of 1,033 carcasses found, cause of death was determined for 104 of them. Of these 104 carcasses, vehicle crushing was identified as the cause of death for 28 tortoises, or 27% of the 104 carcasses.

The nine bulleted questions are addressed in the following nine responses.

(1) Sign count surveys were conducted in 1998, 1999, and 2000-2001.
(2) Sign count surveys were restricted to the West Mojave. Distribution of transects is depicted on Map 3-6 (page 3-80) of the Draft EIR/S.
(3) When carcasses were found, the 17 tortoise biologists were asked to determine both the time since death and, where possible, the cause of death. Biologist Peter Woodman maintains a collection of slides and carcasses, which were shared with the surveyors, that show diagnostic markings for certain types of death. Carcasses crushed by vehicles show characteristic, straight-line fractures that are associated with the trauma of being crushed by rubber tires.
(4) Tortoises were not subjected to necropsies. Rather, the biologists collect available information (sometimes including photographs) for each carcass as it was found in the field.
(5) The distribution of crushed tortoises is shown on Map 3-12 (Draft EIR/S page 103). It appears that 2 of the 43 carcasses mapped were immediately adjacent to paved roadways, including one along Highway 247 and one along Highway 395. The other 41 carcasses (95%) were not obviously associated with paved roads.

(6) Crushed carcasses were spread throughout the survey area, but they appear to be associated with vehicle impact areas. One can compare the distribution of crushed carcasses in Map 3-12 with the distribution of vehicle impact areas in Map 3-14. It appears that there is an overlap between crushed tortoises and heavy use areas, particularly in Johnson Valley, the Rand Mountains, Edwards Bowl, and residential impact areas west of Silver Lakes and Helendale. No crushed carcasses were found in most of the Ord Mountains, which corresponds to lower vehicle impact regions.
(7) The University of Redlands maintains the actual field data forms for both sign count surveys and distance-sampling surveys. BLM also has most of the sign count data in GIS format. The USFWS Nevada Field Office maintains the original data for all distance-sampling surveys.
(8) Raw data would occupy hundreds of pages, and would be much too large to include in an appendix. There is also the concern of releasing exact tortoise location data to the public that could facilitate tortoise poaching or collection.
(9) The data are maintained by the BLM, USFWS, and University of Redlands.

Response 244-29: Carcasses (pates 12 and 13). The Draft EIR/S disclosed that a total of 1,033 carcasses were found during the 1998-2002 sign count survey (page 3-110). The text also referred the reader to Appendix L, which contains a detailed Carcass Observation Analysis at Section L.5.

Response 244-30: Washes (page 14). The EIR/S does not deduce that OHV use in washes kills and disorients tortoises; those were the conclusions of Jennings, whose work is being cited in the Draft EIR/S. The verbatim quote from Jennings (1993) follows:

> These results suggest that off road vehicles (ORV) may negatively impact tortoise populations in at least two ways. First, ORV users with a propensity for driving in washes may disturb relatively rare species of plants that are restricted to washes. Second, if tortoises are utilizing washes for navigational purposes, then "pseudowashes" created by ORV users may disorient tortoises attempting to locate preferred foods or burrows.

Response 244-31: Impacts on tortoise habitat (page 14). The Draft EIR/S concludes that "designating and implementing a motorized vehicle access network in DWMAs … is the single most important management action that could be implemented to minimize the widest variety of known human impacts." Table 4-27 explains how a designated network, once it is implemented, would benefit tortoise conservation. That analysis is grounded on the extensive field work and studies described at length by the Draft EIR/S; please see pages 3-116 to 3-133, Appendix J at pages 43-51 and 57-58, and Appendix L at Section L.5.

Available data do not show that 93% of the planning area is free of OHV impacts; rather cross-country travel was observed on about half of all transects surveyed. When polygons were created for "no observed vehicle impact" areas, only five such areas were identified. Two of these were in the northern part of the Ord-Rodman DWMA, one was in the Mud Hills area, one was in northern Superior Valley, and the fifth such area was near the Cronese Lakes. Cumulatively in these five areas, there were fewer than 30 square miles observed where no vehicle impacts were encountered.

Dr. Boarman's threats analysis identified 22 different threats. The direct effects of many of these impacts are more or less spatially restricted to certain regions. As such, tank maneuvers are mostly contained within Fort Irwin and Twentynine Palms Marine Corps Base. Urban areas are associated with desert cities, particularly along the southern boundary of the planning area. Authorized cattle and sheep grazing are largely restricted to BLM allotments. Paved roads are restricted to several major transportation corridors. Dumping and feral dogs are mostly proximate to urban development. Unlike most of these disturbances, dirt roads and cross-country travel are ubiquitous throughout the desert, restricted in certain areas (e.g. wilderness areas, DTNA) and a serious impact in others (e.g., western Rand Mountains, Edwards Bowl).

Of all the measurable human impacts threatening tortoises, dirt roads and cross-country travel are the most widespread impacts affecting proposed tortoise conservation areas. The El Mirage, Johnson Valley, and Stoddard Valley open areas are all adjacent to proposed DWMAs. WMP data clearly show that vehicle impacts are not contained within these designated recreation areas. Table 3-26 (Draft EIR/S page 3-128) shows that there were 238 square miles of above average vehicle impacts in areas *adjacent to* designated open areas, so the impact is not contained within areas designated for that use. As given in the Draft EIR/S (page 3-128) there were 804 square miles of heavy impact areas not directly associated with open areas, and another 107 square miles associated with residential vehicle use. Importantly, these are regions of above-average impacts; OHV impacts were observed to a lesser degree in a much larger area.

Cumulatively, these data show that vehicle impacts are among the most widespread threats affecting tortoises at this time. Though disease and drought have been implicated, there is no direct evidence that they have resulted in regional declines. Ravens affect only a small portion of tortoises (i.e., those of less than 110-mm carapace length). Crushed tortoises have been found in designated open areas, in high vehicle impact areas, and elsewhere. As a known threat to tortoises with a measurable distribution in conservation areas, appropriate management of vehicle access is still considered the most promising means of eliminating numerous known impacts to tortoises and habitats.

Response 244-32: Impacts on Mohave ground squirrel (page 14). Contrary to the comment, the Mohave ground squirrel *is* listed as a threatened species by the California Fish and Game Commission. Several years ago, Dr. Glenn Stewart petitioned the USFWS to federally list the Mohave ground squirrel. The USFWS declined to list the species, in part, because it was already listed by the State as threatened.

The Mohave ground squirrel has been observed crushed by vehicles on both dirt and paved roads (LaRue, personal observation, Draft EIR/S pages 3-158 and 3-159). Closing routes is intended, in part, to create larger blocks of native habitats that are not exposed to vehicle impacts. Casual use on designated open routes is not likely to create the same effects as high-speed motorcycle use over open terrain in adjacent areas. However, available evidence (e.g., Goodlett and Goodlett 1991) shows that cross-country travel is heaviest alongside roads and diminishes with distance.

Response 244-33: Impacts on cultural resources (page 15). Please see Responses 182-44 and 305-6.

Response 244-34: Direct impacts on public recreation (page 15). The commentator asserts that the plan would "reduce by 66% the number of trail-miles open to OHV use." This statement is incorrect. On June 30, 2003 BLM designated approximately 2,265 miles of routes within the redesign area as open. This is an increase in the number of trail-miles open to OHV use: the preexisting 1985-87 network included only 1,575 miles of open routes (draft EIR/S at page 2-139). Outside of the redesign area, no significant adjustments to the existing network were made. The network designated on June 30, 2003 was comprised of approximately 5,098 miles in total, compared to the preexisting 1985-87 and ACEC network of 4,260 miles. Despite the increase in route mileage, the network is more compatible with sensitive species needs: it leaves relatively more routes open in the more mountainous terrain favored by recreationists and relatively fewer routes open on the flatter terrain and bajadas important to sensitive species. Access to popular recreation sites would, in fact, be enhanced (see Response 244-3).

Response 244-35: Competitive OHV courses (page 16). The West Mojave Plan would close or reclassify only those corridors that cross tortoise DWMAs. The Plan would eliminate the segment of the Barstow to Vegas Race Course that is located within the planning area. Because the eastern three-quarters of the course was eliminated by the NEMO Plan in December 2002, the West Mojave section is no longer viable: what remains is an isolated segment located almost entirely within the Superior-Cronese DWMA. The Plan would replace the Johnson Valley to Stoddard Valley Competitive Events Corridor with a "Connector Route," which would provide participants in open area events with a designated non-competitive route for traveling between the Johnson Valley and Stoddard Valley open areas. The Johnson Valley to Parker Competitive Events Corridor would be retained: while it borders the Ord-Rodman DWMA, its alignment does not cross it (unlike Barstow to Vegas and Johnson Valley to Stoddard).

Response 244-36: Cumulative impacts on public recreation (page 16). The cumulative impacts of the proposed action on public recreation were discussed in the Draft EIR/S on pages 134 and 135. We have reviewed that discussion and, where appropriate, we have added additional descriptive materials in response to your suggestions.

Response 244-37: Trail closures and disease transmission (page 16). The comments are based on several faulty assumptions, as follows. First, with the possible exception of the Pinto Mountain area, there are no known disease-free populations of tortoises in the West Mojave. As reported in the Draft EIR/S (page 3-109), 13 URTD-symptomatic tortoises were observed during the 1998 to 2002 surveys, and were located in three of the four DWMAs, excluding Pinto Mountain.

Eliminating roads will not facilitate spread of disease. The comment wrongly assumes that "…route closures, however, may remove some of these barriers, leaving 'naïve' subpopulations vulnerable to infection and death." Removing the center median from Interstate 15 may have this effect, but closing dirt roads will not. Route closures would result in eliminating dirt roads from distant parts of the desert. So-called "spaghetti bowls" result from concentrated use of vehicles that denude habitat over many acres. However, such areas are not barriers to tortoises. Tortoises have been observed in the central parts of the southern maneuver corridor at Fort Irwin, where they have entered unsuitable habitat from adjacent areas of suitable

habitat. Such areas are often referred to as "sinks." Although roads, staging areas, and maneuver corridors are all types of sinks, they are not impassable barriers to tortoises.

6.3.42 Letter 245: Jeffer Mangels Butler & Marmaro

Response 245-1: The clarifications you requested have been incorporated into the text.

6.3.43 Letter 246: Mr. Freddie Iturriria

Response 246-1: BLM staff along with the lessee will jointly make a determination on utilization levels for key shrub species. Once this determination has been made a decision would follow based on the results of the utilization determination.

Response 246-2: The restrictions proposed for use of key perennial shrubs would only be implemented if utilization levels exceed 25 and 30 percent. If sheep are dependent on perennial shrubs as their primary source of forage then that current operation is no longer considered ephemeral. This type of scenario would only occur late into the ephemeral season when sheep are normally removed from public land.

Response 246-3: Those sheep allotments that the West Mojave Plan proposes to cancel are located within in proposed tortoise DWMAs. The primary purpose of a DWMA is recovery of the desert tortoise. Based on biological opinions, the USFWS has already determined that sheep grazing is incompatible with recovery strategies for the desert tortoise. There are no long-term projections on the de-listing of this species. The public lands contained in these sheep allotments would be declared unsuitable for grazing under the proposed CDCA Plan amendment as long as the desert tortoise is listed.

6.3.44 Letter 271: County of Kern, Planning Department

Response 271-1: Desert tortoise recovery plan (page 2). Dr. Boarman's threats analysis was used as the primary document to determine the types of impacts threatening tortoises. The Current Management Situation document helped identify the shortfalls and gaps in current management that the West Mojave Plan is intended to rectify. The Desert Tortoise (Mojave Population) Recovery Plan was one of hundreds of available documents used to determine potential solutions for threats affecting tortoises in the planning area. Others included management agreements between various agencies, biological opinions issued by the USFWS, and directives from the Management Oversight Group and Desert Managers Group. Recognized experts were also brought in to discuss specific issues. For example, Dr. Hal Avery and Dr. Jeffrey Lovich of USGS discussed grazing impacts and Dr. Kristin Berry of USGS discussed survey methodologies. USFWS, CDFG, and BLM staff biologists were consulted to discuss the policies and programs of those agencies.

The collective information provided in these documents and by these individuals was used to draft the Biological Evaluation, which was released for the tortoise in September 1999. In more than 50 public meetings over the next two-and-a-half years, individuals discussed more than 100 management prescriptions intended to conserve the desert tortoise. As a result, some

prescriptions were dropped, others added, and many modified to accommodate local interests while still providing for meaningful tortoise conservation. Given this process, it is not straightforward to identify those measures that did or did not originate in the recovery plan. If there are significant differences between West Mojave Plan management and newly identified recovery actions, the West Mojave Plan could be amended to reflect those new approaches. Necessary changes would occur through CDCA Plan amendment(s), new directives from the Management Oversight Group and/or Desert Managers Group, and new USFWS biological opinions.

Response 271-2: Page ES-4 (page 3). The planning team, USFWS, and CDFG staff developed the biological goals for desert tortoise conservation. Evaluators used the recovery plan's recommendations to develop the goals. Biological goals were first published in the Biological Evaluation (BLM 1999), discussed during public meetings, and reiterated with modifications in the Draft EIR/S. With several exceptions, all goals were taken directly from the recovery plan. Goal 2, Objective 2.2 recommends achieving 10 females/mi^2, which differs from the recovery plan's recommendation to achieve 10 tortoises (no gender) per square mile. Goal 4 combines a number of recovery plan actions to address various impacts. However, not all recovery actions identified in the 1994 plan have been incorporated into the West Mojave Plan. Several examples include mineral withdrawal throughout the Fremont-Kramer DWMA, removal of cattle grazing from all DWMAs, and maintaining a two-mile wide corridor between DWMAs.

Response 271-3: Page ES-5 and 6 (page 3). The comment contends that DWMAs are doomed to failure if disease and raven impacts are not effectively managed. The comment fails to recognize that any habitat conservation plan must have means to protect both animals *and* habitat, hence *habitat conservation* plan. There is an extensive raven management plan proposed in Chapter 2 (Draft EIR/S pages 2-66 through 2-70), which was provided by Dr. Boarman. The disease management program (Draft EIR/S page 2-62 and 2-63) is less comprehensive due to the small amount of information currently available to develop such a program. However, taken together, the conservation strategy is intended to protect habitats so that if disease or some unknown factor extirpates animals from a given region, the habitat will be sufficiently protected to facilitate repopulation through natural or facilitated means. Therefore, the best strategy is judged to be one that protects both animals and habitats.

Response 271-4: Page ES-6 and 7 (page 3). The Draft EIR/S suggested that if spread of disease was responsible for the older and newer die-off regions, it may be appropriate to close culverts along fenced roads as one means of isolating disease-free population segments. This was not a specific recommendation, as the evidence needs further scrutiny to ascertain if disease was likely responsible for the patterns observed. Thus far, there has been no input from the University of Gainsville, Florida or University of Redlands, which were requested to provide input.

Goal 3 may be accomplished by manual translocation of gravid female tortoises from one DWMA to another where there are impassable barriers between DWMAs, such as between the Ord-Rodman DWMA and all others. This action would fit within Objective 3.2, which is to "…include provisions for major highway crossings." At this time, there is too little information available to support any major changes to the goals and objectives. New means of isolating

disease-free populations and maintaining genetic connectivity should be implemented as such measures are identified.

Response 271-5: Biological transition areas (page 2). The Biological Transition Areas (BTA) concept has been the subject of a great deal of focus with regards to their function and purpose. After reviewing the comments submitted on the Draft EIR/S and conducting further study of these areas, proposed BTAs have been eliminated or incorporated into the adjacent DWMAs. This determination has been based on a specific review of each individual BTA in light of the conservation criteria of the Habitat Conservation Areas. Appendix X contains the analysis of each BTA and their final disposition. This approach will fully protect the transition areas that are appropriate for conservation and eliminate the areas that do not provide meaningful conservation for the covered species within the Plan that may be present within the adjacent DWMAs.

Response 271-6: Special review areas (page 2). You are correct: there are no special review areas in Kern County.

Response 271-7: Rand Mountain – Fremont Valley management plan (page 3). The clarification you requested has been made.

Response 271-8: Allowable ground disturbance (page 4). The clarification you requested has been made.

Response 271-9: Mitigation fee (page 4). Section 2-34 explains how the mitigation fee will be imposed on various size parcels. This section has been clarified to explain the method for calculating the fee on parcels between one acre and 2 ½ acres in size. The mitigation fee for residential development on parcels between one acre and 2 ½ acres in size will be based on either one acre of development, that represents the typical amount of direct disturbance for rural residential land use on 2 ½ acres parcels within the Plan area, or the actual amount of grading associated with the individual residential project, whichever is greater. Commercial and industrial development will pay a mitigation fee for the actual acreage to be disturbed in the same manner as development on parcels greater than 2 ½ acres in size.

Response 271-10: Alkali mariposa lily (page 4). Detailed boundaries of the proposed Alkali Mariposa Lily Conservation Area will be delineated during discussions with the Wildlife Agencies and Kern County as the Implementing Agreement is completed. We have revised the boundaries of the Alkali Mariposa Lily Conservation Area in Los Angeles County and eliminated the interim conservation areas. The revised boundaries are shown on Map 2-11a of the Final EIR/S.

Response 271-11: Barstow woolly sunflower (page 4). Detailed boundaries of the proposed North Edwards Conservation Area will be delineated during discussions with the Wildlife Agencies and Kern County as the Implementing Agreement is completed. We have revised the boundaries of the North Edwards Conservation Area to eliminate the approved expansion of the U. S. Borax. We will also delete the communities of Boron and Desert Lake

from the proposed conservation area. The revised boundaries are shown on Map 2-12a of the Final EIR/S.

Response 271-12: Desert cympoterus (page 4). See Response 271-11.

Response 271-13: Bendire's thrasher (page 5). Bendire's thrasher is no longer a species for which take authorization is sought (page 2-80). Management of BLM lands, including those in the Kelso Valley of Kern County, will be the primary tool to achieve conservation.

Response 271-14: Kelso creek monkeyflower (page 5). We have been unable to determine which agency has acquired the occupied habitat of Kelso Creek monkeyflower in Kern County, but believe it to be the State of California.

Response 271-15: Yellow-eared pocketmouse (page 5). The recent land acquisition in Kelso Valley will benefit this species. All of the area acquired for conservation is within the range and suitable habitat for yellow-eared pocket mouse.

Response 271-16: Alkali mariposa lily (page 5). We no longer believe that a hydrological study is necessary to finalize the boundaries of a Conservation Area for the alkali mariposa lily.

Incidental take would be allowed anywhere in Kern County according to the fee amount ratio of the West Mojave Plan. The modeled habitat for alkali mariposa lily near Rosamond is based on the vegetation map showing saltbush scrub.

Response 271-17: Barstow woolly sunflower (page 5). We have added a survey for annual plants to be undertaken by the Implementing Authority during wet years. This survey, funded by mitigation fees, will include the North Edwards Conservation Area and will assist in establishing final boundaries. New text is found under Measure M-1 at the beginning of Section 2.2.8.

Response 271-18: Reveal's buckwheat (page 6). One of the known locations of Reveal's buckwheat is on private land within the Jawbone-Butterbredt ACEC. Reveal's buckwheat has been dropped as a covered species in the Plan because of insufficient information. The text in Table 2-11 is incorrect.

Response 271-19: Livestock grazing (page 6). There would be no changes to the proposed regional standards and guidelines for grazing as a result of regulatory changes related to Sustaining Working Landscapes (SWL). Even if some aspects of SWL were to be applied in allotments addressed by the West Mojave Plan, the regional standards would still need to be met.

Response 271-20: Voluntary relinquishment (page 6). The voluntary relinquishment discussion has been revised to incorporate the steps necessary to comply with BLM's grazing regulations, including separate planning and grazing decisions, as well as protest and appeal rights.

Response 271-21: Motorized vehicle access network (page 7). A final route designation decision was made by BLM on June 30, 2003. That decision amended the CDCA Plan so that it now includes a network of open and limited access motorized vehicle access routes. The Final West Mojave EIR/S proposes some adjustments to this network, considered in response to public comments on the Draft EIR/S.

As a component of BLM's land use plan, the route network can be modified through the Bureau's planning process. Relatively minor adjustments can be made quickly through the plan modification process. More significant changes may require a formal land use plan amendment, including full NEPA compliance. Thus the findings of the desert tortoise recovery plan review could be incorporated into future adjustments of the route network, if warranted.

6.3.45 Letter 275: Gerald E. Hillier, Public Land Users Services

Response 275-1: In the 1991 biological opinion on ephemeral sheep grazing in desert tortoise habitat (1-6-91-F-18) the USFWS concluded, as it continues to conclude, that ephemeral sheep grazing simply is not compatible with the recovery of the desert tortoise. Because the primary objective of the DWMA concept is recovery of the tortoise, and the USFWS has determined that ephemeral sheep grazing is not compatible with this objective, the West Mojave Plan does not propose to allow ephemeral sheep grazing within DWMAs. Prescriptions LG-26 and LG-27, finding certain grazing allotments no longer available for sheep grazing, and modifying the boundaries of others, implements this intent.

Cattle grazing would continue to be allowed throughout the planning area. It is unlikely that the adoption of a rotational grazing strategy for cattle would markedly improve tortoise conservation. It would constitute, however, a more radical departure from current management of cattle grazing than the strategy proposed by Alternative A. Accordingly, a rotational grazing alternative has not been considered by the EIR/S.

6.3.46 Letter 276: Cushenbury Mine Trust

Response 276-1: Carbonate ACEC access. We appreciate the involvement of the Cushenbury Mine Trust in development of the Carbonate Habitat Management Strategy and in explaining the nature of its mineral and fee interests in the area of the proposed ACEC. The access routes within the proposed ACEC have been designated as limited. The Trust is an authorized user of all routes within the ACEC, since all of these routes are used for Trust property or mine claim access.

6.3.47 Letter 277: Dave Fisher

The proposed prescription (LG-13) that would require 230 lbs/acre of ephemeral forage before perennially based grazing could occur relates to the nutritional needs of the desert tortoise. Avery (1998) concluded that production levels below this threshold (230 lbs/acre) resulted in competition occurring between cattle and tortoises for green ephemeral forage. Although cattle are authorized under a perennial grazing lease they will and do consume ephemeral forage if available.

This prescription is considered a protective measure under FESA that mitigates for nutritional stress to the tortoise that may occur in low production years. This management action only applies to DWMA where recovery of the tortoise is the primary objective.

There is nothing in the proposed grazing strategy that would "deprive" a permitee or licensee of the use of grazing privileges and is not in conflict with the federal Administrative Procedures Act. This claim has been asserted before (CBD Settlement Agreement) and time has proven that this assertion was simply not true. The proposed grazing strategy has been formulated to allow livestock grazing to continue, even in DWMAs, while applying protective measures that would facilitate progress towards recovery of the desert tortoise.

6.3.48 Letter 278: California Department of Fish and Game

Response 278-1: Cover Letter (Fully Mitigated). The issue of whether the proposed conservation strategies would satisfy CESA's "fully mitigated" standard will be considered in detail in the final habitat conservation plan and during the development of the Implementing Agreement.

The relative value of the mitigation ratios relies on the database of species locations. The ratio is highest where concentrations of species are found and lowest in disturbed areas with few recent records. This is the biological basis for mitigation in the Plan.

The absolute value of the ratio was established by consensus of the stakeholder groups. The values were based on a review of existing mitigation practices by both the private sector and BLM and by a review of other Habitat Conservation Plans and Natural Community Conservation Plans in southern California, Nevada and Utah. CDFG representatives were present at these meetings. The local governments evaluated the merits of the incentive provided by a lower ratio for disturbed lands and the disincentive of a higher ratio in Conservation Areas.

We are not aware of any irrefutable justification for the absolute value of mitigation ratios. Many agencies, including CDFG, BLM, and local governments have used formulas or text rationale to impose different mitigation and compensation ratios. The formula used for tortoise compensation habitat, adopted by the Management Oversight Group, varies from 1:1 to 6:1, depending on the location of a project with respect to Category I, II and III tortoise habitat, critical habitat and other factors.

The concept of "no-net-loss" has been applied to mitigation ratios for wetlands and for upland habitats occupied by listed species, but flaws remain in their justification. This is because habitat lost to development is not replaced; instead other existing habitat is purchased. Purchase of habitat changes the ownership, but does not make more habitat available. Nearly all mitigation and compensation ratios based on purchase involve loss (including net loss) of existing habitat available to a species. Incorporating a criterion that compensation lands must be threatened by land use changes (development) does not alter the fact that habitat is lost. Some of the existing baseline acreage available to a species is lost in all cases where land purchase is utilized as mitigation, regardless of the value of the ratio.

Creation, restoration, or enhancement of degraded habitat can serve to replace habitat that is lost, and therefore may represent a logical use of ratios. In that case, a 1:1 ratio would serve to replace habitat lost to development. Every acre lost to development would be replaced by an acre of non-habitat that is created, restored or enhanced and made usable for the species.

Considering current practices, which vary from no mitigation to a ratio as high as 6:1 and the inevitable loss of habitat associated with all purchase compensation ratios, the proposal of the West Mojave Plan for mitigation ratios is reasonable. The 0.5:1 ratio used to generate fees on disturbed lands goes beyond the requirement for mitigation because these lands do not currently support the species. The 1:1 ratio recognizes that the open space value of the land remains, even though a covered species may not be present. The 5:1 ratio is applied within Conservation Areas, and recognizes that these lands are best used for conservation, while not preventing an owner from using the property.

The fee amount ratios in the Plan spread the financial burden across a broad sector of newly developing lands, all of which contribute to the conservation of higher-quality habitat. Further, the Plan relies primarily on management, including creation, restoration and enhancement, rather than acquisition of private land, to achieve the conservation goals. The program better satisfies the basic tenants of mitigation than does land purchase. Purchase as a primary mitigation strategy can deplete available financial resources, leaving little for improved and necessary management.

Response 278-2: Cover Letter (Adequate Funding). The Implementation Tasks, Priorities and Costs table in Appendix C.1 has been revised to include additional information on both the costs necessary to implement the West Mojave Plan, and the sources of funding to cover those costs. Please also see the response to Topical Comment 1.

Response 278-3: Cover Letter (Project Description). The areas proposed for incidental take include the full range of development activities on private land, including residential, commercial and industrial development that would be consistent with the general plans of each jurisdiction. The Plan is a regional-scale program, and the economic analysis in the EIR/S describes the projected growth in the plan area, and the rate and location of growth. This has been utilized to develop estimates of take as required by CESA and FESA, and which are portrayed in Table 2-33. This will allow CDFG to measure the adequacy of mitigation commensurate with the estimated take.

Response 278-4: Cover Letter (Affected Environment). Copies of the full species accounts have been included on the compact disk attached to this Final EIR/S. In addition, the species descriptions in Chapter 3 have been reviewed and modified where necessary to include important descriptive information.

Response 278-5: Cover Letter (Impact Analysis). Chapter 4 of the EIR/S describes the impacts of the Proposed Action and the six alternatives. We have reviewed the impact analysis and, where appropriate, augmented it to ensure that your concerns have been addressed.

Response 278-6: Cover Letter (Cumulative Impacts). The discussion of cumulative impacts has been reviewed and augmented with additional information where necessary to clarify the analysis; see Section 4.2.7. Please note that the discussion of impacts in the Draft EIR/S at Chapter 4 assumed utilization of lands recently transferred by Congress to Fort Irwin for military training purposes (see Table 4-1). Accordingly, the Chapter 4 analysis already considers the combined effects on the conservation of species and habitat of military use of these lands and adoption of the West Mojave conservation strategy.

Response 278-7: Cover Letter (Alternatives Analysis). Alternative D (Enhanced Ecosystem Protection) includes a number of measures that would lessen impacts on species other than the desert tortoise and Mojave ground squirrel. See, especially, prescriptions AD-21 through AD-26, which propose additional conservation measures specifically for the yellow-eared pocket mouse, Ninemile Canyon phacelia, Charlotte's phacelia, burrowing owl, gray vireo, San Diego horned lizard, and the five carbonate endemic plants. Many of the other programs suggested by that alternative have the potential to lessen impacts on special status species; see, for example, prescription AD-3, which changes additional public lands from multiple use class M to class L; higher mitigation ratios suggested by prescription AD-4; additional grazing restrictions proposed in Section 2.5.5; and motorized access restrictions considered by prescriptions AD-33 through AD-35. Many of the desert tortoise prescriptions suggested by this alternative also have the potential to lessen impacts on other species as well.

Response 278-8: Cover Letter (Mojave River). The Plan references the Mojave River adjudication and recognizes its intent to achieve and sustain specified groundwater levels designed to maintain the riparian habitat. We will alter the wording to indicate that no reliance for permit coverage is placed on this adjudication.

Conservation will include restoration of habitat within the floodplain, consisting of eradication of invasive riparian plants. Removal of invasive species followed by regrowth of native species has the potential to save water and increase the populations of listed and sensitive species. In combination with the riparian enhancement plan to be completed by CDFG under terms of the adjudication, these measures should achieve additional conservation over the present conditions in the Mojave River. Any lands that might be dedicated by a property owner for purposes of conservation could be recognized as open space by the jurisdiction in its general plan.

Response 278-9: Cover Letter (Implementing Authority). We concur; the local jurisdictions believe that a Joint Powers Authority is a viable organizational approach to implementing the plan. A JPA may have several advantages over other administrative structures and appears to be the favored approach at this time. It will be considered as the Implementing Agreement is finalized (see Chapter 1).

Response 278-10: Attachment 1 (1a). The overall aspect of the Plan is to identify the most important regions for conservation in the West Mojave and to designate these areas as the Habitat Conservation Area, consisting of the DWMAs and the individual Conservation Areas. Within these regions, biological surveys would continue to be required, except for Mohave ground squirrel. In addition, biological surveys would continue for selected species under

specified conditions, including burrowing owl, triple-ribbed milkvetch, desert cymopterus, alkali wetland plants and others. Other surveys to establish baseline numbers or discover new sites for covered species would be implemented, such as the raptor baseline surveys for prairie falcon and golden eagle, the alkali wetlands surveys, and searches for the little San Bernardino Mountains gilia.

The Plan utilizes the best location information available for the covered species. We recognize that many of the species, primarily plants, are relatively unknown with respect to site-specific data on their distribution. All of these cases involve remote areas unlikely to be developed, except for burrowing owl. In many cases, occurrence can be inferred or predicted from specific habitat requirements, such as soil types.

The local governments would utilize the West Mojave database to determine if and when biological work is needed for CEQA review of discretionary projects. This database of species occurrences and habitat parameters will be continually updated, so that as better information is developed on relatively unknown species, the need for additional survey work can be determined.

The Plan participants have agreed to expand the clearance surveys for desert tortoise to include all species potentially present (see prescription DT-13a). The biologist will report any covered species seen to the local jurisdiction so that potential take can be tracked by the Implementing Authority.

The Plan participants have also agreed to fund wet season surveys for the annual plants whose detectability is dependent on rainfall (see prescription P-1a). In unusually high rainfall years, the Implementing Authority will fund regional surveys to search for the covered plant species within suitable habitat throughout their known range.

Response 278-11: Attachment 1 (1b). BLM Action and Full Mitigation. BLM's California Desert Conservation Area Plan provides for the use of public lands in the Mojave Desert in a manner that enhances, wherever possible, the environmental values of the desert (amended CDCA Plan at page 6). Its Wildlife Element directs BLM to stabilize and, where possible, improve threatened and endangered species populations and their habitats through management and recovery plans developed and implemented cooperatively with CDFG and USFWS (amended CDCA Plan at page 29). The West Mojave Plan proposes amendments to the CDCA Plan that would assure the public lands are managed in a manner that meets the conservation needs of the species addressed by the West Mojave Plan. Those amendments include measures that commit BLM to enhancement of lands as needed for species management.

BLM's ability to conserve species and habitat would be substantially enhanced by the partnership the West Mojave Plan proposes to establish between BLM and local government. CDFG correctly states that BLM is already responsible for offsetting impacts caused by projects sited on public lands for which BLM issues permits, a responsibility the BLM already meets. But merely offsetting impacts is not necessarily the same as enhancing habitat and implementing proactive conservation programs. These can be accomplished only to the degree that funding can be obtained. The partnership between BLM and the local governments will ensure that more

funds are available to restore and enhance habitat within the conservation areas and improve the number and range of species.

The reasons for this can be appreciated by reviewing the revised Implementation Tasks, Priorities and Costs table in Appendix C and the funding assumptions upon which it is based. This table estimates the 30-year cost of implementing the plan to be approximately $60 million. Assuming federal funding continues at current levels, BLM would be able to contribute about 25 percent of these funds. The remaining 75 percent would be provided through other sources, primarily from the mitigation fee. As partners, the local governments and BLM would be able to implement the Plan to a degree that is far beyond the capabilities of any lone agency working in isolation.

The Implementing Authority would control these fees. This entity could be a Joint Powers Authority (as suggested by CDFG) or other appropriate interagency structure. It is not anticipated that the funds would be granted to the BLM; rather, the Implementing Authority, in collaboration with BLM, would determine how the fees could be applied to supplement federal expenditures. Fees could be used to implement conservation prescriptions, surveys, monitoring, and adaptive management tasks, as well as targeted land acquisitions.

The Implementing Authority will select the conservation entity that would hold newly acquired lands. CDFG's suggestions have value, and could be incorporated into the Implementing Agreement.

Response 278-12: Attachment 1 (1d). The habitat linkages between Portal Ridge and the Antelope Valley Poppy Preserve and between Joshua Tree National Park and Yucca Valley are not proposed for species protection, but for their ecosystem importance. This includes wildlife movement between the Antelope Valley and the San Gabriel Mountains.

The Big Rock Creek linkage is essential to the survival of the Mojave fringe-toed lizard at Saddleback Butte State Park because it would protect the fluvial sand transport system. Live-in habitat is not necessary for this corridor. Its basis is described in Section 2.2.4.9.1 of the Draft EIR/S on pages 2-84 and 2-85 and Section 3.3.7.1 on pages 3-178 and 3-179.

The Sierra Foothills Habitat Connector is established to provide connectivity between different parts of the range of the Mohave ground squirrel. It is described in the Draft EIR/S on page 2-13.

Response 278-13: Attachment 1 (1e). See Response 278-1.

Response 278-14: Attachment 1 (1f). The West Mojave Plan is not primarily a plan for acquisition of private land. It relies on improved management of public and private lands in a partnership between the BLM and local governments. Acquisition of private land essential to survival of covered species is a part of the conservation strategy for several Conservation Areas, but the majority of the mitigation fee funds will be spent on other programs, such as habitat restoration. Funds received from the state and federal governments may be used to acquire essential habitat. Partnerships with non-profit organizations may also contribute to acquisition.

Less than fee acquisitions (conservation easements) may be achieved via local development code compliance, such as in the Los Angeles County Significant Ecological Areas or in floodplains in all jurisdictions. In some locations, mitigation banks will be established.

The Implementing Authority will prioritize lands for acquisition from willing sellers based on several factors. The Final EIR/S will provide a more detailed set of criteria to be used in determining acquisition priorities. In addition, please see Map 2-6, which presents a general land acquisition strategy for lands within the planning area.

Response 278-15: Attachment 1 (1g). The Plan describes a number of habitat enhancement and restoration measures. Creation of larger undisturbed blocks of habitat by removal and rehabilitation of dirt roads not designated as open routes will reduce fragmentation and many forms of human and vehicular disturbance in the DWMAs. This consolidation of habitat will benefit a variety of covered species.

The Plan would adopt mine reclamation and revegetation standards for the carbonate endemic plants on the north slope of the San Bernardino Mountains, which are provided in Appendix S. The Plan would expand the eradication of invasive riparian plants in the Mojave River and other drainages supporting covered birds.

Measures to enhance populations by reducing mortality are included, such as construction of tortoise fencing along specified roads and highways, control of cowbirds in riparian habitats if needed and prohibiting travel on blowsand habitat of the Mojave fringe-toed lizard.

Response 278-16: Attachment 1 (1h). We concur with CDFG's observation that conservation must keep pace with habitat loss. A mechanism to ensure that this will occur will be included as part of the final plan and the Implementing Agreement, and is discussed in revised Section 2.2.3.3.

Response 278-17: Attachment 1 (1i). The monitoring and adaptive management discussion has been clarified. A new table has been prepared that lists, for each species, biological goals and objectives, monitoring programs, and adaptive management thresholds and measures; see revised Table 2-26.

The Implementation Tasks, Priorities and Costs table in Appendix C.1 has been revised to include additional information on both the costs necessary to implement the West Mojave Plan, and the sources of funding to cover those costs.

Response 278-18: Attachment 1 (2). Take avoidance measures have been reviewed to ensure that they do not include "permissive" language, and are measurable. Please note, however, than an environmental impact statement is not a decision document; it is our intent to change the "mays" and "woulds" to "wills" in the Record of Decision and the final Habitat Conservation Plan.

Response 278-19: Attachment 1 (3). The Implementation Tasks, Priorities and Costs table in Appendix C.1 has been revised to include additional information on both the costs necessary to implement the West Mojave Plan, and the sources of funding to cover those costs. Please also see the response to Topical Comment 1.

Response 278-20: Attachment 2 (1). Additional descriptive material concerning the general types of new ground disturbing activities that could occur in the planning area has been added to the text of the Final EIR/S, as well as the total acreage projected to be disturbed during the 30-year term of the plan throughout the planning area (approximately 90,000 private land acres out of a total of nearly 3 million acres of private land, and 5,000 acres out of a total of slightly more than three million acres of BLM lands); see Appendix C.

Response 278-21: Attachment 2 (2). Table ES-6 provides a summary of conservation and incidental take for each species, which can be evaluated for each alternative. Chapter 4 presents analyses of the types of impacts mentioned by CDFG. In response to CDFG's comments, Table ES-6 has been augmented to include an overview of this information. The executive summary also addresses areas of controversy.

Response 278-22: Attachment 2 (3). See Response 278-8.

Response 278-23: Attachment 2 (4a). Chapter 4 contains much of the requested information on impacts to each species. The Habitat Conservation Area was designed to protect the best remaining habitat for each species and for all species combined, and the remaining areas of incidental take generally contain the isolated, fragmented, or degraded populations and habitats of the covered species. In addition, Table 2-33 presents the acres conserved, and available for take, for each species addressed by the plan, for each of the seven alternatives.

Utilizing the economic forecasts of where urban development associated with population growth is expected, and compiling the acreage for these land uses, is a logical means of presenting the impact analysis. This compilation is the expected development within the incidental take area, and totals 95,000 acres over the thirty-year life of the Plan.

Impacts to wildlife habitat can also be evaluated by using the 1% limitation on new allowable ground disturbance in the Habitat Conservation Area. This allocation for disturbance is spread among the local jurisdictions and BLM; see Table 2-6.

Impacts on public lands generally limited by activity, consisting primarily of mining, utility projects, and rights-of-way. Outside the Habitat Conservation Area, BLM is not limited by acreage for activities it might permit. However, the CDCA Plan defines the major utility corridors, and the areas of highest mineral potential are known and illustrated in the EIR/S. In addition, BLM would do site-specific environmental analysis of each activity affecting plant or animal habitat on public land.

Response 278-24: Attachment 2 (4b). Only those impacts explicitly identified as significant are "significant impacts."

Response 278-25: Attachment 2 (5). Additional descriptive materials concerning funding and implementing the plan have been included in the Final EIR/S. Please see revised Appendix C.1, in the Implementation Tasks, Priorities and Costs Table. Mitigation fees were established considering relationships of land values, location of sensitive species habitat and disturbed areas; see Response 278-1. The EIR/S establishes the nexus between the mitigation fee and the conservation strategy, as documented by Chapter 3 and 4 of the EIR/S. This analysis meets the requirements of AB 1600, which directs local governments to demonstrate that a nexus exists between fees and the use of those fees. The final Implementing Agreement will summarize this nexus analysis. The fees generated are sufficient to fund the Plan's conservation strategy, as documented by Appendix C.1.

Response 278-26: Attachment 2 (7). Comment noted. Please see Response 278-6.

Response 278-27: Attachment 3 (1). Covered Species List. The list of species to be addressed by the Plan was based on wildlife agency compilations of threatened, endangered, vulnerable, and declining species. Criteria for inclusion on the list included the following:

- Species listed as threatened or endangered by the state and federal governments.
- Species proposed for listing by the federal government.
- Species designated as candidates for listing by the state and federal government.
- "Species of Special Concern" on the Department's "Special Animals" list.
- Plants included on the Department's "Special Plants" list.
- Plants and animals on the BLM "sensitive species" list.
- Plants included on List 1B or List 2 of the California Native Plant Society's *Inventory of Rare and Endangered Plants of California*.

The Supergroup approved the list of 100 plant and animal species to be addressed by the Plan in 1996. The USGS contracted with experts on each species, who prepared the species accounts for use in development of the Plan. The authors of the species accounts are provided in Final EIR/S Section 5.6.

On May 5, 1997 and April 3, 1998, botanist Sandy Hare submitted a list of plants and animals seen at Middle Knob and in surrounding areas. These records were examined, and those species found within the West Mojave Plan area were included. On September 1 1998, the California Native Plan Society submitted a list of fourteen rare plants within the West Mojave and requested their addition to the Plan list.

The West Mojave team prepared a baseline document called the *Current Management Situation of Special Status Species in the West Mojave Planning Area*, which was published March 31, 1999. This document detailed existing conservation measures in place for each jurisdiction for each of the 98 species. The *Current Management Situation* has been distributed to stakeholders and is available on the BLM web site.

Using the species accounts and the *Current Management Situation*, West Mojave Plan biologists met with the wildlife agencies to prepare an evaluation. The evaluation team reviewed all species on the Supergroup list along with the proposed additions. Twenty-one species were

dropped from the list and were not addressed by the Plan because of insufficient data, because they were being separately addressed by other Habitat Conservation Plans and Biological Opinions already in place or underway, because they were too common, or for other reasons. The Evaluation Report of September 22, 1998 discussed the reasons for retention or deletion of species from the covered species list.

Changes were made in the federal, state and CNPS lists between 1998 and now. The *Inventory of Rare and Endangered Plans of California* was revised in August 2001, and plants that were added to List 1B and List 2 were added to the West Mojave List if sufficient information was available to prepare conservation plans. Plants that were deleted from the earlier edition were deleted from the West Mojave list. Similarly, CDFG's list of "Special Animals" changed over time, and these changes were incorporated into the West Mojave list.

The final list of covered species was completed June 26, 2002. This list has been supplied to members of the Task Groups and Supergroup and all interested stakeholders since that time. As this list was reviewed by the local jurisdictions, a few additional changes were made, such as deletion of Kelso Creek monkeyflower, mountain plover and Bendire's thrasher from the request for incidental take coverage.

In response to comments on the West Mojave Plan, other species may be deleted from the request for incidental take coverage. Concerns expressed by CDFG have resulted in deletion of at least eight species because of insufficient information.

The preceding discussion has been incorporated into Chapter 1 of the Final EIR/S.

Response 278-28: Attachment 3 (2). Known populations. The term "known populations" is used to refer to species locations documented by biological surveys. Conservation of occurrences or populations is and will be based on the best judgment of what constitutes the boundaries of the species occurrence and its habitat.

Response 278-29: Attachment 3 (3). Biological goals and objectives. The biological goals and objectives reflect a statement of what outcomes are desired for conservation of a species. They have been modified in several specific cases to reflect concerns of CDFG. Table 2-1 has been revised accordingly.

Response 278-29a: Attachment 3 (4). Funding. The phrase "subject to available funds" has been deleted for all species proposed for state incidental take permits. Federal agency budgets are subject to annual appropriations by Congress and cannot be guaranteed or committed for the future.

Response 278-30: Attachment 3 (5). Directed acquisition. The majority of the funds will probably go toward conservation of the desert tortoise, since this is the flagship species of the Plan and since protection of tortoise habitat also provides conservation for several other species found within the same area.

Each species will be tracked for conservation and incidental take. These two parameters will be maintained in rough proportionality based on acreage.

The Implementing Authority will establish priorities for species conservation. Listed species and endemic species, such as plants with very restricted ranges, will receive the higher priorities for expenditure of funds. The present and current threats to a species will be evaluated as part of the prioritization.

Simultaneous conservation of several species is good planning and a more effective use of funds. In cases where rare plants, for example, can be conserved by a conservation action designed for desert tortoise protection, sites with multiple species values will receive a higher priority.

Response 278-31: Attachment 3 (6). Compensation fees. Appendix C, Exhibit C.1, presented a table summarizing implementation tasks, costs of each task and possible funding sources, among other information. Exhibit C.1 has been revised and clarified to include the following: (1) annual funds estimated to be available for implementing the West Mojave Plan and their source; (2) implementation priorities; and (3) a year by year implementation schedule, indicating funds available, tasks that could be accomplished given available funding and priorities. The table indicates the funds that would be available to implement each of the tasks, surveys, monitoring and adaptive management actions, and targeted land purchases called for by the plan's conservation strategy.

Response 278-32: Attachment 3 (7). Preserve design. The Plan does not incorporate "buffers" outside the conservation areas. All necessary habitat to support a species is included within the Habitat Conservation Area. The preserve design concepts were utilized to the extent necessary and feasible for a species-based Habitat Conservation Plan. In some cases, irreversible fragmentation has already taken place due to conflicting land use within the range of a species. In these instances, the conservation plan attempts to protect the best remaining large blocks of habitat.

Response 278-33: Attachment 3 (8). Adjustment of Conservation Area boundaries. Adaptive management allows for both the reduction and expansion of Conservation Areas. Lands would not be added or deleted without sufficient verification of their necessity and functionality for a conservation area.

Response 278-34: Attachment 3 (9). Mojave River. The Plan recognizes the benefits and potential deficiencies of the groundwater adjudication in the Mojave Basin. Language implying reliance on the adjudication will be removed from the Plan. Conservation measures to improve habitat for the ten covered species within the floodplain have been adjusted to reflect the importance of eradication of invasive riparian plants. Few projects that impact the riparian habitat are proposed and built within the floodplain because of existing wetland protection laws.

Response 278-35: Attachment 3 (10). Acquisition of water rights. Comment noted. The Plan identifies the Mojave River as a site where groundwater extraction may impede conservation. It notes that water diversions may affect the Inyo California towhee. The other wetland sites proposed for conservation do not have threats to the groundwater supply.

In most cases, the lead agencies do not have authority over water rights or usage, which is regulated by the water districts or the state Water Resources Control Board.

Response 278-36: Attachment 3 (11). Monitoring. The monitoring and adaptive management discussion has been clarified. A new Table 2-26 has been prepared that lists, for each species, biological goals and objectives, monitoring programs, and adaptive management thresholds and measures. This table replaces Draft EIR/S Tables 2-26 and 2-28.

The monitoring measures include a program of activities with several specific tasks to track the effectiveness of mitigation and conservation measures, in accordance with the programmatic EIR/S. The Implementing Authority in consultation with the wildlife agencies can develop additional details.

Adaptive management provision s of the Plan have been modified and expressed as a "if…then" format, so that readers will able to see what would take place to adjust to a given monitoring result.

The survey tasks have been deleted or modified to describe them as activities that would establish a species or habitat baseline. Future monitoring would then be compared to the baseline. We have several examples where activities other than population size and extent are monitored, such as OHV disturbance, exotic plant spread or decline, and availability of water. Ground and aerial photos will be utilized in cases where they could provide relevant information to monitoring and management.

Response 278-37: Attachment 3 (12). Adaptive management. Additional tasks have been placed into adaptive management for several species.

Response 278-38: Attachment 3 (13). Cumulative impacts. See Response 278-6. On Draft EIR/S page 4-132, the fourth sentence of the second paragraph ("monitoring and adaptive management aspects … would remain available") has been deleted.

Response 278-39: Attachment 4 (here and below). Owl-1. The first biological goal will be changed to "Prevent direct incidental take" so that it applies to all areas within the HCP where incidental take is allowed. The Plan would not authorize any direct mortality of burrowing owls.

Response 278-40: Owl-2. We believe a more appropriate and effective use of available funds would be to adopt the current conservation proposal The acreage of grassland within the planning area is miniscule, reflecting the fact that little of the preferred native habitat of the burrowing owl is present. A small proportion of the grassland is on public land. The majority of known sites for burrowing owl within the Plan Area are in or adjacent to urban areas. Baseline

data on quality and diversity of vegetation, as well as habitat tracking at urbanized sites is of little value.

The Implementing Authority would record and store new location records of burrowing owls as they are detected. Surveys will be conducted on potential development sites if they are within tortoise survey areas.

Response 278-41: Owl-3. Goal 2 will be revised as follows: "Protect and enhance known populations and habitat on public land". The following second objective will be added: "Evaluate the feasibility of establishing grassland preserves." The native grassland sites in the West Mojave are scattered and are small in acreage. No burrowing owl records are known from these areas. In order to establish a preserve for burrowing owls in native habitat, these sites will have to be examined, have potential threats identified, be surveyed for burrowing owls, and the potential for expansion by acquisition of private land evaluated. Explanatory text will be added in the final Proposed Plan and EIR/S to include these actions. If preserve establishment is feasible, adaptive management will be engaged to protect and manage the habitat.

Response 278-42: Owl-4. The mitigation ratio will not be changed for disturbed lands. If these lands are occupied habitat for burrowing owls and proposed for development, the owls will be protected from incidental take by relocation. Revenue projections indicate that sufficient funding will be generated from disturbed land mitigation fees to fund the West Mojave Plan's proposed program to establish, enhance and manage lands conserved for the burrowing owl.

Response 278-43: Owl-5. The West Mojave plan does not regulate agriculture. If agricultural lands harboring burrowing owls are proposed for conversion to development requiring a discretionary permit, the mitigation fees and take avoidance measures would apply.

Response 278-44: Owl-6. We cannot estimate the acreage of authorized "take" for burrowing owls, nor the number of nest sites that might be converted to other land uses. This is because of the sporadic distribution of this species. No mortality of burrowing owls would be authorized by the Plan. Incidental take and conservation for burrowing owl may have to utilize the number of individuals or nesting pairs as a metric.

Response 278-45: Owl-7. The Plan substitutes the educational program for focused surveys on disturbed lands. This program could be expanded with a broader public outreach so that burrowing owl locations in urban areas are identified prior to applications for development being filed.

Response 278-46: Owl-8. The term "abbreviated survey" means that the standard four visit protocol would not be employed. The biologist walking over a site to inspect for tortoise burrows would also look for burrowing owls, suitable burrows and signs of occupancy at burrows.

Response 278-47: Owl-9. The reference to CDFG in Rap 9 has been deleted. The Plan does not address development not requiring discretionary permits.

Response 278-48: Owl-10. Eviction is intended to be a minimization measure to prevent take.

Response 278-49: Owl-11. Active translocation is intended to bolster or establish burrowing owl colonies at some sites and is an emerging method of conserving this species. It could provide a potentially significant tool for conservation. We will work with CDFG to ensure that the language is specific enough to allow the jurisdictions to know their obligations. Potential translocation of the burrowing owl will be included as an adaptive management measure.

Response 278-50: Owl-12. If exclusion is utilized to prevent incidental take, it will follow CDFG's recommendations for evening or nighttime implementation.

Response 278-50a: Owl-13. See response 278-41.

Response 278-51: Owl-14. The Implementing Authority will evaluate the feasibility of acquisition for grassland preserves for the burrowing owl. See response 278-41.

Response 278-52: Owl-15. The Implementing Authority will rely on appropriate sources to compile sightings of burrowing owl from the sources mentioned. The education program can be expanded to include the general public, Audubon and birding groups and other interested parties. Los Angeles County imposes relatively thorough biological survey standards within Significant Ecological Areas. We have altered the objective for burrowing owls to include an evaluation of existing native grasslands within the West Mojave, and this may include baseline surveys.

Response 278-53: Owl-16. The baseline acreage for conservation and "take" of burrowing owl habitat is 13 acres per pair. The task of Rap 12 is to determine existing levels of conservation for the burrowing owl in DWMAs or other Conservation Areas. Additional habitat may be conserved in the native grasslands identified by actions of the new Objective 2. No mortality of burrowing owls is authorized by the Plan. "Take" within city limits is limited to exclusion or passive relocation. Relocation that is determined to be successful, i.e. the owls adopt a new burrow in secure habitat, will not be counted as incidental take.

Response 278-54: Owl-17. Task M-16 is intended to cover only lands likely to be considered for acquisition. We do not have a third biological goal for burrowing owl.

Response 278-55: Owl-18. We will add that language to Section 1.5.2 and in the introductory section on raptors in Chapter 2 (Section 2.2.4.7).

Response 278-56: Owl-20. Eviction is intended to be a take avoidance measure. It has been widely employed in southern California in order to prevent killing of burrowing owls. In some cases, passive relocation has included provision of alternate burrows. The success of these efforts has been variable, but low. Active relocation is an experimental technique that has met with some success for establishment of burrowing owls at alternate sites. Relocation generally is

not used for other species, but has been used for golden eagle. Artificial nest sites have been successfully established for osprey and peregrine falcon.

Response 278-57: Owl-21. The BLM and local government partnership has been addressed in response 278-1. Information on occurrences of burrowing owls in the subregions where routes of travel may be reduced will be compiled over time. The measures taken in this area will improve habitat for this species, though it may not be occupied habitat at present.

Response 278-58: Owl-22. The federal and state regulations on incidental take permits are explained in Section 3.1.4.5 and 3.1.5.3.

Response 278-59: Owl-23. If agricultural lands are acquired for protection of the burrowing owl, the use of pesticides and rodenticides will be evaluated.

Response 278-60: Owl-24. The Plan does not have any regulatory authority over retail use of rodenticides in urban or suburban areas. However, the educational program can address the issue of rodenticide use. The program described in the Draft EIR/S in Section 2.2.7 (pages 2-148 – 2-152) will include information on the burrowing owl and other raptors and their susceptibility to secondary poisoning from household rodenticides.

Response 278-61: Raptor 1. We are not aware of a substantial threat to raptors from exposure to toxic substances, except for lead. The Plan does not regulate agriculture, which may utilize herbicides, pesticides or rodent poisons. Disposal of other toxic substances, such as antifreeze or motor oil, is regulated by the state.

Ingestion of bullet fragments in carrion has been implicated as causing acute toxicosis to golden eagles in some areas. The source of the lead is primarily from deer hunting. The West Mojave Plan does not regulate hunting, and deer hunting is limited to the westernmost portion of the Plan area, such as the eastern Sierra Nevada Mountains. No measures have been proposed for reducing the level of hunting or changing ammunition. See the following references on this topic:

Bloom, P. H., Scott, J. M. Pattee, O. H., and Smith, M. R., 1989. Lead Contamination of Golden Eagles *Aquila chrysaetos* within the Range of the California Condor *Gymnogyps californianus*, pp. 481-482 *In* B.-U. Meyburg and R.D. Chancellor (eds.), Raptors in the Modern World, World Working Group on Birds of Prey and Owls, Berlin, Germany.

Harlow, D. L., and Bloom, P. H., 1989. Buteos and the Golden Eagle, pp. 102-110 *In* Proceedings of the Western Raptor Management Symposium and Workshop, Nat. Wildl. Fed. Sci. & Tech. Ser. No 12, National Wildlife Federation, Washington, D. C.

Response 278-62: Raptor 2. About 8% of the unincorporated Antelope Valley might be urbanized in the next 30 years, a loss of 40,000 acres of open space and agricultural lands to urban development out of a total of about 510,000. A total of 470,000 acres will remain, which represents a significant foraging area for ferruginous hawks. The text of the Final EIR/S has been clarified to include these figures.

However, electrocution of ferruginous hawks is a problem in other areas, and results in direct mortality. HawkWatch International examined 13,588 structures in Utah and noted 196 mortalities. The most common raptors and those with the largest wingspan were the most affected. The species electrocuted included golden eagle, common raven, red-tailed hawk, Swainson's hawk, great horned owl and ferruginous hawk. Power poles with specific unsafe configurations were responsible for most of the electrocutions. Ferruginous hawk is often seen perching on electrical distribution lines in the Antelope and Mojave valleys where the conductor spacing is less than the wingspan.

We will change the goal for ferruginous hawk as flows: "Minimize electrocutions". We will add these objectives: 1) Require raptor-safe electrical distribution lines for all new construction" and 2) "Identify problem poles on electrical distribution lines and retrofit as necessary".

Response 278-63: Raptor 3. The first goal for the golden eagle will be modified to "Preserve at least 90% of the baseline number of nesting territories." Preservation of a nest site on a transmission line or other unsafe structure may not be feasible or desirable. Because golden eagles may have several nest sites within a nesting territory, it is more important to protect the area where the alternate nests are located than the nests themselves.

We will add the following objective for the golden eagle: "Establish a new baseline number of nesting territories within five years of Plan adoption".

We will add the following second goal for golden eagle: "Minimize electrocutions." We will replace the objective with these objectives: 1) "Require raptor-safe electrical distribution lines for all new construction" and 2) "Identify problem poles on electrical distribution lines and retrofit as necessary".

There is no evidence that loss of foraging habitat for golden eagle is a threat.

Response 278-64: Raptor 4. We will add the following objective for the long-eared owl: "Minimize human disturbance at nest sites and communal roosts." The conservation program will incorporate language to provide for seasonal or permanent closure of routes that may cause disturbance and adaptive management that includes fencing, if monitoring shows the need.

Language will be added to the monitoring and adaptive management sections on the need to determine if great-horned owls are displacing or preying upon long-eared owls. Potential solutions are limited, and might involve destruction of great-horned owl nests.

Response 278-65: Raptor 5. There is no evidence that loss of foraging habitat for prairie falcon is a threat.

Response 278-66: Raptor 6. Comment noted. The Plan would not authorize mortality of any raptor. A citation to the California Fish and Game Code Section 3503.5 has been added to the text.

Response 278-67: Raptor 7. The development projections and overall incidental take area give an indication of foraging habitat that may be lost to raptors, although the areas used will vary with each species. For example, see response 278-62.

Response 278-68: Raptor 8. If the local government jurisdictions seek incidental take permits for raptors, additional detail will be provided in the HCP and application for a 2081 permit. Loss of nest sites would only take place where development is approved at a nest site of one of the covered species, which is relatively unlikely. The removal of a nest from an electrical transmission line, removal of an unsafe nest tree, or development of a mine site in a remote area are possible examples of a nest removal in the non-breeding season.

Response 278-69: Raptor 9. See responses 278-62, 63, 65 and 67.

Response 278-70: Raptor 10. Designation as a Key Raptor Area provides BLM planners with the information that an area has importance to raptors on a national basis. The species of raptors for which a Key Raptor Area is designated are then given extra consideration in BLM environmental reviews. The designation does not contain specific measures, but is a planning feature. The West Mojave Plan acknowledges the Key Raptor Area designation by limiting routes of travel that might impact raptor nests and by requiring monitoring to insure their continued functionality.

Response 278-71: Raptor 11. Measure Rap -2 states that no development would be allowed within ¼ mile of an occupied golden eagle, prairie falcon or long-eared owl nest. This applies to both siting of a development or mine and to construction. Development or mines could be approved under the Plan if the line-of-sight between the development and the mine were obscured.

The primary reference on effects of blasting in mining operations used for the 410 foot standard was:

Holthuijzen, A. M., Eastland, W. G., Ansell, A. R., Kochert, M. N., Williams, R. D. and Young, L. S. 1990 "Effects of Blasting on Behavior and Productivity of Nesting Prairie Falcons", *Wildlife Society Bulletin* 18: 170-181.

Any new mine on BLM land that had the potential to impact nesting golden eagles, prairie falcons, or long-eared owls would typically be required to have a nest monitor to assure that impacts are minimized. Nest monitoring provisions would be determined by BLM if a mine were located on public land or by the Implementing Authority if a mine were located on private land.

References on impacts of disturbance on nesting raptors included:

Richardson, C. T. and Miller, C. K. 1997. "Recommendations for protecting raptors from human disturbance: a review", *Wildlife Society Bulletin* 25(3): 634-638.

Suter, G. W., and Jones, J. L., 1981, "Criteria for Golden Eagle, Ferruginous Hawk, and Prairie Falcon Nest Site Protection", *Raptor Research* 15(1):12-18.

These included a variety of thresholds for disturbance, depending on the nature of the disturbance. The provisions in the Plan follow the recommendations given in those publications to the extent they are applicable.

Response 278-72: Raptor 12. Pre-construction surveys for discretionary projects would be required within Key Raptor Areas, ACECs where raptors are identified as a protected species, and in tortoise survey areas outside DWMAs (for burrowing owls). The Plan database of raptor nests will be utilized to evaluate discretionary projects in remote areas, where the nests are located. Regional raptor surveys would be an ongoing monitoring task of the Plan (M-24 and M-97) and these results will be added to the database.

See responses 278-61, 62, 63 and 64 for additional conservation measures and the recommended goals and objectives.

Response 278-73: Raptor 13. The description of a program to identify problem poles posing a threat of electrocution to ferruginous hawks is sufficient for the programmatic EIR/S level of analysis. The most important locations for monitoring of poles appear to be in the Antelope Valley west of Lancaster and in the Mojave Valley near Hinkley and Newberry Springs. Problem poles may also be present on CDFG property at Camp Cady and Mojave Narrows Regional Park.

Response 278-74: Raptor 14. The utility companies monitor golden eagle nests on transmission line towers. In some cases, they may wish to remove or relocate the nest in order to assure transmission reliability or to prevent electrocution. The adaptive management measure (page 2-167) addresses this situation by suggesting construction of nesting structures in safe locations on the towers. This is patterned after a program undertaken in San Diego County to maintain the nest site while reducing the threat of electricity interruptions and eagle electrocutions.

No prairie falcon nests have been identified on electrical transmission or distribution lines and the nest relocation measure would not apply to this species.

If new mining proposals were in conflict with preservation of occupied nest sites of prairie falcon, golden eagle, or long-eared owl because of location within ¼ mile of the nest and being within the line of sight, the Plan would not cover this activity. See Response 278-71. Measure Rap -16 will be deleted, but can be implemented on a case-by-case basis outside the authority of the Plan.

Response 278-75: Raptor 15. We will clarify that incidental take permits would only be issued if the golden eagle were removed from "fully protected" status and listed as threatened or endangered under CESA, and then only if the procedures described in Section 2-2-3-2 are met.

Response 278-76: Raptor 16. See response 278-74 regarding mining. Nest removal would only take place outside the nesting season.

Response 278-77: Raptor 17. BLM will implement seasonal closures to protect raptor nest sites.

Response 278-78: Raptor 18. Please see revised monitoring and adaptive management table. Responses 278-39, 41, 62, 63 and 64 describe revised goals and objectives for raptors.

Response 278-79: Raptor 19. Although the golden eagle surveys done for the CDCA Plan were comprehensive, new information since that time has revealed additional nest sites. The new Plan objective (see response 278-63) for the golden eagle will establish the current baseline number of territories. This effort will take five years because of the large area to be covered. Measures M-24 and M-97 specify additional monitoring efforts for raptors.

Response 278-80: Raptor 20. The information from the species accounts has been reviewed and incorporated into Chapter 3, not Chapter 4. Responses to the examples given for ferruginous hawk and golden eagle are provided in responses 278-62 and 278-71 above.

Response 278-81: Riparian general. The Western yellow-billed cuckoo will be deleted as a covered species in the Plan due to insufficient information on its occurrence within the Plan area. Measures enacted to protect and enhance riparian habitat may allow for repopulation of some sites by this species, and it can be amended into the Plan at a later date if necessary.

Response 278-82: Riparian 1. This comment is unclear. It states the Plan should not refer to suitable habitat or distinguish between nesting and seasonal habitat. The Plan is more accurate and understandable to the public when it distinguishes between riparian habitat used by these migratory birds for nesting in the spring and summer from habitat used only as a migration stopover. "Developed area" was used for vermilion flycatcher because of the many localities where it is known to nest in golf courses, urban parks, and similar situations.

The goal for five riparian bird species will be modified as follows: "Conserve *and enhance* all suitable riparian nesting habitat." For the vermilion flycatcher and summer tanager the goal will be: "Conserve *and enhance* all *suitable* riparian nesting habitat outside developed areas."

We will add the following objective to the goal for the riparian birds: "Eradicate invasive riparian plants in suitable nesting habitat."

We believe that the most effective use of the West Mojave Plan's funding stream would be to utilize the expertise of agency biologists, assisted by volunteer groups, to conduct presence-absence surveys of riparian habitat along the Mojave River, in Big Morongo Canyon, in the Argus Mountains, at Butterbredt Springs and in the canyons of the eastern Sierra Nevada Mountains.

We will add the control measure for brown-headed cowbirds to the adaptive management section for those riparian birds subject to parasitism.

We will change the objective for the Mojave River as follows: "Achieve and sustain groundwater levels in the Mojave River floodplain sufficient to maintain riparian habitat and allow its restoration and expansion by natural means." This will apply to all species except yellow-billed cuckoo, which is being deleted as a covered species in the Plan.

CDFG suggests several additional objectives for the Mojave River, though some of the recommendations are specific to the eastern Sierra Nevada Mountains. Our responses to these suggested objectives are provided below:

- Acquire or obtain easements on private land: The West Mojave Plan does not propose acquisition of riparian habitat as mitigation. The Permittees will contribute to restoration of riparian habitat via removal of invasive species in cooperation with the Resource Conservation Districts, National Resource Conservation Service, Flood Control Districts and volunteer organizations.

- Establish and enhance riparian forests on public land: BLM will enhance riparian forests on public land by removal of invasive plant species and management of grazing. An example of this ongoing effort is Afton Canyon. BLM will also manage existing conserved riparian forests by controlling public access, as at Big Morongo Canyon ACEC. BLM is not aware of locations where riparian forests can be established on public land.

- Eliminate grazing on public land in canyons and washes of the eastern Sierra Nevada: BLM will manage grazing for the protection of riparian areas in the eastern Sierra canyons, but cannot eliminate grazing without Congressional changes to the Taylor Grazing Act.

- Close unpaved roads and other vehicle routes on public land in canyons and washes of the eastern Sierra Nevada: BLM provides access to the public for recreational use of public lands. The canyons of the eastern Sierra Nevada Mountains are used for hiking, camping, hunting, sightseeing, and a variety of other recreational activities. The route network established by the Plan for the West Mojave provides appropriate access without compromising conservation goals. Some of these canyons are in ACECs, while others are in designated wilderness. Closing all access routes to these canyons is neither feasible nor desirable.

- Enforce grazing restriction and road/route closures: BLM will enforce its grazing regulations and route designations as necessary.

BLM's rangeland health standards include measures to address habitat for threatened and endangered species and protection of riparian habitat. Section 2.2.5 of the Draft EIR/S, beginning on page 2-106, explained the programs and policies. The Draft EIR/S discussion on pages 2-109 to 2-111 addressed riparian habitat. Achieving the public land health standards and the regional guidelines, which apply to livestock grazing, would provide conservation sufficient to maintain habitat requirements for survival and reproduction of the covered riparian species.

BLM will manage grazing for the protection of riparian areas in the eastern Sierra canyons, but cannot eliminate grazing without Congressional changes to the Taylor Grazing Act.

Response 278-83: Riparian 2. Habitat enhancement measures described in the Plan and in these responses will maintain and improve the condition of the riparian habitat for the covered bird species. We have no definitive covered activities that would impact riparian habitat and covered species, hence cannot provide estimates of acreage.

The local jurisdictions request that seven species be covered by the Plan, but do not anticipate incidental take for brown-crested flycatcher, yellow-breasted chat, or yellow warbler. Table 2-11 will be modified to reflect the federal incidental take coverage of least Bell's vireo under the Floodplain Management Plan Biological Opinion.

Response 278-84: Riparian 3. We will add control of brown-headed cowbird to adaptive management, and will add the objective "Eradicate invasive riparian plants in suitable nesting habitat." Funding from the mitigation fees and other sources will be used to restore and enhance riparian habitat by removal of invasive riparian plants. Grazing assessments will be performed at riparian sites in the eastern Sierra canyons in order to conform grazing practices to the regional rangeland health guidelines. These conservation measures apply to all Plan Alternatives except Alternative G.

Response 278-85: Riparian 4. The methodology for censusing the riparian bird populations may include point counts or a breeding bird census at specified locations, but this level of detail is not necessary for the programmatic review in this EIR/S. BLM and the Implementing Authority will partner with the local bird clubs and Audubon societies to conduct bird surveys at riparian sites. The ongoing monitoring will include surveys of sites that have been restored or enhanced by removal of invasive species or changes in grazing practices.

Tasks M-13, M-82 and M-85 have been modified slightly in the Final EIR/S. Task LG-9 will remain a BLM function of the public and local government partnership to achieve conservation for the riparian bird species.

Response 278-86: Bendire's 1. Comment noted. If additional information indicates the location for a feasible private land conservation program for the Bendire's thrasher, the jurisdictions will consider re-instating this species as a covered species in the Plan.

Response 278-87: Bendire's 2. We will modify the goal for Bendire's thrasher as follows: "Protect *and enhance* known populations and habitat on public land."

Response 278-88: Bendire's 3. The goal was rewritten to include enhancement. This will allow BLM to improve habitat for Bendire's thrasher by route rehabilitation, changes in grazing management or modifying the boundaries of the Conservation Areas.

CDFG has suggested a number of new objectives for conservation of Bendire's thrasher. Responses to those suggestions follow:

- Establish a series of reserves representing all areas where the thrasher was found in 1986: The Conservation Areas for Bendire's thrasher do not include lands north of Yucca Valley or in southeast Apple Valley, where Bendire's thrashers were found in 1986 but not in 2001. These areas are almost entirely private land. The remaining four areas are primarily BLM managed public land, and can more feasibly be conserved.

- Eliminate livestock grazing: Three of the four Conservation Areas are not subject to livestock grazing. No evidence exists that grazing is a threat to Bendire's thrasher; see species account (included on attached compact disk). BLM will manage grazing for the protection of this species if necessary. Please note that a program to allow voluntary relinquishment of allotments by permittees is included in the West Mojave Plan.

- Restrict vehicle access to established and approved routes: Vehicle access in each Conservation Area is limited to designated routes of travel.

- Enforce grazing and road/route restrictions: BLM will enforce its grazing regulations and route designations as necessary.

- Prohibit removal of Joshua trees, yucca and cactus: BLM will add a prohibition on harvesting of Joshua trees, yucca and cacti in the conservation areas.

- Acquire or obtain easements on private land: Acquisition of private land is not part of the strategy to conserve Bendire's thrasher. In the Coolgardie Mesa area, some acquisition is likely because it will benefit several species.

Response 278-89: Bendire's 4. BLM will conduct surveys for Bendire's thrasher on public land subject to available funds, and the Implementing Authority will compile all new sightings as they become available. The recommended research and monitoring program will not be undertaken.

Response 278-90: Bendire's 5. BLM will add the conservation measure of prohibiting collection or harvesting of Joshua trees, yuccas and cacti on public lands in the Conservation Areas. Routes of travel have been designated and will be enforced. We do not believe that additional conservation measures are necessary.

Response 278-91: Bendire's 6. The biological considerations for omitting a Conservation Area in Yucca Valley were the lack of any sightings of Bendire's thrasher in the 2001 survey. Additional surveys may be needed to make a final determination.

Response 278-92: Bendire's 7. Habitat based monitoring was established because it is less costly than periodic surveys of the population. Establishment of a baseline for the number of birds and acreage of occupied habitat is the most important task for BLM. The results of the 2001 survey detected a population decline or fluctuation that was not previously known. Reports from observers in the eastern Mojave since 2001 have verified the presence of Bendire's thrasher in areas where it has always occurred, which points to fluctuation rather than decline for the

West Mojave survey results. The monitoring could be changed as more is learned about the Conservation Areas.

We have retained only one modified goal for Bendire's thrasher and task M-10 will be retained as written.

Response 278-93: LeConte's 1. The DWMAs support large populations of LeConte's thrashers, and all provisions applicable to the DWMAs would serve to protect this species as well as the desert tortoise.

Response 278-94: LeConte's 2. The DWMAs total 1,457,660 acres (2,407 square miles)(pages 2-12 and 2-24). Additional habitat for LeConte's thrasher is included within other Conservation Areas, such as that established for the Mohave ground squirrel.

The LeConte's thrasher has density estimates of 1– 6.4 pairs per square mile (species account). The DWMAs would therefore support a population of 2,407 – 15,048 pairs.

We will accept the change for the biological goal for LeConte's thrasher: "Protect and enhance known populations and habitat."

Response 278-95: LeConte's 3. CDFG has suggested a number of new objectives for conservation of LeConte's thrasher. Responses to those suggestions follow:

- Establish a series of reserves representing all historic areas: The Conservation Areas are located in the center and at all edges of the West Mojave Plan area, hence would conserve habitat throughout the historical range. We will accept this objective.

- Eliminate livestock grazing: BLM will manage grazing for the protection of this species if necessary, but cannot eliminate grazing without Congressional changes to the Taylor Grazing Act.

- Restrict vehicle access to established roads and approved routes that exclude washes: Vehicle access in each Conservation Area is limited to designated routes of travel. Travel in washes is minimized in the DWMAs. This conservation measure will apply within the Conservation Areas and is not needed as an objective.

- Enforce grazing and road/route restrictions: BLM will enforce its grazing regulations and route designations as necessary.

- Prohibit removal of desert wash vegetation and of Joshua trees, yucca and cactus: BLM and the local jurisdictions will add a prohibition on harvesting of Joshua trees, yucca and cacti in the Conservation Areas. This conservation measure will apply within the Conservation Areas and is not needed as an objective.

- Acquire or obtain easements on private land: Acquisition of private land is not part of the strategy to conserve LeConte's thrasher. In the DWMAs, some acquisition is likely because it will benefit several species.

Response 278-96: LeConte's 4. The LeConte's thrasher is a relatively common bird in the West Mojave, and should continue to thrive if the DWMA conservation prescriptions are followed. The Plan does not prescribe monitoring for this species, but would identify the densest populations over time by compiling sightings made during other biological surveys. The Plan would employ adaptive management to address problems identified in these population centers.

Response 278-97: LeConte's 5. Conservation measures will be added as described in response 278-95.

Response 278-98: LeConte's 6. We do not have a second biological goal or second objective under that goal. Monitoring will be as described in response 278-96.

Response 278-99: Towhee 1. We will change the goal for Inyo California towhee as follows: "Conserve and enhance all riparian habitat on public lands within the range of the Inyo California towhee." The adjacent upland habitat would be protected by adherence to the existing BLM goal of reducing the feral burro population in the Argus Mountains to zero.

The China Lake Naval Air Weapons Station does not conduct training activities within the critical habitat of the Inyo California towhee. The Navy's goal for the Inyo California towhee is "Maintain viable populations …on NAWS ranges." The Integrated Natural Resource Management Plan for this base describes measures that the Navy employs to protect towhee habitat, including removal of feral burros, removal of exotic vegetation, fencing of springs and re-directing military activities away from towhee habitat. Current management of the base is compatible with conservation of the towhee.

Conservation measures in the Plan would continue for the duration of the BLM CDCA Plan Amendment and the incidental take permits.

Response 278-100: Towhee 2. We will add the following two objectives for the Inyo California towhee: 1) "Remove non-native vegetation at springs with occupied habitat." 2) "Fence springs as necessary to protect the riparian habitat from damage by feral burros or excessive human use".

The other suggested objectives will not be adopted for these reasons:

- Acquire in fee or obtain easements on private land: Private land constitutes 2% of the habitat of the Inyo California towhee. On some of these properties, which total less than 100 acres, the residents live compatibly with the birds and see the towhees at their bird feeders. Only one private land site with habitat for the Inyo California towhee was reported by LaBerteaux and Garlinger (1998), in Crow Canyon. This site was residential with exotic vegetation. No towhees were present. LaPré (1994) observed a towhee at a

private residence in Homewood Canyon. It may have been nesting in the residential landscaping.

- Establish and enhance riparian woodland: The springs and seeps occupied by the towhee generally do not meet the definition of riparian woodland. They are most commonly riparian scrub. At sites that can support riparian woodland, enhancement is prescribed by the new objective.

- Eliminate livestock grazing on public land: No domestic livestock grazing takes place in towhee habitat on either BLM or Navy land.

- Exclude livestock from all springs on public land by fencing: The new objective 2 addresses fencing at springs. The conservation program on page 2-83 of the Plan discusses fencing at Peach Spring. The monitoring program (page 2-158) would evaluate the need for additional fencing. Adaptive management (page 2-158) includes a provision for fencing if needed.
- Discourage human access to all springs: The majority of the occupied habitat is within the Argus Mountains Wilderness and Great Falls Basin ACEC. These areas are only accessible on foot, with the exception of a few roads leading to the trailheads. These public lands are open to public visitation, as is the CDFG Ecological Reserve in Indian Joe Canyon. Public use is very minimal because of the remote location. The new objective 2 addresses fencing at springs if needed to control excessive human access.

- Close unpaved roads and other vehicle routes on public land: The proposed route network is shown on Maps 10 and 12 on the CD-ROM contained within the West Mojave Plan. Direct access to any of the springs is minimal. Technical corrections will be made to adjust the location of the routes with respect to wilderness in some areas.

- Stop any illegal water extraction from springs: BLM has investigated water rights and easements on public lands associated with Inyo towhee habitat. The private use of the water was determined to be legal. Illegal water extraction would be enforced by the state Water Resources Control Board.

- End legal water extraction from springs on public land: The California Water Resources Control Board controls water diversions, not the federal government.

- Remove all burros and horses from public land within two years: The existing BLM goal for the burro population in the Argus Mountains is zero. The burro removal and adoption program will continue.

- Withdraw public land from mineral entry: A mineral withdrawal is not necessary to protect the Inyo California towhee. If a Plan of Operation were submitted with the potential to adversely impact this species or its habitat, a Biological Opinion would be requested from USFWS.

Response 278-101: Towhee 3. Baseline data on the spring water flow and vegetation has been collected in previous surveys conducted by the Navy and the BLM. BLM and the Navy will cooperate to conduct a population census every five years. Funding for this monitoring would come from appropriated funds to the Navy and/or BLM.

Response 278-102: Towhee 4. This recommended measure will be added to the monitoring and adaptive management sections of the Plan for this species.

Response 278-103: Towhee 5. We are including several of the recommended objectives as indicated in responses 278-100 and 102 above. The conservation program will be modified accordingly.

Response 278-104: Towhee 6. The monitoring measures will be retained. They are in conformance with the revised goal and objectives provided in responses 278-99 and 100. The monitoring period will remain at five years to conform to the population census. Biologists from BLM's Ridgecrest Field Office monitor the more easily accessible springs (Austin Spring, North Ruth Spring) more frequently.

Response 278-105: Towhee 7. Although the private land is subject to incidental take for Inyo California towhee, our growth projections do not indicate that there will be any changes in land use that would actually result in take.

The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with the invasive plant removal, monitoring surveys and construction of fences.

Response 278-106: Vole 1. The BLM and local governments do not have the authority to regulate groundwater levels or control the water supply to and adjacent to the Mojave River. They cannot implement the suggested objective a). The West Mojave Plan does not employ acquisition of private land as its principal means of conservation. We will, however, consider acquisition of conservation easements adjacent to the Mojave River.

We agree that the suggested objective d) is appropriate. The Final EIR/S includes this objective for the Mojave River vole as follows: "Remove non-native vegetation on public land and on private land where permission is granted."

Response 278-107: Vole 2. We agree with the addition of the second goal "Conduct research and monitoring programs." Objectives under this goal will be similar to those suggested by CDFG, as described below:

- Objective 1. Establish permanent study plots and conduct baseline studies.
  Objective 2. Monitor changes in vole populations and habitat.
- Objective 3. Identify, map and survey all appropriate habitat along the Mojave River corridor.

Permanent study plots will be placed on State lands, city parklands or on private lands if permission is obtained, such as at Mojave Narrows Regional Park or the Lewis Center. All monitoring and habitat identification will take place on private lands only with landowner permission. The proposed West Mojave Plan and EIR/S is a programmatic document describing the approach to conservation and species protection. The Implementing Authority will develop specific methodologies for habitat evaluation, population estimates and monitoring.

Response 278-108: Vole 3. Mitigation fees collected from development projects would be placed into a single fund that will finance projects according to a priority scheme determined by the Implementing Authority. A separate accounting can be established to track the species that benefit from each part of the conservation and mitigation program.

Acquisition of suitable, occupied habitat is not a conservation method for the Mojave River vole. Fees based on a 0.5:1 ratio do not mean that land will be acquired at a 0.5:1 ratio of impacts to conservation via acquisition. Restoration of habitat via removal of invasive species, including tamarisk and Russian olive, can achieve a ratio of conserved (restored) habitat to habitat lost to development greater than 1:1. Removal of invasive plants in the Mojave River can create suitable habitat for the vole's expansion of local range and conserve water without the necessity of acquisition. Acquisition will be pursued as opportunities to purchase from willing sellers arise.

Response 278-109: Vole 4. The Plan does not cover agricultural uses. It will cover weed abatement when that activity is part of habitat enhancement, as in removal of invasive species from riparian habitats.

Response 278-110: Vole 5. The Plan would include pipelines, road widenings, bridge replacements and other development subject to approval by the participating jurisdictions as covered activities. We recognize that the existing Biological Opinion for flood control maintenance does not cover the Mojave River vole, as this is not a listed species. The Plan would include the same flood control maintenance projects as covered activities. Mitigation measures will inlcude habitat enhancement via removal of invasive plants in the riparian corridor.

Response 278-111: Vole 6. The participating jurisdictions do not have control over transfer of free production allowance. We will add the following mitigation measures for small projects which are within vole habitat: "Project proponents constructing within occupied habitat of the Mojave River vole will be required to fence the outer limits of construction and trap and remove voles from harm's way prior to commencement of construction. Voles will be placed in the nearest suitable habitat."

Response 278-112: Vole 7. The West Mojave Plan does not create new laws. We recognize that most, if not all, projects impacting riparian and wetland habitat are required to provide mitigation sufficient to achieve no net loss under state and federal laws, such as the Fish and Game Code and the Clean Water Act. Loss of riparian habitat within the river corridor is not anticipated, and restoration programs may increase the extent of habitat over what is present today.

Response 278-113: Vole 8. The Final EIR/S will include language describing the conservation measures to be enacted.

Response 278-114: Vole 9. It is theoretically possible that groundwater criteria could not be met for four consecutive quarters under the proposed reporting scheme.

Response 278-115: Vole 10. Mitigation is not proposed for agricultural activities, which are not covered by the Plan. If urbanization or other discretionary surface-disturbing activities involved loss of vole habitat, mitigation would be required by payment of mitigation fees and by avoidance and minimization measures. See response to comment 278-111.

Local law enforcement already has authority to respond to vehicle trespass. These are handled on a case-by-case basis. Where County Flood Control controls access, it has and will continue to make every effort to control unauthorized vehicle access.

Response 278-116: Vole 11. The Plan addresses discretionary actions that may affect the Mojave River vole, but not agricultural activities, unauthorized off-highway vehicle use, flooding, or house mouse competition, which are non-discretionary. Species or population monitoring can assess the degree of threat of house mouse competition. Monitoring of changes in the extent of vegetation types can assess the degree of threat posed by fragmentation. Removal of invasive plants from the riparian corridor is a method of restoring and enhancing habitat for the vole in the West Mojave Plan.

Response 278-117: Vole 12. The City of Victorville has been working on the Mojave Greenway Trail project, a multipurpose recreational trail paralleling the river. The precise alignment of the trail is not yet known. As a programmatic document, the West Mojave Plan would include this project and others like it, as a covered activity. If the approved alignment impacted habitat for the Mojave River vole, the City would require avoidance and minimization measures. See response to comment 278-111.

Response 278-118: Vole 13. Agree. If the water overdraft in the Mojave Basin is not slowed, stopped, or reversed by measures in the adjudication, the worst-case scenario of drying of the riverbed could occur in any alternative. The local governments do not control the flow of water to and from the basin, but can reduce water loss in the river via removal of water-using invasive plants. The impacts analysis in Alternative A has been modified accordingly.

Response 278-119: Pocket Mouse 1. The recommended objectives a), b), and c) address multiple use policies of the BLM. The Plan provides for changes in grazing management within the range of the yellow-eared pocket mouse if the rangeland health assessment shows unacceptable damage to habitat. We will add the following objective for the single biological goal: "Manage grazing on public lands to maintain habitat values".

The Plan also provides a network of unpaved access routes designed to minimize parallel routes and resource damage. Within the range of the yellow-eared pocket mouse are the Owens Peak Wilderness, Bright Star Wilderness and Kiavah Wilderness, where off-road travel is prohibited. The Sand Canyon and Short Canyon ACECs also limit off-road travel. The

Jawbone-Butterbredt ACEC contains two open areas as well as a majority of Class L public land. The former allows unrestricted vehicle travel, while the latter requires staying on designated routes. This mixture of access for vehicles fulfills BLM's multiple use mandate while protecting the great majority of the range of this species from off-road travel. The route designation is a global feature of the West Mojave Plan, and a specific objective is not needed for yellow-eared pocket mouse.

Wind energy projects on public land are not covered activities under the HCP, but are considered on a case-by-case basis by the BLM. All existing wind energy projects are located out of the range of the yellow-eared pocket mouse to the south.

The West Mojave Plan does not include private land acquisition as its primary conservation measure. For the yellow-eared pocket mouse, lands will be acquired from willing sellers if objectives can be met for other species as well. Too little is known about actual occupied habitat to identify private lands for acquisition at this time.

Response 278-120: Pocket Mouse 2. Because most of the range of this species is on public lands and the request for incidental take is limited to 100 acres, the research program is limited to periodic trapping surveys in suitable habitat. These will be done initially in conjunction with botanical surveys in suitable habitat for Kelso Creek monkeyflower. Some survey work is being planned in 2004 for Jawbone Canyon. In addition, the Implementing Authority will record new locations as opportunities arise. This will assist in better defining the range. Monitoring of known habitat is based on compliance with grazing regulations. Until more is known about the distribution and density of the yellow-eared pocket mouse, establishment of permanent study plots and long-term monitoring of populations is infeasible.

Response 278-121: Pocket Mouse 3. The exempt activities are not expected to have any significant effect on the numbers or habitat of the yellow-eared pocket mouse, given that most of its range is on public lands.

Response 278-122: Pocket Mouse 4. Incidental take will be limited to 100 acres (see Draft EIR/S page 4-53). The range totals 164,641 acres, of which 29,032 acres are private land and 133,889 are public land. The Forest Service manages an additional 1,720 acres. Wilderness occupied 62,497 acres of the range, and the ACECs occupy 113,380 acres. The text of the Final EIR/S has been modified to include these figures.

Response 278-123: Pocket Mouse 5. The Plan would not cover agricultural activities. No commercial cultivation is present within the range of the yellow-eared pocket mouse. The primary agricultural activity is grazing.

Response 278-124: Pocket Mouse 6. Comment noted.

Response 278-125: Pocket Mouse 7. Acquisitions that provide mitigation for the yellow-eared pocket mouse would not proceed in the Kelso Creek Monkeyflower Conservation Area unless the pocket mouse was proven to be present. A trapping survey would be conducted

in this area as part of the Monitoring Plan (see Draft EIR/S page 2-157).

Response 278-126: Pocket Mouse 8. Logical inference led to the conclusion that overgrazing, where soil is trampled and shrub cover and seed set are reduced, would impact this species. Because grazing is one of the few potential threats to yellow-eared pocket mouse, the conservation measure of achieving rangeland health standards was proposed.

Response 278-127: Pocket Mouse 9. Comment noted. Grazing standards and guidelines are discussed in Section 2.2.5. The program and monitoring elements LG-9 and M-94 will not be deleted from the Plan.

Response 278-128: General Bat 2. Nine species of bats were included on the list of species to be covered by the Plan that was approved by the Supergroup prior to 1998. BLM contracted with USGS to prepare accounts for eight species. One species, big free-tailed bat (*Nyctinomops macrotis*), was listed in error, as it does not occur in the planning area.

The reference to the "other six species" in Section 2.2.4.5 (page 2-73) will be changed to the "other four species." The fringed myotis and pocketed free-tailed bat are not to be considered for coverage.

Response 278-129: General Bat 3. We recognize that the life history requirements and therefore, the conservation needs, of each species of bat are different. The six species were lumped together because the proposed conservation measures were similar for all species, addressing the most important need, protection of significant roosts.

Pallid bat, spotted bat, Western mastiff bat and long-legged myotis will be dropped from the request for incidental take coverage. Conservation measures, monitoring and adaptive management will be modified accordingly in the Final EIR/S.

Response 278-130: General Bat 4. The Plan does not address non-discretionary actions.

At the March 21, 2002 Task Group 1 meeting, bats were discussed extensively. The public questioned whether protection of significant roosts constituted adequate conservation for bats. Dr. LaPré of the West Mojave team indicated that bats are most vulnerable when together in maternity roosts. LaPré indicated that since there is little existing survey data on bats, CDFG felt that surveying and protecting roosts that are found is the best way to proceed.

Loss of non-significant roosts constitutes the allowable incidental "take". Protection of the significant roosts is the mitigation for this take, along with safe-exit procedures for bats, which avoids actual take of the species.

Funding for the gating of significant roosts would come from the sources specified in the Plan. Please see the revised Implementation Tasks Priorities and Costs table in Appendix C.

Response 278-131: General Bat 5. The 25-bat threshold for these and other species was first discussed between BLM and CDFG staff in January 1995, and was included in the 1999 Evaluation Report. It was discussed at a meeting with CDFG staff in Bishop on October 21, 1998 and with USFWS staff in Ventura on October 27, 1998.

Survey methods and conservation measures were discussed at these and other meetings with CDFG. Task Group 1 agreed to expanded surveys for bats for private land discretionary projects on March 21, 2002 after considerable discussion. The plan does not address non-discretionary actions.

Response 278-132: Bat 1. "Enhance viability" means offer protection that is not now afforded to bats so that populations will not decline. It includes protection of maternity, hibernation and transient roosts.

Response 278-133: Bat 2. Mineral withdrawal is not necessary if the applicable land use plan has a standard defining unnecessary and undue degradation. Loss of significant roosts would fall under this provision. In addition, mineral withdrawal is a relatively complex process, and does not work well with small areas, such as a bat roost, which may occupy only a few acres.

Response 278-134: Bat 3. Comment noted. Because the request for incidental take coverage will be dropped for the other four species, these objectives are appropriate.

Response 278-135: Bat 4. Survey protocols, standards and mitigation measures for bats, which were adopted from CDFG recommendations, were presented in the Draft EIR/S in Section 2.2.4.5 on page 2-74. These standards describe a programmatic approach that could include more detail in the HCP and 2081 permit applications when they are submitted to the Wildlife Agencies.

Response 278-136: Bat 5. The wording states: "Specific procedures" (which are on page 2-74) "must be followed for surveys and to allow for safe exit of bats".

Response 278-137: Bat 6. We concur that no future negotiated agreements with CDFG are necessary. The Plan does not authorize take of any significant roosts under the permits. The wording on Draft EIR/S page 2-73 under (Bat-1) states that protection of significant roosts applies to newly-found roosts. The following language will be added to the first bullet under (Bat-1): "If significant roosts were found, either on public or private lands, protection would be provided by placement of barriers to human entry to the roost, while allowing access for bats. This measure applies to all types of significant roosts, including mine openings, buildings, trees, bridges, cliffs and crevices."

Response 278-138: Bat 7. You are correct: the National Park Service is not a signatory to the MOU for the West Mojave Plan, though BLM and NPS have the ability to work cooperatively on resource conservation projects. The one significant roost on National Park lands will be removed from the discussion.

We have carefully reviewed our records of significant roosts. Of the eighteen significant roosts, seven are on military lands, one is on NPS land, one is just outside the planning area on private land and nine are on public land managed by BLM. The West Mojave Plan will address conservation of the nine significant roosts on BLM managed land. These roosts have reported the following species:

- Roost 1. Maternity roost for pallid bat, Townsend's big-eared bat, California myotis, Western pipistrelle.

- Roost 2. Maternity roost for Townsend's big-eared bat. Public water reserve controlled by Los Angeles Department of Water and Power.

- Roost 3. Maternity roost for big brown bat.

- Roost 4. Maternity roost for California leaf-nosed bat.

- Roost 5. Maternity roost for pallid bat.

- Roost 6. Hibernation roost for Townsend's big-eared bat.

- Roost 7. Hibernation roost for Townsend's big-eared bat.

- Roost 8. Hibernation and maternity roost for California myotis, pallid bat and California leaf-nosed bat.

- Roost 9. Unspecified roost for California myotis.

Response 278-139: Bat 8. The Integrated Natural Resource Management Plans for Twentynine Palms MGAGCC and China Lake NAWS specify protection of bat roosts on these bases. Entrances of some of the significant roosts have been gated. The military bases are not part of the Plan Area.

Response 278-140: Bat 9. The 25-bat threshold was first discussed between BLM and CDFG staff in January 1995, and was included in the 1999 Evaluation Report. It was discussed at a meeting with CDFG staff in Bishop on October 21, 1998 and with USFWS staff in Ventura on October 27, 1998.

Response 278-141: Bat 10. The Pinto Mountains were selected as a bat management area because they contain a number of mine openings and because the highest number of known significant roosts off military lands is within the Pinto Mountains. However, the National Park Service is not a signatory to the Plan. The bat management area for the Pinto Mountains will be deleted. BLM will protect roosts on public land by gating known and new significant roosts.

Surveys are not precluded from other mountain ranges. Survey procedures for bats are presented in the Draft EIR/S at Section 2.2.4.5 on page 2-74.

Response 278-142: Bat 11. The bat management area in the Pinto Mountains will be deleted. BLM will protect roosts on public land by gating known and new significant roosts.

Response 278-143: Bat 12. Mineral withdrawal is not the only means of assuring that new mining avoids impacts to significant roosts. Mineral withdrawal is not necessary if the applicable land use plan has a standard defining unnecessary and undue degradation. Loss of significant roosts would fall under this provision. In addition, mineral withdrawal is a relatively complex process, and does not work well with small areas, such as a bat roost, which may occupy only a few acres.

Response 278-144: Bat 13. Undue degradation is defined by the federal agency land use management plan and applied to the 3809 mining regulations. The West Mojave Plan will define undue degradation with respect to lands valuable to bat conservation as follows: "Elimination of significant roosts for any species of bat will be considered as undue degradation of public lands under the West Mojave Plan."

Response 278-145: Bat 14. Stakeholders in Task Group 1 discussed protection of desert wash vegetation within three miles of significant roosts for California leaf-nosed bats on March 6, 2002. It was decided that a field review of open routes involving OHV interests, CDFG staff, and BLM staff would be conducted, and determinations of substantial damage would be made at that time. Routes could be closed, limited, or re-routed to avoid desert wash vegetation. This measure would be applied adaptively to foraging areas near newly detected roosts. No damage to desert wash vegetation near existing significant roosts for California leaf-nosed bat are known.

Response 278-146: Bat 15. BLM and Bat Conservation International have entered into a Memorandum of Understanding to insure proper design and construction standards for fencing of abandoned mine openings.

Response 278-147: Bat 16. The West Mojave Plan does not address non-discretionary actions, including demolition of existing structures. The wording for "mine shafts" will be changed to "mine features" or "mine openings."

Response 278-148: Bat 17. On March 6, 2002, Task Group 1 adopted the requirement for an initial survey and subsequent delegation to a qualified bat biologist if suitable structures for bat roosts are present.

Response 278-149: Bat 18. The words "as feasible" will be added to the end of the sentence in the third bullet.

Response 278-150: Bat 19. We are not aware of any feasible measures for safe eviction of bats from cliff faces or rocky outcrops. For certain buildings and bridges, the safe eviction protocol would be developed on a case-by-case basis, after consultation with CDFG.

Response 278-151: Bat 20. The Plan sets the framework for monitoring, and specific methodologies will be developed as necessary. The significant roosts of California leaf-nosed bat and Townsend's big-eared bat, which are the two remaining covered species, will be

monitored every five years (M-6, page 2-153). The monitoring protocol will utilize the best and most appropriate technology available at the time, which will be determined by the Implementing Authority in consultation with CDFG.

Response 278-152: Bat 21. Prescription M-8 applied to bat management areas, which have been dropped from the Plan. Surveys would continue as explained on Draft EIR/S page 2-74 under (Bat-6).

Response 278-153: Bat 22. Measure M-9 involves preparation of a report each time bats are evicted using procedures explained on page 2-74 under (Bat-7). The report would contain information on the bat species, number of bats evicted, methods used to block re-entry to the non-significant roost, dates relative to the life history cycle of each species and availability of alternative roost sites.

Response 278-154: Bat 23. The process of mineral withdrawal is initiated by BLM and approved by the State Director, Secretary of Interior or Congress, depending on the size of the withdrawal. It involves a mineral report, statement of reasons for the withdrawal and evaluation under NEPA. Withdrawals are subject to valid existing rights, and it may be necessary to conduct validity examinations of mining claims. Withdrawals can assure protection from mining impacts, but are not the only means to achieve this objective. Standards in a land use plan for undue degradation under the 3809 mining regulations will also protect significant roosts.

Response 278-155: Bat 24. Bat houses are one means of attempting to relocate bats from structures that may be modified by attempting to attract the bats to a new roost site. The future use of bat houses would be evaluated on a case-by-case basis, after consultation with CDFG. If bat houses were installed, use of these artificial roosts, if any, would be monitored.

Response 278-156: Bat 25. The bat species accounts have been added to the compact disk attached to the Final EIR/S.

Response 278-157: Bat 26. This information has been added to the species summary.

Response 278-158: Bat 27. See responses above (278-140) regarding the 25-bat threshold. BLM is aware of only one substantiated migration roost within the Plan Area.

Response 278-159: Bat 28. Comment noted. The sentences will be changed to reflect that these conditions apply to Townsend's big-eared bat and California leaf-nosed bat. The other four bat species will be dropped from the Plan as covered species.

Response 278-160: Bat 29. When gates are placed over mine openings, the mine claim holder is made aware of the importance of the site to bats. Some of the significant roosts are not claimed, so installation of gates would provide protection until a new claim was validated and a Plan of Operations was filed. If a Plan of Operations were filed, specific protective measures would be developed, but BLM cannot restrict access to the minerals.

The bat roost under the I-15 bridge over the Mojave River is not a covered activity of the Plan.

Response 278-161: Bat 30. The roost referenced in the third paragraph is a significant roost for California leaf-nosed bat. Revised text in the final EIR/S will clarify that the National Park Service is not a signatory to the Plan and that no Plan actions will be implemented on Park lands. BLM has obtained funding for gating of one or two bat roosts in Fiscal Year 2004. Continued funding in the Plan comes from a variety of sources, including mitigation fees imposed by local governments; see the revised Implementation Tasks, Priorities and Costs table in Appendix C. These funds are combined and fund the overall program, which may include bat surveys and gating of roosts. Specific funding commitments will be prioritized and scheduled by the implementing team for the Plan. The bat management area for the Pinto Mountains will be dropped as a program of the Plan in favor of site-specific bat protection measures.

Response 278-162: Survey procedures for potential roost sites are provided by measure Bat-6 on page 2-74. These survey procedures were developed in discussions of Task Group 1. See responses 278-131 and 278-135. Newly detected roosts will be protected on a case-by-case basis. Known significant roosts for California leaf-nosed bat and Townsend's big-eared bat will be gated and monitored.

See Response 278-137. We concur that no additional negotiated agreements with CDFG are necessary for protection of bat roosts.

Response 278-163: Bat 32. See Response 278-140 for adopting the 25-bat threshold. . The four bat species of concern (pallid, spotted, mastiff and long-legged myotis) have been dropped from the request for incidental take coverage. Three maternity roosts for pallid bat are known from the West Mojave (see response 278-138).

See Response 278-145 for evaluation of routes of travel in desert washes. Although the evaluation of routes in washes could be considered not a uniform survey and mitigation measure, a procedure is outlined for the evaluation and is designed to satisfy all concerns about protection of bat foraging habitat on a site-specific basis.

The likelihood of aggregate mining in washes of the Pinto Mountains is extremely low. The case of aggregate mining that disturbed foraging habitat cited in the species account involved a specific site and mine plan in Imperial County. This scenario is unlikely to be repeated should mining be renewed in the Pinto Mountains, where the California leaf-nosed bat occurs in the West Mojave Plan area.

All significant roosts are on public land.

Response 278-164: Bat 33. Comment noted. The requests for an incidental take permit for bats will be limited to California leaf-nosed bat and Townsend's big-eared bat. Although permit coverage will not be sought for the other four species (pallid, spotted, mastiff and long-legged myotis), the Plan will include conservation measures that address these bats.

Response 278-165: Bat 34. Comment noted. Three maternity roosts for pallid bat would be protected. The requests for incidental take permits from CDFG will be limited to Townsend's big-eared bat and California leaf-nosed bat.

Response 278-166: MGS General 1a. *The boundary of the proposed Conservation Area largely avoids private land. The Department contends the Conservation Area be designed to include some portions of the squirrel's geographic range that now are in areas with little public land.* The decision to exclude large tracks of private land from the conservation area is based on direction from CDFG, which is summarized in the MGS biological evaluation (BLM 2000). A 1991 CDFG report indicated that reserve design should "…simplify management issues…avoid major conflicts…avoid fragmented ownerships where possible," all of which suggest that private land should be mostly excluded from the conservation area. A 1993 BLM document entitled, "Goals and objectives of Mohave ground squirrel protection and Zone A monitoring" indicated "Each Zone A should be comprised of as much public land as possible, consistent with goals and objectives, to minimize the need to acquire private land holdings."

Finally, in 1998, the 1993 polygons were modified for numerous reasons. One of the main reasons was to avoid inclusion of private lands (see pages 3-7 through 3-9 of BLM 2000). The following wording was provided at the top of page 3-9 of the evaluation, which was in part reflective of CDFG's concerns in year 2000. "The polygons did not '…avoid major conflicts where possible (i.e., avoid California City…developed portions of Indian Wells Valley.' For example, the proposed polygon around California City (279.5 square miles) encompassed 151 square miles of private land. The polygons south of Edwards Air Force Base (Saddleback Butte area) and east of Highway 14 through Inyokern (north of Bowman Road) and Ridgecrest (east of Highway 395) were also largely comprised of private lands." One of the "Proposed Remedies" given on page 3-9 of the evaluation was to "Reduce the amount of private lands included in the proposed protection areas."

MGS General 1b. *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.* Although it has not been conclusively demonstrated that the MGS has "core populations," it has been suggested that the MGS persists in certain "core" areas during extreme and prolonged drought conditions; they are temporarily extirpated from "non-core" areas. Once conditions are favorable, the MGS reproduces and young animals disperse out of the "core" area to reoccupy adjacent habitats. As recently summarized by Brooks, most trapping studies have failed to trap the species, much less support the general idea of "core populations."

Private lands and some BLM public lands located in Inyo County along Highway 395 were withdrawn from the then-proposed MGS Conservation Area. This action was intended to minimize conflicts between private land development and MGS conservation. We do not believe that any "core populations" would become isolated if these private lands were not included within the MGS Conservation Area, for the following reasons.

No "core populations" have been identified to the north and south that would be connected by this corridor. Dr. Leitner has identified a persisting population in the Coso Range on China Lake Naval Air Weapons Center, but none has been found outside the Navy installation, mostly due to lack of study. This "corridor" is a manmade artifact that shows a narrow band of habitat between the Sierra, where the MGS is absent above about 6,000 feet, and China Lake. In fact, as can be seen on Map 3-15 (page 3-142) this narrow band of habitat is actually contiguous with the eastern extent of the range. Restoring private lands in Inyo County to the conservation area will not help to maintain this connection (and *what* is being connected is unclear).

Response 278-167: MGS General 2. The lands separating the small areas south of Jawbone Canyon and east of Ridgecrest from the remainder of the MGS conservation area are within two off highway vehicle open areas that were established by BLM's CDCA Plan in 1980, the Spangler Hills Open Area and Jawbone/Dove Springs Open Areas. These open areas would not be designated as part of the MGS Conservation Area. The two small parcels are not truly isolated from the nearest adjacent conservation area. Although vehicle impacts in open areas are likely to affect the MGS, that use is not comparable to urban and agricultural development where habitat is outright eliminated from extensive blocks of land. The MGS is likely to reside within open areas and to disperse through them.

CDFG mentions the narrow bridge in the conservation area between Hinkley and Harper Dry Lake. This small corridor has been expanded; see Map 2-1. The new connection is considered more in line with principles of conservation biology than the previous one.

Response 278-168: MGS General 3. See Response 278-166. We could not identify any feasible location for a connector between DTNA and Edwards, due to the extensive development of the lands in this area and the presence of the City of California City.

Response 278-169: MGS General 4a. *The Plan does not contain specific objectives and appropriate measures for conserving and providing full mitigation for impacts to the Mohave ground squirrel (squirrel).* Specific objectives were presented on page ES-9 and in Table 2-1 of the Draft EIR/S, and the determination made that the objectives could be met by implementing Alternative A. Ed LaRue, Michael Connor, Ms. Jones and Pete Kiriakos attended, and the four comprised the "MGS Biological Goals Subcommittee."

MGS General 4b. *As the Plan currently is written, only 35% of the known range of the squirrel would receive protection.* As reported in Table 4-34 (page 4-45) of the Draft EIR/S, the MGS Conservation Area is 2,693 square miles compared to 2,243 square miles of incidental take area; the remaining 2,775 square miles is on military installations. Given a suspected range size of 7,691 square miles, the conservation area comprises 35%, the incidental take area comprises 29%, and military comprises 36%. The MGS Conservation Area is comprised of open undeveloped lands, compared to the Incidental Take Area that includes the urban and agricultural development of the Victor Valley and Antelope Valley.

Although incidental take is authorized for 29% of the area, such take will not happen immediately, rather it will be incremental and take many years. In fact, current projections are that development for the entire planning area over the thirty-year term of the plan will result in the loss of approximately 140 square miles of habitat, approximately 2% of the range. Simultaneously, the MGS Conservation Area will be designated and the protective measures identified will be implemented over 35% of the species range. Adaptive management would provide opportunities to acquire more private lands and implement newly identified protective measures.

MGS General 4c. *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.* The West Mojave Plan proposes an interagency work group consisting of CDFG biologists, environmental managers of the military installations, the Implementation Team, and other agency officials. The military bases have indicated a strong interest in participating as members of this group. This is a clear opportunity to track uses of habitat on installations to see if the MGS continues to be protected (or not) at those facilities.

Response 278-170: MGS 1. See preceding response.

Response 278-171: MGS 2. The word, "unfragmented" was intentionally used to clearly demonstrate that the species requires good connectivity, which is best expressed as unfragmented habitat. CDFG observes that the existing land is already fragmented and degraded, which it uses as rationale for removing the word. We suggest leaving the word in place, as this is a goal for future MGS conservation, not a reiteration of current conditions.

Response 278-172: MGS 3. It is important that any conservation strategy remain open to modification through well-intended adaptive management that will benefit the species being conserved. The Goal is to "…protect sufficient habitat…" and this objective is intended to support that goal. The objective would promote boundary modifications in response to new data; see, for example, prescription MGS-5 (Kern County Study Area).

Response 278-173: MGS 4. The MGS Biological Goals subcommittee carefully crafted the Goals in the Draft EIR/S so that Goal 1 would apply to habitat protection and Goal 2 would apply to animal protection. CDFG's suggested revisions are adequately addressed by the MGS biological objectives, as modified in response to your comments.

Response 278-174: MGS 5. The wording of Goal 2 Objective 1 will be changed to the following "Minimize and fully mitigate the impacts of the Plan's authorized incidental take of the MGS."

Response 278-175: MGS 6. The analysis presented in Draft EIR/S Chapter 4 assumed that the Plan's MGS conservation strategy would be implemented in coordination with, but without the direct participation of, the military bases. The Draft EIR/S did evaluate whether the proposed conservation strategy would be effective in conserving the MGS given this assumption; please see conclusion was that MGS could be conserved by this approach.

Response 278-176: MGS 7. We concur that the grazing standards primarily apply to the health of rangelands. Moreover, there is little date available to indicate "optimum and minimum habitat requirements" for MGS. Dr. Leitner's work has suggested that there are important forage species in the Coso Range, but even those data do not establish the upper and lower thresholds in habitat quality and other essential habitat components. Dr. Leitner has demonstrated a relationship between the amount of rainfall and MGS reproduction, but no comparable relationship between MGS reproduction and the presence of other species has been shown.

Response 278-177: The discussion of procedures to allow for voluntary relinquishment in Section 2.2.5 has been expanded to provide more details concerning how this program would be implemented.

Response 278-178: Comment noted.

Response 278-179: Comment noted. Mining operations have not been identified as a major threat to MGS at this time, and conservation of this species has not been shown to benefit significantly from broad-scale mineral withdrawals are not warranted.

Response 278-180: Tortoise General 1. Monitoring proposed in the Draft EIR/S includes population level surveys using distance sampling, monitoring at BLM permanent study plots, and miscellaneous other monitoring programs (e.g., route closure, ravens, etc.). Although mitigation lands would necessarily be located within DWMAs, acquired parcels may not be contiguous and would come in various sizes. Monitoring tortoise "populations" on dispersed 100-acre or one-square-mile parcels spread throughout the DWMAs is impractical. Acquisition lands and public lands would be interspersed within DWMAs, which would need to be surveyed to determine population trends. The Implementing Authority would track the locations and amounts of acquired lands.

Response 278-181: Tortoise General 2. Biological information is based on the best available data, which was collected throughout the planning area between 1998 and 2001. As described in the biological evaluation (Bureau of Land Management 2000) and in the Draft EIR/S, these data have not been used to estimate tortoise densities for the reasons given. Other data collected from county and city governments show areas where tortoises may be relatively common (e.g., Copper Mesa) or have apparently been extirpated (e.g., parts of Lancaster and Palmdale). One can say with relative certainty that tortoises will not be affected in downtown Hesperia, but the number of tortoises that may be affected just outside Barstow, for example, cannot accurately be determined without more survey information.

The Plan does call for tracking the actual level of take as it occurs, and reports will be provided to CDFG and USFWS on the results as often as required. In addition, the USFWS will issue a biological opinion on both the federal (CDCA Plan Amendment) and private (completion of an HCP and issuance of incidental take permit) components of the Plan, which will necessarily include authorized take limits.

Response 278-182: Tortoise 1. No Survey Areas are intended to encompass areas of non-habitat; not to indicate areas previously unsurveyed, such as the Hyundai test track. Suspected non-habitat areas were delineated several years ago based on 1995 aerial photography. In response to CDFG's concern, Ed LaRue mapped out non-habitat areas between Kramer Junction and California City in January 2004. The Borax mine was the only major area of non-habitat in the region that was not mapped. The No Survey Areas (i.e., areas of non-habitat for tortoises) depicted in the Final EIR/S have been adjusted to address CDFG's concerns on the basis of these ground-proofed data. The mitigation fee and MGS conservation measures would be required in lieu of an MGS survey.

Response 278-183: Tortoise 2. Figures cited in Table 2-12 were developed by CalTrans based upon its best estimate of new ground disturbance associated with the project. The West Mojave Plan would provide coverage for the entire project so long as the new ground disturbance does not exceed the stated acreage. Habitat located between new construction and existing roads would be counted as part of the ground disturbance acreage. Chapter 2's text has been clarified to explain this point.

Response 278-184: Tortoise 3. BLM is required by Section 601 of FLPMA to allow motorized vehicle access, where appropriate, to public lands in the California Desert Conservation Area. An effective vehicle network is one that provides public access to recreation venues and commercial sites in a manner that is compatible with species conservation. Facilitating public access to such sites by acquiring intervening private lands is recognized and effective land management tool. Route network implementation would receive funding from sources other than mitigation fees. These include moneys appropriated by Congress that are specifically earmarked for route network design enhancements.

Response 278-185: Tortoise 4. Tortoise 4. See Response 190-36.

Response 278-186: Tortoise 5a. The comment letter indicates, "The Department is opposed to dual sporting events in DWMAs. Past events that have been monitored have demonstrated impacts to habitat." BLM personnel (including biologists) have monitored all recent dual sport events in the West Mojave, and have reported few impacts. Not a single BLM monitoring report reviewed by Ed LaRue during August through October 2003 provided acreage for any impact area. In its recent review of dual sports for the CDCA Plan consultation and resulting biological opinion, the USFWS did not identify dual sports as having any significant impacts. The USFWS saw no need to modify the earlier biological opinion that was issued for dual sports and continues to regulate those events when authorized by the BLM.

Tortoise 5b. The information given on page 2-54 is incomplete, and does not include all protective measures recommended for commercial filming on private lands. A more complete list of applied measures is found in Volume 2, Appendix C, Exhibit C.2, Pg. 5-6. The requirements to avoid burrows (DT-2, DT-3) and relocate tortoises (DT-2) are included on these two pages. The BLM requires project proponents to enlist a qualified biologist, or alternatively, the BLM provides one. Biologists are required to quantify impacts to habitat and tortoises and to compensate accordingly, although avoidance is the main part of the BLM's program. With regards to tortoise relocations, commercial filming would occur in such a manner that relocations

would be avoided insofar as possible. If tortoises were to be relocated, the authorized biologists would have to follow the guidelines given in Section 2.2.4.2.2, pages 2-57 through 2-58. Appropriate cross-references have been added to the text to clarify the discussion, and Appendices C.2 and I (Best Management Practices) reviewed to ensure consistency.

Response 278-187: Tortoise 6. The first of the protective measures for commercial filming (see previous response) indicates that an Authorized Biologist would be called to the site to determine if prolonged monitoring is required or not. If the Authorized Biologist determines that tortoises may be affected, then he/she would remain on-site to implement all other measures. If the Authorized Biologist determines that tortoises would not be affected, the film crew would be given the hotline number to call in case a tortoise is encountered.

Response 278-188: Tortoise 7. The following wording has been added to DT-8, "These specifications would be adjusted accordingly if it is determined that tortoises (particularly subadults) are still being trapped within roads having such dimensions."

Response 278-189: Tortoise 8. The West Mojave Plan does not include a new proposal to prohibit target shooting in open areas and, therefore, no movement of target shooters from open areas into DWMAs is anticipated.

Data presented in Table 3-36 (page 3-160) show that evidence of target practice (i.e., spent shells, perforated cans, clay pigeons, etc.) was found on 160 square miles surveyed. This does not indicate, as stated, that: "…target shooting…is most prevalent in open areas." In fact, one can see in the lower half of Table 3-36 that the largest area with evidence of target shooting was a 76 square mile region around California City and in the Rand Mountains. This is not an open area, although is does receive heavy OHV use.

The proposal to allow target shooting in DWMAs was not made at the last minute. At a West Mojave task group meeting, Barry Nelson (BLM Barstow Chief Law Enforcement Ranger) indicated that existing law already prohibited many types of target practice from all public lands. It was agreed to consider the shooting or discharge of firearms as long as currently permitted by State and local laws. As of that date, on public lands within five route designation subregions that encompassed about 75 percent of the public lands within the tortoise DWMAs, a restrictive shooting policy was in place. Early in 2001, as part of a settlement of litigation between BLM and the Center for Biological Diversity, et al, the parties agreed to limit shooting in these areas to "hunting and target practice at paper targets specifically created for such purpose" until the completion of the West Mojave Plan. Far from allowing additional shooting, Prescription DT-10 actually extends this shooting limitation to all public lands within DWMAs for the term of the West Mojave Plan.

Dr. Boarman summarizes the results of Dr. Kristin Berry's 1986 paper on page 56 in Appendix J. Dr. Berry found that 20.7% of the carcasses she collected and later analyzed showed evidence of gunshot wounds. This does not mean that 20.7% of the tortoise population suffered this fate; rather it means that about a fifth of the carcasses collected showed evidence of gunshot. It is possible that some of these carcasses were shot after the tortoise died. Data collected by the West Mojave team is summarized in Table L-5, Appendix L. One can see there that 9 of 148 (6%) carcasses found between 1998 and 2001 showed evidence of gunshot.

There is no evidence to suggest that tortoise mortality is primarily associated with target shooting as opposed to hunting. When compared to distance sampling data collected in the spring, West Mojave planning team data show that males are very active in the fall, and are encountered about twice as often as females. West Mojave data (Table l-7) show that 5 of the 8 (62%) tortoises with gunshot wounds were males. There is too little information present to assume that all gunshot mortality is associated with target shooters, or that eliminating target shooting from DWMAs would result in less tortoise mortality.

Response 278-190: Tortoise 9. The best available information indicates that there are large regions, such as the western part of the Antelope Valley and the southern portion of the Victor Valley, from which tortoises have been extirpated. Survey data submitted to the San Bernardino County planning department between 1990 and 2002 clearly show that tortoises have not been found in places like Baldy Mesa, Oak Hills, and Phelan. These are the places where tortoise surveys would no longer be required. The hotline number has been identified as a contingent means of minimizing take of tortoises should they be found in No Survey Areas. The plan also allows for feedback to the Implementation Team to change the boundaries accordingly as more survey data are collected.

The issue of No Survey Areas in Kern County is addressed above in Response 3.

Response 278-191: Tortoise 10. Research by Dr. Boarman in conjunction with fencing Highway 58 shows that tortoises may make long distance movements of up to several miles. The potential for disease transmission *was* considered in recommending the ½ and one-mile distances given in these guidelines. Subcommittee members felt that these relatively short distances were appropriate to maintain the tortoise near its original home range and to minimize the spread of new diseases into the area.

As described above, available information indicates that tortoises are already extirpated from large areas, and these are the areas most likely to be developed in the near future; see also Response 278-181. Without the plan these same tortoises are exposed to pet collection, feral and domestic dogs, and other impacts that will eventually extirpate the local tortoise population. The translocation guidelines are intended to alleviate the impact at the time of construction, while providing for conservation in DWMAs.

Response 278-192: Tortoise 11. The potential impact of ravens on the headstarting program has been considered. The following wording is on page 2-65 of the Draft EIR/S: "The Implementation Team would ensure that predation by ravens and other predators does not compromise the integrity, function, and success of the headstarting program funded and implemented by this HCP."

Response 278-193: Tortoise 12. A West Mojave "Headstarting Subcommittee" developed a proposal for headstarting on September 5, 2001. The proposed "translocation area" is in the vicinity (if not on) the BLM's Fremont Peak Study Plot. Dr. Kristin Berry estimated 70 adult tortoises on this plot in 1980, and only 5 on the same plot in 1993 when last censused. This plot was assessed at four-year intervals between 1980 and 1993. The actual cause for the decline

cannot be determined, although disease has been implicated and predation by kit foxes and coyotes is known in the area.

With Dr. Morafka's recent death, Dr. Kenneth Nagy has continued the work on the pilot headstarting program at Edwards Air Force Base. The effects of stress on egg-laden tortoises, and the potential for vertical transmission of URTD are only a few of the questions Dr. Nagy is pursuing.

The following wording has been added to prescription DT-26: "Longitudinal monitoring of tortoises released into the wild through headstarting technologies should persist a sufficient amount of time (suggest at least 15 years) to see if released tortoises are reproducing and adding viable offspring into the study area."

Response 278-194: Tortoise 13. The following wording has been added to DT-41: "The study should also assess use of quail guzzlers by common ravens, feral dogs, coyotes, and foxes."

Response 278-195: Tortoise 14. The West Mojave Plan's voluntary relinquishment provision will allow an allotment to be retired, at the request of the permittee or licensee.

Response 278-196: Tortoise 15. The uncertainties associated with the proposal to use the ephemeral forage threshold of 230 pounds are discussed in Chapter 4 (Table 4-20, page 4-30). A 350-pound threshold is not practicable for the following reasons. First, the CDCA Plan *does not* apply *any* specific threshold to cattle grazing. The CDCA Plan states (1999 amended plan at page 59), "For ephemeral cattle operations, turnout of animals will be determined annually by an interdisciplinary team, including grazing operator, based on considerations for maintaining an adequate amount of annual forage production for wildlife, erosion prevention, and visual needs. Allotments classified as ephemeral sheep operations will be managed under ephemeral authorizations…in highly crucial desert tortoise habitat…a 350 pounds-per-acre requirement is specified." One can see that the 350-pound threshold is applicable to sheep, not cattle. The 230-pound threshold would be the first time a threshold has been applied to cattle.

Although the threshold was based on Dr. Hal Avery's studies in the East Mojave, it has recently been applied elsewhere. Its application to the West Mojave was first identified in the settlement of the litigation between the BLM and Center for Biological Diversity et al. The analysis given in Chapter 4 clearly shows that the effectiveness of applying this threshold to West Mojave cattle allotments remains an open question, pending the completion of a West Mojave "Avery study." It is not advisable, however, to apply a standard used for sheep grazing to cattle grazing.

See also Responses 188-18 to 22.

Response 278-297: Tortoise 16. On June 30, 2003, the BLM's CDCA Plan was amended to incorporate the route network described by Draft EIR/S Alternative A. That network now constitutes the "No Action" alternative. The network adopted on June 30, 2003, together with new stopping, parking and camping restrictions, a route rehabilitation program, and

competitive event limits (see below), should conserve and recover desert habitat more effectively that the network that was in place prior to June 2003.

This will occur because the West Mojave Plan significantly reduces the DWMA acreage likely to be disturbed by off highway vehicle use. Although the total mileage of open routes was increased somewhat, the portion of the network that lies within the tortoise DWMAs was redesigned in a manner that closed relatively more routes in biologically sensitive areas, while opening routes in less sensitive mountainous terrain favored by recreationists (see Draft EIR/S at page 4-118 and elsewhere). The stopping and parking corridor would be narrowed from within 300 feet of the centerline of open routes to 50 feet of the centerline, and camping would be limited to previously disturbed sites adjacent to open routes. By establishing and funding a new and aggressive route rehabilitation program, the West Mojave Plan will ensure that affirmative and effective steps are taken to prevent route proliferation. The plan also proposes to eliminate the Barstow to Vegas racecourse (which crosses the Superior-Cronese DWMA) and replace the Stoddard Valley to Johnson Valley Competitive Event Corridor with a non-competitive "connector route." All of these actions, taken together, would provide significantly more protection for desert habitat and more effective species conservation than the motorized vehicle access program in effect prior to June 30, 2003.

Response 278-198: Tortoise 17. The 50-foot limit applies to stopping and parking only. It represents a significant reduction from the area currently available for this activity, which is 300 feet of routes of travel. Please note that the CDCA plan currently provides BLM with the discretion to sign specific parking areas as Open or Closed to protect sensitive or fragile resources (see CDCA Plan, as amended, page 78).

The West Mojave Plan proposes to limit camping to previously existing disturbed sites adjacent to routes designated open. It would not allow camping at any location within 50 feet of the open route. This also is a significant change from the current situation, which allows camping anywhere within 300 feet of a route of travel.

Response 278-199: Tortoise 18. CDFG makes the following comment, which is not true: "In appendix K, Dr. Kraysik's [sic] reports II and III report that the correlation between tortoise sign and tortoise densities are [sic] not reliable." Dr. Krzysik's results are summarized in a paragraph on page 3-84 of the Draft EIR/S. "Dr. Krzysik found that (a) desert tortoises are closely associated with their sign (i.e., burrows and scats); there is a highly significant correlation of live tortoises with burrows, scats, and Total Corrected Sign (TCS); (b) transects associated with live tortoises are typically also associated with appreciable sign counts…"

Response 278-200: Tortoise 19. Prescription DT-17 proposes that dust emissions from playas be monitored for toxic elements; see Table 2-14. This measures has now been included in the Monitoring and Adaptive Management table (Table 2-26).

Response 278-201: Tortoise 20. The adaptive management prescriptions for the desert tortoise have been revised and clarified for the Final EIR/S.

Response 278-202: Comment noted. The three bullets associated with prescription DT-2 (Draft EIR/S page 2-54) was clearly intended to direct filming away from DWMAs and higher concentration areas of tortoises. The following wording has been added to DT-2: "If biological monitoring shows that filming is adversely affecting tortoises inside DWMAs, the Implementation Team will consider remedial actions, which if deemed necessary could include limitations or prohibitions on filming activities within DWMAs."

Response 278-203: Tortoise 22. See Response 278-6.

Response 278-204: Fringe-toed Lizard 1. The policy of Los Angeles County for Significant Ecological Areas is to "Advocate development that is highly compatible with biotic resources". We believe that this policy would preclude blocking of fluvial sand transport in Big Rock Wash, for example, by restricting development in the floodplain.

The Plan does not rely on the SEAs for conservation, but recognizes the value of this overlay zoning in Los Angeles County to biological resources. Any changes to the SEA boundaries will be adopted by the Los Angeles County Board of Supervisors upon adoption of the General Plan Update, which is anticipated in 2005.

Response 278-205: Fringe-toed Lizard 2. Table 2-33 states that 42,865+ acres of land would be conserved and that four sites would be subject to incidental take. These four non-military sites are discussed on page 4-66. They constitute sites where habitat is irrevocably fragmented, within city limits, or where no recent records exist. Sufficient delineation of the habitat does not exist to make an accurate acreage determination of the incidental take areas. However, at this programmatic level of analysis, new conservation clearly exceeds the potential for incidental take.

Response 278-206: Fringe-toed Lizard 3. Specific parcels of occupied habitat adjacent to Saddleback Buttes State Park are identified for potential acquisition from willing sellers. The essential ecosystem process lands within Big Rock wash are within a floodplain and are not suitable for permanent development. The Los Angeles County policy for SEAs (see response 1 above) is intended to function for conservation instead of acquisition.

Response 278-207: Fringe-toed Lizard 4. We will add the following measure to the monitoring section for this species: "Conduct periodic presence/absence surveys for the Mojave fringe-toed lizard at conserved sites."

Response 278-208: Panamint Alligator Lizard General. The Final EIR/S contains the species accounts on a CD-ROM.

No verified records exist for the Panamint alligator lizard within the planning area. However, at least one record exists from the Argus Mountains on Navy property. The spring habitat on public land in the Argus Mountains appears to be suitable for this secretive species. We intended to provide conservation for the Panamint alligator lizard based on the high probability that it would be detected within the planning area in the future.

The Morafka study did not identify any new locations for the Panamint alligator lizard within the planning area.

The Panamint alligator lizard will be dropped as a covered species in the Plan. However, this species could be amended into the Plan at a later date if new information is obtained. The provisions for protection of habitat for the Inyo California towhee, which is believed to have overlapping habitat with the Panamint alligator lizard, will remain.

Response 278-209: Horned Lizard 1. Records from CDFG's Natural Diversity Data Base were used to identify Big Rock Creek and Mescal Creek as the best potential private land sites for conservation.

The foothill lands in San Bernardino County are highly fragmented into rural residential lots and are not suitable for conservation of habitat blocks. In Los Angeles County, the foothills of the San Gabriel Mountains are not yet developed, although many areas are subdivided into smaller lots. The Mescal Creek and Big Rock Creek areas, along with lands between Portal Ridge and the Antelope Valley Poppy Preserve, are nearly the only remaining private lands that could be conserved.

Public lands within the range of the San Diego horned lizard are found along the foothills of the San Bernardino Mountains. In this area, the Plan would establish the Carbonate Endemic Plants Research Natural Area ACEC, which would benefit the horned lizard. Existing Bighorn Wilderness lands also provide conservation, as do lands managed as the Juniper Flats ACEC.

Response 278-210: Horned Lizard 2. Table 2-33 indicates that 15, 954+ acres of conserved lands would be provided for the San Diego horned lizard. The acreage subject to potential take cannot be easily determined because of the fragmentation resulting from existing rural residences and the potential for non-discretionary construction to take place in the San Gabriel Mountains foothills. At a programmatic level, the conservation provided by the large blocks of habitat at Big Rock Creek and Mescal Creek and the connectivity of habitat via the southern boundary of the National Forests is apparent.

Response 278-211: Horned Lizard 3. Because the horned lizard can be difficult to detect, we believe that habitat-based monitoring is appropriate. Evaluation of impacts from nearby development will allow corrective measures, such as boundary fencing, to be applied if necessary.

Response 278-212: Horned Lizard 4. If Los Angeles County adopts the Plan, the Big Rock Creek Conservation Area would limit new development to 1% of the land area and would require payment of a 5:1 fee amount ratio in addition to the compatibility review provided by the Significant Ecological Area policy (contained in response 1 to the Mojave fringe-toed lizard).

Response 278-213: General Plants 1. <u>Definition of occupied and suitable habitat.</u> Most of the plant species in the Plan are relatively poorly known. Occupied habitat was generally defined as a polygon drawn around the outer limit of the known occurrences, whether they were points or small polygons. We did not use the larger, imprecise circles of the CNDDB

as a polygon because these records do not provide sufficient habitat definition. The encircling polygon was utilized for Mojave monkeyflower.

The extent of occupied habitat differed among species. For the alkali mariposa lily, habitat was modeled using the saltbush scrub plant community, existing disturbance and known locations. For the little San Bernardino Mountains gilia, habitat was defined as streams within the watershed where occurrences were known.

Certain species distributions are very well known. These are the listed carbonate endemic plants, the Lane Mountain milkvetch, and the Kern buckwheat. Parish's phacelia occurrences and habitat have been well defined. Both potential and suitable habitat for the Kelso Creek monkeyflower has been mapped with precision previously.

The level of habitat definition is sufficient for the programmatic analysis of this EIR/S. The Final EIR/S will refine the occupied and suitable habitat for selected species where we now have additional information.

The local governments and Implementing Authority will utilize the database of the West Mojave Plan to define occupied and suitable habitat for purposes of implementation.

Response 278-214: General Plant 2. Species occurrence records. The Implementing Authority will utilize the latest and best information on plant occurrences. Acquisitions will not proceed without verification of the conservation value of a site to a rare plant species.

The summaries of plant occurrences were compilations of all records available to us. The authors of the species accounts were free to utilize place names known to them, which may have differed from those used by others.

Response 278-215: General Plant 3. Incidental take based on acreage. During all stakeholder and agency meetings where the Plan provisions were developed, a consensus was reached to use acreage figures. Habitat quality or population density of a rare plant species was considered in formulation of the Conservation Areas.

The 50-acre limitation on take for several rare plants represents the maximum expected loss of occupied and suitable habitat (depending on the species) during the Plan's duration.

Response 278-216: General Plant 4. Determination of acreage. The definitions in the Plan are sufficient for the programmatic level of analysis. For certain species, no take of occupied habitat is expected, but suitable habitat based on life history requirements may be lost. For some species take is limited to newly detected populations, if any are found. The Implementing Authority will refine the definition of suitable habitat as more becomes known about these rare plant species. If an area surrounding an occurrence is required for support of pollinators, for example, it could be defined as "essential habitat" necessary for conservation of the occupied habitat.

Response 278-217: General Plant 5. Partial disturbance of parcels. We have provided the fee reduction and conservation easement provisions as an incentive to rural residents to conserve habitat and covered species. It would be applied primarily to reduce take in areas already highly fragmented, such as the north slope of the San Gabriel Mountains, where the incentive could result in protection of short-joint beavertail cactus. The Implementing Authority will examine the potential for creation of larger open spaces by designing adjacent conservation easements. This measure is not intended to apply to larger subdivisions that might create an unmanageable open space within a suburban or urban setting. Guidelines or specifications on the use of the partial disturbance incentive can be provided at the time the HCP and 2081 permit applications are submitted to the wildlife agencies. At that time, the preserve design criteria discussed in Attachment 3 can be incorporated.

Response 278-218: General Plant 6. Monitoring in wet rainfall years. Botanical surveys for monitoring purposes will conform to the CDFG *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*, as noted in the Draft EIR/S on page 2-153 in Section 2.2.8. This publication recognizes the need for botanical surveys in wet rainfall years.

Response 278-219: General Plant 7. Monitoring of reference populations. Monitoring of reference populations of rare plants, especially annuals, will be added to the general monitoring provisions described in the Draft EIR/S in Section 2.2.8 on page 2-153. We anticipate that reference sites would be located in Conservation Areas on public land.

Response 278-220: General Plant 8. Natural communities. The Plan is designed to protect covered species rather than natural communities. We will change the term incidental take to "loss" when referring to natural communities. Although Table 4-4 describes potential loss of natural communities, including relatively rare communities, the development projections do not support a conclusion that this loss is inevitable. Many of these sites, such as alkali springs or montane meadows, are in remote locations. Other communities, including Mojave riparian forest, are jurisdictional wetlands where additional permits are needed and where building is impractical. CEQA review will continue for discretionary projects, and will provide an additional opportunity to disclose and analyze significant impacts. The local jurisdictions will have the ability to utilize the West Mojave database when reviewing development applications, and can then identify situations where a rare natural community might be adversely impacted.

An actual loss of wetland communities is not expected to occur. Therefore, there would be no violation of the State's "no net loss of wetlands" policy. The state and federal governments regulate wetland development through enforcement of other laws. BLM places its highest priority on conservation of riparian vegetation in the desert. The ACECs at Afton Canyon, Big Morongo Canyon, Sand Canyon, Great Falls Basin and other sites are evidence of this commitment.

Response 278-221: General Plant 9. Alkali seeps and springs. The local governments will utilize the Plan database to identify projects that may impact alkali seeps and springs. Few projects are ever proposed for these unusual wetland sites. The monitoring program will identify

those alkali seeps, springs and meadows containing rare plants and provide for their conservation via adaptive management.

Response 278-222: Lily 1. Goal 1 will be changed to: "Maintain the hydrological processes that support alkali mariposa lily at the Rosamond Lake Basin and outlying seeps, meadows and springs." Goal 2 will remain the same. Objective 1 includes conservation of playa habitat adjacent to Edwards AFB and the outlying springs, seeps and meadows do not have adjacent playa habitat.

Response 278-223: Lily 2. We concur that the total acreage of incidental take of alkali mariposa lily exceeds the projected conservation acreage. We have redesigned the conservation area, however, so that it encompasses the Amargosa River drainage, which incorporates the most important areas for ecological process and the most concentrated occurrences for this species. The permanent Conservation Areas represent the best remaining lands having connectivity to occupied habitat on Edwards Air Force Base.

The 0.5:1 compensation ratio does not imply that half of the suitable habitat lands would be conserved. This fee amount ratio is part of the overall Plan mitigation structure. Mitigation fees would be placed into an account that would fund the overall mitigation and management program of the Plan based on priorities established by the Implementing Authority.

The mitigation fee is based on the average value of land in the DWMAs and would be collected from a large area where development is taking place. Different fee amounts will not be charged in regions where land values are different from the average.

Response 278-224: Lily 3. The applicants will ensure that mitigation fees are sufficient to fund implementation of the plan and to attain its biological goals and objectives.

Response 278-225: Lily 4. Map 2-8 on page 2-33 of the Draft EIR/S shows the permanent Conservation Area on the west side of Edwards AFB as a 5:1 fee ratio area. The interim Conservation Areas were not intended to be placed in a 5:1 fee ratio area. They would become 0.5:1 or 1:1 fee ration areas, depending on the level of surface disturbance, unless the local jurisdictions imposed a different ratio.

Response 278-226: Lily 5. The Draft EIR/S contained an objective of conservation of half of the interim Conservation Areas, or 23,810 acres of the 47,620 acres total. Map 2-1 indicated five interim Conservation Areas. Kern County has not agreed to establishment of two additional Conservation Areas, and the two were not removed from the map by the time of publication of the Draft EIR/S. The tables, however, were correct. Table 2-3 listed the three larger interim Conservation Areas in Los Angeles County. Table 2-11 also included the three interim areas and listed the permanent Conservation Area as well.

The proposal for interim Conservation Areas has been discussed with the affected local jurisdictions. The conservation strategy for the alkali mariposa lily will change in the final EIS. All interim Conservation Areas will be eliminated, and additional permanent Conservation Areas

will be established. These new Conservation Areas will lie along the southern boundary of Edwards AFB. Maps and tables have been revised to reflect the conservation strategy revisions.

Response 278-227: Lily 6. Opportunities for habitat restoration may exist in the revised Conservation Area. Conversion of abandoned farmland could potentially restore former alkali mariposa lily habitat, but proven methodologies are not now available.

Response 278-228: Lily 7. We have received additional survey results from the City of Lancaster and the Los Angeles County Sanitation Districts showing occurrences of alkali mariposa lily within both the permanent and interim Conservation Areas. The interim areas were defined based on the overlap of occurrence records, the saltbush scrub plant community and undisturbed lands, where sheet flooding and ponding may still take place.

The Plan will track the pace of incidental take and the pace of conservation for alkali mariposa lily to assure that the two are in rough proportionality.

Response 278-229: Lily 8. The Plan includes a global measure that the local government jurisdictions track and report new development authorized under the Plan's incidental take permits.

Response 278-230: Lily 9. Green Springs is a private agricultural operation that is not addressed by the Plan. It was reported because records of alkali mariposa lily are known from the alkali meadow at that location. Turner Springs is an incidental take area because groundwater pumping has altered the local hydrology sufficiently so that the conservation of the alkali mariposa lily at this site cannot be assured. No threats are present at Playas 28-32, so this region was not designated as a Conservation Area. It is unlikely that any threat of surface-disturbing activity requiring a discretionary permit will appear during the duration of the Plan. In the future, adaptive management could conserve the alkali mariposa lilies at the edge of these playas.

Response 278-231: Lily 10. Isolated springs such as Box S and Cushenbury Springs are wetland communities, which receive protection from state and federal laws. No threats are now known to these areas, and Cushenbury Springs receives protective management from Mitsubishi Cement Corporation. CDFG holds a conservation easement for a portion of the wetland at Cushenbury Springs. We believe that a review of development proposals by San Bernardino County will respect existing wetland protection laws and the conservation value of these springs.

Response 278-232: Lily 11. A hydrology study is no longer needed for the following reasons. Extensive work on temporary and ephemeral wetlands, water basins and sheet flooding and ponding near EAFB can be utilized. Much of the hydrology in Lancaster and adjacent unincorporated areas has been irrevocably altered. No proof has emerged that groundwater levels are important to alkali mariposa lily in playa edge habitat or the shallow ponding areas surrounding the Rosamond Basin.

The water table is less important than conservation of areas where sheet flooding and local ponding within the saltbush scrub takes place. It is doubtful that conservation can be achieved along Little Rock Creek, which is in a Mineral Resource Zone and which has several active aggregate mines.

Response 278-233: Sunflower 1. The biological goal will be revised to state: "Protect a contiguous habitat block with conserved populations on public lands throughout the species range." Establishment of Conservation Areas is better suited to a species objective.

Response 278-234: Sunflower 2. Objective 2 will be changes as follows: "Acquire private lands containing known occurrences within the core reserve." Known would include historical records or discoveries from new surveys. Private lands will not be acquired unless presence of the species is established or they are essential for connectivity with other conserved lands. In 1998, biologists from the BLM and California Native Plant Society have verified the continued existence of many of the populations originally reported in 1983-1986. Within the overall range, many of the populations are located on shallow soils, often with an underlying caliche layer. These specific soil conditions cannot be mapped.

Response 278-235: Sunflower 3. Table 2-3 describes the Northeast Edwards Conservation Area (see Draft EIR/S on page 2-16).

The occurrences reported from the Waterman Hills, Lane Mountain, Harper Lake Road, North Harper Lake, Cuddeback, Highway 395 S, and Transmission Line are protected within the DWMA. These occurrences are somewhat scattered and isolated and do not form a core reserve. The 1% limitation on surface disturbance within the DWMAs, along with the 5:1 mitigation fee ratio and consolidation of routes of travel into a designated network provide sufficient conservation of the non-core populations. Designation of separate conservation areas is not necessary.

The Barstow Woolly Sunflower Conservation Area northeast of Kramer Junction is located outside the utility corridor in order to avoid conflict with present and future utility uses. Objective 4 provides for site-specific measures to be enacted within utility corridors. Most of the occurrences mapped in 1988 and earlier are still extant, having been avoided by placement of transmission line towers.

We do not know if populations near Harper Lake Road potentially impacted by the Mojave Pipeline are still extant. The species account describes the limited success of restoration efforts with this species on the right-of-way. Other occurrences adjacent to the right-of-way were noted after pipeline installation.

The count data presented by Andre was apparently from Section 30, R5W, T10N. The species account lists this site as in R4W, but this section does not occur south of Highway 58. The Andre data are not included in the West Mojave records because we never received any documentation. They will be added when we are able to provide sufficient details.

For the Opal Mountain occurrence, the species account author referenced an NDDB form filed with the Department. These plants were found in 1998 within Section 5, T32S, R3W. They would be addressed in the Plan the same as the other non-core populations (see paragraph above in Response 278-235).

Response 278-236: Sunflower 4. Maps and descriptions of the utility corridors have been available in the CDCA Plan since 1980. See Map 16 of the CDCA Plan (1999, as amended).

The West Mojave task group consensus was to calculate conservation and take based on acreage. Incidental take was limited to a specified amount at the suggestion of CDFG.

The Plan includes a global measure (page 2-30) that the local government jurisdictions track and report new development authorized under the Plan's incidental take permits.

No take is assumed or anticipated for populations in the utility corridor. If a utility proposes to construct an additional facility within the corridor, the avoidance and minimization measures (P-17) described in the Draft EIR/S on page 2-95 would be implemented.

We have no project details for widening of Highway 58 and Highway 395. The EIR/S is not intended to analyze take and conservation at a project-specific level. Rather, this document is a programmatic EIR that provides information on the conservation program for each species in the broader sense.

Response 278-237: Sunflower 5. The 1% cap on development approximates the level of ground disturbance recorded in the DWMAs from pre-settlement times to now. Threats of ground disturbance from discretionary development that might impact the Barstow woolly sunflower and other species in the DWMAs are low.

Response 278-238: Sunflower 6. No change is necessary. Acquisition would only be pursued if the private lands were a top priority of the Implementing Authority, considered in the context of acquisition needs and priorities for other species.

Response 278-239: Sunflower 7. Map 3-19 on page 3-214 of the DEIR/S shows mineral potential and mining claim density for the Fremont-Kramer DWMA. In the proposed Barstow Woolly Sunflower Conservation Area, the mineral potential is low except for the extreme southwest corner and most of the area has no mining claims. The proposed North Edwards Conservation Area has very few or no mining claims and the mineral potential is low. Presence of mining claims does not indicate that mineral exploration is imminent. Measure P-18 prescribes BLM review of proposed Plans of Operation. The level of detail requested for mining claims is not necessary for this programmatic DEIR/S.

Response 278-240: Sunflower 8. The intent of additional surveys on the proposed Conservation Area lands was to determine that the Barstow woolly sunflower populations and habitat are adequately conserved. This falls under the scope of monitoring. We will remove the requirement for surveys on lands outside the proposed Conservation Areas. A survey

requirement is already in place for Barstow woolly sunflower within the DWMA for new discretionary projects.

Response 278-241: Sunflower 9. The adaptive management measure is intended to define the best biologically defensible boundary for the North Edwards Conservation Area, which is almost entirely private land. U. S. Borax Company has submitted survey information for its lands in the northern portion of the Conservation Area, and the boundaries will be adjusted to exclude those lands, which have an approved entitlement for mining expansion. Parcels within the proposed Conservation Area will not be removed if they create inholdings that are not manageable for conservation purposes. Parcels will not be removed if they doing so would create unacceptable edge effects on the conserved lands.

Response 278-242: Carbonate 1. Comment noted.

Response 278-243: Carbonate 2. The number of occurrences of the carbonate endemic plants outside the proposed ACEC, west of Highway 18 and within the Yucca Valley city limits is less than 50 acres. Almost all of these occurrences are Parish's daisy, although eight small occurrences of Cushenbury milkvetch are known west of Highway 18 below Arctic and Furnace canyons.

Response 278-244: Carbonate 3. Appendix D, Section D.2.2 provides management actions addressing off highway vehicles. All routes within the proposed ACEC would be designated as limited or closed, as illustrated on Maps 70 and 73 on the CD-ROM showing route designations. In addition, the Multiple Use Class of lands within the ACEC would change from M to L. Implementation includes signing and gating of these routes where necessary. Given these measures, no additional measures are needed under adaptive management.

Response 278-245: Charlotte's Phacelia 1. The 50-acre limit applies to the HCP and 2081 incidental take permits on private lands. The community collaborative process will consider the occurrences of Charlotte's phacelia in the El Paso Mountains. The resulting network will consist of designated routes of travel; off-road use will not be permitted. If monitoring shows damage to occurrences of Charlotte's phacelia, fencing will protect the plants off the road. The open route will not be closed.

The mitigation for take of Charlotte's phacelia is the program of grazing improvements and route designation. This program addresses the known threats to this species.

The 50-acre take limitation applies to potential incidental take. Threats from discretionary development permits are almost non-existent, and actual take could be less than 50 acres. The information requested for the occurrences on private land is too detailed for this programmatic level of analysis.

The mitigation fees will not be used for directed mitigation, but will provide management and acquisition based on priorities set by the Implementing Authority.

The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with the grazing allotment assessments, monitoring surveys and with construction of fences or exclosures.

Response 278-246: Crucifixion Thorn 1. BLM will consider the posting of signs prohibiting collection of firewood near the crucifixion thorn "woodland". This area does not receive much camping use.

Occurrences on private lands are limited to a single plant or an occurrence of less than ten plants. The existing mining operation has conserved the crucifixion thorn on the property. Potential impacts from new mining within the ACEC are unknown, but crucifixion thorn occurrences are very small and scattered.

The potential for development at the crucifixion thorn location is negligible. The mineral potential of this area is low (Map 30-20, page 3-215). The possibility that large-scale clustered development would impact this species is speculative and remote.

The Johnson Valley to Parker competitive event is restricted to existing routes of travel, primarily utility easements. It has undergone previous environmental review. Monitoring of earlier events has not indicated any damage to crucifixion thorn plants.

The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with signing, monitoring surveys or construction of fences. The mitigation proposed is intended to cover incidental take on private land. The potential foe take on these remote lands is low.

Response 278-247: Cymopterus 1. This comment summarizes Plan provisions and does not require an answer.

Response 278-248: Cymopterus 2. A Conservation Area boundary based upon the best data currently available would be established immediately upon adoption of the West Mojave Plan. Future revisions of that boundary based upon botanical surveys would depend upon the findings of those surveys, and when new data that warrant boundary modifications became available. As this would be a continually evolving process, a specific timeline cannot be established now. The Implementing Authority would establish priorities for baseline surveys in the proposed Conservation Area.

Rangeland health standards include an assessment of grazing on special-status species. For the desert cymopterus, the assessment would include direct observation of known occurrences of this plant to see if grazing is impeding reproduction by trampling or consumption of the flowers or seeds.

Response 278-249: Cymopterus 3. The Plan request for incidental take is 50 acres. Conservation would include all areas within the DWMAs and the North Edwards Conservation Area, subject to the 1% allowable ground disturbance. This conservation figure has not been calculated, but includes hundreds of thousands of acres. Actual occupied habitat or occupiable habitat is a smaller acreage within the DWMA where suitable sandy soils are present.

Response 278-250: Cymopterus 4. Surveys would be required anywhere within the Habitat Conservation Area, which includes the DWMAs and the North Edwards Conservation Area. Text has been clarified.

Response 278-251: Cymopterus 5. The 50-acre take limitation applies to private lands. It is included within the allowable ground disturbance, not in addition. Avoidance of all occurrences would be required on public lands and avoidance to the maximum extent feasible would be required on private lands.

Response 278-252: Cymopterus 6. The Plan does not employ directed acquisition. Acquisition would be from willing sellers only and would be based on priorities established by the Implementing Authority. Since many of the cymopterus occurrences are within a DWMA that includes both desert tortoise and Mohave ground squirrel habitat, it is likely that parcels containing desert cymopterus would receive a high priority because of this multispecies value. However, the West Mojave Plan relies more on improved management for species protection than on acquisition of private land.

Response 278-253: Cymopterus 7. Jurisdictions commonly define what is required for local biological assessments. The Final EIR/S will illustrate suitable habitat where surveys are required for desert cymopterus outside the HCA, based on the best information available.

Response 278-254: Cymopterus 8. Improved grazing management, route designation, designation of DWMAs and the North Edwards Conservation Area all comprise mitigation for the 50 acres of incidental take of desert cymopterus. See also Response 278-l.

The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with the grazing allotment assessments, monitoring surveys and with construction of fences.

Response 278-255: Monardella 1. Flax-like monardella was added to the list of covered species after receipt of information from botanist Sandy Hare in 1998. This species qualified for coverage in the Plan due to its rarity status as described by the California Native Plant Society. A single record was available from the planning area, with additional records to the west outside the Plan boundary. It is found on BLM managed-land within the proposed Middle Knob ACEC.

The flax-like monardella will be deleted from the list of species included in the request for state incidental take coverage because of insufficient information. Monitoring and adaptive management provisions will be deleted form the Plan. Its rarity suggests that this species should be included in the Plan at a later date if additional information is gathered.

Response 278-256: Kelso Creek Monkeyflower 1. This comment summarizes Plan provisions and a response is not required.

Response 278-257: Kelso Creek Monkeyflower 2. We do not agree that approximately half of the numbers and range of the species will be lost. Incidental take permits are not requested for this species, so there is no relationship of full mitigation for impacts on private land to conservation on public land. Several significant parcels of occupied habitat have recently been offered for conservation purposed by the landowner.

Response 278-258: Kelso Creek Monkeyflower 3. Comment noted. Larger rural lots may provide habitat for pollinators, continuity of drainages and other open space features that are beneficial to the plant's survival, even if some or all plants are eliminated from the rural lot.

Response 278-259: Kern Buckwheat 1. Two occurrences of Kern buckwheat are located on private land within a wind energy development on Sweet Ridge outside the proposed Middle Knob ACEC. At the westernmost location, the owners have fenced the rare plants and no apparent threats are evident. The eastern occurrence lies within the wind turbine development and has been bisected by an access road. The owner is aware of the rarity of the Kern buckwheat, has implemented erosion control measures, and no further disturbance is anticipated. These two occurrences are within an existing permitted development, and are not subject to provisions of the West Mojave Plan. If the turbines are replaced and subject to another discretionary permit from Kern County, mitigation measure requiring avoidance of the plants will be imposed. The plants will be fenced if necessary and feasible. Language addressing this possibility will be added to the Final EIR/S.

Response 278-260: Kern Buckwheat 2. Two occurrences of Kern buckwheat are on Sweet Ridge outside the proposed Middle Knob ACEC (see Response 278-259) and one occurrence is on the south portion of Sweet Ridge within the Proposed Middle Knob ACEC. Acquisition of private land is not the primary conservation tool of the West Mojave Plan. Private land within the ACEC could be acquired from willing sellers if the Implementing Authority identified it as a priority.

Response 278-261: Kern Buckwheat 3. Seasonal closure of the main access road from the south is not part of the conservation proposal for this species. Access from the north is restricted year round by a locked gate.

A camping area now exists in gray pine-oak woodland area about ¼ mile from the Pacific Crest Trail. BLM has not proceeded with development of a designated campsite.

Signing of the pebble plains habitat along the Pacific Crest Trail will be added to the implementing measures of the Plan.

Response 278-262: Kern Buckwheat 4. Take is estimated at 0.01 acre (Draft EIR/S, page 4-74). Two occurrences are north of the proposed ACEC (see response 278-259). No take is proposed for those areas. Conservation measures for private land will be clarified to apply to lands outside the proposed ACEC.

Response 278-263: Kern Buckwheat 5. The boundary of the proposed ACEC was drawn along a line separating private land from BLM-managed land. Given adequate conservation measures on private land, there is no need to expand the boundary to the north. Management (by BLM) within an ACEC does not apply to private lands within the ACEC boundary.

Response 278-264: Milk vetch 1. We used the most recent information on occurrences of Lane Mountain milkvetch provided by the Army in order to draw the boundary of the West Paradise and Coolgardie Mesa Conservation Areas. The Army surveys did not verify the locations of the plants plotted on the Central Bioregion map. The boundaries of the proposed Conservation Areas in the Final EIR/S reflect discussions with the Army and US Fish and Wildlife Service concerning additional survey data from 2003.

Response 278-265: Milk vetch 2. Comment noted. No grazing is taking place on either private or public lands in the range of the Lane Mountain milkvetch, although the area receives some use by equestrians.

Response 278-266: Milk vetch 3. Routes would be fenced if off-road travel caused damage to Lane Mountain milkvetch habitat. This would be determined by monitoring. Criteria for determining the need for fencing are not needed at this programmatic level of review.

Response 278-267: Milk vetch 4. Comment noted. Acquisition of private lands containing occupied habitat of Land Mountain milkvetch is expected to be a high priority of the Implementing Authority using the criteria outlined on page 2-51. Directed acquisition based on a nexus between habitat lost and conservation land acquired by species would not work in this area, because few mitigation fees would be collected within the Lane Mountain milkvetch habitat.

Response 278-268: Milk vetch 5. Funds for mineral withdrawal would come from the Army, if its mitigation program for the Fort Irwin expansion is approved, and/or from the BLM Resource Area, as part of the routine duties of the Barstow Field Office using appropriated funds.

Response 278-269: Milk vetch 6. The phrase "take on private lands would be prohibited unless economic use of the parcel is precluded" refers to a constitutional taking of property under the Fifth Amendment. Mitigation in this instance would be imposed by San Bernardino County as part of the environmental review process for discretionary permits. Development potential of private land containing Lane Mountain milkvetch habitat is very low, and the threat of development on occupied habitat is very low.

Response 278-270: Milk vetch 7. Projects on public land are not held to the "fully mitigate" standard.

Response 278-271: Milk vetch 8. Alternative A proposes no take of Lane Mountain milkvetch. The 1% allowable ground disturbance would not be realized in occupied habitat where avoidance is a management prescription. For Alternative C, the 1% AGD and 5:1 fee amount ratio would be in effect; the Draft EIR/S text was in error and has been modified.

Response 278-272: Gilia 1. The 100-year floodplains have not been mapped by FEMA or the Flood Control agencies for all of the washes with potential or occupied habitat for Little San Bernardino Mountains gilia. The programmatic level of analysis in the Draft EIR/S was sufficient to understand the conservation provisions without specifying a mapped width of each desert wash. We agree that the boundaries of the conserved habitat could be defined as an early implementation task. This would define the area where a conservation easement in favor of the Flood Control District or their designee would be required. Acquisition of a conservation easement assumes that surface-disturbing activities, including extraction of aggregate materials would be prohibited. This will be clarified in Chapter 2 of the Final EIR/S.

Response 278-273: Gilia 2. None.

Response 278-274: Gilia 3. Off-road vehicle use in this area is an unauthorized activity. Unauthorized activities are not addressed by the Plan, but are the purview of law enforcement. Fencing such as that suggested could be installed at road crossings if it did not obstruct flow. Placement of fences along property lines at the edges of the easement would be at the discretion of the landowners. Specific measures that might be feasibly implemented at the local government level can be developed to address this potential threat by the Implementing Authority.

Response 278-275: Gilia 4. The lead agencies have not agreed to alter their general plans or zoning ordinances with respect to lot size. Restrictions on vegetation clearing and disturbance outside building sites would be imposed on the area designated for a conservation easement when review of a discretionary permit in this area takes place.

Response 278-276: Gilia 5. The acreage of habitat is not known, but specific washes where the species occurs have been identified. The 90% conservation standard takes precedence over the 50-acre take limit. The 50-acre limit was chosen so that the Plan might cover newly detected occurrences.

Response 278-277: Gilia 6. The measure prohibiting channelization would maintain streambed function and habitat values, obviating the need for delineation of the 100-year floodplain. Most of the reaches of Big Morongo, Little Morongo and Dry Morongo creeks are less than 100 feet wide. The setback provisions would apply to wide portions of these washes if the Little San Bernardino Mountains gilia is detected in those locations. These areas are within the survey for triple-ribbed milkvetch, and survey requirements will be added for the gilia on private lands bordering these washes.

Response 278-278: Gilia 7. The Special Review Area for Little San Bernardino Mountains gilia applies to the washes and a 100-foot buffer only within the polygons depicted on Map 2-1. Language will be added to the Final EIR/S stating that BLM will retain parcels falling within this more narrowly defined boundary. Exceptions might be made if a land exchange or sale would result in better conservation for the gilia.]

Response 278-279: Gilia 8. The wilderness boundary is 30 feet from the Rattlesnake Canyon Road. The gilia plants are within or immediately adjacent to the wilderness. No Conservation Area is needed in this location.

Response 278-280: Gilia 9. The measure to change the take limit will be deleted. If new populations are discovered and the need for an increase in the take limit becomes apparent, the Plan will be amended for this species.

Response 278-281: Mojave monkeyflower 1. The request for incidental take of Mojave monkeyflower will be clarified. What is termed "maximum allowable take" on Draft EIR/S page 4-76 refers to the amount of private land within the two conservation area units. The 50-acre limit on take applied to other restricted range plant species is incorrect and would not apply to Mojave monkeyflower. Table 2-33 will be changed.

Response 278-282: Mojave monkeyflower 2. See preceding response. Because the majority of the land within the Mojave Monkeyflower Conservation Area is managed by BLM, acquisition of private land is not the primary conservation strategy for this species. Private parcels within the Conservation Area would be purchased from willing sellers based on priorities set by the Implementing Authority.

Response 278-283: Mojave monkeyflower 3. We believe that the avoidance measures are sufficient to allow the biological goals and objectives to be met for this species. Additional measures to deal with indirect hydrologic or disturbance regime impacts would not significantly augment the effectiveness of the conservation strategy.

Response 278-284: Mojave monkeyflower 4. Comment noted.

Response 278-285: Tarplant 1. In addition to the sites noted, a relatively large population of Mojave tarplant is located in the Short Canyon ACEC in Inyo County.

Response 278-286: Tarplant 2. Comment noted. It is unlikely that new populations will be located in areas where development may take place, based on the known locations in mountain canyons at mid-elevations near springs or subsurface water.

Response 278-287: Tarplant 3. We will change the standard for preservation of new populations to 90% for newly discovered populations if a feasible mitigation strategy can be devised. No degraded or unprotected habitat exists, and the spring and groundwater conditions this plant prefers cannot be created. Given this situation, which is similar for other rare plants, the local jurisdictions may choose to exclude this species from their request for incidental take.

Response 278-288: Tarplant 4. We will add language to the life history summary in Chapter 3 stating that Mojave tarplant is found near springs, seeps, margins of wetlands, swales and stream channels.

Response 278-289: Tarplant 5. The Las Flores Ranch and City of Hesperia are pursuing a separate Habitat Conservation Plan with the USFWS. Several biological surveys have been conducted, but we are not aware of botanical surveys directed towards detecting Mojave tarplant.

There is not a very high potential for re-discovering this species in the vicinity of Las Flores Ranch, which is reflected in the Draft EIR/S statement on page 3-188 that this locality "apparently no longer supports this species". The species account states:

> The species is known at Deep Creek only from two collections made in 1933 (Keck, 1935; Tanowitz, 1982). It has not been seen at that locality since, despite extensive searching there and at numerous nearby localities with suitable habitat (Tanowitz, 1982; Sanders et al., 1997). These searches have extended over a period of several years and have involved several investigators. The inability of anyone to find the species, at the one locality from which it was unquestionably known, led to the conclusion that it was probably extinct. It may have been extirpated at that locality, but is now known to occur elsewhere.

Given this information and the separate HCP for Las Flores Ranch, specific conservation measures are not needed for the San Bernardino County portion of the species range.

Response 278-290: Tarplant 6. The language regarding "no surprises" on page 2-173 will be changed to indicate that only the federal government provides assurances.

Response 278-291: Nine-mile Canyon phacelia 1. The Plan includes a global measure that the local government jurisdictions track and report new development authorized under the Plan's incidental take permits. Appendix B will be modified to indicate the jurisdictions responsibility to track incidental take and conservation and the BLM obligation to perform rangeland health assessments.

Response 278-292: Nine-mile Canyon phacelia 2. See preceding response. The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with the grazing allotment assessments, monitoring surveys and with construction of fences. Funding for this and other measures is described in Appendix C.

Response 278-293: Parish / Salt Springs 1. Objectives are not needed for every goal. Adaptive management (Section 2.2.9.2 on page 2-172) addresses the protection of newly detected populations.

Response 278-294: Parish / Salt Springs 2. The 10% allowable take at Rabbit Springs was formulated in order to avoid a constitutional taking of property. Degraded sites for these species do not exist and wetland seeps and springs cannot be created. Potentially a small amount of take and mitigation could be established at the Rabbit Springs site itself. However, the wording in Table 2-11 will be changed to delete the provision of allowing 10% incidental take if

Rabbit Springs cannot be purchased. If this site cannot be purchased, the incidental take authorization for these three species would be cancelled. If a development plan involving a discretionary permit is submitted, the local government will address the biological issues on a site-specific basis.

Parish's alkali grass has been found on a separate property adjacent to Rabbit Springs. Representatives of the landowner have indicated a willingness to conserve the plants in place. The discussion in the Draft EIR/S on page 4-77 refers to this separate property.

Response 278-295: Parish / Salt Springs 3. The species conservation measures for these three species are found in the Draft EIR/S at Section 2.2.4.10.3 on page 2-92.

Response 278-296: Parish / Salt Springs 4. Widening of the road will be specifically excluded as a covered activity.

Response 278-297: Parish / Salt Springs 5. A local non-profit organization based in Lucerne Valley has indicated its availability to manage the Rabbit Springs site. This organization has been pursuing acquisition, and would manage the site with interpretative features on both the history and natural resources of the area. Approval of the land manager by CDFG is not required.

The language in the Final EIR/S will be changed to indicate a requirement of 90% conservation of the Salt Spring checkerbloom occupied habitat at newly found sites, along with maintenance of the hydrological regime. If this goal cannot be achieved, incidental take authority will not be extended to newly-found sites. See Response 278-294.

Response 278-298: Parish's phacelia 1. If the acquisition of private land near the population south of Fort Irwin were successful, five acres of Parish's phacelia would remain unprotected and would be subject to incidental take. These five acres would be part of the take limit of 50 acres, which applies to other new or re-discovered occurrences. Directed acquisition is not a feature of the West Mojave Plan, which is a program of conservation and mitigation based on collection of fees from approved discretionary development. The funds would be spent based on priorities established by the Implementing Authority. It is highly unlikely that directed mitigation could work for Parish's phacelia because little development would occur in its habitat, hence generating few funds for directed mitigation.

The 1991 USFWS survey indicated that hundreds of thousands of plants were present within the limited acreage of suitable substrate. We are not aware of substantial differences in habitat quality among different sites, but the numbers of plants at historical sites is not known.

The BLM has agreed to improve management of public lands in partnership with the local government applicants for the incidental take permits in order to improve overall conservation of this and other species. Mitigation fees collected by local governments may be used to assist BLM with the acquisition of private land on and near the playas supporting Parish's phacelia. Designation of the Conservation Area, with its 1% limitation on allowable ground disturbance and 5:1 fee amount ratio, along with the objective of acquisition of nearly all

of the known occupied habitat, is a significant private sector conservation measure. Additional measures imposed by BLM (page 2-104) manage the habitat for conservation. We believe these measures provide full mitigation for any incidental take of this species, which is expected to be minimal because of the low development potential in the relatively remote region where it is found.

Response 278-299: Parish's phacelia 2. Comment noted.

Response 278-300: Red Rock poppy 1. See Response 278-298.

Response 278-301: Red Rock poppy 2. Comment noted.

Response 278-302: Red Rock tarplant 1. Designating a network of routes in the El Paso Mountains would provide new conservation. Avoidance of Red Rock tarplant would be one of the primary constraints to expansion of the rout network.

Response 278-303: Red Rock tarplant 2. The reference on page 2-78 refers to private land, where take would be limited to 50% of a newly discovered site. The take limit is 50 acres for all newly discovered sites. If a newly discovered site exceeds 100 acres of occupied habitat, and take is proposed for greater than 50 acres, the permit coverage afforded by the West Mojave Plan would not apply. See also Response 278-298.

Response 278-304: Reveal's buckwheat 1. This plant was added to the list of covered species because it is designated on List 2 of the CNPS Inventory. Botanist Sandy Hare reported a location at the edge of the Plan Area in Waterfall Canyon in the proposed Middle Knob Conservation Area. The reference to an occurrence in the Jawbone-Butterbredt ACEC is incorrect; this was for San Bernardino buckwheat (*Eriogonum microthecum* var. *corymbosoides*).

Response 278-305: Reveals' buckwheat 2, 3 and 4. Reveal's buckwheat will be dropped from the request for state and federal incidental take coverage.

Response 278-306: Shockley's rockcress. The occurrence information for Shockley's rockcress is summarized on page 3-190 of the Draft EIR/S.

Response 278-307: Beavertail cactus 1. Short-joint beavertail cactus is found within the two existing Significant Ecological Areas of Los Angeles County: Mescal Creek and Big Rock Creek. Within the Big Rock Creek SEA, known locations are north of Highway 138 in the proposed open space corridor along Big Rock Wash. The Big Rock Creek Conservation Area was designed to incorporate the riparian woodland which harbors covered bird species, habitat for the San Diego horned lizard, habitat for the gray vireo and habitat for the short-joint beavertail cactus. Although no locations of the cactus have been recorded within the boundary as shown, it is nearly certain to occur, since it has been found to the north, south and east.

The West Mojave Plan recognizes the Mescal Creek SEA as a protective measure for the short-joint beavertail cactus, but did not designate this area as a Conservation Area. A single Conservation Area was proposed at Big Rock Creek because of the multiple species values.

The Gray Vireo Conservation Area was an earlier proposal and is not part of any Alternative of the West Mojave Plan.

Response 278-308: Beavertail cactus 2. The reference to Landis (1993) primarily covers development within SEAs to the west in Los Angeles County where land values are substantially higher than in the Antelope Valley. The adoption of the West Mojave Plan by Los Angeles County would retain the review procedures now in place or as altered by final adoption of the General Plan update and incorporate the mitigation provisions of the West Mojave Plan. Within the Conservation Areas, the 1% limitation and 5:1 fee amount ratios would be in effect, while in the SEA outside the Conservation Areas, the SEA review procedures and the 1:1 and 0.5:1 fee amount rations would apply.

The state geologist has designated a large area surrounding Big Rock Creek and Little Rock Creek as a Mineral Resource Zone. Policies of Los Angeles County provide for restriction of incompatible development near these aggregate reserves. This zoning, which recognizes the statewide significance of the mineral resources, makes a prohibition of surface mining within the Mineral Resource Zones infeasible.

Thank you for your suggestions for additional measures within the SEAs. The SEA review of development proposals could impose restrictions on vegetation clearing and ground disturbance similar to those you suggested. Los Angeles County does not have plans for structural flood control, and maintenance of the floodplain is the current policy.

Response 278-309: Beavertail cactus 3. The City of Palmdale has identified opportunities to conserve short-joint beavertail cactus as part of a linear open space park along the San Andreas Fault. Details of this proposal can be provided, along with any necessary commitments, when the HCP and 2081 applications are submitted to the wildlife agencies. In south Hesperia and the Las Flores Ranch, the identity of the beavertail cactus is uncertain. At his eastern part of the range, the distinctive characters of the short-joint subspecies are not present, or appear to by hybrids with the more rounded form of subspecies *O. b. basilaris*. Protection of hybrids or forms of uncertain identity is not mandated by the FESA or CESA. In addition, most of the lands in south Hesperia and the Las Flores Ranch have already been subdivided or approved for substantial development, so restrictions on further subdivision would not be effective. The Las Flores Ranch does incorporate some fairly large areas of open space within the Specific Plan.

Response 278-310: Triple-ribbed milkvetch 1. The conservation goal for triple-ribbed milkvetch is to avoid all incidental take. This species will probably not be subject to a request for incidental take permits. However, the measures provided in the Draft EIR/S on page 2-106 will go into effect with approval of the West Mojave Plan. If additional information is obtained in the future on the definition of habitat and specific distribution, the Plan could be amended to include this species.

Response 278-311: Triple-ribbed milkvetch 2. The approval of the Coachella Valley amendment to the CDCA Plan by BLM in December 2002 included restrictions on routes of travel in the Little San Bernardino Mountains. Motorized vehicle travel is not allowed within the

Big Morongo Canyon ACEC where the milkvetch population is known, and other milkvetch sites are within the San Gorgonio Wilderness. The potential threat of disturbance to triple-ribbed milkvetch is low. Route designation Maps 78 and 82 on the compact disk provided with the Draft EIR/S illustrate the route network near Morongo Valley and Yucca Valley.

A habitat restoration project has recently been completed by BLM to rehabilitate off-road tracks and hill climbs in the Big Morongo Canyon ACEC.

Response 278-312: Triple-ribbed milkvetch 3. The proposed restrictions for development on and near the floodplain that apply to Little San Bernardino Mountains gilia will also serve to protect habitat for triple-ribbed milkvetch. The precise mapping of the Special Review Area will be one of the first implementing tasks for the gilia, and it may follow the 100-year floodplain, if mapping of that area is available.

The drainages described as habitat for triple-ribbed milkvetch have not been designated as Mineral Resource Zones, and the demand for aggregate from these sources is minimal at present. The requirement for surveys and avoidance of the plants, if found, would serve to protect this species from aggregate mining.

Response 278-313: Triple-ribbed milkvetch 4. Any applicant for a discretionary permit affecting this species would consult with CDFG during the CEQA review and with USFWS if a federal nexus to the project were identified.

The area connecting the San Bernardino Mountains with the Little San Bernardino Mountains has been identified as a potential linkage and corridor for movement of bighorn sheep. Highway 62 is a barrier to bighorn travel in most of this region, but a public land connection is present. Bighorn sheep have been removed from the Plan as a covered species, and the local jurisdictions will not request incidental take permits for bighorn sheep.

Response 278-314: White-margined beardtongue 1. See Response 278-298.

Response 278-315: White-margined beardtongue 2. The Pisgah Crater ACEC has been reconfigured to include additional occurrences of the white-margined beardtongue north of Interstate 40. The Johnson Valley to Parker competitive route is located on existing roads and is monitored during the event.

Response 278-316: Miscellaneous 1. Comment noted. Page numbers and the table of acronyms have been review and error and omissions corrected. An index of tables has been added. The text has been checked and any inconsistencies corrected.

Response 278-317: Miscellaneous 2. The glossary in the Final EIR/S will define the terms “conserve”, “maintain”, and “protect”. The strict definition of these terms would be included in the Implementing Agreement for the HCP and in the 2081 permit application when those are prepared.

The term "avoid" as used in the Plan does not meet the five points specified in this comment. Use of the term assumes that an accurate depiction of occupied habitat is available. It generally means avoidance of any ground disturbance to occupied habitat, especially for plant species. This also applies to nest sites for birds. The term follows the state definition of "take", which applies to the actual killing of a species. Avoidance does not mean disallowing ground disturbance of potentially suitable habitat.

"Avoidance of impacts" means that processes that sustain populations and their habitat are protected and may mean that a buffer area is conserved so that edge effects from permitted disturbance does not affect a species at that location.

Response 278-318: Miscellaneous 3. Wording provide in the Plan is sufficient to understand the conservation program and meets the needs of a programmatic EIR under CEQA. More precise and detailed language can be prepared for the HCP and 2081 permit application submittals to the wildlife agencies.

Response 278-319: Miscellaneous 4. Comment noted.

Response 278-320: Miscellaneous 5. The purpose of the monitoring actions included in this section is to determine how well the plan is being implemented, and whether adaptive management changes need to be made. This is somewhat different that additional base-line studies, although information collected during monitoring certainly will contribute to general knowledge of the region.

Response 278-321: Miscellaneous 6. References to the NCCP Act, except in the most general and informative sense, have been deleted.

Response 278-322: Miscellaneous 7. Los Angeles County has been added to the table.

Response 278-323: Miscellaneous 8. Table 1-2 correction has been made.

Response 278-324: Miscellaneous 9. The open space corridors are important to ecosystem protection and to prevent isolation of State Parks lands from surrounding habitat and public lands. In the case of Big Rock Creek, maintenance of fluvial sand transport in the wash from occasional flooding is an essential ecosystem process sustaining the blowsand habitat of the Mojave fringe-toed lizard. For the Portal Ridge to Antelope Valley Poppy Preserve linkage, species protection is not an issue, although baseline studies may show that this area might make a good reserve for the burrowing owl.

Los Angeles County reviews discretionary development within SEAs. The policy is to advocate development that is highly compatible with biotic resources. If additional specific requirements for species protection in these linkages are needed, the language can be developed during preparation of the 2081 permit application.

Response 278-325: Miscellaneous 10. The Biological Transition Areas (BTA) concept has been the subject of a great deal of focus with regards to their function and purpose. After reviewing the comments submitted on the Draft EIR/S and conducting further study of these areas, proposed BTAs have been eliminated or incorporated into the adjacent DWMAs. This determination has been based on a specific review of each individual BTA in light of the conservation criteria of the Habitat Conservation Areas. Appendix X contains the analysis of each BTA and their final disposition. This approach will fully protect the transition areas that are appropriate for conservation and eliminate the areas that do not provide meaningful conservation for the covered species within the Plan that may be present within the adjacent DWMAs.

Response 278-326: Miscellaneous 11. The discussion of the Administration of Mitigation Fees has been clarified to indicate that fees collected on BLM lands could be used for monitoring and management as well as for mitigation.

Response 278-327: Miscellaneous 12. We anticipate that CDFG, as a member of the Implementing Team, will participate in the administration of the Habitat Rehabilitation Credit program.

Response 278-328: Miscellaneous 13. Comment noted. CDFG will be involved in all aspects of the Habitat Rehabilitation Credit program.

Response 278-329: Miscellaneous 14. Section 2.2.3.2 has been modified pursuant to your suggestion.

Response 278-330: Miscellaneous 15. Section 2.2.3.2 has been modified pursuant to your suggestion.

Response 278-331: Miscellaneous 16. Section 2.2.3.3 has been modified pursuant to your suggestion.

Response 278-332: Miscellaneous 17. Prescription HCA-39, Native Plant Harvesting, has been modified pursuant to your suggestion.

Response 278-333: Miscellaneous 18. Thank you for your support. The costs of providing this level of law enforcement has been included in the revised Implementation Tasks, Priorities and Costs table in Appendix C. Prescription DT-28 and Appendix C have been clarified to indicate that such services could be provided by sources other than BLM staff.

Response 278-334: Miscellaneous 19. Comment noted.

Response 278-335: Miscellaneous 20. Comment noted.

Response 278-336: Miscellaneous 21. Section 3.1.5.1 has been modified pursuant to your suggestion.

Response 278-337: Miscellaneous 22. The "Mitigation/Compensation" discussion has been clarified in response to your comment.

Response 278-338: Miscellaneous 23. Removal of problem ravens from utility lines will be funded from moneys administered by the Implementing Authority. In the past, many utilities have expressed an interest in proceeding with this program, pending authorization from the wildlife agencies.

Response 278-339: Miscellaneous 24. The species accounts were contracted by USGS and sent out to experts and specialists for peer review. They were completed in 1998 and used as baseline data for the Evaluation report and preparation of the Plan. New information for several species has been incorporated into the Plan when it has been made available. The draft Recovery Plan for the southwestern willow flycatcher has been reviewed and cited in the Plan (page 3-31). The Final EIR/S will incorporate a reference to the final Recovery Plan for this species.

Response 278-340: Miscellaneous 25. See Response 278-49.

Response 278-341: Miscellaneous 26. The species summaries have all been reviewed for the Final EIR/S to assure consistency with the species accounts. The case of the ferruginous hawk is an example where additional information regarding the threats has been incorporated. HawkWatch International has documented the threat of electrocution of this long-wingspan species in the Great Basin, and by inference this threat is present in the California desert. We have observed frequently used perches of this species that are not a raptor-safe design.

Loss of habitat in the Antelope Valley, given the development projections in the Plan, will not be significant compared to the agricultural lands remaining. Hundreds of thousands of acres will still be available as foraging habitat at the end of thirty years. Loss of foraging habitat for wintering birds does not meet the state definition of "take". However, electrocution kills birds and is something that can be prevented or fixed by retrofitting of problem poles.

6.4 PUBLIC HEARING RESPONSES

Responses to specific oral comments provided at seven public hearings area presented below. Topical responses provided in Section 6.2 (above) are not repeated below. The hearings were held at the following locations:

- Victorville (July 15, 2003)
- Lone Pine (July 16, 2003)
- Ridgecrest (July 17, 2003)
- Redlands (July 22, 2003)
- Yucca Valley (July 23, 2003)
- Palmdale (July 24, 2003)
- Barstow (July 30, 2003)

All comments submitted were considered during the preparation of the Final EIR/S. Hearing transcripts were produced for the Lone Pine, Ridgecrest, Redlands, Yucca Valley, Palmdale and Barstow meetings, and can be found on the compact disk attached to this Final EIR/S. An appropriate reference to the hearing transcript is provided for each response. If, for example, a comment can be found on page 45, lines 15 to 23 of the hearing transcript, the following reference would be provided: HT at 45:15-23. If the comment can be found from pages 42 line 11 to page 46 line 10, the following reference would be provided: HT at 42:11 to 46:10.

6.4.1 Lone Pine Public Hearing (301)

Response 301-1: HT at 26:7-12. The issues being addressed by the West Mojave Plan are, by their very nature, highly complex. Ensuring that solutions to identified problems are developed using the best available science requires a detailed presentation of that science, and of all other data pertinent to the decisions to be made. Problems of this complexity demand thorough and complete treatment and analysis. We have made every effort to present the materials in a straightforward and easy-to-understand manner.

Response 301-2: HT at 27:3-24. The BLM's establishment of a network of designated motorized vehicle access routes does not preclude the rights of a local government to assert RS 2477 rights within its jurisdiction. In fact, the West Mojave planning team has made every effort to work with county highway departments to ensure that routes of interest to local government are a component of the designated access network as well. In the event that a future assertion of an RS 2477 right results in the need to modify the route network, BLM's land use amendment process provides an administrative process to accomplish this.

Response 301-3: HT at 32:20 and 36:18 (comment also raised at several other public hearings by Commentator Bob Strub). Your proposal is intriguing; however, the level of complexity and the ability to apply this uniformly given the numerous local disparate conditions throughout the region make the proposal less desirable. We want to point out that, fundamentally, the proposed mitigation fee itself is uniform and consistent and is based on a nexus between impact and mitigation/compensation. Your proposal seems to be based upon the

impact of the fee on individual property owners; this does appear not meet the legal standards for a program like the West Mojave Plan. Appendix N, Socio-Economic Analysis describes the methodology that was used to determine the fee. The methodology is based on standard real estate valuation procedures utilizing comparable sales of actual past transactions for acquisition of lands for wildlife conservation purposes. Those involved in the preparation of the mitigation fee program believe that the process is legally defensible and meets the requirements of AB1600. The fee is based on what an acre of land within the Habitat Conservation Areas (HCAs) would cost to acquire. The fee would be used to purchase key private parcels, from willing sellers, needed to consolidate public ownership within the HCAs as well as contribute to other implementation actions as described in Appendix C, Implementation Tasks, Exhibit C.1, Implementation Tasks and Priorities.

Your proposal focuses on the economic effects that addressing endangered species have had on rural communities. This is a very vaild issue that is actually one of the underlying reasons why local government has choosen to participate in the development of this plan. The expected outcomes of the plan are anticipated to provide relief to property owners and businesses burdened with the obligations of dealing with the endangered species act and other environmental regulations. Certainly, the effect of the fee on anyone who develops a piece of property is an important consideration by County Boards of Supervisors and City Councils when making decisions to participate in programs like the West Mojave Plan. The decision-makers will undoubtedly consider the potential benefits of the overall program compared to the potential negative effects on individuals and communities.

Response 301-4: HT at 37:4-12. See Response 189-11.

Response 301-5: HT at 38:12-23. The West Mojave Plan will not reduce any payments made by BLM to local government. There will be no loss of funds.

Response 301-6: HT at 39:1-6. The comment is made, “all your studies were done a long time ago. You don't have really good data.” Recent studies are described on pages 3-76 through 3-82 of the Draft EIR/S. Tortoise surveys included hundreds of focused presence-absence surveys in urbanizing areas between 1990 and present day. The USFWS coordinated distance-sampling surveys in 2001 and 2002 throughout all West Mojave DWMAs. Since 1990, there have been about 8,100 sign count transects surveyed over about 6,300 square miles in the West Mojave; 3,372 of these transects were surveyed since 1998.

Response 301-7: HT at 39:7-12. The West Mojave Plan is being prepared for two reasons: to conserve sensitive species (including the desert tortoise) and to streamline the incidental take permit issuance process. These twin purposes were included in the 1992 Memorandum of Understanding among the participating agencies, and the 1997 Equitable Precepts developed by the West Mojave Supergroup. The 2001 settlement of the litigation referred to by the commentator did require that a West Mojave motorized vehicle access network be adopted by June 30, 2003, and that date was met by the BLM decision record for the Western Mojave Desert Route Designation Project, issued on that date.

Response 301-8: HT at 39:13-17. The BLM's land use plan amendment and maintenance process provides land use plans with the flexibility to modify decisions as new information or circumstances require. If the commentator is aware of specific errors in the Inyo County area, the commentator is encouraged to work with the BLM's Ridgecrest Field Office to rectify those errors.

Response 301-9: HT at 40:2-4. See Response 185-4.

Response 301-10: HT at 41:6-23. Comment noted.

Response 301-11: HT at 41:24 to 42:16. The route network adopted on June 30, 2003 designated a number of routes going south in the direction of the China Lake Naval Weapons Center as open.

6.4.2 Ridgecrest Public Hearing (302)

Response 302-1: HT at 36:25 to 37:3. Population growth and its resultant increase in demand for recreational opportunities was considered and discussed in the Draft EIR/S (pages 4-111 to 4-121). Since the release of the Draft EIR/S, shifts in recreational use around Johannesburg have been observed. Most local observers, like the commentator, have attributed these changes in recreational use patterns to the route closures in the Rand Mountains. We believe that the most appropriate method to address this use would be to re-establish a portion of the "C" route network, that is, those "C" routes located northeast of the Spangler Open Area. Re-establishment of these routes would be offset by selected closure of routes within the Fremon-Kramer tortoise DWMA, Red Mountain subregion.

Response 302-2: HT at 37:4-14. See preceding response. We do not propose to add Red Mountain MAZ- to the Spangler Open Area because this area is within both designated desret tortoise critical habitat and the proposed Fremont-Kramer DWMA. For the same reason, the "C" routes originally located within the Summit Range (south of the open area) would not be reestablished: thar area is simply too close to the tortoise DWMA. "C" routes to the northeast of the open area, however, would be reestablished.

Response 302-3: HT at 37:4-14. The comment concerns the prospective location of a headstarting facility at Fremont Peak. West Mojave planning team biologists were aware that there are extensive OHV impacts in the area of Fremont Peak, but that most of these are centered along Lockhart Road to the south, east, and north of Fremont Peak. The headstarting facility location was recommended several miles west of Fremont Peak in an area that is not so nearly impacted as areas to the east. The proposed location satisfies many of the prerequisites identified by Dr. David Morafka and discussed during the planning process. The planning team was aware of the OHV impacts in the proposed DWMA, and recommended route closures, increased law enforcement, and designating an official campground as ways of minimizing impacts to tortoises.

Response 302-4: HT at 37:21-25. Comment noted. The El Paso issue could be addressed during the El Paso CAPA process.

Response 302-5: HT at 41:14-18. West Mojave stakeholders, including representatives of local government, state and federal agencies, industry, recreationists and others with an interest in the western Mojave Desert, established the Supergroup in the middle-1990s. Its formation had nothing to do with the litigation brought by the Center for Biological Diversity in the spring of 2000.

Response 302-6: HT at 42:3-10. No permits are required by BLM to ride a motorcycle on private property. On public lands, permits are only required to stage organized events; a motorcyclist riding a bike along a designated open route or in an open area does not require a permit.

Response 302-7: HT at 45:24 to 46:6. A policy of maintaining "no net loss in assessed value" has been added to prescription HCA-36 (land acquisition within the HCA). The Plan will be implemented to ensure that the result in the future change in assessed value for all lands within the West Mojave planning area will be a net positive increase.

Response 302-8: HT at 46:16 to 48:15. El Paso CAPA sideboards. Please see Response 209-5.

Response 302-9: HT at 49:17-23. Utilizing the best available information, routes were evaluated for how, why where they terminated. The route designation team considered whether routes ended at a gate, a fence, a dead-end, a Wilderness boundary, a change in jurisdiction (e.g. transition from public lands to Military reservation), or a campground. As part of the route evaluation process described on pages 2-126 to 2-140 of the Draft EIR/S, consideration was given to situations like those described by the commentator, for example, might a route might direct visitors to sensitive habitat or to an inappropriate destination? The subsequent designation of that route was then based upon those factors as well as many others as described in the Draft EIR/S on pages 2:126-140.

Response 302-10: HT at 50:2-7. Guzzlers will remain in place with limited access (page 2-53 of the Draft EIR/S). Water sources within tortoise critical habitat will be evaluated for their ability to attract ravens; see prescription DT-33).

Response 302-11: HT at 58:16-24. See Response 189-11.

Response 302-12: HT at 58:25 to 59:11. See Response 185-4.

Response 302-13: HT at 59:13-17. CDFG has collaborated with other Supergroup members during the development of the West Mojave Plan, and has provided funding for the planning process. Implementation of the West Mojave Plan will require issuance of CESA Section 2081 permits, and those permits would be issued only if CDFG determines that all CESA permit issuance criteria have been met. Final CDFG "buy-off" will not occur until that time. CDFG is working closely with the participating agencies to ensure that the West Mojave Plan's conservation strategy conforms to the requirements of state law and regulation.

Response 302-14: HT at 59:18-23. The route network designated for those areas not subject to recent route surveys (circa 2001-2003) was based upon data from the '85-'87 route surveys, as well as input received throughout this planning effort from local agencies, BLM staff and the public. This information was the best available and because it included recent input from both local public and private sources the route system designated by this planning effort is expected to adequately meet the needs of both public and private entities, including utilities and commercial concerns, as well as emergency services (including fire, police and medical personnel). Please note that BLM allows police, fire and other emergency service access throughout the desert, and that BLM provides reasonable access across public lands to owners of private land inholdings.

Response 302-15: HT at 61:18 to 62:24. The BLM's planning process allows land use plans to be amended as new circumstances and information may require. If future field surveys indicate the need for a modification of the network beyond the scope of what can be addressed by plan maintenance, an amendment could be considered at that time.

Response 302-16: HT at 64:23 to 65:5. We have tried to ensure that the access network can access recreation venues identified by the 2002 route field survey. In fact, the great majority of inventoried venues are within 100 feet of designated open routes, including: 931 of 1,369 campsites; 272 of 379 scenic views; 77 of 100 staging areas; and 28 of 37 trailheads. No changes in open area boundaries have been made.

Response 302-17: HT at 65:6 to 66:5. See Response 189-11.

6.4.3 Redlands Public Hearing (303)

Response 303-1: HT at 25:7-23. Additional information concerning the financial cost and funding priorities of the West Mojave Plan has been included in a revised Implementation Tasks Priorities and Costs table, in Appendix C.

Response 303-2: HT at 25:24 to 26:14. Dual sport guidelines have been in place throughout the California Desert Conservation Area for many years. Many of these were set forth in the programmatic dual sport biological opinion. The additional time constraints proposed by prescription HCA-41 have been developed to ensure that dual sport events are compatible with species conservation: rather than force an "either/or" choice, the Plan accommodates both needs.

The BLM's CDCA Plan specifically allows time constraints to be placed on routes designated "limited." The Plan states as follows: For "limited routes", "access on route is limited to use by motor vehicles in one or more of the following ways and limited with respect to: … 3) time or season of vehicle use…." (CDCA Plan as amended, pages 77-78).

Response 303-3: HT at 26:23 to 27:3. Single-track routes that were inventoried during the 2002 field inventory are among those depicted on the route network maps that were included on the attached compact disk.

Response 303-4: HT at 27:4-17. Available funds were used to conduct field surveys in those areas with the greatest potential for resource conflict, such as the tortoise DWMAs. In all remaining areas, the existing route network was retained; only minor changes were made. If future field surveys indicate the need for a modification of the network beyond the scope of what can be addressed by plan modification, an amendment could be considered at that time.

Response 303-5: HT at 27:18-25. Dr. William Boarman identified measures intended to address the raven problem. Dr. Boarman's recommendations have been incorporated into the West Mojave Plan (see Draft EIR/S pages 2-66 through 2-70). Also, within the last year the USFWS has met with various scientists to develop an immediate plan to manage ravens. As such, the raven problem is being addressed.

The West Mojave Plan includes a disease management program; see Section 2.2.4.2.3, Prescription DT-17. Primary emphasis, however, would be placed on the continuing work of the interagency desert tortoise management oversight group. The West Mojave Implementing Authority could implement any breakthroughs developed by this group.

The inter-relationship between disease, ravens, and other types of management are discussed throughout most of the alternatives compared in Chapter 4. In particular, the Draft EIR/S discussion on pages 4-235 through 4-240 describes the strengths and weakness associated with management that targets only disease and/or ravens, as envisioned by Alternative F.

Response 303-6: HT at 28:1-19. The proposal for the nursery facility to occur west of Fremont Peak does not coincide with the vehicle play areas that have impacted many square miles of tortoise habitat east of the peak. If the comment is referring to Fremont Valley, which is north of the Rand Mountains and the northernmost extension of the tortoise conservation area, that is even farther away. See also Response 302-3.

Response 303-7: HT at 28:20 to 29:2. See Response 183-7.

Response 303-8: HT at 31:4-8. See Topical Response 7a.

Response 303-9: HT at 34:11-35:1. Pisgah ACEC. The Pisgah ACEC has been revised as shown in Figure 2-11. This revision excludes the Hector Mine, many mining claims, and private land, and includes lands to the northeast where sensitive species are found.

Route designations in the Pisgah area have been reviewed, with some revisions made to include additional access and others to close routes crossing occupied habitat of the rare plants.

Response 303-10: HT at 35:25-36:5. See Topical Response 7b.

6.4.4 Yucca Valley Public Hearing (304)

Response 304-1: HT at 31:18 to 32:16. Comment noted. The comment is a reiteration of the information provided in the Draft EIR/S (pages 3-98 through 3-99) and throughout Chapter 4 relative to the alternatives. The work of Dr. Oftedahl is also discussed by the Draft EIR/S (pages 3-73 through 3-74, see Section 5.8 for references).

Response 304-2: HT at 33:6-10. The recommendation to fence all designated routes is problematic for a number of reasons. First, there are literally hundreds of linear miles of open routes. The cost to fence these at between $5.00 and $7.00 per linear foot is cost prohibitive. Secondly, such an extensive campaign to fence designated routes outside DWMAs has not even been recommended inside DWMAs where it would provide relatively more conservation value. Finally, erecting fences along all designated open routes would seriously fragment tortoise habitat, which is something that should be avoided for the most part (except in disease management and at specific problem areas).

Response 304-3: HT at 33:11-12. See Topical Response 5b.

Response 304-4: HT at 33:16-22. Several alternative approaches to designating a motorized vehicle access network were considered during the planning process. In the Draft EIR/S, Alternative A (Proposed Action) and Alternative G (No Action) presented two completely different route networks. Alternative D included an option to limit access to large portions of the tortoise DWMAs to street-legal vehicles only (Section 2.5.6). Two additional approaches (the Mileage Ceiling and Interim Management alternatives) were evaluated but eliminated from detailed consideration. Finally, this Final EIR/S, in response to specific public comments, addresses a revised Juniper subregion network.

Response 304-5: HT at 33:23 to 34:9. Comment noted. The comment is a reiteration of the information provided in the Draft EIR/S (pages 3-99, 3-101 through 3-105). The need to assess raven populations and their relative impacts to juvenile tortoises was also discussed by the Draft EIR/S; see pages 2-66 through 2-70, and particularly measure DT-39 on page 2-70.

Response 304-6: HT at 34:10-21. Many of the species lack complete information on distribution, population status and life history. Conservation measures for these species are necessarily oriented towards protection of the known sites and research and adaptive management. The Wildlife Agencies will judge the adequacy of the information. If it is too incomplete, incidental take permits will not be issued. Some species have been dropped from consideration for incidental take permits as a result of public comment on the issue of insufficient information.

Response 304-7: HT at 35:16-20. The comment asks whether the DWMAs are viable, in view of the declines in tortoise populations. The answer is a conditional "yes." The "yes" is conditional because recovery requires that protective measures are identified and implemented in a timely manner. The West Mojave Plan identifies numerous protective measures, which need to be implemented in a timely manner if recovery is to occur. Even if a certain population was lost, the DWMAs could be managed in such a way as to reclaim habitats and repopulate those areas

where tortoises have been extirpated. So long as habitats are protected within DWMAs for tortoise conservation, those areas will remain available for repatriation and protection of tortoises where they still occur. There is evidence at the DTNA, where the population was decimated in the 1980's, that the population might be coming back, as evidenced by the presence of subadult tortoises within the fence. That the DWMAs are widely spread is another advantage should disease or some other factor extirpate tortoises from a given region.

Response 304-8: HT at 35:21-36:3. Comment noted.

Response 304-9: HT at 36:20 to 37:2. The comment refers to squirrels observed in the Yucca Valley area, which is approximately 80 miles east of the known range. Available information indicates squirrels in Yucca Valley are the common round-tailed ground squirrels, not the threatened Mohave ground squirrel. One cannot differentiate the species by sight; the squirrels need to be trapped, and in some cases, electrophoresis performed on hair samples to ascertain the species. Current and historic information suggest that the Mohave ground squirrel does not occur east of Rabbit Dry Lake in Lucerne Valley, and that it has probably been extirpated from that original location. The West Mojave Plan proposes that exploratory trapping surveys for the Mohave ground squirrel be conducted in the Ord Mountain Area, west to Brisbane Valley. These areas are within 10 to 20 linear miles of the eastern boundary of the Mohave ground squirrel range. If Mohave ground squirrels were positively identified in these proximate areas, it would then be appropriate to extend surveys further east to see how far the range extends.

Response 304-10: HT at 37:3-7. Survey Areas are in fact required along the borders of Joshua Tree National Park. Please refer to the Survey/No Survey Map on page 2-59 of the Draft EIR/S. The text in Section 2.2.4.2.2 describes the purpose of the two different areas.

Response 304-11: HT at 37:10-18. Chapter 2, Section 2.2.2.2, Draft EIR/S page 2-34, fourth paragraph clearly indicates the method for calculating the mitigation fee for parcels larger than 2 ½ acres in size. The fee for projects on private land parcels greater than 2 ½ acres may be calculated by determining the acreage of land actually disturbed, if steps are taken by the project proponent to ensure that the remainder of the parcel would remain undisturbed (e.g. the project area is fenced off from the remainder of the parcel and a conservation easement is granted for the remaining land). For projects occurring on public land, the mitigation fee would be based on the total acreage of land to be disturbed. In the example that the commentor is citing, the mitigation fee would be based on 300 acres if the remainder of the parcel remains undisturbed as described previously.

Response 304-12: HT 39:17-21. Dr. Kristin Berry is responsible for what we know today about disease in tortoises. She enlisted experts from University of Florida and many other places to ensure that disease research was a priority. Even so, as given in the Draft EIR/S and elsewhere (Boarman 2002), very little is known about the disease, or if it is the causative factor for region-wide tortoise declines. As far as curing the disease, we concur with the commentator that this is a major issue. Although the West Mojave Plan does suggest a program for dealing with the disease (see prescriptions DT-16 and DT-17), the issue is highly complex and will take considerable effort to address. Keep in mind that we have yet to cure the common cold in

humans despite many years of effort and much more money that is available to address tortoise diseases.

Response 304-13: HT at 39:22-25. The raven management proposal is presented in the Draft EIR/S, beginning on page 2-66.

Response 304-14: HT at 42:21 to 44:7. The Pinto Mountain area was first identified as critical habitat in 1994, and later in that year identified in the Recovery Plan as one of the four Desert Wildlife Management Areas, or DWMAs. The current proposal would implement the Recovery Plan recommendation that this be one of the four DWMAs established and explicitly managed for desert tortoise conservation to facilitate recovery. The importance of including the Pinto Mountain area in tortoise conservation is given in the Recovery Plan, and characterized in the Draft EIR/S in Table 4-59 on page 4-195 (see also top of page 4-209). It would complement the Joshua Tree National Park's program to protect desert tortoise habitat and, as the commentator indicates, the Pinto Mountains, together with the parklands, would provide a DWMA that meets the recommended size parameters established by the Recovery Plan. It is important to protect tortoises where they occur and repatriate them where they once occurred in the DWMAs. Pinto Mountain may be particularly important as a disease refugium for many of the reasons listed in the comment letter (e.g., absence of disease).

Response 304-15: HT at 45:2-6. Open area closures are not proposed by any of the alternatives.

Response 304-16: HT at 45:7-11. Your concern has been forwarded to the BLM Ridgecrest field office for their consideration.

Response 304-17: HT at 52:11-53:19. See Response 184-3.

6.4.5 Palmdale Public Hearing (305)

Response 305-1: HT at 25:9-16. The commentator referred to the many comments regarding dual-sport events and then without direct mention makes comments that characterized "enduro" events (e.g. roll charts, timed events) and suggested that a portion of those events not involving speed or competition should be allowed within tortoise DWMAs outside of the Open Areas. This proposal has been deliberated and carefully considered. Ultimately however, "Enduro" events will continue to be allowed only within the "Open Areas" and not outside them. Dual sport events would be allowed outside Open Areas at certain times of the year because they are non-competitive, non-speed proceedings that amount to little more than recreational touring rides. Eduros have more of an element of competitiveness to them, and indeed a portion of the event might be highly competitive. Their nature is more like the types of events that the Desert Tortoise Recovery Plan recommended should not be held in tortoise DWMAs. Accordingly, enduros will not be allowed within the DWMAs.

Response 305-2: HT at 25:18-20. The term "existing" routes of travel includes routes that have been closed through the route designation as well as those that have been designate as open or limited. Use of closed routes for events, as well as casual touring, is inconsistent with

the decisions made through the route designation process. We believe that the existing language should be retained because it is consistent with the route designation decisions that were made on June 30, 2003.

Response 305-3: HT at 26:6-24. The Big Rock Creek linkage can still act as a flood control channel, although it would direct flows by non-structural means, i.e. within the existing streambed. The road crossings may need improvements, such as bridges, which would be allowed under the West Mojave Plan.

Movment of predators (including badgers, foxes, and coyotes) into the desert from the mountains is valuable for maintaining a balanced ecosystem. Although movement of mountain lions through Big Rock Wash has been documented, it is probably a relatively rare event, since the preferred prey (deer) is not found in the desert.

Response 305-4: HT at 27:1-12. We do not know if the International Airport at Palmdale will be built within the time frame of the West Mojave Plan. If it were, the noise effects to wildlife would probably be substantial. These and other impacts would be considered in a separate Environmental Impact Report for that project. The West Mojave Plan would not cover projects proposed by the City of Los Angeles (Los Angeles World Airports), which is not a participating jurisdiction.

The North County Corridors Plan, which may include the High Desert Corridor, an east-west road linking Interstate 15 with Interstate 14 would cross the Big Rock Wash linkage. If this road were constructed while the West Mojave Plan is in place, it would be required to allow passage of floodwaters and wildlife at the crossing, most likely with bridges.

Response 305-5: HT at 27:13-19. A map displaying the exact course of the California Back-Country Discovery Trail (CBDT) within the planning area was not included in the Plan. It was not included because the route of the CBDT is still a proposal. It has not been identified with certainty for much of its course across California, including the West Mojave planning area. Utilizing best available information, however, its proposed course(s) across the planning area was given due consideration during the evaluation phase of the Route Evaluation/Designation Decision Tree Process (see page 2-143 of the DEIS).

Response 305-6: HT at 30:6-32:7. BLM's responsibility under Section 106 of the National Historic Preservation Act for designation of routes for vehicular use in the West Mojave and other planning areas will be met through a programmatic agreement developed in consultation with the State Office of Historic Preservation. BLM proposes the area of potential effect to be all routes open to vehicular use and a corridor adjacent to the routes authorized for stopping, parking, and camping. The programmatic agreement addresses the identification and evaluation of resources, assessment of effect, and resolution of adverse effect.

Response 305-7: HT at 34:13-25. Comment noted.

Response 305-8: HT at 35:10-13. Routes were not designated across private lands and therefore were not color-coded red (closed) or green (open) on the route maps that were included in the Draft EIR/S.

Routes on private land were identified by black lines, but only to indicate their location. This was done to indicate that access was provided to inholdings and to show connectivity between those routes designated on public lands and those routes on private lands that already are known to exist.

Routes that enter onto private property from public lands may be subject to the laws that protect the private property owner against unwanted trespass. These laws afford the private landowner the means by which to close routes to public use as they enter private property (i.e. in accordance with the law with appropriate signage and/or fencing). Where necessary to allow agency and/or public access may be obtained, easements could be obtained.

Response 305-9: HT at 35:14-18. The BLM's El Mirage Plan and the Western Mojave Desert Off Road Vehicle Designation Project addressed route designations within the "Edwards Bowl". Specific route information obtained from local property owners was applied during the designation process.

We believe a successful rehabilitation and enforcement program can take place in the Edwards Bowl area. Closing and restoring routes, properly signing open routes, implementing an education and outreach program for the public, preparing and circulating maps, and enforcing regulations would accomplish this goal. The commentator is invited to work closely with the BLM's Barstow Field Office to help ensure that implementation of this program is a success.

Response 305-10: HT at 35:19-21. Please see preceding response. The West Mojave Plan would not change the El Mirage Plan (as amended). Issues related to the implementation of proper signing are addressed by the Draft EIR/S on pages 2-144 to 2-147. Issues related to route proliferation were addressed as part of the route evaluation process (see Draft EIR/S at pages 2-128 to 2-139).

Response 305-11: HT at 39:3-12. Concerns regarding the premature or overuse of route "reclamation" or rehabilitation are discussed in the Draft EIR/S on pages 2-144 to 2-146. Due to a variety of concerns, route rehabilitation will be utilized only as necessary (e.g. to ensure compliance by motorized recreationists).

Equestrians, bicyclists, hikers and other non-motorized recreationishs may continue to use closed routes, as well as cross-country travel.

Response 305-12: HT at 40:13-15. See Response 182-46. The West Mojave Plan proposes some minor modifications of the designated route network (including route closures in the Red Mountain subregion (within the Fremont-Kramer DWMA) and the Lane Mountain Conservation Area (within the Superior-Cronese DWMA). BLM's final route designation decision was made on June 30, 2003, however, when the CDCA Plan was amended to adopt a regional network of motorized vehicle access routes as a component of that plan.

Response 305-13: HT at 40:19-22. See Response 188-11.

Response 305-14: HT at 40:23-41:4. See Response 278-11.

Response 305-15: HT at 41:5-9. Comment noted. Other than a reference to distance sampling in that area (Draft EIR/S on page 3-78), we are unaware of any discussion of the Washington County HCP in the West Mojave Plan.

Response 305-16: HT at 43:2-11. See Response 190-5.

Response 305-17: HT at 43:17-20. The 1 percent development threshold would apply throughout the entire habitat conservation area.

Response 305-18: HT at 45:7-15. We agree that the rapid growth of motorcycle recreation must be considered. The Draft EIR/S addressed the growth in the popularity of OHV recreation in the planning area (see Draft EIR/S pages 3-233 to 3-244) and the effects of route closures on OHV recreational opportunity (see Draft EIR/S pages 4-134 to 4-135).

6.4.6 Barstow Public Hearing (306)

Response 306-1: HT at 28:3-29:18. See Response to Topical Comment 3.

Response 306-2: HT at 32:4-14. The Draft EIR/S carefully considered the growth in the popularity of OHV recreation in the planning area (see pages 3-233 to 3-244) and the effects of route closures on OHV recreational opportunity were carefully considered as part of the DEIS (see pages 4-134 to 4-135).

The Johnson Valley to Parker Competitive Event Corridor has been retained as part of the Proposed Action. A "connector route" would replace the Johnson Valley to Stoddard Valley Competitive Event Corridor because the existing corridor crosses designated critical habitat for the desert tortoise as well would be replaced by a "Connector Route". This allow competitive events to include segments in both the Stoddard and Johnson Valley open areas, and provide a means for event participants to travel from one open area to another in a manner that is compatible with tortoise conservation.

The creation of new "Open Areas" was considered by Alternative E, but not incorporated into the proposed action due to overriding resource concerns.

The proposed action considered "leaving unmarked trails open", but did not based upon local and recent experience in the planning area. The lessons learned from these experiences are detailed in the Draft EIR/S on pages 2-144 to 2-146.

The commentator recommends "increased reliance on new methods of protecting endangered species, such as raven control". Alternative A includes a number of measures designed to address raven impacts on the desert tortoise (see Draft EIR/S pages 2-66 to 2-70).

Additional consideration was given to this proposal as part of Alternative F: "No DWMA, Aggressive Disease and Raven Management" (see Draft EIR/S at pages 2-191 to 2-193).

The Route Evaluation/ Designation Decision Tree process that was used to create the route network carefully considered the needs of the recreational motorized community. This process and the criteria that were evaluated is discussed in detail by the Draft EIR/S on pages 2-124 to 2-140.

Response 306-3: HT at 33:14 to 34:3. The comment indicates that the disease is "clearly a Class 4 virus and its spreading in the prevailing winds." In the early 1990's, the veterinarian research group of Dr. Elliott Jacobson at the University of Florida at Gainsville identified the pathogen for Upper Respiratory Tract Disease as being a mycoplasma, which is a bacterium, not a virus as stated. Herpesvirus has been identified in tortoises in the past several years. In both cases, and including the shell disease, there is no definitive evidence that disease is responsible for the catastrophic die-offs of tortoises observed in the West Mojave.

Research that has been done on tortoise diseases is well documented in the Draft EIR/S (pages 3-107 through 3-110) and elsewhere (see discussion in Boarman 2002). Primary researchers on disease issues are listed in Section 5.8 of the Draft EIR/S. The following is an abbreviated list of recent disease research listed in Section 5.8. Berry 1997; Brown et al. 1994; Christopher et al. 1993; Homer et al. 1994 and 1996; Jacobson et al. 1991, 1994, and 1996; and Schumacher et al. 1997. Unfortunately, very little has resulted from the clinical research that could be applied to disease management within in the listed tortoise population. Researchers and biological monitors are required to use handling protocols to minimize the likelihood of disease spread. However, nothing like a vaccine has been developed that can be applied to the wild population.

Response 306-4: HT at 34:4 to 35:5. The commentator reiterates information provided in the Draft EIR/S (pages 3-101 through 3-105). We are not sure which BLM – USFWS document or agreement is being referenced that states ravens were the primary cause for tortoise demise in the early 1990's.

Dr. William Boarman first identified measures intended to address the raven problem, and those recommendations have been incorporated into the Draft EIR/S (pages 2-66 through 2-70). And within the last year the USFWS has met with various scientists to develop an immediate plan to manage ravens. As such, the raven problem is being addressed.

Response 306-5: HT at 35:6-16. The Draft EIR/S agrees that drought exacerbates other threats to tortoises, including recreational vehicle use (pages 3-105 and 3-106). For example, some researchers have suggested that canine predation on tortoises may increase during drought conditions when other prey species become less available. Available information suggests that there is no one threat that can be fully blamed for the demise of the tortoise population. The comment is likely true that a combination of drought, disease, ravens, and other factors has affected the tortoise population. However, it is also true that data clearly demonstrate an impact to both tortoise habitats and animals in much of the proposed conservation area.

Response 306-6: HT at 36:10-15. Comment noted.

Response 306-7: HT at 40:3-24. The inter-relationship between disease, ravens, and other types of management are discussed throughout most of the alternatives compared in Chapter 4. In particular, the Draft EIR/S discussion on pages 4-235 through 4-240 describes the strengths and weakness associated with management that targets only disease and/or ravens, as envisioned by Alternative F.

The following comment is made, "I feel off-road activities have a minute impact on the species, as most of our competition events are done during the time when the desert tortoise is hibernating." First, there is clear, recent evidence that tortoises may be active throughout the year, as was observed between November 2002 and February 2003 by many sources. Second, vehicle impacts also affect tortoise habitats, which may not have the same seasonal vulnerability as the animals, but are equally important to effective tortoise conservation. Finally, available data show that OHV impacts are the most widespread persisting, known impact to tortoises and habitats (see Draft EIR/S pages 3-116 through 3-133).

The comment is made that land closures are not benefiting tortoise populations. However, available data show compelling evidence that the fenced-off DTNA may be the only place in hundreds of square miles where there is recruitment of juvenile tortoises. Even if disease, drought, or a combination of the two decimates tortoise populations, it is important to protect the habitat so that natural or enhanced recruitment (e.g., headstarting) is facilitated and not compromised by persisting authorized and unauthorized uses. If disease were associated with poor forage, damaged habitat, or physiological stress in tortoises (which are all suspected), land closures would benefit disease management by alleviating these threats and protecting habitat for future tortoise generations. The lower level of human presence that would be associated with land closures would very likely contribute to raven management, since ravens are known to frequent places regularly used by humans.

Response 306-8: HT at 41:4-7. As shown in Volume 2, Appendix L, Table L-11, there are eight vehicle open areas managed by the BLM in the West Mojave. The seven open areas found within the tortoise range encompass 570 square miles of land that are primarily managed for vehicle recreation. As given in the comment letter, it is plausible that there will be relatively heavier impacts in these vehicle play areas. Members of the public attending planning meetings indicated that they are often forced to find new areas for vehicle play as traditional areas become denuded and unattractive. This tendency leads to ever widening areas of intensive vehicle impacts that can, in the worse case scenario (e.g., "Camp C" in the western part of the Rand Mountains), result in the complete loss of suitable tortoise habitat.

Currently, competitive events occur primarily within the 570 square miles, which is no small area. The vehicle free-play areas are well distributed throughout the region, with larger open areas relatively more proximate to urban areas in the Inland Empire and Los Angeles Basin. The problems with dispersing competitive events throughout the planning area are numerous. Visitor camping and staging areas are currently restricted to open areas, but, as per the comment, would be spread over a significantly larger area, including DWMAs. Such congregations of people result in increased habitat degradation, litter, attraction of ravens, and potential for

harming or collecting tortoises. It is also apparent in the desert that vehicle users tend to follow existing trails and tracks. Therefore, the tracks and trails created during widely dispersed competitive events would tend to be used by future visitors who were not related to the event. This results in route proliferation, increased cross-country travel, and miscellaneous other impacts that would not occur if such events were restricted, as at present, to designated open areas.

Direct comparisons can be made with urban development. In terms of regional tortoise conservation, it is far more desirable to have urban centers of concentrated human use than to disperse those people and associated impacts throughout the landscape. Although tortoise habitat will ultimately be lost from the urban centers, there is the opportunity to designate and protect conservation areas that are intended to perpetuate the species. Although urban areas may never recover, they do function to direct known impacts away from habitats that are considered essential to tortoise conservation.

Response 306-9: HT at 44:6-10. Prescription HCA-41 has been clarified to indicate that all routes designated as open could be used for dual sport events, subject to that prescription's seasonal and other requirements.

Response 306-10: HT at 47:6 to 48:2. We agree that it is important to implement an effective process for rehabilitating and managing closed routes. The Draft EIR/S included a detailed discussion of how this would occur; see Section 2.2.6.8.

Response 306-11: HT at 48:12-21. Riparian areas in the West Mojave are found on both public and private lands. On public land, BLM, through the West Mojave Plan, has taken many steps to reduce disturbance, such as adjusting route designations to avoid stream crossings and isolated springs and requiring rangeland health assessments in allotments with important riparian areas. The Plan would utilize mitigation fees to perform restoration of riparian areas in the Mojave River and elsewhere through removal of tamarisk, Russian olive and *Phragmites* in a federal – local government partnership. Mining normally does not directly impact riparian systems, although aggregate mining necessarily takes place in current or former streambeds. In these cases, mitigation is developed on a case-by-case basis. BLM has discretion to deny mining in riparian areas because aggregate is a leased material, and local jurisdictions may impose conditions on mining plans including avoidance, compensation, or restoration.

Response 306-12: HT at 49:4-9. Retrofitting of problem poles is now done solely at the discretion of the electric utilities. The West Mojave Plan would allow mitigation fees to be used for surveys to identify problem poles and recommend sites where retrofitting is necessary. BLM has an existing policy to require that new construction adhere to raptor-safe guidelines.

Response 306-13: HT at 49:10-14. The details of the conservation program for burrowing owls will be developed during discussions with the Wildlife Agencies on the Habitat Conservation Plan and 2081 permits. New methods of relocating burrowing owls from urbanizing areas into safe sites are being developed. Several relocation sites are now extant within urban landscapes, including San Diego and San Jose. The likely scenario for relocation of burrowing owls in the Weest Mojave is utilization of sites embedded in the urban matrix, such as

airports, landfills and parks. The preferred grassland habitat is not common in the West Mojave, and the urban sites where owls have adapted sites appear to hold the most promise for maintenance of existing numbers of this species.

Response 306-14: HT at 55:19 to 56:3. We agree that providing motorized access to staging areas and trailheads is an access issue. Ensuring that this access is provided for equestrians, hikers and other public land users was a critical component of the route designation process, and was one of the reasons that teams conducting the 2002 route field survey were instructed to record the locations of staging areas and trailheads. The final network provides motorized vehicle access to within 100 feet of 77 of 100 inventoried staging areas, and 28 of 37 trailheads.

Response 306-15: HT at 58:5-13. In the mid 1980's the BLM declared an emergency closure in the Rand Mountains in response to severe OHV impacts throughout the area. At about the same time, Dr. Berry discovered there was a region-wide die-off of tortoises at the DTNA, in the Fremont Valley, and at the Fremont Peak study plot located east of Highway 395. There is no evidence to support the comment that there were fewer coyotes in the area when there were more vehicles. In fact, coyotes are regularly detected by their scat and observed in urbanized areas. It is suspected that they have expanded from the western to the eastern portions of the United States because of human habitation and the availability of human resources like food and water.

Response 306-16: HT at 66:18-23. Chapter 4's impact analysis assumes that Fort Irwin expansion lands will be used for military training purposes; see Table 4-1, under Long-term Regional Trends. In fact, Chapter 4 presents extensive cumulative analysis of how the Fort Irwin expansion and the West Mojave Plan's conservation strategy will affect species addressed by the Plan.

Response 306-17: HT at 66:24 to 67:3. The "Blue Ribbon Panel" report was developed early in 2000 to discuss the possible effects of, and potential means of mitigating, the Army's April 1999 proposal to expand Fort Irwin. The report included offsetting measures such as route closures, establishing reserves, fencing highways, and hiring rangers. These types of measures are all components of the conservation strategy proposed in Alternative A. They may differ in degree from the recommendations given in the Blue Ribbon report for two reasons. First, the April 1999 expansion proposal involved significantly more land than was transferred to Army by Congress in December 2000. Second, Army is preparing its own supplemental environmental impacts statement that includes measures to mitigate any impacts that might result from expansion of military training activities at Fort Irwin.

Response 306-18: HT at 67:4-8. A detailed implementation program that includes procedures to obliterate and revegetate routes designated closed was presented in the Draft EIR/S. Please see Section 2.2.6.8.

Response 306-19: HT at 67:9-13. The proposed design of the habitat conservation area, including the four tortoise DWMAs, incorporates most of the land suitable for inclusion in a conservation area. The acreage currently included in open areas is less than 15 percent of public

lands within the planning area, and represents a long-term land use commitment that has been in place since the CDCA Plan was adopted in 1980. They are of sufficient size to allow the staging of competitive events within their boundaries, while minimizing "spill-over" issues onto adjacent lands. Boundaries of the open areas are well established and well known, which should contribute to the effectiveness of future efforts to focus OHV recreation within these areas. The "Blue Ribbon Panel" report considered some reductions in open area acreage, but only in the context of a proposal for a significantly larger expansion of Fort Irwin than actually occurred.

Response 306-20: HT at 67:14-22. The West Mojave Plan would close all such corridors that cross DWMAs. The Plan would eliminate the segment of the Barstow to Vegas Race Course that is located within the planning area. It would replace the Johnson Valley to Stoddard Valley Competitive Events Corridor with a "Connector Route," which would provide participants in open area events with a designated non-competitive route for traveling between the Johnson Valley and Stoddard Valley open areas. The Johnson Valley to Parker Competitive Events Corridor would be retained: while it borders the Ord-Rodman DWMA, its alignment does not cross it (unlike Barstow to Vegas and Johnson Valley to Stoddard).

Response 306-21: HT at 67:23-25. It is BLM's ability to achieve its mandate to conserve sensitive resources that would be the prime beneficiary of the West Mojave Plan. Public lands have long benefited from streamlined procedures set forth in a variety of biological opinions. The West Mojave Plan's program would make some minor changes to these, but it would not have as dramatic a "streamlining" benefit as would occur on private lands. What the Plan would do is to ensure that a single, coordinated conservation strategy is adopted for public and private lands. By implementing a consistent program and by pooling mitigation fees and allowing their application throughout the region under the procedures established by the plan, the conservation of species and ecosystems in the planning area should be significantly enhanced.

Response 306-22: HT at 68:1-7. Both air quality and degraded resource were considered in developing the conservation strategy, particularly as they relate to route closures. Habitat degradation (page 3-122) and regeneration (3-123) are both discussed in the Draft EIR/S.

Response 306-23: HT at 75:15 to 76:23. The Habitat Rehabilitation Credit program described in Section 2.2.2.3 was designed to address the concerns you raise.