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Final Environmental Impact Statement and Proposed Plan

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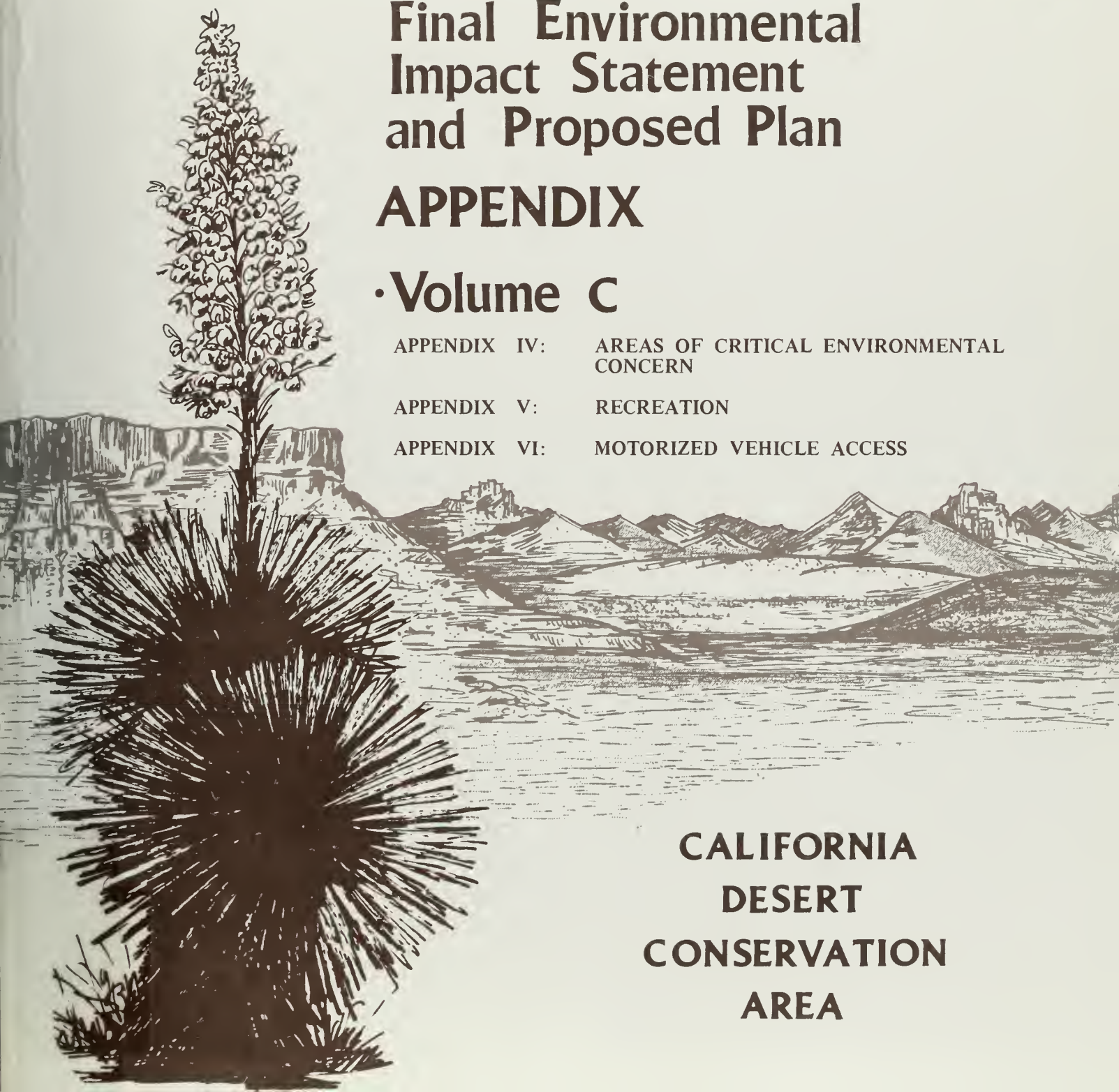

CALIFORNIA DESERT CONSERVATION AREA

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AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Part 1a

Special Interim Management Prescriptions for Proposed ACECs

1. WHITE MOUNTAIN CITY

NOMINATING DISCIPLINE

Cultural Resources (as White Mountain City)

VALUES AND LOCATION

This area was nominated in order to protect the historic and prehistoric cultural resource values located in the foothills of the White Mountains, at the northeast end of Deep Springs Valley, in northern Inyo County. The area contains a prehistoric village site with petroglyphs, plus a rock shelter with pictographs, as well as remnants of a 19th Century mining town. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Increase BLM patrol.

2) Fence sensitive sites and areas as necessary.

3) If other management techniques are ineffective, salvage the sites.

2. DEEP SPRINGS VALLEY BLACK TOAD HABITAT

NOMINATING DISCIPLINE

Wildlife

VALUES AND LOCATION

This nomination was proposed to protect habitat for the rare black toad. Deep Springs Valley is located east of the White Mountains in northeastern Inyo County. The valley contains a number of riparian areas which provide habitat for the black toad (Bufo exsul), listed as "rare" by the State of

California. Protection of black toad habitat was considered a priority because of its status and limited distribution. It is therefore proposed for ACEC designation with the following special management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop cooperative agreement for black toad habitat protection and development among Deep Springs Valley College, California Department of Fish and Game, and BLM.

2) Develop Allotment Management Plan (AMP) with black toad habitat protection and improvement as primary objective.

3) Plant riparian vegetation where needed.

4) Develop additional pond habitat if possible.

3. EUREKA VALLEY DUNES

NOMINATING DISCIPLINES

Wildlife (as Eureka Valley Dunes)
Recreation (as Eureka Dunes)
Vegetation (as Eureka Dunes)

VALUES AND LOCATION

This nomination was proposed to protect flora, fauna, and scenic values of the Eureka Dunes. Located in northeastern Inyo County between the White Mountains and the Last Chance Range, the Eureka Dunes are the tallest dune system in California and a prominent regional feature. They host a primrose listed as threatened by the U.S. Fish and Wildlife Service (FWS), Oenothera avita eurekensis, and an endemic dune grass (Swallenia alexandrae) listed as endangered by the U.S. Fish and Wildlife Service, as well as populations of unique beetles. The area has received protective management since the early 1970s and will continue to receive special protective attention through its recommendation as a designated ACEC. The following special management prescriptions will be applied to the area:

MANAGEMENT PRESCRIPTIONS

1) Continue and post vehicular closure.

2) Erect interpretive display at road end near dunes.

3) Continue regular patrol and visitor contacts.

4. SALINE VALLEY

NOMINATING DISCIPLINES

Wildlife (as Salt Lake Mesquite/Marsh)
Cultural Resources (as Hunter Canyon/Saline Dunes)

VALUES AND LOCATION

This nomination was proposed to protect wildlife habitat in part of the Saline Valley. The Saline Valley dunes, mesquite, and marsh are located in Inyo County between the Inyo Mountains and the Saline Range. The area provides a variety of wildlife habitats (aquatic, arboreal, and aeolian) within a small area, and its protection from burro and visitor damage is essential to resident and transient wildlife. The area also contains a salt grass meadow, vegetation not commonly found in the desert. Located in the area are both prehistoric and historic cultural resources, including a village site with rock art and a turn-of-the-century borax operation. The area is recommended for ACEC designation to protect resource values using the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop cooperative management, agreement, and plan with California Department Fish and Game.

2) Acquire non-BLM lands through exchange or purchase.

3) Reduce burro populations; fence marsh and mesquite thicket adjacent to marsh.

4) Limit vehicles to approved routes: Eureka Saline road and road to Lower Warm Springs, and to identified camping areas.

5) Designate camping areas.

6) Prohibit vegetation collection and/or use.

7) Develop interpretive display explaining resources and their management.

8) Close Saline Dunes to vehicle entry.

5. CERRO GORDO

NOMINATING DISCIPLINES

Cultural Resources (as Cerro Gordo)
Vegetation (as Cerro Gordo Peak)

VALUES AND LOCATION

The purpose of this nomination was to provide protection to extensive prehistoric and historic values, and to an unique plant assemblage. This area is located around Cerro Gordo Peak in the southern Inyo Mountains. Considerable evidence of aboriginal occupation exists, but it is the mining history and its remnants that are of major cultural interest. Silver mining in the area in the 1800s was a factor in the early development of Los Angeles. The area contains the following unusual plant species: (1) Caulostrominea jaegeri, a candidate species for listing as "threatened" by FWS, and (2) Phacelia amabilis, Perityle inyoensis, Eriogonum eremicola, and Eriogonum microthecum var. panamintensis, all listed as species of concern by FWS. Two activities are impacting the plant species at present. One is mining -- especially for limestone -- and the other is the feral burros. The limestone resource also provides a restricted and uncommon habitat for the vegetation. Multiple-Use Class M is identified for this area; but, owing to the special values present, Multiple-Use Class M does not provide adequate resource protection. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Regulate mining in areas of rare, threatened and endangered plant species.

2) Reduce burros within ACEC.

3) Restrict vehicle access to approved routes.

4) Place signing along the boundary road, noting management designations and allowed uses.

5) Protect archaeological and historical sites.

6) Develop an agreement with residents and owners of patented lands, to help protect cultural, historical, and biological resources.

6. DARWIN FALLS/CANYON

NOMINATING DISCIPLINES

Wildlife (as Darwin Falls)
Recreation (as Darwin Falls/Canyon)

VALUES AND LOCATION

This area was combined with Darwin Falls/Canyon for protection of scenic and biotic values. The Darwin Falls are one of a very few series of perennial waterfalls in the California Desert. The falls and canyon present outstanding scenic quality and are a regular stop for many visitors on State Route 190 between Route 395 and Death Valley National Monument. Flowing

water supports thick vegetation and provides habitat and/or water for many species of wildlife. Protection of these unique and outstanding resources can be best provided through visitor management and ACEC designation. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Restrict vehicle access between main canyon road and Darwin Falls to designated limits.

2) Install more effective barriers at end of access way.

3) Increase BLM patrol.

4) Designate camping areas.

5) Coordinate tamarisk removal with Shoshone Indian groups.

6) Reduce feral burros.

7) Cancel or acquire existing water rights of Panamint Springs resort.

8) Prohibit shooting within the ACEC.

7. ROSE SPRING AREA

NOMINATING DISCIPLINES

Cultural Resources (as Rose Spring Area)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric human artifacts south of Haiwee Reservoir between State Route 395 and the Los Angeles Aqueduct. The area contains a cluster of archaeological sites covering a 3,000- to 4,000-year period, and consists of village and other occupation sites, plus much scattered material. The area has been "pothunted" historically and currently, and this is threatening the resource's integrity. In order to provide adequate special management attention, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Coordinate with private landowners to place locked gates on existing fences.

2) If (1) above is unsuccessful, obstruct vehicle access to specific sites or public lands, and sign access as limited to existing roads.

3) Initiate and continue BLM patrol.

4) Monitor site conditions. If qualities are degraded, salvage resources or develop and implement tighter management controls.

8. SURPRISE CANYON

NOMINATING DISCIPLINES

Wildlife (as West Panamint Canyons)
Cultural Resources (as Panamint City)
Recreation (as Surprise Canyon/Panamint City)
Vegetation (as Panamint City/Surprise Canyon)

VALUES AND LOCATION

This nomination was proposed to protect natural and cultural values in the Panamint Range, and originally covered the western side of the Panamint Mountains which form part of the western boundary of Death Valley National Monument. West Panamint Canyons include Hall, Jail, Happy, and Surprise canyons, the last of which contains the historic mining settlement of Panamint City. Only Surprise Canyon is proposed as an ACEC. The canyon possesses outstanding scenic quality, wildlife habitat (notably for bighorn sheep), unique vegetative resources associated with a limestone substrate, and prehistoric values. Visitor use, possible mineral development, and burros threaten Surprise Canyon and Panamint City, requiring immediate and ongoing resource protection. The Surprise Canyon watershed and visual resource are recommended for ACEC designation with the following special management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Designate parking and camping areas.

2) Construct small, interpretive displays and create local pamphlets describing the area.

3) Prohibit gathering of firewood in riparian area.

4) Allow vehicle use on approved routes.

5) Begin intensive burro removal.

6) Rehabilitate the marsh at Chris Wicht's camp.

7) Eliminate tamarisk after consultation with Native Americans.

8) Begin studies to determine the effects of mining on riparian vegetation and wildlife.

9) Investigate the feasibility of acquiring key private parcel, and initiate acquisition as appropriate.

10) Protect scenic values through rigorous application of the BLM Visual Resource Management (VRM) system.

11) Increase visitor service/law enforcement presence.

12) Provide interpretive display where road splits to Surprise Canyon road.

13) Prohibit collecting of plants and animals except by permit.

In addition to recommendation for ACEC designation, Panamint City is recommended as a National Historic Landmark, for inclusion in the National Register of Historic Places, and for listing on the National Architectural and Engineering Record.

9. GREENWATER CANYON

NOMINATING DISCIPLINES

Cultural Resources (as Greenwater Canyon)
Native American (as Greenwater Canyon)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for prehistoric occupation sites still important to Native Americans. This area is located in Greenwater Canyon in the Greenwater Mountains in eastern Inyo County. The 42 prehistoric sites located in the canyon consist mostly of rock shelters. The shelter contains 300 to 350 petroglyph elements that are important for comparative and interpretive purposes. The public is especially concerned that the petroglyphs be preserved in place, and Native Americans consider the sites to be sacred. The petroglyphs in this canyon are susceptible to illicit collecting, and several of the shelters have been impacted by pothunters. Multiple-Use Class L is considered inadequate protection for the resource. The area is therefore recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Block vehicle access to north and south entrances to canyon.

2) Post regulatory and interpretive signs.

3) Develop Cultural Resources Management Plan.

4) Patrol daily.

5) Coordinate management actions with Panamint Valley (Furnace Creek) Shoshone Indians.

10. FOSSIL FALLS

NOMINATING DISCIPLINE

Cultural Resources (as Fossil Falls)

VALUES AND LOCATION

This nomination is designed to protect an area with an unusually high concentration of prehistoric human site features located in Rose Valley between Red Hill and Little Lake in Inyo County. Human occupation of at least 5,000 years is known, and the more than 50 sites reported represent primarily villages and rock art. The area receives substantial visitor use, some of which has included "pothunting" and vandalism. In order to protect the remaining features, the area is recommended for ACEC designation. The management prescription for the area is to implement the existing Cultural Resources Management Plan (CRMP) for the Fossil Falls/Little Lake Locality. Specifically, this includes:

1. Improve and sign foot trail.

2. Place vehicle barriers (see above CRMP, pp. 44-50).

3. Salvage areas already damaged by pothunters.

4. Construct a minimal day-use facility, including picnic tables, sanitary facilities, and waste containers.

5. Remove spray-painted graffiti.

6. Institute regular patrols, and provide interpretive services.

7. Acquire the 80-acre parcel below Fossil Falls.

8. Develop interpretive brochure and display.

11. SAND CANYON

NOMINATING DISCIPLINE

Wildlife (as Sand Canyon)

VALUES AND LOCATION

Sand Canyon is located on the eastern slopes of the Sierra Nevada Range about 30 miles north and west of Ridgecrest. It was nominated to protect a "typical" eastern Sierra Canyon. The area contains an exceptional diversity

of flora and fauna, and its scenic values attract many visitors. Some of this use, such as off-road travel and firewood collection, have the potential to damage habitat and scenic values. In order to protect those representative resources, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Restrict vehicles to the main access routes.

2) Post (sign) area to indicate off-road travel is prohibited.

3) Erect an interpretive display near the canyon mouth, being careful not to disturb surface cultural sites.

4) Increase BLM presence and patrol.

12. GREAT FALLS BASIN AREA

NOMINATING DISCIPLINES

Wildlife (as Inyo Brown Towhee)
Recreation (as Great Falls Basin)

VALUES AND LOCATION

This area was nominated to protect wildlife and scenic values. The area is located near Trona in the southern Argus Range. It contains the scenic Great Falls Basin Research Natural Area, and it provides habitat for a relict population of the Inyo brown towhee (Pipilo fuscus eremophilus). Because of the need to protect these values, and because of potential listing by State and Federal wildlife authorities, the area is recommended for ACEC designation with the following special management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Acquire private lands, Indian Joe Spring, in particular.

2) Develop Memorandum of Agreement (MOA) with China Lake Naval Weapons Center.

3) Remove burro populations, especially around riparian areas.

4) Develop MOA with California Department of Water Resources to monitor water production in the area, and investigate acquisition of unappropriated or unused water rights if not already protected as a public water reserve.

5) Limit vehicular use to approved routes.

6) Prohibit camping in riparian areas.

7) Develop hunting/shooting management plan portion of existing Fish and Game agreements.

8) Increase ranger patrols.

9) Rigorously implement BLM VRM system.

11) Expand visitor services program and field presence.

12) Distribute interpretive materials describing local resources.

13. AMARGOSA RIVER/GRIMSHAW LAKE

NOMINATING DISCIPLINES

Wildlife (as Amargosa Gorge and as Grimshaw Lake)
Recreation (as Amargosa River)
Vegetation (as China Ranch)
Soils (as Amargosa River)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for an unusual vegetational assemblage, an extensive riparian habitat, and the wildlife, soils, and scenic values which are dependent upon it. This area is located five miles southeast of Tecopa in central Inyo County. It is one of the very few areas within the desert in which there is a permanent running stream providing a riparian habitat. The area contains a variety of aquatic habitat and vegetation. Wildlife resources include the sensitive Amargosa River pupfish (Cyprinodon nevadensis amargosae), the speckled dace (Rhinichthys osculus), and the Amargosa vole (Microtus californicus scirpensis), and provides shelter or sustenance to more than 220 species of birds. A major portion of the Amargosa Canyon/Dumont Dunes Natural Area is within this area. Outstanding scenic values result from the canyon topography, abundant vegetation, and standing and flowing water. Such areas in the desert are sensitive to damage. The area is recommended for ACEC designation with the following special management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Acquire private lands through purchase or trade.

2) If (1) above is not feasible, enter into MOA with private landowners to limit vehicle use and grazing.

3) Develop comprehensive resource/visitor management plan.

4) Restrict vehicle use to access for landowners, patrol, and maintenance.

5) Construct effective vehicle barriers.

6) Construct and/or designate hiking trail.

7) Post access opportunities/limitations.

8) Conduct intensive resource inventory.

9) Conduct cooperative program with California Department of Fish and Game, U. S. Fish and Wildlife Service, and BLM.

10) Designate parking area outside of ACEC boundary.

11) Withdraw all currently unwithdrawn lands from mineral entry.

12) Increase BLM presence, and, in conjunction with cultural resource specialist, provide interpretation of resource values.

13) Fence most sensitive riparian areas if management plan identifies need to do so.

14) Monitor water table drawdown and water consumption in river area.

14. KINGSTON RANGE

NOMINATING DISCIPLINE

Wildlife (as Kingston Range)

VALUES AND LOCATION

The Kingston Range is a high, rugged range in far northeastern San Bernardino County. It is a prominent regional landmark, an "island mountain" with outstanding scenic values and distinctive floral and faunal components, including white fir, pinyon-juniper, giant Nolina, and bighorn sheep. The area contains the world's largest population as well as individual Nolina wolfii, constituting a truly unique plant assemblage. The area requires protection of scenic, floral, and faunal values, which is accomplished on the main (southern) portion through recommendation for Wilderness (Class C) status (see Proposed Plan Multiple-Use Class map). In order to protect bighorn sheep, the northern, Class M area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Establish big game guzzlers accessible only to bighorn sheep. Consult with cultural resource specialist and ranchers before development.

2) Ensure wildlife access to existing developed water sources or pipe water to areas removed from cattle access.

3) Determine effects of grazing on the population of bighorn. Adjust allotment size as necessary.

4) Explore possible erection of drift fences to segregate cattle and bighorn sheep.

5) Monitor burro populations and reduce if necessary.

6) Determine if travel corridors for bighorn extend to and from the ACEC. Consider special management of these corridors, if necessary.

7) Livestock should be allowed, consistent with the AMP to be developed.

15. MESQUITE LAKE

NOMINATING DISCIPLINE

Cultural Resources (as Mesquite Lake)

VALUES AND LOCATION

This nomination was proposed to protect an important locale of prehistoric human occupation. Located on the shore of Mesquite Lake in extreme northeastern San Bernardino County, the area was occupied for an extended period of time by aborigines, and it contains extensive surface and subsurface artifacts. The area is threatened by pothunters and illegal vehicle use. In order to protect the occupation area, this nomination is recommended for ACEC designation with the following management prescriptions:

1) Fence sensitive areas.

2) Restrict or prohibit vehicle use in nonsensitive areas, to be determined by resource specialists and ACEC Activity Plan.

3) Initiate periodic BLM patrol.

4) Excavate known sites when necessary.

5) Sign the area to inform visitors of sensitive values requiring protection.

16. TRONA PINNACLES

NOMINATING DISCIPLINES

Recreation (as Trona Pinnacles)
Geology (as Trona Pinnacles)

VALUES AND LOCATION

This area was nominated to protect the most outstanding example of tufa (calcium carbonate) deposits in the United States. The Trona Pinnacles are located in Searles Valley near Trona. They formed under mysterious circumstances during a time when water covered much of the California Desert. Visually striking, even bizarre, the area is frequently photographed in science fiction and futuristic films and television. The Pinnacles are currently designated as a National Natural Landmark and receive considerable educational use. Parts of the area are threatened by uncontrolled visitor use; vehicle access is not easily controlled because of the open topography. In recognition of, and in order to provide the necessary special management attention for this unique scenic and geologic resource, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence all or the best portion of the Pinnacles, if necessary to protect the features.

2) Designate approved routes of vehicle travel, but permit foot travel throughout.

3) Construct an interpretive kiosk in lieu of a visitor center.

4) Construct day use or camping facilities in proximity to, but not immediately adjacent to, the tufa formations.

5) Provide an on-the-ground presence on regular patrol, and provide aerial coverage of the ACEC.

6) Explore the applicability of a volunteer or caretaker approach to the ACEC, at least during peak use periods.

7) Build a "scenic overlook" of the area on State Route 178.

8) Rigorously implement VRM system.

17. DENNING SPRING

NOMINATING DISCIPLINE

Cultural Resources (as Denning Spring)

VALUES AND LOCATION

This area was nominated to protect significant cultural resources, including historic and prehistoric occupation sites and prehistoric lithic sites. The area is located around Denning Spring in the Avawatz Mountains north of Fort Irwin Military Reservation. In order to protect this valuable area adequately, ACEC status is recommended with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence the ACEC.

2) Sign the south and east sides of the ACEC.

3) Install limited-access gates on roads present.

4) Reroute those routes that border or cut through sites.

5) Salvage those sites which cannot be effectively managed.

18. SALT CREEK (DUMONT)

NOMINATING DISCIPLINES

Wildlife (as Salt Creek)
Cultural Resources (as Salt Spring Hills)

VALUES AND LOCATION

This area was nominated to protect archaeological and wildlife values.

The area is located in the Salt Spring Hills north of the Avawatz Mountains, and is bound on the east and south by Highway 127. The presence of lithic scatters, historic sites, temporary camps and midden sites are evidence of the area's cultural resource values. The area contains one of the largest riparian vegetation zones in the California Desert, approximately one mile long and up to 200 feet wide, which supports a high diversity and density of wildlife, including 82 species of birds. In order to protect the wildlife and archaeological resource values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Close area to vehicular use, except to a designated camping area no closer than 200 yards from the riparian area.

2) Remove all trash and fire rings.

3) Limit discharge of firearms to licensed individuals during dove and quail season. To be accomplished through development of a county ordinance.

4) Develop a Habitat Management Plan.

5) Eliminate tamarisk and replace with native species.

6) Develop interpretive display(s) and materials.

7) Identify the water source as a Public Water Reserve withdrawn under Public Water Resource Order 107, and prohibit groundwater pumping. If the water source is not eligible, pursue acquisition of water rights.

8) Fence midden areas or protect through locked gates.

9) Increase surveillance by rangers.

10) Sign the area to indicate vehicular restrictions and available nearby opportunities.

19. CLARK MOUNTAIN

NOMINATING DISCIPLINES

Wildlife (as Clark Mountain)
Cultural Resources (as Clark Mountain/Pachalka Spring)
Recreation (as Clark Mountain)

VALUES AND LOCATION

This area was nominated to protect and manage natural and cultural values on Clark Mountain. Located in far northeastern San Bernardino County, Clark Mountain is a prominent regional landmark, an island mountain reaching a height of 7,929 feet. It is one of the richest floral and faunal areas in the desert, and includes eight plant communities, including the largest relict stand of white firs in the CDCA and one of the richest cacti populations in the desert. Desert bighorn sheep are present, as well as diverse avian and reptile populations. The area is highly scenic and is known for floral displays and educational and research uses. The area contains a wide variety of metallic and nonmetallic minerals, and current as well as historic evidences of mining are visible, particularly at the lower elevations. Prehistoric occupation is extensive and evident at spring sites, drainages, and food collecting and preparation areas. In order to protect these wildlife, scenic, and cultural resource values while providing for a variety of recreation and economic opportunities, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Before any site development takes place, survey for cultural resources.

2) Develop additional water sources for wildlife which are inacessible to livestock; develop livestock water away from Pachalka Spring.

3) Limit major activities along the power line to winter months so as not to interfere with bighorn sheep migration to Pachalka Spring.

4) Limit vehicle use to designated routes only, and close road within 200m of Pachalka Spring.

5) Develop interpretive display(s), at least one at the junction of Shadow Valley Road and the road to Pachalka Spring.

6) Remove burros to improve environs for bighorn sheep.

20. JAWBONE-BUTTERBREAD AREA

NOMINATING DISCIPLINES

Wildlife (as Butterbread and Jawbone Canyons)
Native American (as Jawbone Canyon)

VALUES AND LOCATION

This area was nominated to protect wildlife and Native American values, and is located west of State Highway 395 where the Sierra Nevada and Tehachapi Ranges meet the Mojave Desert. The area contains a wide variety of resources, especially reptiles and birds, as well as Native American cultural values. Selected areas such as Jawbone Canyon and Dove Springs receive intense use, and require constant management attention. Because of the unusual faunal diversity and spiritual values to Native American groups, protection of these values, while allowing other appropriate uses, will be provided through ACEC designation. The following management prescriptions provide special attention:

MANAGEMENT PRESCRIPTIONS

1) Allow vehicle use on approved routes only except in designated motorized vehicle free-play areas.

2) Evaluate the potential effectiveness of restoration and rehabilitation of disturbed areas.

3) Consider reintroduction of bighorn sheep.

4) Install a locked gate on the fire roads in Kelso Valley consistent with necessary access to private lands.

5) Conduct aerial patrols.

6) Develop AMP and monitor impacts of grazing on wildlife.

21. LAST CHANCE CANYON

NOMINATING DISCIPLINE

Cultural Resources (as Last Chance Canyon)

VALUES AND LOCATION

This area was nominated to protect archaeological resources. Located in the El Paso Mountains in Kern County, the canyon area extends from Black Mountain at the north to Saltdale at the south. The area is extremely significant because it contains more than 60 archaeological sites. It has very high site diversity, including villages, temporary camps, rock art sites, lithic scatters, milling stations, quarries, cremations, rock shelters, historic sites, and isolates. In addition, the area has been heavily mined from the early 1890s until the 1940s with some small scale mining activities continuing until the present time. To protect the cultural resource values, the area is recommended for ACEC status with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Limit access to approved routes.

2) Fence petroglyph concentrations.

3) Conduct an intensive surface inventory.

4) Provide interpretation of resource values.

5) Increase ranger and other BLM surveillance of the area, and maintain regular patrol.

22. DESERT TORTOISE RESEARCH NATURAL AREA

NOMINATING DISCIPLINE

Wildlife (as Desert Tortoise Research natural Area)

VALUES AND LOCATION

This nomination was made to protect the Desert Tortoise. This area lies on the western edge of the Mojave Desert in eastern Kern County. It contains the world's densest known population of desert tortoise, a BLM sensitive species which is under review for Federal threatened or endangered status. Intensive protective management of this area has resulted in an improvement in resource condition in recent years, and considerable floral and faunal

research, education, and nature study are accommodated through visitor interpretive services. Protection a and expanded awareness of these outstanding biotic values is warranted, and the area is recommended for ACEC designation. The management prescription for the area is implementation of the recently completed Desert Tortoise Research Natural Area Habitat Management Plan, which includes the following:

MANAGEMENT PRESCRIPTIONS

1. Implement a natural history program.
2. Permit nature to determine population levels and dynamics.
3. Eliminate or control vehicle use, grazing, mining, and dumping.
4. Complete perimeter fencing.
5. Rehabilitate disturbed areas.
6. Acquire private inholdings.
7. Allow scientific research.
8. Increase surveillance.
9. Continue coordination with Federal, State, local, and private interests.

23. CHRISTMAS CANYON

NOMINATING DISCIPLINE

Cultural Resources (as Christmas Canyon)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric cultural values in the Searles Valley near the Naval Weapons Center Mojave Range B boundary. The area contains a large number of rockshelters, lithic scatters, workshops, projectile points, and tools. The area is situated in a Class I (open to vehicle free play) area. Sites are subject to damage, and vandalism has been reported. In order to protect these values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1. Increase patrol of the area.
2. Fence or otherwise restrict access to limited, specific sites if necessary.

3. Salvage sites if necessary.

4. Utilize interpretive and other visitor services to explain sensitive resource values and seek voluntary user resource protection.

5. Coordinate patrol and visitor management with Mojave B Range Naval authorities.

24. BEDROCK SPRING

NOMINATING DISCIPLINE

Cultural Resources (as Bedrock Spring)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric cultural resources located north of Bedrock Spring on the north edge of the Lava Mountains at the interface with Searles Valley to the north and the Summit Range to the west. In order to protect the cultural resources of the area, including six sites which possess middens, villages, petroglyphs and milling sites, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Prohibit vehicle access into the area from the north where Classes M and C meet.

2) Post unobtrusive signs to interpret resource values.

3) Conduct periodic surveillance of the ACEC.

4) Salvage resources if other management is unsuccessful in protecting resources.

25. STEAM WELL

NOMINATING DISCIPLINE

Cultural Resources (as Steam Well)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric human values near Red Mountain in western San Bernardino County. The area contains a major petroglyph concentration, milling station, and other traces of early occupation. The area has been vandalized, and the area's Class L designation is not expected to provide adequate protection. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence petroglyphs within the ACEC.

2) Develop interpretive program at major sites in conjunction with appropriate Native American group.

3) Continue regular patrols of the area.

26. SQUAW SPRING

NOMINATING DISCIPLINE

Cultural Resources (as Squaw Spring)

VALUES AND LOCATION

This nomination was proposed to protect cultural resources around Squaw Spring near Red Mountain in western San Bernardino County. The area contains a major village site and midden, rock rings, cairns and alignments, milling stations, rockshelters, lithic scatters, and petroglyphs. In order to provide adequate special management attention to these diverse cultural values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Keep all existing roads to the ACEC closed.

2) Post the area with signs indicating the need for special management of the valuable resources present.

3) Monitor known sites by air and on the ground.

4) Salvage sites as necessary and appropriate, consistent with protection of Native American values.

5) Complete implementation of existing Cultural Resources Management Plan.

27. GOLDSTONE

NOMINATING DISCIPLINE

Cultural Resources (as Goldstone)

VALUES AND LOCATION

This nomination was proposed to protect the historic mining town of Goldstone, located northeast of Barstow on the Camp Irwin Military Reservation boundary. A number of foundations and historic structures are

intact, and the area contains a complex of shafts, mines, and prospects. Relatively high levels of visitor use, coupled with intentional or accidental damage to cultural resources threaten the area's integrity. The area has been nominated to the National Register of Historic Places. The area is also recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop Memorandum of Agreement (MOA) with the military to monitor the area and block access along common boundaries.

2) Block those roads which permit uncontrollable access.

3) Patrol periodically.

4) Develop an interpretive program, including a self-guiding tour.

5) Stabilize historic structures.

6) Coordinate patrol and visitor management with Camp Irwin military authorities.

28. CAMP IRWIN BOUNDARY

NOMINATING DISCIPLINE

Cultural Resources (as Camp Irwin Military Reservation Boundary)

VALUES AND LOCATION

This nomination was proposed to protect a dense assemblage of well-preserved prehistoric cultural features immediately south of the Camp Irwin Military Reservation Boundary. The area once received heavy seasonal use for food gathering and contains shelters, cleared circles, rock alignments, and lithic scatters. In order to protect these resources from recent pothunting, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence and padlock road west of the Camp Irwin to Goldstone road to deny access.

2) Place fence at junction of east-west road and road from south to prevent access along this area.

3) Designate and sign approved routes of travel.

4) Increase patrols; coordinate patrols and visitor management with Camp Irwin military authorities.

5) Initiate interpretive signing program.

6) Stabilize cultural features.

29. HALLORAN WASH

NOMINATING DISCIPLINE

Cultural Resources (as Halloran Wash)

VALUES AND LOCATION

This nomination, north of Interstate 15 in the east Mojave, was proposed to protect a variety of prehistoric cultural values. Rock art, prehistoric turquoise mines, and known Anasazi ("the Ancient Ones") occupation are among these values. Mining, vandalism, and recreation activities hold the potential for damage to these resources, and the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Block access to the wash with boulders and cables.

2) Patrol periodically.

3) Place signs notifying visitors of sensitive values requiring protection.

4) Conduct intensive cultural resource inventory.

30. MOUNTAIN PASS/DINOSAUR TRACKWAY

NOMINATING DISCIPLINES

Cultural Resources (as Mountain Pass)
Geology (as Mescal Range Dinosaur Trackway)

VALUES AND LOCATION

The purpose of this nomination was to provide protection of rare fossil dinosaur tracks. The area is located in the Mescal Range about three miles south of Interstate 15 near Mountain Pass. This is the only known occurrence of fossil Mesozoic dinosaur tracks in the CDCA. The occurrence is considered rare anywhere in the western United States. Known tracks are found on a bedding plane of Aztec sandstone, and there is potential for discovery of additional evidence. The area also contains an excellent mining complex representing primarily 19th Century hardrock mineral exploitation and settlement. Present are dugouts, adobes, wells, a mine, mill site, refuse areas, and more. Many of these resources are well-preserved, but proximity to Interstate 15 threatens these values through vandalism. Another existing threat is that of possible limestone quarrying because there has been

quarrying of Dimension stone in Aztec sandstone nearby. This area has been designated Multiple-Use Class M which does not adequately protect this unique resource. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Allow vehicle access only on approved routes in the Mountain Pass area; allow foot access only within the dinosaur trackway area.

2) Develop interpretive displays.

3) Develop a parking area in lower portion of the area; construct a foot trail up to the springs and the Mollusk Mine.

4) Patrol on a regular basis.

5) Stabilize historic resources.

6) Salvage historic resources if necessary.

7) Do not attract attention to trackway through fencing.

8) Conduct an intensive paleontological inventory; prohibit development and mining in areas with identified values.

31. NEW YORK MOUNTAINS

NOMINATING DISCIPLINES

Wildlife (as New York Mountains)
Recreation (as New York Mountains)

VALUES AND LOCATION

This area is a tall mountain range located in the far eastern portion of San Bernardino County south of Ivanpah. This area was nominated to protect its outstanding scenic quality, uniqueness, and high visual sensitivity as well as its extremely diverse flora, including white fir and many unique or endemic ferns, and fauna such as mule deer and bighorn sheep. These natural values result in significant levels of educational use by colleges and universities. Recreational and other land uses are expected to increase in the near future. In order to protect natural values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Eliminate burro populations.

2) Give priority to designation of approved vehicle routes in the ACEC.

3) Acquire sensitive lands in private ownership.

4) Develop and implement an interpretive program describing cultural and natural values in the ACEC in consultation with the Chemehuevi and Mohave Indian tribes.

5) Rigorously implement the VRM system.

6) Develop AMP consistent with Conflict Resolution for Bighorn Sheep Decisions.

7) Consult with cultural resource specialist prior to any development.

32. CAMP ROCK SPRING

NOMINATING DISCIPLINE

Cultural Resources (as Camp Rock Spring)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric and historic cultural features at Rock Springs, on the Mojave Road in eastern San Bernardino County. The area contains prehistoric and historic petroglyphs, remnants of a U.S. Army outpost, 1862 military graffiti, foot and vehicle trails, and a variety of aboriginal and modern occupation artifacts. The area is readily accessible and has received considerable inadvertent and overt damage. In order to protect these significant resource values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Implement proposed Cima Activity Plan but with less signing than identified in that plan.

2) Clean and restore areas damaged by floods, litter, and vandalism.

3) Increase BLM patrols.

33. FORT PIUTE

NOMINATING DISCIPLINES

Wildlife (as Fort Piute)
Cultural Resources (as Fort Piute)
Recreation (as Fort Piute)
Soils (as Piute Spring)

VALUES AND LOCATION

This nomination was proposed to protect prehistoric, historic, and natural values around Piute Spring. Fort Piute is located in the far eastern Mojave Desert, near the Colorado River. The area includes Piute Spring and Piute Creek, one of the desert's few perennial watercourses, which makes the area rich in natural and cultural values. The "fort" was an outpost on the Old Government Road in the 1860s, and the area received considerable use by Native Americans prior to that time. The riparian vegetation of the area provides scenic contrast and variety and is important to wildlife populations. Portions of the Old Government Road are recognizable and used today, and the road is proposed in the Plan as a National Historic Trail. Because of the need to protect these outstanding natural and cultural values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Prepare Habitat Management Plan and AMP.

2) Exclude grazing from riparian area.

3) Develop livestock water away from the ACEC.

4) Remove tamarisk and replace with cottonwoods, willows or other native trees.

5) Assess visitor impacts and determine visitor carrying capacity.

6) Prepare Recreation Activity Plan.

7) Exclude camping from riparian areas.

8) Prohibit vehicle entry west of Irwin Ranch area.

9) Prohibit campfires and wood gathering in the Piute Creek area.

10) Increase BLM presence by patrol or otherwise.

11) Develop an interpretive display, with particular emphasis an historic and cultural values.

12) Stabilize or rehabilitate ruin of Fort Piute.

13) Conduct an intensive cultural resources inventory.

34. DEAD MOUNTAINS

NOMINATING DISCIPLINE

Native American (as Dead Mountains)

VALUES AND LOCATION

The purpose of this nomination was to provide protection of Native American cultural values. The Dead Mountains represent an area of particular religious and cultural significance to several Native American groups. The area is principally, significant in the origin myth of the Mohave and other oral narratives of both the Mohave and Chemehuevi tribes. Problems and concerns of the area relate to human intrusion by other than Native Americans, thus impacting the Native American heritage values. Even though Multiple-Use Class L is identified for this area, it was determined that additional special management attention was needed. The nomination is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Enter into a procedural and programmatic Memorandum of Agreement with the Fort Mojave Indian Reservation, Colorado River Indian Tribes, and the Chemehuevi Indian Reservation. This MOA will clearly define specific management actions proposed for protection of the area.

2) Designate approved routes of travel.

3) Patrol regularly.

4) Identify specific communication sites consistent with protection of Native American values.

5) Limit access to Picture Canyon.

35. BLACK MOUNTAIN

NOMINATING DISCIPLINES

Cultural Resources (as Inscription and Black Canyons)
Native American (as Black Mountain)

VALUES AND LOCATION

This nomination was proposed to protect cultural and Native American values located at Black Mountain in western San Bernardino County. These values include one of the largest concentrations of petroglyphs in the California Desert, and cairns and trail shrines associated with myth and ritual performance for many groups. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Allow vehicle access on approved routes.

2) Install locked gates into area, if required.

3) Increase aerial and ground surveillance.

4) Fence limited, threatened resources.

5) Direct traffic along routes away from rock art complex.

6) Expand cooperative agreements with nearby private landowners, including Southern Pacific Railroad.

7) Ensure grazing leases are consistent with ACEC objectives.

8) Salvage sites if required for preservation.

36. NORTH HARPER DRY LAKE

NOMINATING DISCIPLINE

Vegetation (as North of Harper Dry Lake)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for the plant species Eriophyllum mohavensis in an area located just north of Harper Dry Lake. This species is a candidate for listing as "threatened" by U.S. Fish and Wildlife Service. Activities impacting or having potential impacts to the species are motorized vehicle activity, road and energy corridor construction, and agricultural and other urban development. Multiple-Use Class L is identified for this area, which would ordinarily provide adequate protection from the activities now impacting the area. However, the habitat for the plant species found on BLM-administered land makes up only a small portion of the habitat. Therefore, the habitat located on BLM-administered lands becomes more critical and requires recommendation for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Provide access on approved routes only.

2) Retain site of known presence of Eriophyllum mohavense.

3) Consider acquiring through exchange approximately 480 acres of private land thought to possess the species.

37. HARPER DRY LAKE

NOMINATING DISCIPLINES

Wildlife (as Harper Lake)
Soils (as Harper Dry Lake)

VALUES AND LOCATION

This nomination was intended to preserve and protect marsh habitat. This area is located about 20 miles north of Barstow and provides a quality marsh habitat for water birds and marsh species, including two federally-listed endangered species, the Yuma clapper rail and bald eagle. The presence of standing water and the marsh is, at least in part, a result of agricultural operations on adjacent private lands, necessitating a cooperative agreement with those interests. In order to protect wildlife values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop a comprehensive management plan in conjunction with the California Department of Fish and Game.

2) Monitor water levels and determine effects of agricultural use of water on wildlife.

3) Monitor water quality and relate to use of fertilizer and pesticide application on private land.

4) Monitor wildlife and vegetation in the marsh.

5) Develop a cooperative agreement with agricultural management to ensure water flow and quality.

6) Allow no development to disturb lake-bed sediments.

7) Consider removing tamarisk and replacing with willows and cottonwoods.

8) Establish an interpretive program, and consider an observation tower and boardwalk in a portion of the marsh.

38. KRAMER HILLS

NOMINATING DISCIPLINE

Cultural Resources (as Kramer Hills)

VALUES AND LOCATION

This nomination was proposed to protect archaeological resources in the Kramer Hills east of State Route 395. The area was regularly used in prehistoric times, particularly for procurement of material and subsequent manufacture of stone tools. Stone tool "workshops" are present, as well as lithic scatters, seed gathering and processing areas, and other artifacts. The Class M designation for the area does not provide adequate management protection for these resources. Therefore the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Acquire private lands or coordinate with landowners to restrict access to sensitive sites.

2) Allow vehicular travel on approved routes.

3) Mitigate impacted sites.

4) Interpret mitigated sites with roadside exhibits.

5) Increase patrols.

6) Restrict rock collecting in sensitive archaeological areas.

7) Develop protection and mitigation procedures in conjunction with Native American groups.

39. RAINBOW BASIN/OWL CANYON

NOMINATING DISCIPLINE

Cultural Resources (as Owl Canyon)
Recreation (as Rainbow Basin)
Geology (as Owl Canyon Trackway)

VALUES AND LOCATION

This nomination was proposed to protect unique geological and paleontological values located about 10 miles northwest of Barstow. It contains a spectacular display of colorful sedimentary rocks with geological structures clearly exposed. The area is also important as a source of Miocene vertebrate fossils, including fossilized camel tracks.

There is a road loop through the area, and a BLM campground in Owl Canyon. The area is popular for educational field trips, particularly among students of geology. In December of 1979, surface and subsurface artifacts were discovered that indicated at least 3,000 years of occupancy.

Because of the unique exposure of geologic structure, the area's outstanding scenic qualities, the nonrenewable nature of the paleontological resources, and the high visitor use, Rainbow Basin is recommended for designation as an ACEC. Management prescriptions follows:

MANAGEMENT PRESCRIPTIONS

1) Close roads at appropriate points.

2) Institute salvage program in disrupted portions of the ACEC.

3) Stabilize sandy ridge to prevent erosion and displacement of cultural resources.

4) Develop an active interpretive program for the area, including user pamphlet, map, and signing.

5) Vigorously implement the Natural History Management Plan completed in 1980. Accelerate the implementation schedule described in that document in order to provide adequate, immediate special management attention.

6) Increase frequency and duration of BLM patrol/presence in the area.

40. CALICO EARLY MAN SITE

NOMINATING DISCIPLINE

Cultural Resources (as Calico Early Man Site)

VALUES AND LOCATION

Protection of this designated National Register Property from mining and visitor damage was the reason for its nomination. This area northeast of Yermo and east of the Calico Mountains is reputed to contain evidence of ancient human occupation, perhaps 50,000 to 70,000 years ago. It may be the most significant evidence of Pleistocene man in the contiguous United States. Current management of the site by San Bernardino County is being reduced, and the BLM believes that special management attention is required to protect this unique resource. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Hire permanent interpretive specialist/caretaker for site as soon as possible.

2) Withdraw the ACEC from mining activity and conduct validity checks on existing claims.

3) Upgrade all protective shelters around master site and exploratory site.

4) Build new interpretive facility/workshop/parking area.

5) Remove deteriorating and obsolete existing structures.

6) Install permanent water storage tank and/or well, and provide power and sewage facilities to site.

41. FORT SODA/MOHAVE CHUB

NOMINATING DISCIPLINES

Wildlife (as Fort Soda Marsh/Mohave Chub)
Cultural Resources (as Fort Soda)

VALUES AND LOCATION

This area was nominated to protect wildlife, prehistoric, and historic values. Fort Soda is located along the shore of ancient Lake Mohave, now known as Soda Dry Lake, near Baker. Artifacts in the area reveal that the area has received continuous human occupation for the last 9,000 years. It also was a military outpost in the 1860s. The area contains the Old Government Road and a portion of the Old Tonopah and Tidewater Railroad berm. Until recently, it was used as a health resort (popularly known as ZZYZX). The area also contains considerable native and planted vegetation, including several small marshes which support the endemic and federally listed "endangered" Mohave Chub (Gila mohavensis) and the introduced Saratoga Spring pupfish (Cyprinodon nevadensis). The marsh and ponds are locally important to migrant birds, bats, and mammals. The resort structures and area are managed with the California Desert Studies Consortium for educational and research purposes. In order to protect these values and provide additional special management attention, the area is recommended for ACEC designation with the following management prescriptions:

1) Post management designations and allowed uses along the shoreline and access routes into the area.

2) Fence sensitive sites as necessary.

3) Increase patrol.

4) To enhance protection of Mohave Chub, control access by limiting vehicles to approved routes and areas.

5) Allow limited general public access to, and use of, area.

6) Develop interpretive program to describe natural and cultural resources in conjunction with Chemehuevi tribe and California State College and University system.

42. MESQUITE HILLS/CRUCERO

NOMINATING DISCIPLINE

Cultural Resources (as Mesquite Hills/Crucero)

VALUES AND LOCATION

This area was nominated to protect archaeological resources. Located near the town of Crucero, the area includes Crucero Hill, the Mesquite Hills, the Mojave River Wash, and the surrounding sand dunes. More than 50 sites are recorded in the region, including temporary camps, intaglios, petroglyph sites, milling stations, lithic scatters, and pottery. In order to protect cultural resource values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence especially sensitive sites such as intaglios.

2) Erect interpretive display to explain the sites' significance.

3) Restore damaged intaglios.

4) Establish an interpretive, including visitation, program for the area.

5) Limit vehicle access to approved routes.

6) Increase ranger surveillance.

7) Salvage sites if use impacts cannot be mitigated.

43. AFTON CANYON

NOMINATING DISCIPLINE

Wildlife (as Afton Canyon)
Recreation (as Afton Canyon)
Vegetation (as Afton Canyon)
Soils (as Afton Canyon)

VALUES AND LOCATION

This area was nominated to protect natural and scenic values in Afton Canyon, a portion of the Mojave River drainage east of Yermo and south of Interstate 15. It is one of two places where the Mojave River surfaces, and it sustains extensive riparian vegetation and diverse wildlife, including raptors and bighorn sheep. The area contains outstanding scenic quality as a result of the vegetation and because of erosion of the canyon's sedimentary materials. A developed BLM campground which attracts considerable visitor use sometimes

conflicts with the protection of natural values and requires ongoing management attention. To ensure proper visitor use and provide adequate protective management attention, the area is recommended for ACEC designation. Accelerated implementation of the existing Afton Canyon Recreation Activity Plan will form the basis for protective management, including, in part, the following management prescriptions.

MANAGEMENT PRESCRIPTIONS

1) Develop cooperative agreements with Union Pacific Railroad and the Mojave Water District to manage regions given.

2) Remove tamarisk, and replace with cottonwood, willow, etc.

3) Provide a BLM presence full time during weekends and peak use periods, and investigate the potential use of volunteer caretakers.

4) Develop nature and access trails for foot and equestrian use.

5) Develop interpretive displays and materials.

6) Limit access to approved routes.

7) Eliminate motorized vehicle use off road and in campground.

8) Conduct archaeological reconnaissance in conjunction with appropriate Native American groups.

9) Conduct archaeological test excavation in the only remaining prehistoric village site in canyon.

44. SILVER MOUNTAIN VICINITY

NOMINATING DISCIPLINE

Cultural Resources (as Silver Mountain Vicinity)

VALUES AND LOCATION

This nomination was proposed to protect an historic mining area, located in the Silver Mountain vicinity, and including the Oro Grande and Apex Mines. The area is east of Highway 91 approximately 4 1/4 miles and immediately west of Sidewinder Valley. The area is important, primarily because of the level of preservation of at least two silver mines -- the Yankee Maid and Oro Grande Mines. Due to the high cultural resource values in the area, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Erect limited access gates on public lands at specific points.

2) Coordinate with private landowners to protect resources and monitor limited access gates.

3) Patrol the area and monitor resource values.

4) Post signs at gates to indicate that sensitive resources are the reason for access limits.

5) Salvage site if necessary.

45. JUNIPER FLATS

NOMINATING DISCIPLINE

Cultural Resources

VALUES AND LOCATION

This area was nominated to protect prehistoric human resources located at Juniper Flats in foothills of the San Bernardino Mountains. The boundaries are the Ord Mountains on the west, the U.S. Forest Service boundary on the south, and the escarpment forming the plateau on the other boundaries. The area is an extremely diverse and dense region for cultural resources. The ACEC designation will best protect village sites, temporary camps, rockshelters, milling sites, burial areas, and other aboriginal remains. In order to adequately protect the cultural resource values, the area is nominated for ACEC status with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Designate and sign approved vehicle routes in the ACEC.

2) Close limited site areas; post explanatory notices.

3) Erect fences around midden sites.

4) Increase presence and patrol on a regular basis.

5) Salvage sites if other management is ineffective.

6) Before allotment is leased, review for consistency with ACEC objectives.

46. UPPER JOHNSON VALLEY YUCCA RINGS

NOMINATING DISCIPLINE

Vegetation (as Fry Mountain/Upper Johnson Valley)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for unusual vegetation assemblage of ancient clonal rings of Mojave Yucca (Yucca schidigera). The area is located in the Upper Johnson Valley-Fry Mountain vicinity. The area contains unusually large and undoubtably very old (exact ages have not been determined) clonal rings of Mojave yucca, some of which are 30 or more feet in diameter, and have important research values. Existing activities impacting, or having potential impacts on the area, are motorized vehicle activity, harvesting of vegetation products, development of energy corridors, new road construction, and mining of salable minerals. Multiple-Use Class I, which would not restrict these activities is identified for the area.

Owing to its uniqueness and research values the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Fence individual clonal rings and sign to interpret the resource. Allow vehicle use otherwise as prescribed in the proposed Desert Plan.

2) Erect interpretive sign alongside the existing roadway.

3) Monitor and report annually the condition of fenced and unfenced rings, using ground and aerial surveillance.

4) Do not lease ACEC for commercial yucca harvesting.

47. SOGGY DRY LAKE CREOSOTE RINGS

NOMINATING DISCIPLINE

Vegetation (as Soggy Dry Lake)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for an unusual vegetation assemblage of creosote bush rings -- which may be the world's oldest living things. This area is located in Johnson Valley in the Soggy Dry Lake vicinity. The creosote bush rings found in this area are generally recognized as the oldest living plants known, some 11,000 to 12,000 years old. Existing and potential activities that threaten this resource include motorized vehicle activity, sand and gravel extraction, and new road

construction. Owing to the research values of the creosote bush rings, this area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Allow unrestricted, "free play" vehicle use in the ACEC, except for individual clonal rings, which will be fenced and signed to interpret the unique value of the resource.

2) Erect an interpretive display alongside the existing roadway.

3) Monitor and report annually the condition of fenced and unfenced rings, using ground and aerial surveillance.

48. MARBLE MOUNTAINS FOSSIL BED

NOMINATING DISCIPLINE

Geology (as Marble Mountains Fossil Bed)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for fossil Cambrian trilobites and other fossil fauna of the Latham Shale. The area is located northeast of Cadiz in the southern portion of the Marble Mountains. The area is one of the classic Cambrian trilobite localities in the western United States. There is ongoing paleontologic and biostratigraphic research, and the area is also visited frequently on school trips and by professional paleontologists. The area is being impacted by professional fossil hunters quarrying easily accessible outcrops of fossil material. In some cases, weathered surface material has been removed or buried under quarry debris. Multiple-Use Class M which has been identified for this area does not adequately protect the paleontological resources. The area is therefore recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Identify noncommercial "hobby" beds for public collecting.

2) Provide minimal visitor aids; an interpretive display may be developed, however.

3) Conduct frequent ranger patrols.

4) Withdraw the area from mineral entry.

49. WHITEWATER CANYON

NOMINATING DISCIPLINES

Wildlife (as Whitewater Canyon)
Native American (as Whitewater Canyon)

VALUES AND LOCATION

The nomination was made to protect the major drainage system for the southeastern San Bernardino Mountains, which contains the perennial Whitewater River, fed by snowmelt and runoff from higher elevations. Desert, coastal, and mountain influences combine to present great floral and faunal diversity. The area also contains Native American collecting, occupation, trail, and ritual sites. A small portion of the Pacific Crest National Scenic Trail is within this proposed ACEC. Historic and projected future visitor uses have indicated that immediate attention be given to the area. The area is recommended for ACEC designation with the following special management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop MOA with California Fish and Game to set bag limits on wildlife in the ACEC, with collection by permit only.

2) Sign area to interpret resource values and provide user information, including wildlife collection restrictions.

3) Monitor prairie falcon eyries during nesting seasons (February to August), and ensure that no harassment occurs.

4) Conduct a detailed faunal inventory of the drainage to determine "critical" areas, and monitor population fluctuations.

5) Enter a cooperative agreement with U. S. Forest Service and private landowners.

6) Allow grazing at current levels; later set levels to be consistent with AMP and Herd Management Area Plan (HMAP) to be developed.

7) Allow vehicular use on approved routes only.

8) Develop interpretive trail and brochure for the lower canyon.

9) Consider development of a campground in the canyon.

10) Increase visitor services program.

50. BIG MORONGO CANYON

NOMINATING DISCIPLINE

Wildlife (as Big Morongo Canyon)

VALUES AND LOCATION

This area was nominated to protect the habitat qualities which have earned it a national reputation among bird watchers. Big Morongo Canyon is a desert oasis with perennial surface water flowing over three miles, and supports an extensive willow and cottonwood forest. At least 235 bird species have been observed here, and 72 are known to breed here. Unusual migrants and vagrants are often seen, and mule deer and bighorn sheep occasionally water at the stream. Special recognition and limited protection of the area has been given by the Nature Conservancy's 80-acre preserve and by San Bernardino County's 100-acre wildlife reserve. In order to complete protective management of this unique area, it is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop a cooperative management plan with San Bernardino County and the Nature Conservancy.

2) Relocate the existing gate to within one-half mile of the canyon mouth (i.e., in Sec. 10 SE1/4 SW1/4 [or Sec. 15NW 1/4]).

3) Prohibit woodcutting.

4) Provide for camping and campfires only in the area below and south of the gate.

5) Determine appropriate restrictions for equestrian use in conjunction with San Bernardino County and the Nature Conservancy.

6) Acquire private lands in Secs. 3 and 10 or acquire conservation easements in those areas.

7) Post closure signs.

8) Develop interpretive display/kiosk and handout to educate and foster understanding and awareness of the area's values.

9) Remove trash and the abandoned vehicles.

10) Consider implementing a tamarisk control program.

11) Conduct a cowbird control program.

51. DALE LAKE

NOMINATING DISCIPLINE

Cultural Resources (as Dale Lake)

VALUES AND LOCATION

This nomination was proposed to protect cultural resources at a point along the shoreline of a once-filled freshwater lake. The area is located on the west edge of Dale Lake between Amboy Road and Twentynine Palms Road north of Joshua Tree National Monument.

Of particular interest here is the relative dependence of aboriginal occupants upon the lake and upon the surrounding terrestrial resources. The inherent accessibility of the area to vehicles and the potential for development of salts threaten the area. It is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Sign the area to enforce vehicular restrictions as well as protect sensitive resource values.

2) Increase patrol.

3) Eliminate or disallow uses in conflict with protection and maintenance of site values.

52. PATTON'S IRON MOUNTAIN DIVISIONAL CAMP

NOMINATING DISCIPLINE

Cultural Resources (as Iron Mountain Divisional Camp)

VALUES AND LOCATION

This area was nominated to protect significant cultural resources found in the area, including the remains of the World War II U.S. Army training camp of General George S. Patton. The area is located on the southeast side of the Iron Mountains, immediately southwest of the Iron Mountain Pumping Plant. In order to adequately protect the historic values present, ACEC status is proposed with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Conduct an intensive ground and aerial reconnaissance of the ACEC to assess and record the values present.

2) Consider means of limiting access, including the use of drift fences.

3) Consider the use of an on-site or nearby resident caretaker to patrol and monitor the site.

4) Rock alignments and historic military features should be protected and restored, and otherwise treated as intaglios and fenced.

5) Initiate aerial patrols.

6) Develop interpretive program and pamphlet.

53. WHIPPLE MOUNTAINS

NOMINATING DISCIPLINE

Native American (as Whipple Mountains)

VALUES AND LOCATION

The purpose of this nomination was to provide protection of Native American values. The Whipple Mountains represent one of the most extensively used and concentrated distributions of culturally sensitive resources in the CDCA. Occupation sites and footpaths are found throughout the region. The area has traditionally been used for hunting and gathering. Certain areas are significant solely for their role in myth and religion. Cremation and burial sites are also located in the area. Problems and concerns of the area relate to excessive human intrusion by non-Native Americans. These intrusions impact heritage values of the Native American groups. Multiple-Use Class L has been identified for this area; however, owing to the sensitiveness of the resources, it was determined that additional protection was needed. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Enter into a procedural and programmatic Memorandum of Agreement with the Colorado River Indian Tribes, the Chemehuevi Reservation, and the Fort Mojave Indian Reservation. This MOA will clearly define specific management actions proposed for protection of the area.

2) Designate approved routes of travel to serve valid existing rights.

3) Patrol regularly.

4) Salvage cultural resources as necessary.

54. SIDEWINDER WELL

NOMINATING DISCIPLINE

Cultural Resources (as Sidewinder Well)

VALUES AND LOCATION

This nomination was proposed to protect cultural resources located on the western side of Palen Lake in Riverside County. The area contains a high concentration of prehistoric remains, many camps, mesquite processing areas, and lakeshore camps. There are seven recorded sites and several dozen which are known but unrecorded. Because of the significance of the cultural resource values of the area, the site is recommended for ACEC with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Close the single road to Sidewinder Well.

2) Conduct ranger patrols to enforce vehicle closure and to monitor resource conditions and trends.

3) Fence those sites or areas suffering continuing and uncontrolled damage.

4) Erect drift fences perpendicular to each side of the closed road.

5) Place explanatory signs at road closure area.

6) Develop appropriate guidelines for mitigation in conjunction with appropriate Native American groups.

55. PALEN DRY LAKE

NOMINATING DISCIPLINE

Cultural Resources (as Eastern Palen Dry Lake)

VALUES AND LOCATION

This area was nominated to protect cultural resource values located southeast of Palen Dry Lake and southwest of the Palen Mountains. The area is recommended for ACEC designation to protect prehistoric evidence of habitation in the area through implementation of the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Develop an educational program as the primary management prescription.

2) Allow vehicle use on approved routes in the area, and post vehicle restrictions.

3) Patrol the area.

4) Monitor sites to ensure resource values are maintained; modify management if the above is ineffective.

5) Salvage impacted sites if necessary.

6) Before allotment is leased, ensure grazing is consistent with ACEC objectives.

56. CORN SPRING

NOMINATING DISCIPLINES

Wildlife (as Corn Spring)
Cultural Resources (as Corn Spring)
Recreation (as Corn Spring)
Vegetation (as Corn Springs)

VALUES AND LOCATION

The area is nominated to protect a variety of biotic and cultural resource values. Located in a canyon deep in the Chuckwalla Mountain, Corn Spring supports a rich stand of riparian vegetation that includes about 20 native California fan palms, a dense thicket of gnarled mesquite, catclaw, desert willow, and smoke trees. The oasis supports abundant wildlife, and is important for migratory birds. It is one of the few places in California where the elf owl has bred. Corn Spring was a major occupation site for prehistoric Native American groups. There are rockshelters, petroglyphs, trails, and other artifacts. Several unusual plants are found in the area. Corn Spring is an important recreation site. It is known as an excellent birdwatching area, and the Corn Spring BLM campground receives substantial use. Because of the need to protect these high natural and cultural values, and because of heavy visitor use, the area is recommended for designation as an ACEC. Management prescriptions for the area are:

MANAGEMENT PRESCRIPTIONS

1) Develop interpretive and site management programs to protect identified ethnographic values of Cahuilla and Serrano Indians.

2) Designate nature routes or trails from campground to noteworthy areas.

3) Develop an interpretive kiosk and materials.

4) Discourage collection of firewood through signing.

5) Restrict vehicle use to the single-access road.

6) Reroute existing road as necessary to minimize damage to natural and cultural resources.

7) Implement vegetation manipulation program to reduce tamarisk and protect native palms.

8) Develop county ordinance with Riverside County to prohibit discharge of firearms in the area except during appropriate hunting seasons.

9) Monitor visitor use and resource condition and trends.

10) Place anodized barrier around already-signed petroglyph panels.

11) Stabilize, and where feasible, rehabilitate damage to known cultural resources.

12) Conduct an intensive site inventory of cultural resources.

13) Increase BLM presence, and investigate the role of volunteer caretakers.

57. CHUCKWALLA VALLEY DUNE THICKET

NOMINATING DISCIPLINE

Wildlife (as Chuckwalla Valley Dune Thicket)

VALUES AND LOCATIONS

This area is located south of Interstate 10 about 18 miles west of Blythe in eastern Riverside County. The nomination is intended to provide protection of a series of unusually dense thickets of palo verde and desert ironwood which provide exceptional habitat for reptile, bird, and mammal populations. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Close the area to motorized vehicles.

2) Develop AMP and evaluate the effects of grazing on the area.

3) Determine carrying capacity of the area and control visitor use if necessary.

4) Acquire private lands through exchange or purchase in T 7S, Secs. 5 and 6 and T 6S, Sec. 32.

58. MULE MOUNTAINS

NOMINATING DISCIPLINE

Cultural Resources (as Mule Mountains)

VALUES AND LOCATION

This nomination was proposed to provide protection for a dense collection of prehistoric occupation features in far eastern Riverside County. These features include petroglyphs, quarries, intaglios, trails, a rockshelter and potsherd loci. The area is threatened by mining, vandalism, and motorized vehicle use. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Place a locked gate on the access road to the ACEC.

2) Otherwise prohibit access to the ACEC.

3) Place explanatory signs at closure points.

4) Monitor resource values at least monthly.

5) Use anodized aluminum fencing around the tank and petroglyphs to prevent cross-country vehicle access within the ACEC.

59. CHUCKWALLA BENCH

NOMINATING DISCIPLINE

Wildlife (as Chuckwalla Bench, and as Chuckwalla Bench Desert Tortoise Habitat)

VALUES AND LOCATION

The Chuckwalla Bench consists of the bajadas, washes, and desert pavements between the Chocolate Mountain Aerial Gunnery Range and the Chuckwalla Mountains in eastern Riverside County. The nomination supports protection of what may be the best-developed Sonoran Desert biotic community in the CDCA. The area contains several endemic plants, most notably the 6- to 15-foot tall Munz cholla Opuntia munzii), and was the last area in the CDCA to contain pronghorn. Tortoise populations are significant, and deer, rabbit, and quail hunting are common forms of recreation. The Bradshaw Trail, part of the historic Butterfield Stage Route, runs the length of the area. In order to protect these significant values, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Allow vehicle use on approved routes only.

2) Identify areas appropriate for camping.

3) In cooperation with the California Department of Fish and Game, determine the feasibility of reintroduction of pronghorn. If reintroduction is recommended, a Habitat Management Plan should be prepared.

4) Develop a Habitat Management Plan for the desert tortoise.

5) Sign the area to describe vehicle use regulations.

6) Increase BLM patrol of the ACEC.

60. SALT CREEK PUPFISH/RAIL HABITAT

NOMINATING DISCIPLINE

Wildlife (as Salt Creek Desert Pupfish/Black Rail)

VALUES AND LOCATION

This area consists of several parcels of land on the northeastern edge of the Salton Sea in Riverside County. This ACEC nomination is proposed to protect the lands containing washes, seeps, and springs which provide critical habitat for the California black rail, a State-listed "rare" species, and/or the "sensitive" desert pupfish, as well as the Yuma clapper rail, federally listed as endangered. In order to protect these species and expand population size and habitat quality and quantity, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Manage the area under Class L guidelines. In addition:

2) Develop a joint agreement with private landowners to restrict vehicle use near streamside vegetation and within 1/4 mile of Dos Palmas Spring. Particular attention will be directed to the protection of natural and cultural resources identified as sensitive by the Cahuilla Indians.

3) Provide access on existing routes only, and post signs describing vehicle limitations.

4) Develop additional pupfish habitat.

5) Remove tamarisk; coordinate with Cahuilla Indians to minimize damage to cultural resources.

6) Introduce pupfish to potential and newly created habitat.

7) Conduct intensive faunal inventory of the ACEC.

8) Monitor water table and spring for water quantity and quality.

61. SAN SEBASTIAN MARSH/SAN FELIPE CREEK

NOMINATING DISCIPLINES

Wildlife (as San Sebastian Marsh)
Cultural (as Harpers Well)
Recreation (as San Felipe Creek/San Sebastian Marsh)
Native American (as San Sebastian)
Soils (as Sebastian Marsh)

VALUES AND LOCATION

In all, five disciplines nominated this area for protection and restoration. The San Sebastian Marsh area is located at the southwestern edge of the Salton Sea. It contains the perennial San Felipe Creek, the San Sebastian Marsh, and Harper's Well, and it forms one of the most extensive resource complexes in the CDCA. This area contains many Native American occupation sites and many artifacts. Explorer Juan Bautista de Anza visited the area in 1774 when some 400 Indians lived in a single village, and thereafter the area provided water for travelers and settlers. The "sensitive" desert pupfish is common, and the unique, relict San Sebastian leopard frog may still be present. Scenic qualities are high in the presence of water and vegetation, but vandalism is adversely affecting the area. Much of the area is checkerboarded with private ownership, requiring land acquisition. Floods in recent years have damaged the marsh habitat, and immediate restoration and improvement is required. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Acquire private lands through purchase or trade.

2) MOA to be developed between BLM and landowners.

3) Limit vehicle access to approved routes only.

4) Consider placing a locked gate in the steep gully immediately east of Harper's Well.

5) Increase ranger patrol.

6) Develop a pool habitat below Harper's Well (to be filled with spring water, not alkaline water from San Felipe Creek).

7) Conduct an intensive study with California Fish and Game to determine frog population.

8) Consider control of competing exotic fish species.

9) Consider flood control and silt removal.

10) Conduct a detailed surface and subsurface evaluation of cultural resources.

11) Fence archaeologically sensitive sites.

12) Develop interpretive materials and display, but not to specifically identify remaining cultural features.

62. COYOTE MOUNTAINS FOSSIL SITE

NOMINATING DISCIPLINE

Geology (as Coyote Mountains Fossil Site)

VALUES AND LOCATION

The purpose of this nomination was to provide protection for important paleontologic and biostratigraphic sites in the Coyote Mountains. This area is located about two miles northeast of the juncture of the Imperial Highway State Route (98) and the San Diego-Imperial County line. This area contains an abundance of excellent Pliocene echinoid and molluscan fossils. The site is important for research work. It is visited by students on school field trips and by professional paleontologists. Pliocene invertebrate fossil localities are rare, and this site is exceptional for their abundance and state of preservation. The area has not yet been heavily impacted by fossil hunters. The BLM considers preservation of the area's integrity important and in 1972 identified it as the "Fossil Shellfish Natural Area." Class L designation of the area is considered inadequate for protection because it would allow mineral entry and would not necessarily provide proper visitor guidance. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Direct visitors to the well-known and already impacted Fossil (Alverson) Canyon.

2) Withdraw the area from mineral entry.

3) Conduct regular ranger patrols.

4) Allow access from south only; post vehicle restrictions.

63. COYOTE MOUNTAINS

NOMINATING DISCIPLINE

Cultural Resources (as Coyote Mountains)

VALUES AND LOCATION

This nomination was proposed to protect extensive and very old surface cultural materials in a dissected wash area east of the Coyote Mountains in western Imperial County. Intensive motorized vehicle use in the area threatens tools and other artifacts. Because the area is identified as "open" to vehicular free play in the proposed Plan, there is need for special management attention. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Conduct intensive cultural resource inventory.

2) Fence or otherwise restrict access to limited specific sites if necessary.

3) Salvage sites if necessary.

4) Increase BLM presence in the area.

5) Utilize interpretive and other visitor services to explain sensitive resource values and seek voluntary user resource protection.

64. YUHA BASIN

NOMINATING DISCIPLINES

Wildlife (as Yuha Flat-tailed Horned Lizard)

Cultural Resources (as Yuha Basin)

VALUES AND LOCATION

This nomination was intended to protect a variety of cultural resource values and much of the optimal range of the flat-tailed horned lizard, a State endangered and federally proposed threatened species. The area is located in southwestern Imperial County between State Route 98 and Interstate 80. The diverse and concentrated cultural resource values consist of intaglios, village sites, lithic scatters, pottery loci. temporary camps, and historic trails. Evidence also indicates that human occupation in this area extends back at least 25,000 years. Vehicular use in the area has damaged a variety of these resources. Because of the growing need to protect these significant

resources, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Limit vehicular use to approved routes (including Hacker Drive).

2) Establish permanent baseline study plots, and periodically monitor populations.

3) Increase law enforcement patrol.

4) Post vehicle restrictions along State Route 98, especially (a) Hacker Drive and (b) along Yuha Wash where Pinto Wash intersects the pavement.

5) Fence and interpret intaglios; restore as necessary.

6) Possibly permit limited pesticide use following environmental assessment.

65. LAKE CAHUILLA NO. 2

NOMINATING DISCIPLINE

Cultural Resources (as Lake Cahuilla No. 2)

VALUES AND LOCATION

This nomination was proposed to protect two extensive aboriginal habitation sites along the shoreline of the ancient Lake Cahuilla in east-central Imperial County. Much evidence of early trade, lakeshore adaptation, agriculture, and socio-religious practices are present but threatened by sand and gravel removal. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Limit access to approved routes; post these vehicle designations.

2) Periodically patrol area on the ground and in the air.

3) Conduct intensive site inventory.

4) Monitor site qualities at largest sites annually.

5) Prohibit sand and gravel extraction.

6) Conduct all resource inventories in conjunction with affected Native American groups.

66. LAKE CAHUILLA NO. 3

NOMINATING DISCIPLINE

Cultural Resources (as Lake Cahuilla No. 3)

VALUES AND LOCATION

This nomination was proposed to protect a very large, complex site of undisturbed prehistoric human artifacts along the shoreline of the ancient Lake Cahuilla in east-central Imperial County. The area is particularly rich in settlement and trade artifacts and shows adaptations to a lakeshore lifestyle. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Allow access on approved routes only.

2) Monitor resource values with periodic ground and air surveillance.

3) Propose mitigation where necessary and appropriate, consistent with identified Native American values. Conduct all resource inventories in conjunction with affected Native American groups.

67. GOLDEN BASIN-RAND INTAGLIOS

NOMINATING DISCIPLINE

Cultural Resources (as Gold Basin-Rand Intaglios)

VALUES AND LOCATION

This nomination was proposed to protect a number of intaglios in eastern Imperial County. Several of these rare "ground figures" are present and are subject to damage from almost any source. They cannot be excavated and can only be protected in place. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Conduct an intensive cultural inventory of the ACEC.

2) Withdraw intaglios from mineral and development entry.

3) Fence individual intaglios and complexes. Develop fencing or other appropriate protection measures in conjunction with appropriate Native American groups.

4) Conduct frequent checks by ground personnel, and occasionally inspect by air.

68. INDIAN PASS

NOMINATING DISCIPLINE

Cultural Resources (as Indian Pass)

VALUES AND LOCATION

This nomination proposes to protect prehistoric artifacts located in the Chocolate Mountains in eastern Imperial County approximately four miles southeast of Quartz Peak. Resources present include trails, petroglyphs, cleared circles, potsherds, firepits, lithic scatters, and tools. The area is recommended for ACEC status with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Sign specific areas to prohibit rock collecting.

2) Conduct regular surveillance and patrol.

69. LAKE CAHUILLA NO. 5

NOMINATING DISCIPLINE

Cultural Resources (as Lake Cahuilla No. 5)

VALUES AND LOCATION

This area was nominated to protect prehistoric human artifacts located in Imperial County and bounded on the west by the All American Canal and developed agricultural fields, on the south by State Route 98, on the north by State Route 80 and on the east by a utility line. In order to protect the high density of archaeological sites from mineral development and visitor-caused damage, the area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Limit vehicle access to approved routes.

2) Increase BLM patrol presence.

3) Conduct intensive cultural resources inventory.

4) Prohibit sand and gravel extraction.

5) Conduct all resource inventories in conjunction with affected Native American groups.

70. EAST MESA

NOMINATING DISCIPLINES

Wildlife (as East Mesa Flat-Tailed Horned Lizard)
Cultural Resources (as IMP-70 [East Mesa]).

VALUES AND LOCATION

This area was nominated to protect wildlife and cultural values. The area is located in southern Imperial County north of Interstate 80 and west of the Coachella Canal, and provides optimal habitat for the flat-tailed horned lizard, a State endangered and Federally proposed threatened species. The area also contains an overlapping series of prehistoric occupation sites along the shore of the ancient Lake Cahuilla. Geothermal development threatens portions of the lizard's range, and sand and gravel extraction and recreational use pose danger to cultural resources. The area is therefore recommended for ACEC designation with the following management prescriptions.

MANAGEMENT PRESCRIPTIONS

1) Limit vehicular use to approved routes.

2) Establish permanent baseline study plots, and periodically monitor lizard populations.

3) Allow geothermal development within the area consistent with environmental analysis recommendations and the management objectives of the ACEC.

4) Prohibit gravel extraction within the area.

5) Closely coordinate Coachella Canal maintenance and improvements in ACEC with Coachella Valley Irrigation District.

6) Conduct intensive cultural resources inventory, and provide mitigation where necessary.

7) Possibly permit limited pesticide use following environmental assessment.

71. LAKE CAHUILLA NO. 6

NOMINATING DISCIPLINE

Cultural Resources (as Lake Cahuilla No. 6)

VALUES AND LOCATION

This area was nominated in order to protect the cultural resources, including extensive prehistoric campsites. Located in Imperial County, the area is

bounded on the north and west by the All American Canal and on the south by Mexico. The area is also on the southern boundary of the East Mesa flat-tailed horned lizard habitat. The area is recommended for ACEC designation with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Limit traffic to approved routes (along canal road, border road, and on the eastern boundary), and clearly post vehicle restrictions.

2) Institute periodic ground and aerial patrol.

3) Institute a monitoring program with an annual inspection of major sites.

4) Conduct emergency mitigation measures, i.e. excavation, if other management is unsuccessful.

5) Conduct intensive cultural resource inventory in conjunction with affected Native American groups.

6) Prohibit sand and gravel extraction.

72. PLANK ROAD

NOMINATING DISCIPLINE

Cultural Resources (as Plank Road)

VALUES AND LOCATION

This nomination was proposed to protect and restore an historic engineering accomplishment, a 6 1/2-mile wooden road that ran through the southern Algodones Dunes in Imperial County. A short portion of the Plank Road has been salvaged and restored in the vicinity of Gray's Well along Interstate 80. The Plank Road is an early automobile roadbed that was used between WWI and the mid 1920s. It is believed to be the only wooden automobile road existing in the United States. An ACEC designation is recommended for this area with the following management prescriptions:

MANAGEMENT PRESCRIPTIONS

1) Survey by air and on the ground and carefully map the 6 1/2-mile length of the road. Use remote sensing techniques as necessary for road location.

2) Expose all remaining portions of the road.

3) Stabilize and restore missing portions of the road as necessary.

4) Relocate the road as required by the shifting sands.

5) Interpret the road in displays and handouts.

73. PILOT KNOB

NOMINATING DISCIPLINE

Cultural Resources (as Pilot Knob)
Native American (as Pilot Knob)

VALUES AND LOCATION

This area was nominated to protect cultural and Native American values located around Pilot Knob one mile south of Interstate 80 in Imperial County. The All American Canal forms the southern and eastern borders. In order to provide adequate protection of intaglios, sleeping circles, trails, and a village site which has mythic importance, the area is proposed for ACEC designation with the following management directives:

MANAGEMENT PRESCRIPTIONS

Develop Management prescriptions in conjunction with the Quechan tribe. Such prescriptions may include:

1) Fence intaglios and associated cultural resources.

2) Monitor resource values through ground and aerial reconnaissance.

3) Interpret cultural and ethnographic values through signing.

4) Limit access to the controlled road from the reservation and to the service road from Interstate 80. Limit access from the reservation and service roads consistent with protection actions of Quechan tribe.

5) Minimize intrusions of mining, vehicle use, and archaeological excavations.

Part 1b

AREAS NOMINATED BUT NOT RECOMMENDED FOR ACEC DESIGNATION

NOMINATIONS BY WILDLIFE

Algodones Dunes Microphyll Woodland

The nomination was proposed to protect the area's vegetation and wildlife. Located in southeastern Imperial County, the Algodones (Imperial) Dunes is the largest dune system in California. The area contains the endemic Andrew's dune scarab beetle and four plants listed as rare by the State of California. The area contains all four multiple-use classes, including wilderness, and implementation of class guidelines is considered to provide adequate resource protection, but opening the central portion of the dunes to vehicle travel will require regular monitoring to ensure that unacceptable impacts do not occur to the biota.

Argus Range

This area was nominated to protect wildlife resources in the Argus Range which is located along the eastern edge of the China Lake Naval Weapons Center. The area provides habitat for desert bighorn sheep and also for feral burros and horses. In order to protect the bighorn, control or elimination of competition is required. This will be accomplished through preparation and implementation of a Herd Management Area Plan. The area is also Class L, which should help provide adequate protection for the desert bighorn.

Cadiz Dunes

This area was nominated to protect the Cadiz Dune ecosystem. The Cadiz Dunes is a wishbone-shaped area in eastern San Bernardino County about 50 miles east of Twentynine Palms. It contains two prehistoric human occupation sites, sand sheets, ridges, and dunes, and provides habitat for various flora and fauna, and this ACEC nomination aimed to protect aeolian habitat and the temporary aboriginal occupation sites. The area has received limited competitive and noncompetitive motorized vehicle use. It was used for military training exercises in 1942. The area is proposed as predominantly Class L and designated "closed" to vehicular use. With increased BLM patrol, it is expected to be provided with adequate protection of resource values.

Cady Mountain Bighorn Sheep

This area was nominated to protect and enhance bighorn sheep populations in the Cady Mountains in San Bernardino County between Interstate 15 and State Route 40. The area includes a portion of the Mojave River drainage in Afton Canyon. The Cadys provide permanent habitat for bighorn sheep as well as golden eagle and prairie falcon, and the intent of ACEC nomination was to protect those wildlife species. Visitor use of the area, particularly in Afton Canyon, is considered detrimental to the existence of the sheep population. The area is designated as Class L. Coupled with designation of Afton Canyon as an ACEC, adequate protection will be provided for the bighorn.

Coachella Valley Fringe-toed Lizard Habitat

The intent of this nomination was to protect the Coachella Valley fringe-toed lizard (Uma inornate), a State-listed endangered species, and other wildlife resources in the area. This area consists of a number of scattered parcels in the Coachella between San Gorgonio Pass and Indio, which comprise almost all of the Federal or State-administered lands which contain or provide potential habitat for the species. No recognizable boundaries exist to aid management. None of these parcels contains critical habitat for the species. Most or all of the lands are crossed or bordered by roads or vehicle trails. BLM staff biologists believe that the BLM lands within the area are of inadequate configuration and extent to sustain populations of the species. Efforts are currently underway to acquire adequate, permanent critical habitat through exchange with private landowners. Until such an exchange occurs, the parcels of land nominated for ACEC status will be designated a Research Natural Area in recognition of the species' importance. When there is Federal acquisition of adequate critical habitat, consideration will be given to ACEC designation.

El Paso/Red Mountain Raptor Breeding Area

This area was nominated to protect birds of prey in an area including Red Mountain and the El Paso and Lava Mountains. This area contains one of the densest known breeding areas for golden eagle and prairie falcons in the California Desert Conservation Area. The raptor population and individual eyries are being jeopardized by shooting and other visitor use, and management has recognized the problem. The area is about half multiple-use Class C (wilderness) and L (approved vehicle routes), which, coupled with an increase of eyrie surveillance, should provide adequate protection for the raptors.

Fremont-Stoddard Desert Tortoise Habitat

This area was nominated to protect the desert tortoise. The area covers most of the Fremont and Stoddard valleys in southeastern Kern and northwestern San Bernardino counties, and contains one of the desert's four major, high density desert tortoise populations. It also supports populations of golden eagles, prairie falcons, and the State-listed rare Mohave ground squirrel.

Because of the large size of the area the extensive private land ownership, it is believed that adequate protection can be achieved through grazing and recreation management, increased visitor education, and, in about half of the area, Class L designation.

Granite Mountains

The Granite Mountains were nominated to protect outstanding scenic and biotic values. The Granites are located north of State Route 40 in eastern San Bernardino County. The area contains diverse elements of the Mojave, Sonoran, and Great Basin deserts: In all, 393 plant, 40 mammal, 115 bird, 33 reptile, and one amphibian species have been recorded.

The area is proposed for wilderness in the Plan, which will provide adequate protection of these values. In addition, scenic and biotic values are further recognized in this Plan with designation as a Research Natural Area and nomination for the United Nations' Man and the Biosphere Reserve program.

Granite Mountains Desert Bighorn Habitat

This nomination proposed ACEC protection of a permanent bighorn sheep population in the Granite Mountains in northeastern Riverside County. Because the population is small and there are no known permanent water sources in the Granites, survival of this sheep population is questionable. A Habitat Management Plan will be prepared for the area, and the area will be designated Class L.

Grapevine Canyon

This area was proposed as an ACEC to protect the bighorn sheep, their water, and habitat. Located between the Nelson Range and Hunter Mountain and east of Cerro Gordo Peak, Grapevine Canyon contains riparian vegetation and provides water for bighorn sheep and a variety of other wildlife. Livestock and feral horses and burros graze in the area and may impair bighorn sheep habitat or population dynamics. The Proposed Plan classifies the area in Multiple-Use Classes C (wilderness) and L (limited use) The Plan also requires preparation of a grazing Allotment Management Plan and will eliminate horses and burros through development and implementation of a Herd Management Area Plan. This management is expected to provide adequate protection for the resources.

Indian Spring

This area was nominated to protect it from extremely heavy burro use. Indian Spring is located in the eastern Mojave Desert in an area known as the Lava Beds, approximately 15 miles east of Baker in eastern San Bernardino County. The area is really a canyon/wash where two perennial streams flow, providing water and habitat for many wildlife species. The area is designated Class L, and the immediate vicinity of the spring will be fenced to exclude burro use, thus providing adequate protection for the habitat.

Kelso Dunes

The Kelso Dunes were nominated to protect the scenic and wildlife values of one of the tallest sand dune systems in the United States. Located in a remote portion of the eastern Mojave Desert, between Interstate 15 and State Route 40, at least four dune types are represented here, and the scenic quality, particularly in low-angle light, is outstanding and uniquely golden. The loose sands provide habitat for a variety of fauna, especially lizards, unique to aeolian systems. At least 29 educational institutions use the area. The area is proposed for wilderness in this plan, and it is believed that this will provide adequate protection. In addition, scenic and habitat values are recognized through nomination of the area as a National Natural Landmark.

Koehn Lake/Marsh

This area was nominated to protect the wet Koehn Lake and the habitat it provides for shorebirds and waterfowl in accordance with Executive Order 11990 (Protection of Wetlands, May 24, 1977). The area is located in the northern portion of Fremont Valley in southeastern Kern County. Unknown effects of nearby halite production and groundwater pumping to irrigate adjacent alfalfa fields renders lake management problematical at this time. The area will be addressed specifically through preparation of a Habitat Management Plan.

Milpitas Wash

This nomination was proposed to protect the large Sonoran desert wash system located in northeastern Imperial County, extending from the Chuckwalla Bench to the Colorado River south of the Palo Verde Mountains. The exceptional denseness of the arboreal vegetation in the area provides excellent habitat for many species of wildlife. The area receives limited visitor use and currently is not threatened. The unusual nature of the area is recognized through this consideration, but management under Class L (travel on approved routes) and M (travel on existing routes), coupled with implementation of the Desert Plan will provide adequate attention.

Newberry/Granite Mountains Raptor Area

The intent of this ACEC nomination was to protect desert raptor populations. This area contains the Newberry, Ord, and Granite mountains and adjacent lands near Lucerne Valley in central San Bernardino County. It provides breeding sites for golden eagle and prairie falcon. Non-BLM ownership of much of the nomination area hampers effective management. Most of the public domain lands in this area are designated as Classes L and C which will limit vehicular access and impacts to eyrie sites.

Panamint Valley Dunes

The dunes are located at the northern end of Panamint Valley west of Death Valley National Monument. The area contains many prehistoric artifacts,

unique plant assemblages, and habitat for endemic beetles. The area was nominated in order to protect it from recreational vehicle use and overuse by recreationists in general. Because the area is identified as Multiple-Use Class C (wilderness), it is considered to be adequately protected.

Three Panamint Canyons

This nomination considered Hall, Jail, and Happy canyons in the Panamint Range for protection of wildlife and habitat. Close inspection revealed a lack of threat and lesser resource values than those present in Surprise Canyon. Therefore, the decision was to recommend only Surprise Canyon for ACEC designation.

Western Mojave Saltbush Community

This area was nominated to protect a once widespread plant community. The area is located in extreme western San Bernardino County around the junction of State Route 395 and 58. This once-widespread plant community is becoming reduced because of development and visitor use, and this nomination aims to protect the community. Because of large blocks of privately owned lands, and an extensive "checkerboard" ownership pattern, the area is not manageable as an ACEC. The area is designated Classes L (designated routes) and M (existing routes), which are believed to provide adequate protection. A Research Natural Area is designated in this Plan to ensure that a representative part of the saltbush community is maintained for monitoring the resource condition and trend.

NOMINATIONS BY CULTURAL RESOURCES

Amargosa Rings

This nomination was proposed to protect a geometric pattern of rings south of Shoshone in southern Inyo County. The origin of these rings is questionable: One theory is that they are prehistoric; the other is that they represent Chinese labor in testing for the presence of borax. More than 28 of these rings are evident, each about six feet in diameter and worn one or two inches into the desert pavement. Management review of the nomination questioned the importance and relevance of the resource, and it was determined that the area does not require special management attention.

Baxter Range

This nomination was proposed to protect prehistoric human values in Stoddard Valley southwest of Barstow. The area contains many tool material and seed gathering sites. It is threatened by visitor use, particularly by motorized vehicles, since it is situated in a Class I, "open" area. Known resources will be salvaged, if necessary and practical.

Blackwater Well

This area was nominated to protect prehistoric and historic values located immediately surrounding Blackwater Well approximately five miles northeast of Cuddleback Lake and due south of the Naval Weapons Center Mojave B Range. Cultural Resource values in the area include one historic and 18 prehistoric sites. Prehistoric sites include a large village, temporary camps, lithic scatters, rock alignment, cairns, and isolates. The historic site is a watering stop on the Twenty Mule Team Road. The area is proposed for Multiple Use Class L which should adequately protect it.

Butterfield Stage Route

Two nominations were proposed to protect portions of the Butterfield Overland Stage Route (circa 1860). The route is located in Western Imperial County between Plaster City and Carrizo Canyon. This area also contains prehistoric sites. It was part of the De Anza and Fages exploration routes and was used by military expeditions, gold seekers, postal couriers, and the railroad. The route was very important to the early development of California. Portions of it remain in good condition. The resource is threatened by vandalism and motorized vehicle use. It is identified as "open" to motorized vehicle use in the Plan. The area is nominated in this Plan for National Historic Trail status, which may protect isolated resource loci. This status is believed to be more appropriate than ACEC designation.

Crater

This nomination was proposed to protect the historic mining town of Crater in the Last Chance Range in northern Inyo County. Extensive sulphur and gypsum mining and milling took place here, and the remains of the actual townsite and mills are evident; however, many of the structures have been vandalized and/or dismantled. Because of the extent of damage to the area, it was considered to lack "importance" and "relevance."

Ford Dry Lake

This nomination was proposed to protect numerous archaeological sites around Ford Dry Lake in Chuckwalla Valley north of Interstate 10. The area contains many campsites, milling stations, lithic scatters, trails, projectile points, and an historic structure. The area receives some motorized vehicle and grazing use. Some vandalism has been reported, although impacts are believed to be low level. The area determined to lack "importance," and to be without substantial threat.

Lake Hill

The area was proposed to protect prehistoric occupation artifacts located on the eastern side of the northern basin of Panamint Valley, including Lake Hill. The area contains relevant cultural resource values including 11 prehistoric sites, temporary occupation sites, and lithic toolmaking areas. The area is adequately protected under the proposed Class C designation.

Mojave Road

This nomination was proposed to protect a portion of prehistoric, historic, and in parts, modern, route of travel, exploration, and trade. The portion of the trade nominated here as the Old Mojave Road, also known as the Old Government Road, runs from Fort Mohave on the Colorado River to Fort Soda, a distance of approximately 80 miles. The route connects several springs, which later became military outposts and settlements. The road was a major east-west corridor for trade and settlement. In three places - Fort Piute, Camp Rock Spring, and Fort Soda - The nomination is recommended for ACEC designation in this Plan. Its linear configuration and inherent manageability problems were also felt to outweigh values of ACEC designation. In addition to the three ACEC recommendations, the Mojave Road is proposed in this Plan both as a National Historic Trail and as a National Historic Landmark. For these reasons, the area is not recommended for ACEC designation.

North Ryan

This nomination was proposed to protect prehistoric and historic values at the north end of the Greenwater Range in eastern Inyo County. The area contains prehistoric campsites, rock rings, lithic sites, and rock art. Mining artifacts from the 1930s and an historic cemetary are present. It is often associated with the early 1900s borax mining town of New Ryan. The area is threatened by mining, vandalism, and inadvertent vehicle damage. This plan designates the area as Class I - Intensive Use, because of the mineral values. Class I allows use of existing roads. A Cultural Resources Management Plan, which will provide adequate protection for those portions of the area with special values, will be prepared for the area.

Old Wells

This nomination was proposed to protect prehistoric resources in the Lava Mountains near Red Mountain on State Route 395. The area contains numerous rockshelters and other evidence of aboriginal occupation such as lithic scatters, milling tools, middens, and fire-blackened bones and stones. The area is recommended for wilderness designation in the proposed Plan, and it is believed that this action will provide adequate protection through access and use controls.

Panamint Dunes

This nomination by Cultural Resources was considered with a Wildlife nomination. While both were rejected, documentation is listed only under the first. For further information see Wildlife rejections.

Paymaster Mine

This nomination was proposed to protect an historic mining area located in the eastern Mojave Desert approximately seven miles north of the Old Dad Mountains and Seventeen Mile Point. The cultural values found reflect

historic activity, specifically gold mining. According to written accounts, between $50,000 and $100,000 was produced from the Paymaster Mine in the area. Multiple-Use Class L proposed for the area will adequately protect the resources. Existing mining activity in the area makes more stringent use restrictions infeasible.

Plaster City

This nomination was proposed to protect the prehistoric cultural values located south of Plaster City, north of Interstate 8. The area is composed of alluvial flats with gravel ridges dissected by small washes. The known cultural resource values represent an important segment of human occupation of the region. Numerous sites are located in this area, including temporary camps, lithics, and cremation loci. Multiple-Use Class M is proposed for the area. Since there is little threat of damage and increased surveillance of the area is planned, adequate protection is provided for these resources.

Portuguese Bench

This nomination was proposed to protect prehistoric human resources near the California Aqueduct in southwest Inyo County. These resources consist of a village complex, ritual areas, rock art, etc., and demonstrate occupation over a period of 3,000 to 4,000 years. "Pothunting" has threatened some of the area, and increased surveillance will be directed toward protection of these cultural values. Because the area is little-visited, it is not considered threatened. Surveillance by BLM will provide adequate resource protection.

South McCoy Mountains

This nomination was proposed to protect prehistoric cultural values in the southern tip of the McCoy Mountains, approximately one mile north of Interstate 10. The area is composed of rugged, mountainous terrain in the north and a dissected alluvial fan in the south. The area's cultural resource values include a very large petroglyph site, as well as lithics, potsherds, a temporary camp, and a number of trails. The area is designated as Multiple-Use Class L which will adequately protect the cultural resource values present by restricting vehicle use and mining activity.

South Owens Lake

This nomination was proposed to protect prehistoric cultural values located on the southeast side of Owens Lake approximately one mile from the edge of the present lake as depicted on U.S. Geologic Survey topographic maps. The proposed area includes Red Ridge and Sugar Loaf on the north end of the Coso Range. Resource values include lithic scatters, trails, and temporary camps. Use of existing routes in the area by motorized vehicles, as permitted by the Class M designation for the area, will not significantly adversely affect the cultural resource values.

Spangler Hills

This nomination was proposed to protect historical values located in the Spangler Hills, two miles west of Spangler and one mile north of the Trona Railroad. The area is the site of mining activities carried out in 1896 by the Spangler Brothers. Remains include shafts, tunnels, and processing facilities. Multiple-Use Class I is proposed for the area and it will be open to unrestricted vehicle free play. However, anticipated additional degradation of cultural resource values is not expected because of the irregular topography and a lack of roads.

Spanish Canyon

This nomination was proposed to protect historic values located in the Alvord Mountains. Spanish Canyon was a branch of the Old Spanish Trail. It was in use in the late 1700s and from the early to mid-1800s. Gold and silver mining took place after 1885. The physical manifestation of this period is an old wagon road with occasional evidence of wheel ruts. The area is designated Multiple-Use Class M, which provides adequate protection for the area.

Superstition Mountains

This nomination was proposed to protect archaeological values. The area is located south of the Superstition Mountains, west of the Naval Reservation boundary, and six miles east of the Fish Creek Mountains. The known cultural resource values found in the area consist of 64 archaeological sites, including temporary camps and cremations. The area is currently under lease to, and under the jurisdiction of, the U.S. Navy.

Tumco

The purpose of this nomination was to provide protection for an historic mining area, and ritual areas for the Quechan and Cocopa tribes. This area is located in the Cargo Muchacho Mountains. The area is of special concern owing to the historic mining towns of Tumco, Hedges, Obregon, and a concentration of traditional occupation sites and ritual areas. Many of the sites are being impacted by vehicle uses. To protect the sites would require eliminating vehicle use totally, which is not feasible. It is felt that any attempt to sign or install barriers would attract more recognition than not signing or fencing, thus increasing threats to the resource, instead of protecting them. In order to provide appropriate management attention, ranger patrols will be increased, a cooperative agreement will be sought with local residents, and Class M guidelines will be enforced.

Volcanic Cones

This nomination was proposed to protect prehistoric cultural resources to the west of the Coso Range, north of China Lake Naval Weapons Center. Specific resources include lithic sites, an obsidian source, and a temporary

occupation site. Pumice mining poses a threat to these resources. Bureau staff determined that area did not possess "important" values.

Warm Sulphur Spring/Ballarat

This nomination was proposed to protect historic values located on the east side of the Panamint Valley between and south of Indian Ranch. It includes Warm Sulphur Spring, Stage Station (ruin), Ballarat, and Post Office Spring. Cultural Resource values include the stage station and the historic mining towns of Ballarat and Post Office Spring. The Multiple-Use Class L proposed for the area will adequately protect the resource.

West Well

This nomination was proposed to protect prehistoric cultural values in Chemehuevi Wash in eastern San Bernardino County near the Colorado River. The area contains a large and unique concentration of rock circles which apparently were used during gathering or ritual occasions. The area has been severely impacted and access is well established. The area is designated as Class L (limited use) in this Plan. Coupled with the existing fencing, this designation should provide adequate protection of the resource.

Willow Creek Camp

This nomination was proposed to protect historical resources. Located adjacent to the Inyo National Forest and Saline Valley floor, this area encompasses the eastern edge of the Inyo Mountains from the eastern edge of Piute Canyon to the south side of Willow Creek. There are a few historic talc mines and a small community present. There are no prehistoric sites recorded, although the presence of temporary camps is suspected. The Class L designation for the area will adequately protect the cultural resource values through mining regulations and other restrictions provided for in the designation.

Zinc Hill

This nomination was proposed to protect an historic mining area located in the Argus Range. The area contains the Zinc Hill Mine, one of the biggest zinc producers in Inyo County in 1918. The area's special values have been recognized by identification for the National Register of Historic Places and for the National Architectural and Engineering Record. The protection afforded by Class L proposed for the area will adequately protect the cultural resources in the area.

NOMINATIONS BY RECREATION

Amboy Crater

This nomination seeks to preserve the best example of a cinder cone and related lava flows in the California Desert. The area is located just south of State Route 40 near Amboy. It is one of the few unmined cinder cones in

the desert. The area is frequently used for teaching, education, and research, and is a designated National Natural Landmark. The area is not considered threatened, and the Class L designation, which will limit vehicular use of the area to approved routes, is considered to provide adequate protection.

Fossil Canyon (Coyote Mountains)

This area was nominated to protect an area well-known for its echinoid and molluscan fossils. The area is located in a Pliocene Imperial Formation in the Coyote Mountains west of El Centro. The area is heavily impacted and receives considerable visitor use, in part because of its exceptional scenic quality and the deeply eroded canyon topography. Because the area is so accessible, well known, and heavily used for collection purposes, ACEC designation was felt to be inappropriate. In addition, better quality, less impacted fossil beds nearby (Coyote Mountains Fossil Site) were felt to be more manageable and appropriate as an ACEC.

Golden Valley

This nomination was proposed to protect outstanding visual resources located in a small, enclosed valley east of Red Mountain. The area regularly contains one of the desert's most outstanding floral displays. It was also rated as one of the highest quality wilderness study areas. The plan identifies the area as Class C (wilderness) which will provide adequate protection of scenic values.

Granite Mountains

This nomination by Recreation was considered with the Wildlife nomination. While both were rejected, documentation is listed only under the first. For further information, see Wildlife rejections.

Kelso Dunes

This nomination by Recreation was considered with Wildlife. While both were rejected, documentation is listed only under the first. For further information, see Wildlife rejections.

NOMINATIONS BY VEGETATION

Algodones Dunes

The purpose of this nomination was to provide protection for an unusual vegetation assemblages and particularly for four sensitive plant species, (1) Croton wigginsii, (2) Helianthus niveus var. tephroides, (3) Astragalus magdalenae var. piersonii, and (4) Ammobroma sonorae. Of the four, (1), (2), and (3) are State-listed, and (2), (3), and (4) are candidates for listing by the U.S. Fish and Wildlife Service. Motorized vehicle (dune buggy) play holds potential for impact on these plant species. Recent surveys have shown, however, that the central portion of the dunes south of State Route 78

receives only light motorized vehicle use, and the plant species there are only nominally impacted. That portion of the dunes north of State Route 78 is in Multiple-Use Class C (wilderness) which gives maximum protection. For this reason, it is believed that these plant species have been provided adequate protection.

Big Sands Springs

This nomination was proposed to provide protection for the plant species Astragalus lentigenosus var. sesquimetralis. The area is located in a portion of Death Valley Wash northeast of Death Valley National Monument. Big Sand Spring is the only area where Astragalus lentigenosus var. sesquimetralis is found in California. The species is proposed as a federally listed endangered species, and currently is threatened by severe burro grazing and trampling, camping, and construction of campsites. The Big Sand Spring site is not recommended as a ACEC because threats will be eliminated through the development and implementation of a Burro Management Plan, in which all burros will be removed, and because camping will not be allowed on the site in the future.

Colton Hills Exclosure

The purpose of this nomination was to assure the upkeep and protection of one of the largest and oldest (14 years) grazing exclosures in the CDCA. This area is located in the Colton Hills. Several studies have been made using this exclosure as a comparison area. During the reviewing process it was recognized that the area was useful for making comparison studies and that it should continue to be used as such. However, it was determined not to be important enough to warrant an ACEC designation. Multiple-Use Class L is identified for this area. The class would allow continued use of the area for study comparisons.

Cushenbury Grade

The purpose for the nomination was to provide protection to five unusual plant species. This area is located between the San Bernardino Mountains and Lucerne Valley, and encompasses the following plant species: Dryopteris felix mas, Cordylanthus eremicus ssp. bernardinus, Erigeron parishii, and Castilleja ewanii. Critical habitat determination for Cordylanthus is currently being investigated.

Activities affecting the plant species include new road construction, sand and gravel activity, and expansion of existing limestone operations. The area is identified as Multiple-Use Class L which provides for tight controls in mineral development and access limited to approved routes. Therefore, it was determined that the resource is adequately protected.

Death Valley Junction

The purpose of this nomination was to provide protection for two plant species. The nomination area is located about three miles northeast of Death

Valley Junction. Concern is for two plant species, Nitrophila mohavensis and Cordylanthsus tecopensis. which are being impacted by wild horses and burros. The two species were not nominated for protective Federal listing at the time this Plan was prepared. Because the plant species were not listed, and because a Herd Management Allotment Plan will be prepared and implemented, this nomination is not recommended for ACEC designation.

Hanging Rock Canyon-Last Chance Range

The purpose of this nomination was to provide protection for six unusual plant species. The area is located at the north end of the Last Chance Mountains in the vicinity of Hanging Rock Canyon. The unusual plant species are Enceliopsis nudicaulis var. corrugata, Mimulus rupicola, Sclerocactus polyancistrus, Eriogonum gilmanii, Cymopterus gilmanii, and Eriogonum shockleyi.

Because of the almost impenetrable topography of the area and the minimal threats to the plants from mining and visitor use, the area is not considered to require protection through ACEC designation. The Classes L and M designations for the area will provide adequate protection for the plant species.

Kingston Mountain

The purpose of this nomination was to provide protection for an unique vegetation assemblage and several unusual plant species. Because the area is identified as Multiple-Use Class C, wilderness, it was considered to be adequately protected.

Lane Mountain

The purpose of this nomination was to provide protection for plant species Astragalus jaegerianus. The area is located north of Barstow and west of Lane Mountain. The plant species is a candidate species for threatened listing by the U.S. Fish and Wildlife Service. Possible impacts to the species are motorized vehicle activity, grazing, road and energy corridor construction, mining for sand and gravel, and urban expansion. Multiple-Use Class I identified for this area would provide adequate protection to the plant species by restricting vehicle access to approved routes, and through greater supervision of mineral development. A grazing allotment management plan will be developed to provide necessary protection from the effects of overgrazing and trampling.

Painted Canyon

The purpose of this nomination was to provide protection for the plant species Ditaxis californica. The species is proposed for listing by the U.S. Fish and Wildlife Service as threatened. This area is located in the Mecca Hills south of Cactus City. Motorized vehicle activities, indiscriminate camping, and other forms of visitor use are impacting and threatening this plant species. Multiple-Use Class C (wilderness) identified for this area

would adequately protect the plant species by eliminating vehicle-play activity, limit potential urban expansion, and restrict camping.

Red Rock Canyon

The purpose of this nomination was to provide protection for rare and endangered plant species. This nomination area is located in Red Rock Canyon, and is the location of three unusual species: Sclerocactus polyancistrus, Hemizonia arida, and Chorizanthe spinosa. Activities impacting these species are motorized vehicle use, camping, road construction, and urban development. This area is not recommended for ACEC designation owing to past and programmed transfer of land, including all of this nomination, to the California Department of Parks and Recreation.

Saline Valley

The purpose of this nomination was to provide protection for an unusual plant assemblage in a salt marsh. The area is located in Saline Valley and contains the unique plant species Haplopappus brickellioides and Phacelia amabolis. An unusually large and productive population of mesquite clones and a salt marsh and salt grass meadow contain concentrations of vegetation not found commonly in the desert. Existing or potential activity threatening or impacting the plant species and salt marsh habitat are possible expansion of salt mining, motorized vehicle activity, new road construction, and a high burro population. Multiple-Use Class L has been identified for this area. It is believed that Class L designation will adequately protect the resource values by restricting access to approved routes and by controlling mineral development. In addition a Herd Management Allotment Plan will be developed and implemented, resulting in a decrease of burros in the area.

Saline Valley Corridor

The purpose of this nomination was to provide protection for nine unusual plant species. This area is located along a jeep road crossing the Last Chance Range between Eureka Valley and Saline Valley. The area contains the following species: (1) Mimulus rupicola and Dedeckera eurekensis, both listed as threatened by FWS; (2) Haplopappus brickellioides, Penstemon calcareus, and Salvia funerea, listed as species of concern by the U.S. Fish and Wildlife Service, (3) Scopulophila rixfordii, Cymoterus gilmanii, Buddleja utahensis, and Eriogonum shockleyi, all unusual species. Current activity adversely impacting the plant species is mining for dolomite, and some camping along the unimproved road wehre the plant species are found. Multiple-Use Class C (wilderness) identified for this area will protect the species.

NOMINATIONS BY NATIVE AMERICAN

Saline Valley/Hunter Canyon

This area is located in southern Saline Valley in a remote portion of Inyo County east of the Inyo Mountains. This nomination was proposed to protect

historic Native American burial sites which are of concern to Owens Valley area Paiute and Shoshone. Other cultural values include occupation sites, rock art, a graveyard, etc. Some rock art has been vandalized and removed. The area has been designated Classes L and C (wilderness), which will limit or exclude vehicle access, respectively, and provide adequate protection to the resources.

Tumco

This nomination by Native American was considered with Cultural Resources. While both were rejected, documentation is listed only under the first. For further information see Cultural Resources rejections.

NOMINATIONS BY GEOLOGY

Amboy Crater

This nomination by Geology was considered with Recreation. While both were rejected, documentation is listed only under the first. For further information see Recreation rejections.

Fossil (Alverson) Canyon

This nomination by Geology was considered with Recreation. While both were rejected, documentation is listed only under the first. For further information see Recreation rejections.

Part 2

Table IV-2-1

EXISTING 'SPECIAL AREA' DESIGNATIONS

SPECIAL AREA	Designation	Estimated Total Acreage
Amargosa Canyon	Natural Area	3,580
Argus Mountain	Primitive Area	8,320
Black Mountain	Primitive Area	15,680
Cerro Coso College	Research Natural Area	2,400
Darwin Falls	Outstanding Natural Area	750
Desert Tortoise	Research Natural Area	14,560
Dove Springs, Butterbread, and Water Canyons	Natural Area	46,080
El Paso Mountains	Natural Area	48,640
Eureka Sand Dunes	Natural Area	1,580
Great Falls Basin	Research Natural Area	1,920
Owens Peak	Primitive Area	28,800
Sage and Horse Canyons	Natural Area	7,040
Amargosa Canyon/Dumont Dunes	Natural Area	22,764
Bigelow Cholla	Natural Area	80
Chuckwalla Valley Desert Lily Sanctuary	Natural Area National Recreation Lands	2,404
Cima Dome	Natural Area	18,440
Cinder Cone	Natural Area National Natural Landmark	24,320

Table IV-2-1 (Continued)

EXISTING 'SPECIAL AREA' DESIGNATIONS

SPECIAL AREA	Designation	Estimated Total Acreage
Crucifixion Thorn	Natural Area National Recreation Lands	360
Dead Indian Creek	Natural Area National Recreation Lands	960
Fossil Canyon	Natural Area	180
Fossil Shellfish	Natural Area National Recreation Lands	480
Jacumba	Outstanding Natural Area	14,000
Kelso Sand Dunes	Natural Area National Recreation Lands	11,591
Mopah Spring	Natural Area National Recreation Lands	160
Rainbow Basin	Natural Area National Recreation Lands National Natural Landmark	1,982
San Sebastian	Outstanding Natural Area	6,400
San Sebastian	Research Natural Area	640
Sand Hills	Natural Area National Recreation Lands National Natural Landmark	22,000
Signal Mountain	Research Natural Area	560
Trona Pinnacles	Natural Area National Recreation Lands National Natural Landmark	720
Whipple Mountains	Natural Area National Recreation Lands	91,433
Milpitas Wash	Research Natural Area	600

Table IV-2-1 (Continued)

EXISTING 'SPECIAL AREA' DESIGNATIONS

SPECIAL AREA	Designation	Estimated Total Acreage
Bow Willow Palms	Research Natural Area	720
Amboy Crater	National Natural Landmark	3,200
Pacific Crest	National Scenic Trail	n.a.

Part 3

Descriptions of Special Area Designations

NATURAL AREAS (BLM Authority)

Research Natural Areas (43CFR8223)

Areas that are established and maintained for the primary purpose of research and education because the lands have one or more of the following characteristics:

1. A typical representation of a common plant or animal association.
2. An unusual plant or animal association.
3. A threatened or endangered plant or animal species.
4. A typical representation of common geologic, soil, or water features.
5. Outstanding or unusual geologic, soil or water features.

Outstanding Natural Areas (43CFR8352)

Areas of unusual natural characteristics where management of recreation activities is necessary to preserve those characteristics.

Other Natural Areas

Lands possessing outstanding or unique natural qualities which have been designated in recognition of those values.

NATURAL LANDMARKS (Secretary of Interior's Authority)

National Natural Landmark

Areas designated by the Secretary of Interior which contain representative examples of the nation's natural history, including terrestrial communities, aquatic communities, landforms, geological features or habitats of native plant and animal species, possessing national significance in illustrating or interpreting the nation's natural heritage.

National Historical Landmarks

Areas of major historical or cultural significance, either national, regional or local; usually tracts of land containing significant evidence of American history, such as battlegrounds, mining camps, cemeteries, pioneer trails and trading posts; or lands containing significant evidence of prehistoric life such as pictographs, petroglyphs, burial grounds, prehistoric structures,

middens, fossils, paleontological remains, and any other forms of prehistoric life.

NATIONAL REGISTER OF HISTORIC PLACES (Secretary of Interior's Authority)

Register of districts, sites, buildings, structures, and objects of national, state or local significance in American history-architecture, archaeology and culture designated by the Secretary of Interior and maintained by the Heritage Conservation and Recreation Service.

NATIONAL ARCHITECTURAL AND ENGINEERING RECORD (Heritage Conservation And Recreation Service authority)

Identifies and documents Historic American buildings and the engineering and industrial heritage of the United States.

NATIONAL TRAILS (Congressional Authority)

National Scenic Trails

National scenic trails are extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities of the areas through which such trails may pass. Use of motorized vehicles is prohibited on national scenic trails.

National Historic Trails

National Historic Trails are extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historical significance. Designation of such trails or routes shall be continuous, but the established or developed trail, and the acquisition thereof, need not be continuous on site. National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. Only those selected land-and water-based components of an historic trail which are on federally owned lands and which meet the national historic trail criteria in the National Trails Systems Act are established as national historic trails. The Secretaries of Interior or Agriculture may subsequently certify other lands as protected segments of an historic trail upon application from State or local governmental agencies or private interests involved if such segments meet the national historic trail criteria established in the Act and such criteria supplementary thereto as the appropriate Secretary may prescribe, and are administered by such agencies or interests without expense to the United States.

MAN AND THE BIOSPHERE RESERVES (Joint Authority by Secretaries of State and Interior)

These are joint designations by the Secretaries of State and Interior which fit into an international program administered by the UNESCO (United Nations

Educational and Scientific Committee). The three objectives of the program are to:

1. Conserve for present and future use the diversity and integrity of biotic communities of plants and animals within natural ecosystems, and to safeguard the genetic diversity of species on which their continuing evolution depends,
2. Provide areas for ecological and environmental research, including particularly, baseline studies, and
3. Provide facilities for education and training.

The international goal of this program is to preserve representative examples of ecosystems.

NATIONAL RECREATION LANDS (Secretary of Interior's Authority)

National Recreation Lands are public lands designated by the Secretary of the Interior which are managed for multiple use, with an emphasis on recreation.

APPENDIX V

RECREATION

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APPENDIX V
RECREATION

Part 1

Description Of 'Recreation Opportunity Spectrum'

As adopted for use in the California Desert Conservation Area Plan, and briefly described herein, the Recreation Opportunity Spectrum (ROS) is a recreational resources inventory and planning tool designed to determine types and settings of desired recreational activities. Social and behavioral factors are also considered in designing for a high-quality recreational experience while promoting visitor safety and protecting the natural resources. (BLM Manual 8310 Recreation Inventory)

Broad recreational opportunities all will be provided for throughout the four multiple-use classes. Also, there is considerable crossover of recreational opportunities between multiple-use classes which increases the resource management options available to the Bureau of Land Management. One can expect, however, to find primitive and semiprimitive kinds of recreational experiences in Multiple-Use Classes M and I.

Within the Recreational Opportunity Spectrum planning approach, recreation is defined not as an activity or the behavior of participating in a recreational activity, but rather as a self-rewarding experience that finds its source in voluntary engagements (mental and/or physical) during nonobligated or "free" time. In this more comprehensive recreational planning approach, participation in the experience requires recreational opportunities. Providing for these opportunities is the major objective of the ROS approach. As a tool, then, this approach provides for diverse recreational opportunities through three primary components.

Activity Opportunities

These are defined as the activity itself, e.g., hiking, hunting or motorcycle racing.

Setting Opportunities

Such opportunities include the preferred physical, social, and management settings. For example, the dune buggy enthusiast may prefer rolling sand dunes (physical) with few people (social) and a specially identified play area (managerial).

Experience Opportunities

Experiences are the psychological and physiological outcomes desired by the user. These may involve such things as taking risks, for example, or applying skills, getting exercise or seeking solitude.

This planning approach was adopted in order to assure availability of a broad spectrum of recreational opportunities, ranging from intense motor vehicle free play and competitive activities to wilderness/primitive experiences. At the same time, the approach is consistent with the capabilities of the resource to sustain such activities. (BLM Manual 8320 Recreation Evaluation)

Part 2

Summary of Process Used to Determine Areas Appropriate for Motorized Vehicle Free-Play Areas

Lead resource staff personnel from each resource division on the Desert Planning Staff made up the Plan Development Team. The team also included two additional staff persons representing the Bakersfield and Riverside districts.

Thirty-three potential motorized vehicle free-play areas were evaluated by each resource division, and an impacts analysis was done for each area by each division. The inventory of potential choices included all such areas shown on the "Use" alternative, plus additional areas each resource division believed should be considered.

As a group, the Plan Development Team identified 16 specific criteria to be applied to each area. These criteria served to determine which candidates possessed the best attributes as motorized vehicle free-play areas.

Through an overlay technique, areas determined to have the best attributes were checked against the important and critical resources lists from all resource divisions. Boundary changes were proposed and defined for existing and potential motorized vehicle free-play areas so that the broadest array of areas could be considered.

Consensus was gained when all resource representatives could agree that an area should be dropped or accepted. One dissenting vote was sufficient for "no consensus." A dissenting opinion was accepted from all resource divisions concerned, including those who favored adopting the area.

The Plan Development Team's area-by-area impact analysis, decision criteria, opinions, and final boundary map for motorized vehicle free-play areas was submitted to the Steering Committee for final decision on inclusion in the Proposed Plan.

Criteria used to evaluate each proposed area and a summary of the decisions passed to the Steering Committee appear on the following pages. The criteria were employed to determine those areas most appropriate and best suited to provide recreation and to withstand heavy motorized vehicle use.

Part 3

Criteria for Evaluating Motorized Vehicle Free-Play Areas

TERRAIN DIVERSITY

A motorized vehicle free-play area should include a variety of landforms and soil surfaces: dry lake beds, bajadas, washes, hills, and sand dunes all provide important experiences. The best areas contain a number of these features; however, specific terrain and soil needs will differ depending on the type of motorized vehicle use contemplated. These needs are described below.

Hill Climbing

Nearly all types of motorized vehicles may be involved in hill climbing. Steep slopes clear of impediments, such as rock outcroppings and gullies, are the preferred hillsides for climbing. Hillside slopes ranging from a gentle 10 percent to a more difficult 30 percent are commonly used. To provide for a complete range of hill levels, however, steep slopes in excess of 60 percent grades are necessary. Again, surface conditions are as important as the grade. Steep hardpan hillside challenge areas and steep dune slopes should be provided where possible.

Competitive Race Events

Nearly every type of topographical feature can be included for these event areas except for the most extreme land forms, i.e. escarpments, extreme slopes greater than 60 percent grade, areas made impassable by rock outcroppings, and densely vegetated or heavily eroded and rilly areas.

Free-Play Areas

Terrain in these areas should be as diverse and challenging as that in the competitive-event areas. Because most motorized vehicle activity in free-play areas is unstructured and dispersed, and free-play participants prefer flat, open spaces, the very rugged and extreme landforms are not as important to them as they are to competitors.

Trail Riding

Trails should include a diversity of topographic and surface conditions to provide the most interest and the largest array of opportunities for using

trail-riding skills. Possibilities for BLM to develop a desert awareness among motorized vehicle users should not be overlooked.

ACCESSIBILITY

At least one graded, maintained or paved public road must lead to and from motorized vehicle free-play areas. Access should be clearly identifiable from the major highway or thoroughfare which the access intersects. The access should be easily negotiable by a standard, two-wheel drive, family automobile or recreational vehicle such as a motor home.

TRADITIONAL USE

Major areas of traditional motorized vehicle use should be included in a free-play area. These areas will have an established pattern of concentrated use. Providing for the continued use of these areas will enhance compliance and will recognize most popular areas. However, not all traditional use areas will be appropriate as free-play areas. Conversely, areas not presently popular may be suitable.

PROXIMITY TO USERS

Motorized vehicle free-play areas should be located within three hours driving time (approximately 150 miles) from the majority of users. This will save driving time and cut potential costs of traveling. Most areas would serve users from San Diego, Orange County, Los Angeles and Las Vegas. These locales account for as much as 80 percent of all motorized vehicle use in the California Desert Conservation Area (CDCA) (Fieldscope 1977; Natelson 1978)

SIZE

The appropriate size for a motorized vehicle free-play area will depend upon the type of use involved. Pit areas for race events can be as small as 640 acres or even smaller depending on the number of entrants in a particular race events. Other motorized vehicle free-play areas will need to be sizable in order to contain free-play and race events. Race events vary widely in area requirements. While some races require only one 30-mile loop of trail which may be traversed twice as in a hare scramble, enduros may require as much as 500 miles of trail for a major competitive event.

MANAGEABLE BOUNDARIES

Recognizable boundaries are necessary to enable BLM to effectively supervise motorized vehicle free-play areas. Maintained roads, well-defined ways, canals, energy corridors, and railroad tracks are preferred management boundaries. Where no recognizable boundaries exist, a trail (or berm) can be graded or a fence erected. Confinement of motorized vehicle activities is best afforded by topographic barriers, such as steep escarpments or impassable terrain. Activities also may be contained within a single, closed

valley watershed. Areas with few or no confining boundaries should be avoided.

RECREATION

Recreation in the CDCA includes a wide variety of activities and recreational resources. While some of these are compatible with motorized vehicle free-play, others are potentially in conflict. The six categories of recreation and recrational resources described below have variable tolerances to motorized vehicle use.

Activities Oriented Toward Nature

Activities, such as camping, picnicking, and leisurely sightseeing, are incompatible with motorized vehicle free-play areas. Locales which contain high natural and cultural values for recreation seekers should be avoided.

Motor Vehicle-Oriented Activities

These activities are highly compatible with motorized vehicle free play. They include towing, exploring, competitive events, etc. Locations which attract such uses should be designated as motorized vehicle free-play areas.

Collecting and Hunting Activities

Activities, such as hunting and rock collecting, can be compatible or incompatible with motorized vehicle free play. Rock collecting generally requires vehicle access to sites and is not affected by motorized vehicle use. Hunting, however, will deteriorate in motorized vehicle free-play areas as vegetation and wildlife decline.

Space-Dependent Activities

Activities such as hang gliding and sand sailing conflict with motorized vehicle activity. A motorized vehicle free-play area would pose a safety hazard for these uses and designation as such sould be avoided where they take place.

National Recreation Lands

These lands can be either compatible or incompatible with motorized vehicle use, depending on the specific area involved.

National Natural Landmarks

National Natural Landmarks are sensitive to motorized vehicle impacts and should be avoided by motorized vehicle free-play areas.

PLANTS AND WILDLIFE

Losses to plants and wildlife are inevitable in any motorized vehicle free-play area. Locations and immediate vicinities of sensitive and significant plants and wildlife should be avoided when designating these areas. Specific plant and wildlife criteria are described below.

Federally Listed Species

Motorized vehicle free-play areas are incompatible with Federally listed species. Federally listed endangered and threatened species, as well as proposed or candidate species, are defined and designated by the U.S. Fish and Wildlife Service (FWS) and are protected by the Endangered Species Act.

State-Listed Species

State-listed rare, threatened or endangered species are designated by the California State Department of Fish and Game and are protected by BLM policy. This policy states that State-listed species shall be conserved in furtherance of state law.

Sensitive Species

Bureau of Land Management sensitive and proposed sensitive species will be managed in such a way as to maintain populations at levels so that listing does not become necessary. This category includes BLM sensitive species and a portion of the California Native Plant Society (CNPS) rare plant list (1974).

Species of Concern

This category includes most of the CNPS main list as well as FWS-identified species of concern. These species are, in general, of relatively restricted occurrence but not currently threatened by an activity to any great degree. These species may be abundant where they occur, but populations of some species may have declined in recent years. The Bureau of Land Management must give special consideration to these species so their populations will be maintained or enhanced.

Significant Wildlife Species (Staff Concept)

These are species of importance; are rare or declining; or are of limited distribution. Special consideration must be given to these species in the BLM decision-making process so that these species will be maintained or enhanced.

Riparian Areas, Seeps, and Streams

Motorized vehicle free-play areas are incompatible with riparian areas, seeps, and both permanent and semipermanent streams and their associated vegetation. These resources are protected by Executive Order.

Plant Associations

Motorized vehicle free-play areas may be compatible with plant associations, depending on the size of the motorized vehicle free-play area in relation to the size and relative rarity of the plant association. Two categories are included: Unusual Plant Assemblages and Representative Ecosystems.

Unusual Plan Assemblages (Staff Concept). Unusual plant assemblages are those which can be recognized as being extraordinary, either because of unusual size of individuals, exclusivity within the CDCA or because of special biogeographic factors. Some unusual instances include disjunction from main population centers (enclaves); elevational, latitudinal or longitudinal limits; or rarity of occurrence (e.g., riparian areas, springs, and calciphyte assemblages). Rare population structures, including those of great age or large size, are also recognized as unusual plant assemblages.

Representative Ecosystems (Staff Concept). These are areas of wildlife habitat which are declining or are naturally rare in the California Desert. They also include sand dunes, dry lakes, and desert washes.

Noncrucial Habitat

Motorized vehicle free-play areas may be compatible with areas of noncrucial habitat. In cases of certain species, however, these areas may be incompatible and must be examined case by case. Noncrucial habitats include many kinds of species: State listed, BLM sensitive and proposed sensitive, species of concern, and significant species.

Resistant Soils

In order to limit impacts on soils, motorized vehicle free-play areas should be encouraged where soils are relatively resistant to accelerated erosion, compaction, and other soils impacts. Such soils can be divided into four categories: (1) soils resistant to compaction, (2) soils resistant to accelerated water erosion, (3) soils resistant to accelerated wind erosion, and (4) soils resistant to production of long-lasting visual scars.

Soils Resistant to Compaction. These include poorly graded sands (similar-sized particles) and cohesionless sands (e.g. sand dunes and most other blow-sand areas). Most sandy washes are also resistant to compaction.

Soils Resistant to Accelerated Water Erosion. This group includes soils on level terrain and soils on steeper slopes which are resistant to compaction, such as sand dunes or other areas of blow sand.

Soils Resistant to Accelerated Wind Erosion. Some soils are characterized by high rates of wind erosion in both disturbed and undisturbed conditions. These soils occur in sand dunes, other blow-sand areas, and most river washes. Other soils may have generally low rates of wind erosion in both disturbed and undisturbed conditions, such as those in some playa centers where the soil breaks into large unerodible fragments when there is traffic. These types of soils exhibit the greatest resistance to accelerated erosion after disturbance.

Soils Resistant to Production of Long-Lasting Visual Scars. Soils resistant to compaction (e.g. sand dunes, most blow-sand areas, and many river washes) are also the most resistant to visual scarring.

Susceptible Soils

Soils susceptible to accelerated erosion, compaction, and other related impacts should be avoided. These soils include the following categories.

Soils Susceptible to Compaction. This category comprises most soils other than those mentioned in the first item under SOILS. Most soils will compact to a much greater extent when wet than when dry.

Soils Susceptible to Accelerated Water Erosion. These include compactable soils on steeper slopes. Large increase rates of erosion generally occur when vehicles have been driven up slopes greater than 15-20 percent. However, erodibility varies with soil properties (e.g. silty soils erode more readily than those high in sand or clay) and with topographic features, such as length of slope. Slopes as level as 3 percent have shown evidence of increased water erosion. This erosion occurred where compacted motorized vehicle trails ran for long distances below a steeper, compacted motorized vehicle campsite. The campsite produced runoff that was funneled down the trails.

Soils Susceptible to Accelerated Wind Erosion. These are soils which erode at much lower wind speeds after they have been disturbed than they would if left undisturbed. These soils include most areas other than sand dunes, sand sheets, and playas. Desert pavement and silty soils on playa margins are particularly susceptible. The soils which lose the largest amounts of particles are those which contain the highest proportion of fine material. Thus, soils with large amounts of rocks, gravel or even very coarse sand are less susceptible to wind erosion in a loosened condition than soils with lesser amounts of coarse particles. Soils which will produce the largest amounts of transportable dust during wind erosion are loosened soils with more silt and clay. An exception is soils with very large amounts of clay, such as some playa surfaces where aggregation of clays, even after disturbance, provides resistance to wind erosion.

Soils Most Susceptible to Production of Long-Lasting Visual Scars. Desert pavement surfaces are most sensitive to visual impacts. Disturbed soil created by motorized vehicle use becomes susceptible to compaction and

increased water erosion (discussed earlier). These sites will show more obvious and long-lasting visual impacts than will less heavily impacted sites.

Soil Pathogens

Motorized vehicle activity on soils containing the valley fever organism could result in spread of the disease. About 500 soil samples were collected in motorized vehicle free play areas in the CDCA and tested for presence of valley fever. Two of the soil samples, both from Johnson Valley, contained the organism.

WILDERNESS

A motorized vehicle free-play area is not compatible with the maintenance of wilderness values since it would conflict with all Wilderness Act Section 2(c) criteria, as well as Section 603 of the Federal Land Policy and Management Act. Potential conflicts also exist between Wilderness Study Areas (WSAs) and adjoining multiple-use classifications. These conflicts may be direct, as when activities spill over into the wilderness area, or indirect, as when noise, dust and smoke degrade the wilderness character of the area. To ensure adequate protection, WSAs recommended as suitable for wilderness should be avoided by motorized vehicle free-play areas and should share boundaries only with land designated as Multiple-Use Class L.

SCENIC QUALITY

Scenic quality will be impaired in a motorized vehicle free-play area. Such an area will negatively alter visual attributes, such as color, vegetation, naturalness, and uniqueness. As a consequence, the quality of the visual experience will be reduced. Thus, areas of high scenic quality should be avoided in locating motorized vehicle free-play areas.

RANGE

Motorized vehicle free-play areas are incompatible with livestock grazing. Range resources are severally degraded by designation of these areas. There are effects on both vegetation and animals.

First, vehicle activity within these areas will impact the cover and composition of perennial and emphemeral forage, reducing the amount of grazing in these areas. Since a grazing permit/lease is for the forage, any change would require administrative actions to reduce the numbers of Animal Unit Months (AUMs). Also, the forage reduction would affect the allocations to wild horses and burros. (However, where there is little or no forage available, such as on dunes or in dry lakes, the areas may not have any effect on livestock or burro grazing. Grazing animals would not normally inhabit these locations.)

Second, vehicle activity in the motorized vehicle free-play areas will directly impact the grazing animals. Harassing and chasing livestock and burros does occur to some extent, although it is illegal. Also, the tendency of vehicle users to gather or camp around water will inhibit the ability of livestock and burros to water. On ephemeral allotments, the grazing use may occur only three or four years out of ten, and then only during the spring months. Nevertheless, despite mitigation, forage loss would still occur, and motorized vehicles would disturb or harass the sheep bands.

GEOLOGY-ENERGY-MINERAL RESOURCES

Motorized vehicle free-play areas are potentially incompatible with (1) paleontological resources and with (2) exploration for and development of mineral, geothermal, and oil and gas resources. (1) Motorized vehicle activity can destroy paleontological resources. (2) Fences, open shafts, and other mining structures and improvements pose safety hazards to vehicle users. Establishment of motorized vehicle free-play areas in close conjunction with these structures would invite vandalism and trespass against private property and potentially disturb exploration and development activities.

In general, designation of motorized vehicle free-play areas should be avoided where known or potential energy, and mineral resources are located. Some G-E-M resources, however, are more significant than others and will be of correspondingly greater concern if included within these areas.

G-E-M resources can be divided into six categories based on the particular type of resource involved. The resource presence, at known or potential, in these categories is determined by the specific criteria below.

1. Locatable Minerals

This category includes active mines, intermittently active mines, past producers, reserves and resources which have been demonstrated or inferred, patented claims, active unpatented claims, occurrences of minerals, and existence of a favorable environment.

The following types of locatable minerals are relatively more significant than others:

a) Any deposit of a commodity of which more than 25 percent of U.S. production comes from the CDCA.

b) Any deposit of a commodity of which the United States imported more than 50 percent of its 1979 consumption.

c) Any strategic mineral commodity.

2. Geothermal Energy

Included are present production or development and associated environment, Known Geothermal Resource Areas, (KGRAs), Potential Geothermal Resource Areas (PGRAs). leases, and direct evidence for geothermal activity not included in KGRAs and PGRAs.

3. Oil and Gas Resources

Included are past production, resource shows, favorable environment (i.e. the overthrust belt), and whether site is in a prospective geologic structure.

4. Sodium and Potassium

Included are present production, intermittent production, past production, sodium/potassium reserves, sodium/potassium in exploratory drill holes, and whether areas are prospectively valuable for sodium/potassium.

5. Salable Mineral Commodities

Included are present production, intermittent production, past production, free-use permit areas, whether commodity is near roads and railways, and where the commodity is found.

6. Paleontological Resources

Included are the presence of the resource or the probability that the resource is present.

CULTURAL RESOURCES

Motorized vehicle activity will cause direct and indirect impacts on cultural resources. To protect them, significant known and predicted cultural resources should be avoided in the designation of motorized vehicle free-play areas.

Each cultural resource site is potentially significant, but three levels of sensitivity/significance can be distinguished: (1) very high, (2) high, and (3) moderate, low or unknown.

Areas of Very High Sensitivity/Significance

Areas of very high sensitivity contain the most sensitive and significant sites, based primarily on known sources. These areas are incompatible with motorized vehicle free-play areas.

Areas of High Sensitivity/Significance

Areas of high sensitivity/significance tend more to be predictive or represent cultural resources which have been seriously impacted or are

relatively common to the region under evaluation. Determinations of relative sensitivity and significance were based on one or a combination of criteria. These areas are also incompatible with motorized vehicle free-play areas.

Areas of Moderate, Low or Unknown Sensitivity/Significance

Areas of moderate, low or unknown values may contain important cultural resource sites, but available information is generally too limited to be conclusive. While potentially incompatible with motorized vehicle free-play areas, these areas of moderate, low or unknown values may provide opportunities not available in areas of very high or high sensitivity/significance.

The criteria most often used in evaluating the significance of archaeological or historical remains are potential, integrity, and public appreciation. Additional considerations include historical and ethnic interest, uniqueness/rarity, site diversity, site complexity, site density, site variance, and site distribution.

National Register of Historic Places

The National Historic Preservation Act of 1966 provided for the expansion of the National Register of Historic Places. The register includes districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, and culture. Many of the same criteria used to evaluate resources and regions for prehistoric sensitivity are also applicable for determinations of elegibility for National Register listing. Consequently, with proper documentation and more refined boundary designations, many sites of high and very high cultural resource sensitivity would qualify or be eligible for the National Register.

NATIVE AMERICAN

Motorized vehicle free-play areas are incompatible with many of the Native American resources which occur throughout the CDCA. Public law (95-341) and BLM policy (MOU 3/19/80)[1] specify that identification of Native American values be made by "Native American experts" and not secondary "Indian experts." The sensitivity of potential motorized vehicle free-play areas has been determined in this context based on information provided by Native American experts. The information concerned the type, location, distribution and relative sensitivity of resources the Native American experts considered essential to the integrity of traditional culture and religion.

[1]Memorandum of Understanding, March 19, 1980, among the Native American Heritage Commission, the State Historic Preservation Officer, and the Bureau of Land Management, California.

While identified sensitivity is based on limited data and incomplete inventory, a preliminary sensitivity determination has been derived from site-specific values, ethnic affiliation, site integrity and regional sensitivity. Although the majority of Native American sensitivity determinations must be pragmatically defined during Plan implementation, the potential land-use commitments of proposed motorized vehicle free-play areas have required initial sensitivity/significance recommendations.

Site-Specific Values

Although most proposed areas of motorized vehicle free play occur outside of primary areas of traditional Native American occupation, many of the study areas contain sensitive resources, including but not limited to seasonally exploited plants and animals, traditionally significant mineral resources, habitation areas of ongoing importance, and sites associated with ritual, myth, and religious practice.

Ethnic Affiliation

Wherever possible, contemporary field data are employed to identify the appropriate Native American contact groups in order to coordinate protection and/or mitigation of potential impacts on known values.

Current Integrity

Where possible, existing and ongoing impacts on sites of Native American value are identified and described. In those cases where resource integrity may affect the relative value of an area to Native Americans, those effects are a consideration in evaluating the proposed motorized vehicle free-play area.

Regional Sensitivity

In many cases, Native American inventory data provide rich description of resources by type, significance or use, and their regional distribution. In cases where site-specific data are scarce, regional descriptions are applied in analysis and sensitivity determinations.

OTHER VALUES CONSIDERED

Motorized vehicle free-play areas may be incompatible with some kinds of land uses, including residential, agricultural, educational, and research. An area of this kind may also conflict with the interests of National Parks and Monuments, National Forests, military bases, and the lands of other agencies.

Where scattered parcels of BLM-managed lands are intermixed with private landholdings, motorized vehicle use is difficult to control. These intermixed lands should generally be avoided. However, opportunities for

land transfer may exist which would be favorable to motorized vehicle free-play use.

Past land uses may also conflict with free cross-country travel. For example, some areas were used by the military as testing ground and these areas may still have live, unexploded ordnance. Still other areas have been intensely explored for minerals, leaving exposed holes and mine shafts. These and other past uses pose hazards and unsafe conditions for motorized vehicle free-play enthusiasts.

Part 4

Table V-3-1

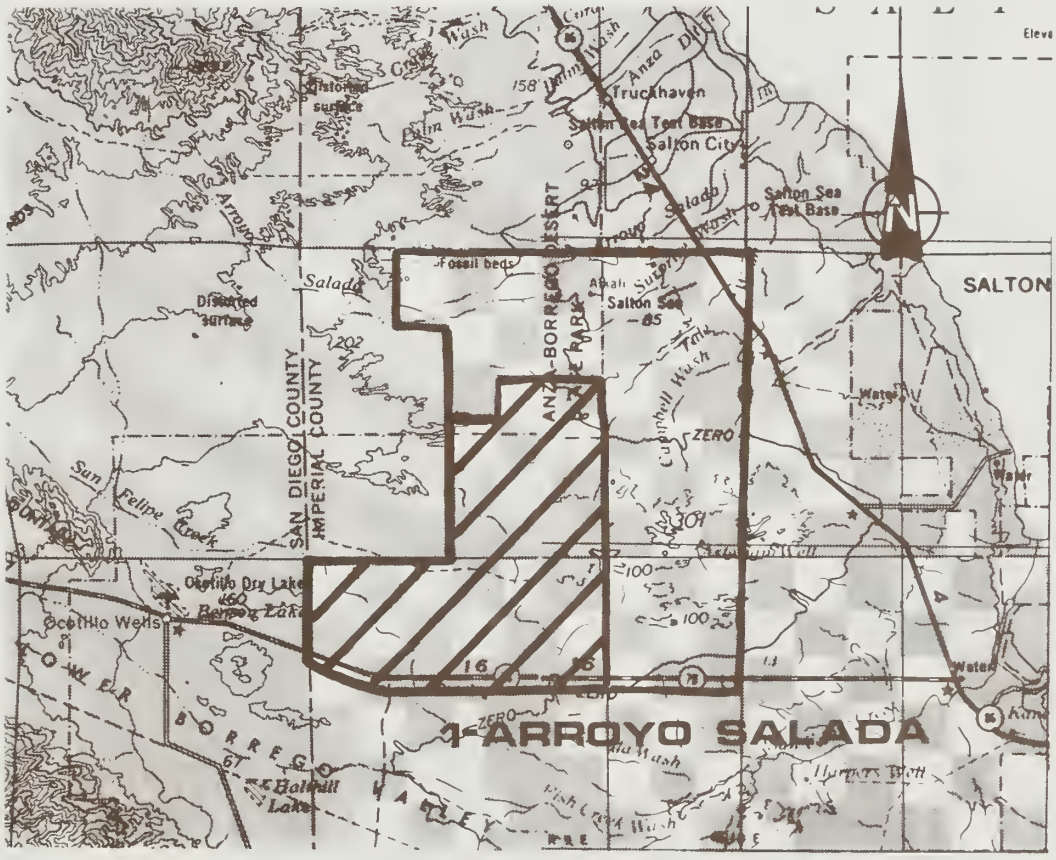
SUMMARY OF PLAN DEVELOPMENT TEAM RECOMMENDATIONS
FOR 32 POTENTIAL MOTORIZED VEHICLE FREE-PLAY AREAS

	POTENTIAL AREA	Approved (Use Alt.)	Approved with Boundary Adjust	Not Approved	Disagree
1.	Arroyo Salada		X		
2.	Blythe			X	
3.	Bristol		X		
4.	Coyote Dry Lake			X	
5.	Dove Springs				X
6.	Dumont Dunes				X
7.	East Mesa			X	
8.	El Mirage	X			
9.	Granite Mtn. Ext.			X	
10.	Ivanpah Dry Lake			X	
11.	Jawbone Canyon				X
12.	Johnson Valley		X		
13.	McCoy Valley				X
14.	Mesquite Dry Lake			X	
15.	North Algodones				X
16.	Olancha				X
17.	Orocopia			X	
18.	Painted Canyon			X	
19.	Panamint Dunes	X			
20.	Panamint Dry Lake			X	
21.	Plaster City		X		
22.	Rand				X
23.	Shadow Mountain				X
24.	Silurian Dry Lake	X			
25.	Silver Dry Lake			X	
26.	Soda Dry Lake				X
27.	South Algodones		X		
28.	Spangler Hills		X		
29.	Stoddard Valley				X
30.	Superior Dry Lake			X	
31.	Ward Valley			X	
32.	Yuha			X	
	TOTAL	3	6	13	10

1. ARROYO SALADA STUDY AREA

RECOMMENDED OPEN AREA

NOT RECOMMENDED



Scale 1:250,000

5 0 5 10 Statute Miles

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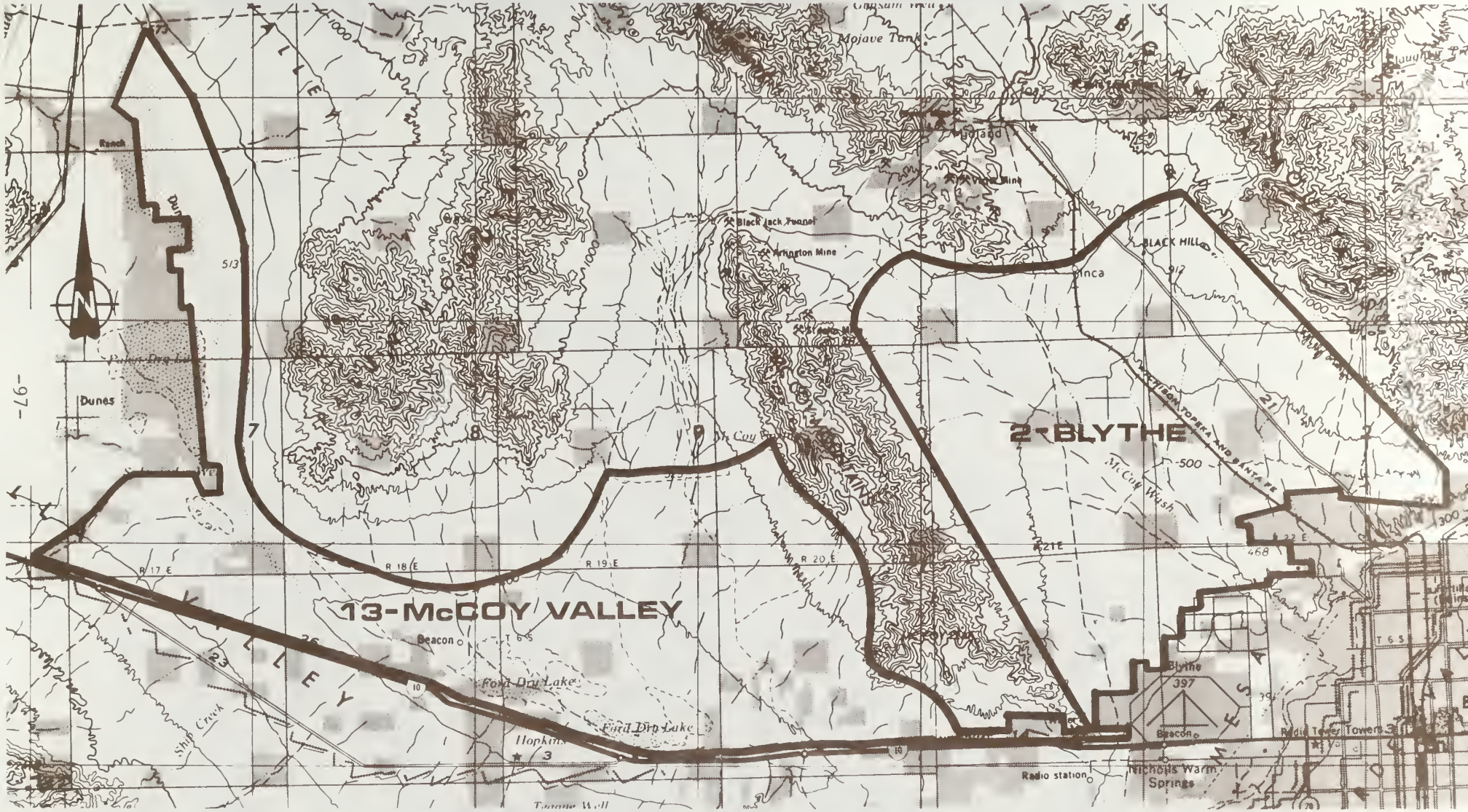
MAP V-5-1

2. BLYTHE STUDY AREA
NOT RECOMMENDED

13. McCOY VALLEY STUDY AREA (NORTH HALF)
NOT RECOMMENDED



MAP V-5-2

3. BRISTOL (NORTH HALF), 25. SILVER DRY LAKE, AND
26. SODA DRY LAKE STUDY AREAS

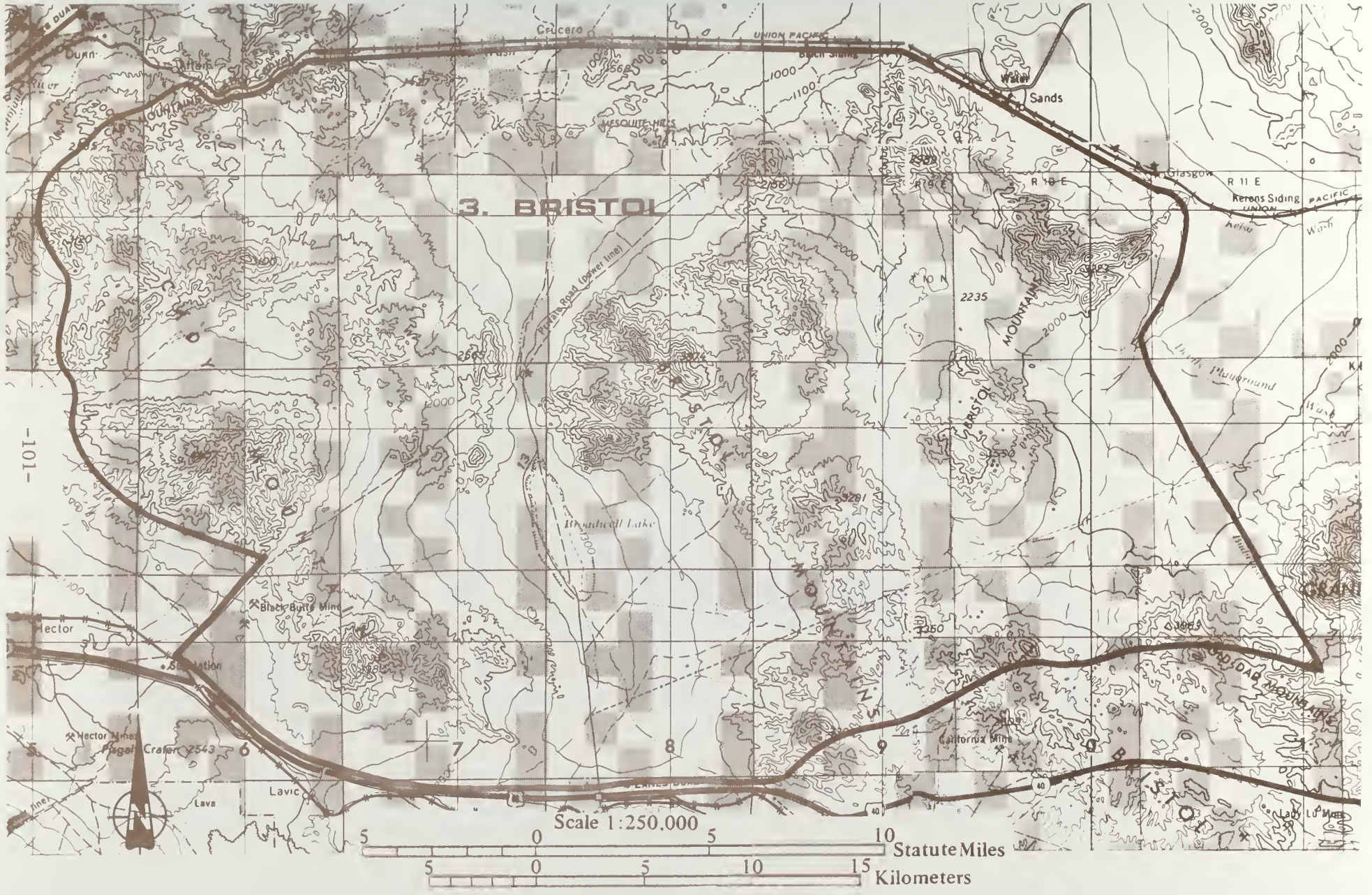
RECOMMENDED OPEN AREA ▨

NOT RECOMMENDED ☐

MAP V-5-3a

3. BRISTOL STUDY AREA
SOUTH HALF

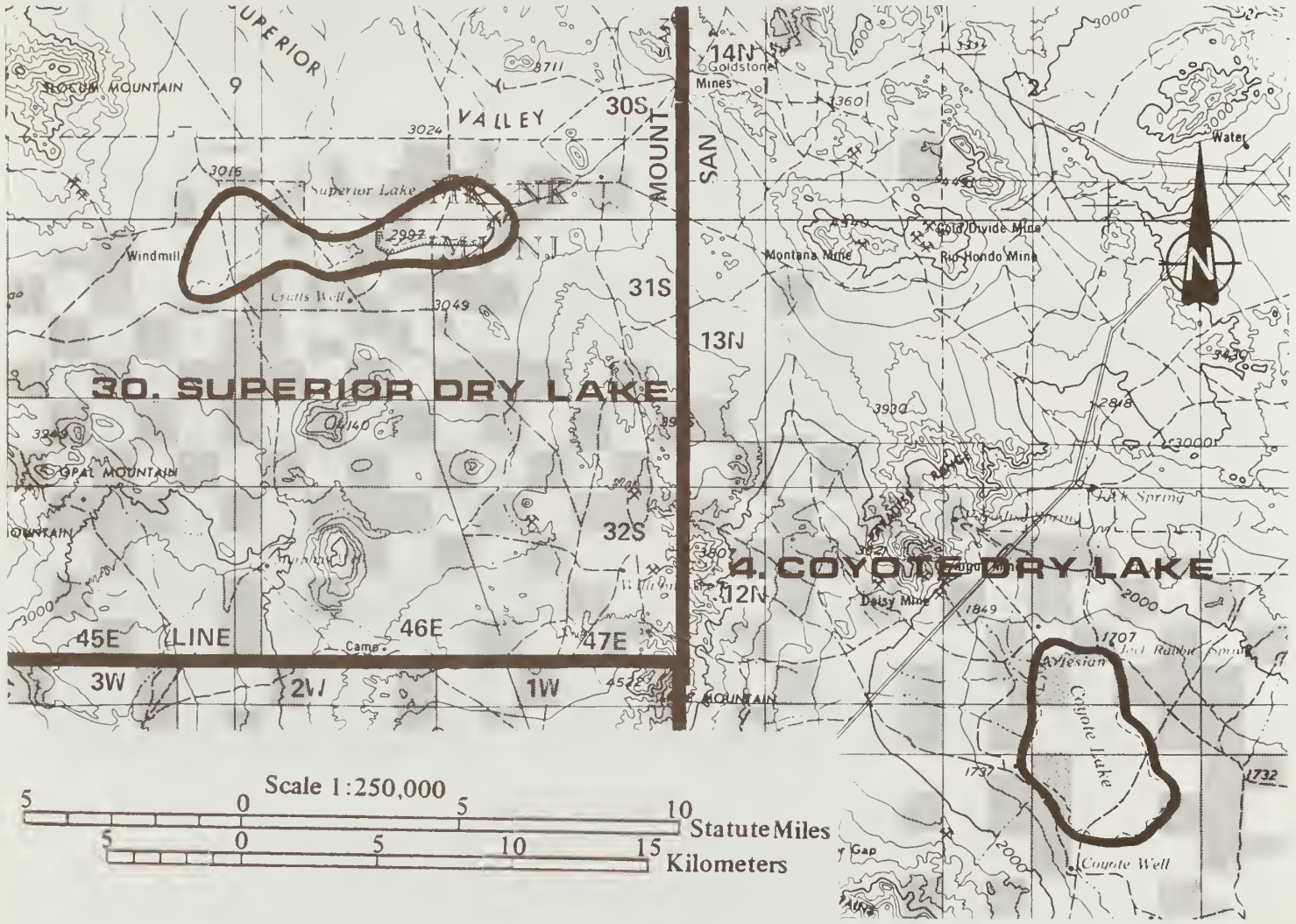
NOT RECOMMENDED ▭



MAP V-5-3b

30. SUPERIOR DRY LAKE AND
4. COYOTE DRY LAKE

STUDY AREAS
NOT RECOMMENDED ☐

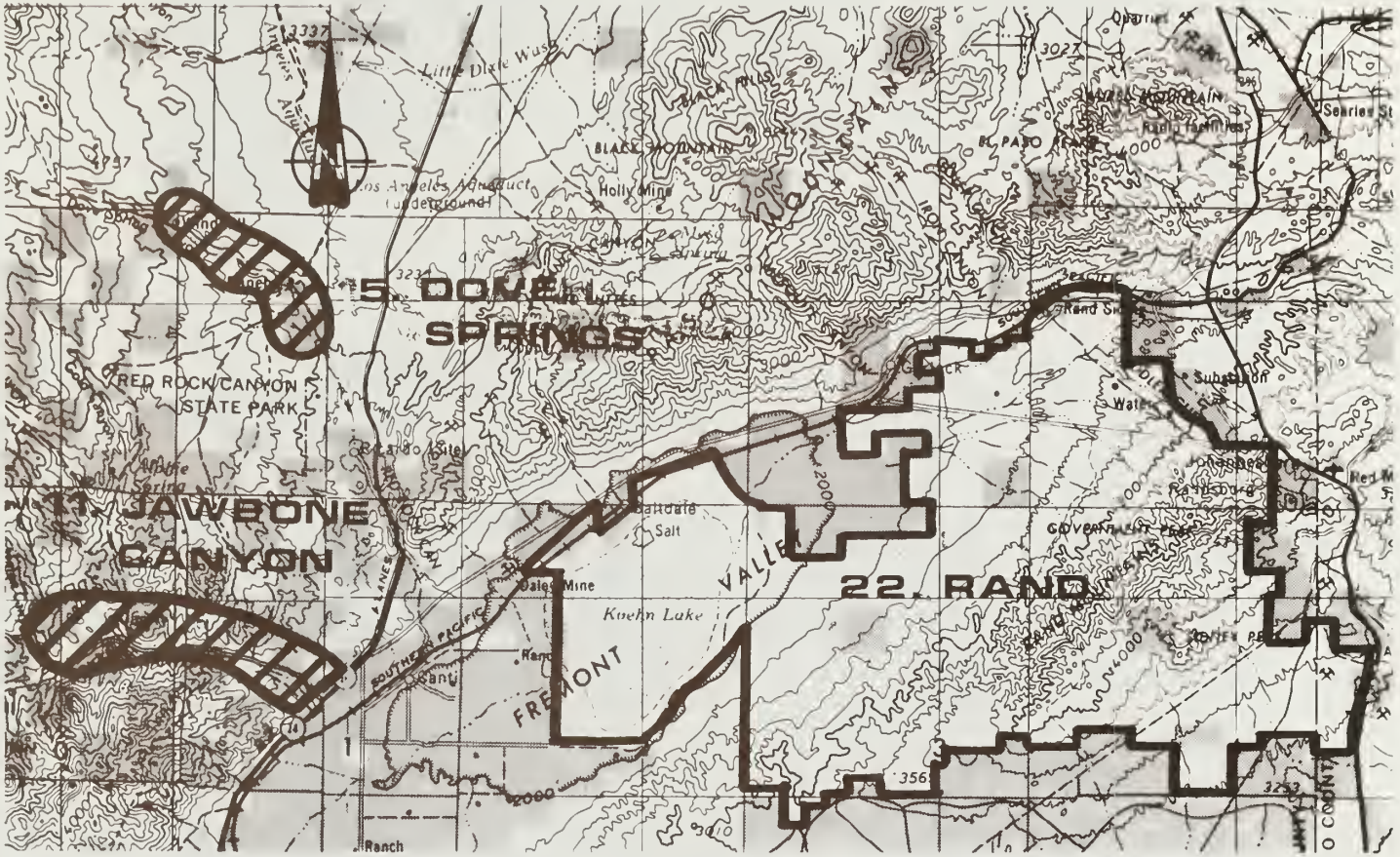


MAP V-5-4

5. DOVE SPRINGS, 11. JAWBONE CANYON,
AND 22. RAND STUDY AREAS

RECOMMENDED OPEN AREA

NOT RECOMMENDED



Scale 1:250,000

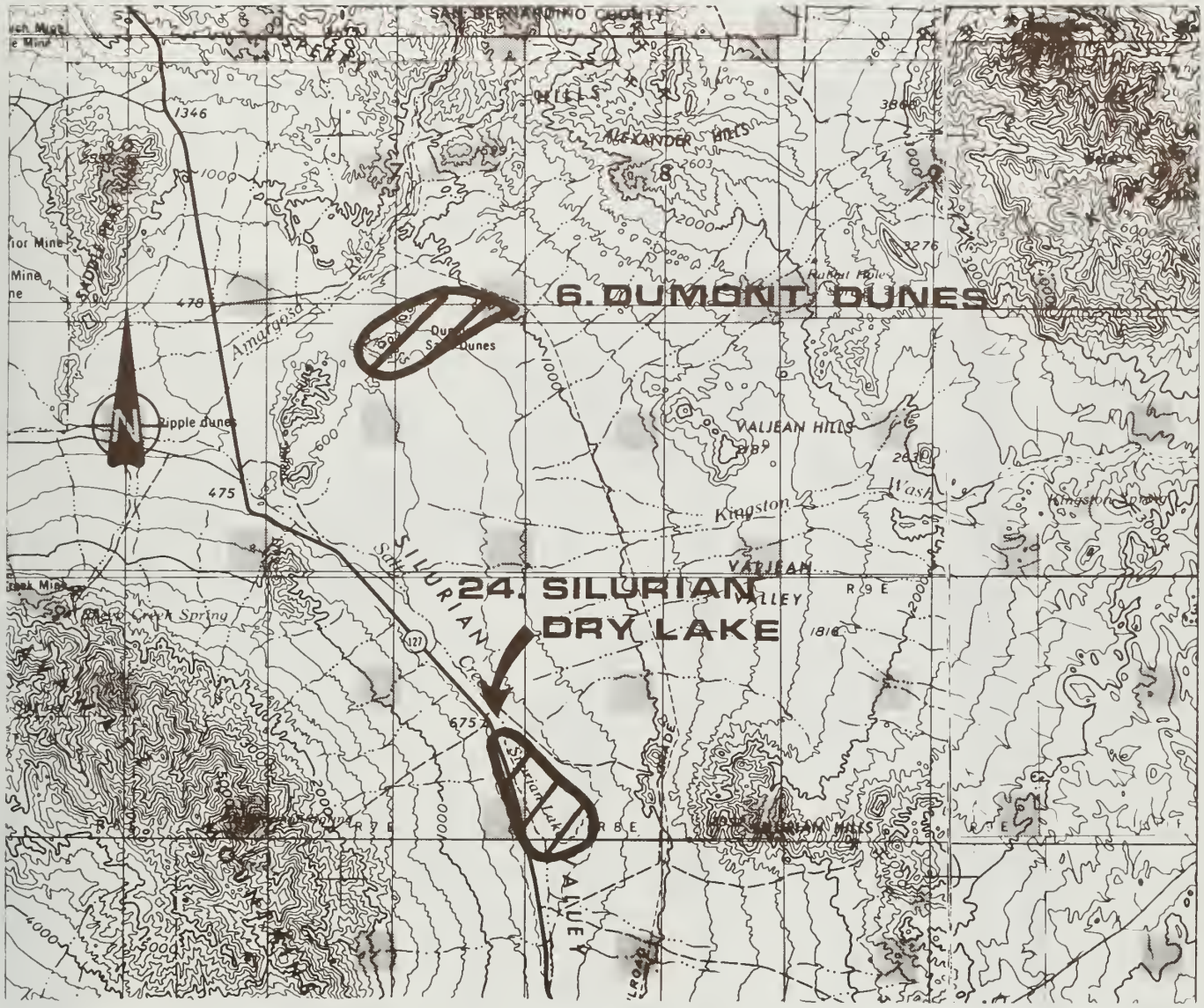
5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

MAP V-5-5

6. DUMONT DUNES AND
24. SILURIAN DRY LAKE
STUDY AREAS

RECOMMENDED OPEN AREAS ▨



MAP V-5-6

7. EAST MESA STUDY AREA

NOT RECOMMENDED

27. SOUTH ALGODONES STUDY AREA

RECOMMENDED OPEN AREA

Scale 1:250,000

5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

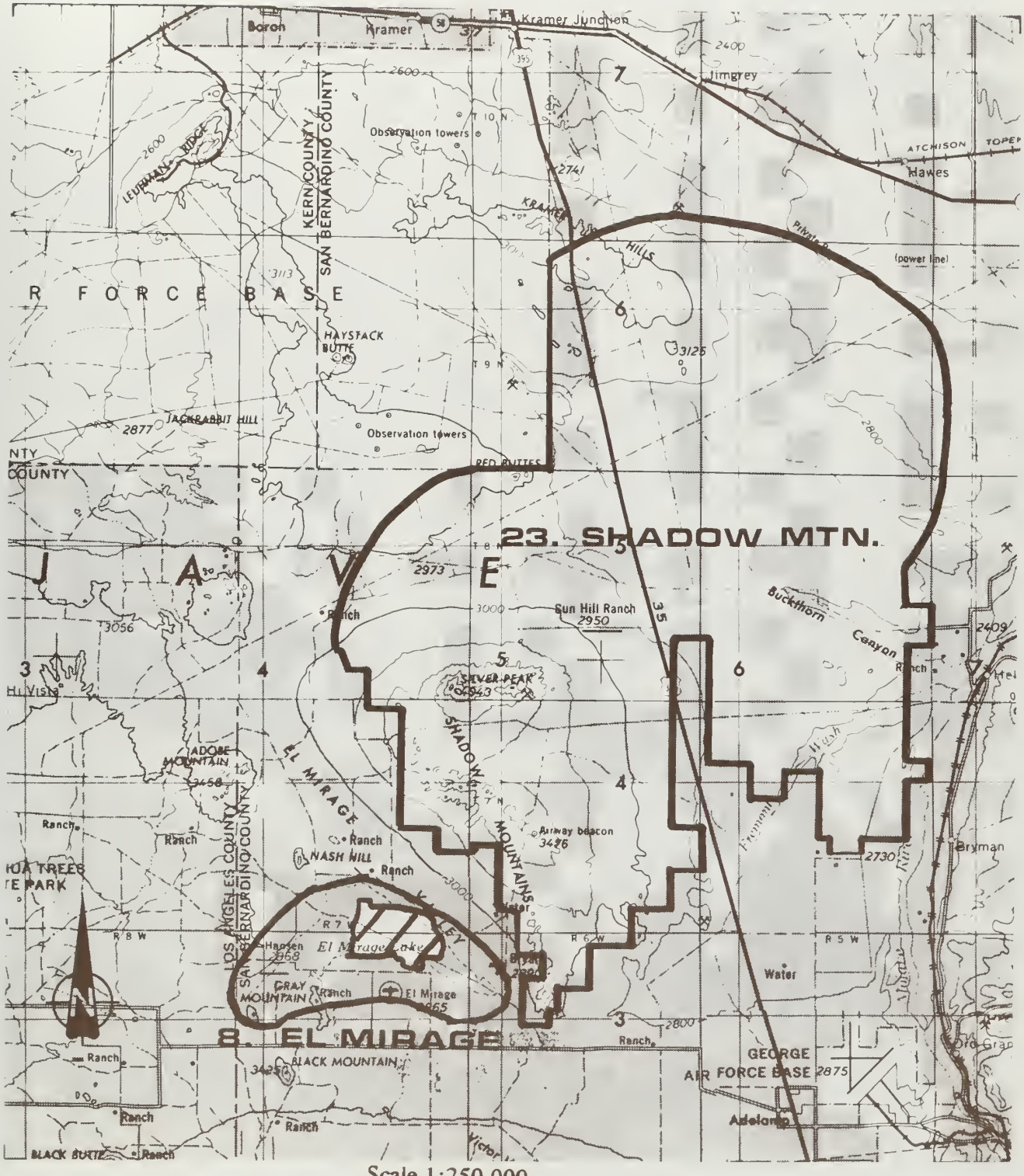
MAP V-5-7

23. SHADOW MOUNTAIN AND

8. EL MIRAGE STUDY AREAS

RECOMMENDED OPEN AREA

NOT RECOMMENDED



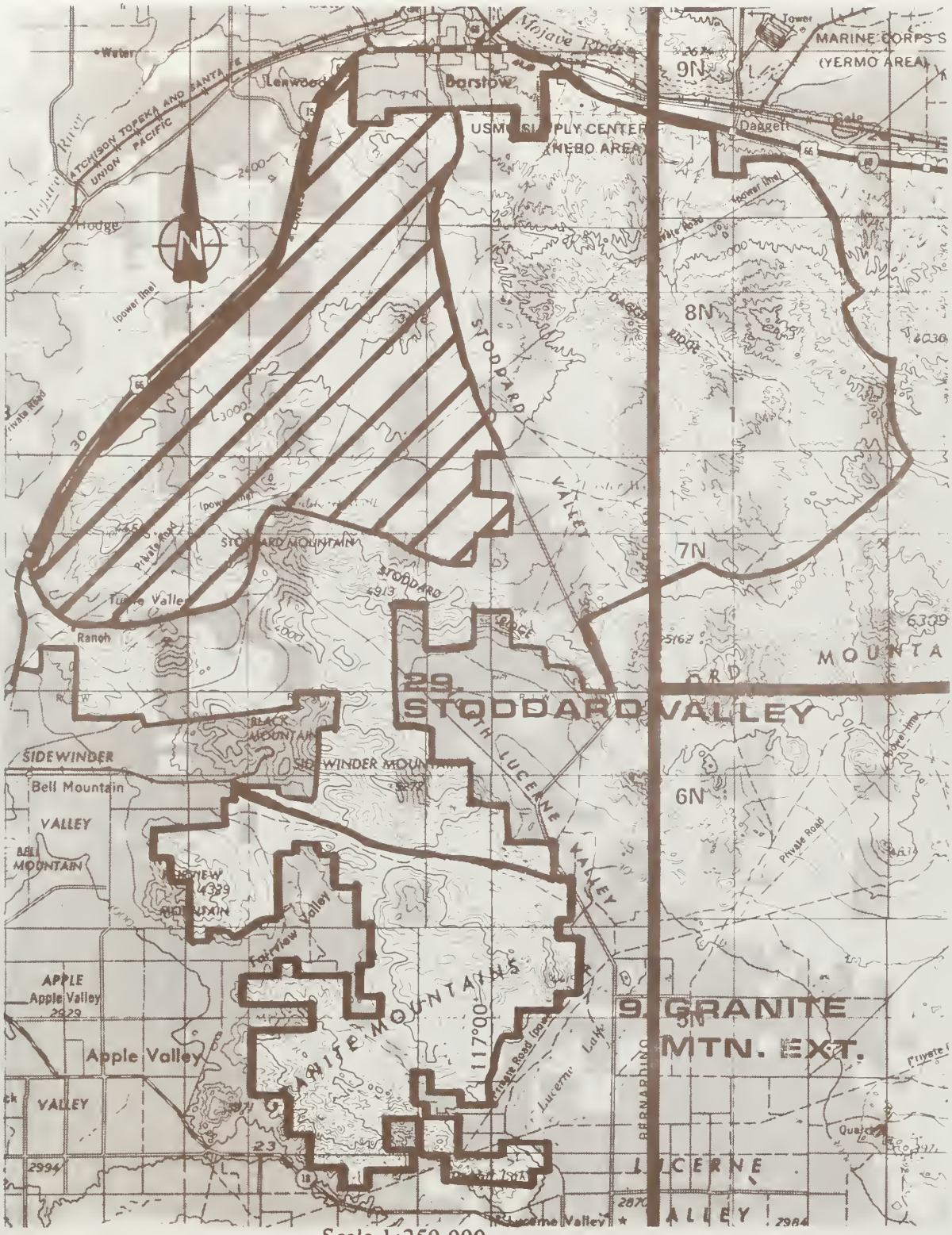
MAP V-5-8

9. GRANITE MTN. EXT. AND

29. STODDARD VALLEY STUDY AREAS

RECOMMENDED OPEN AREA

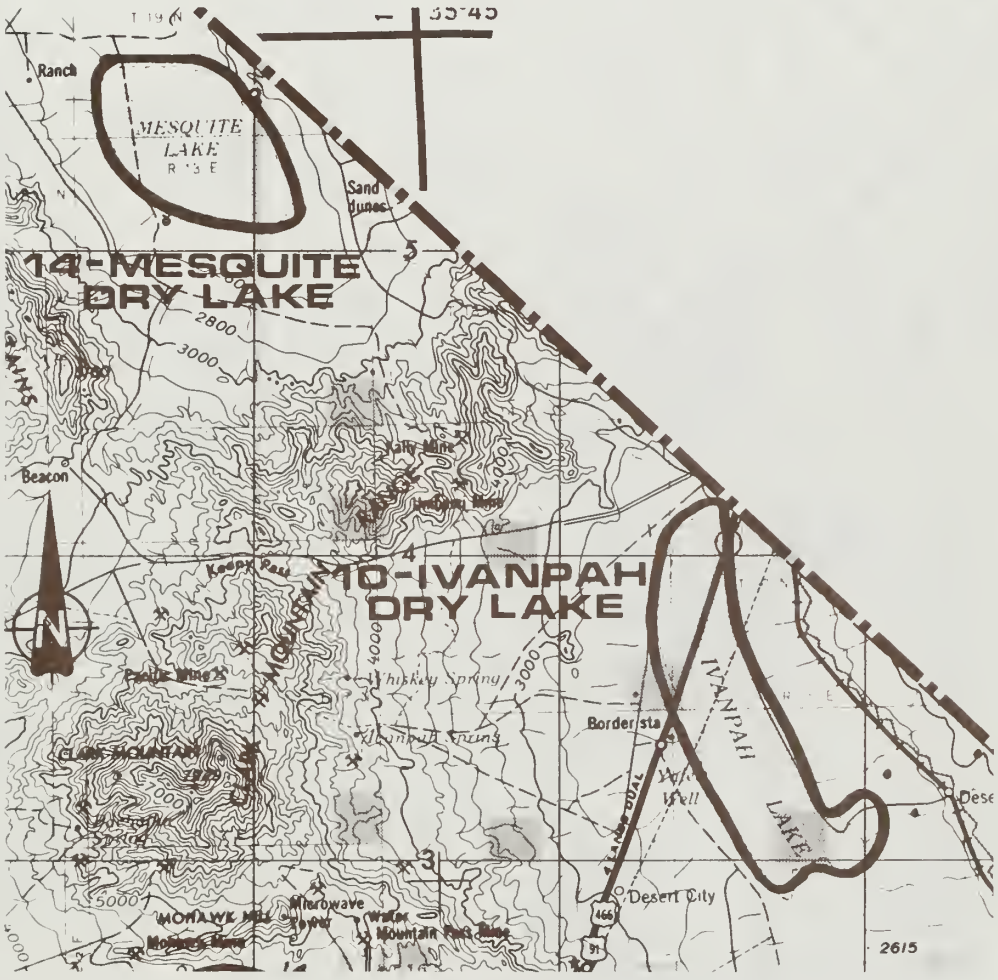
NOT RECOMMENDED



MAP V-5-9

10. IVANPAH DRY LAKE STUDY AREA
NOT RECOMMENDED

14. MESQUITE DRY LAKE STUDY AREA
NOT RECOMMENDED



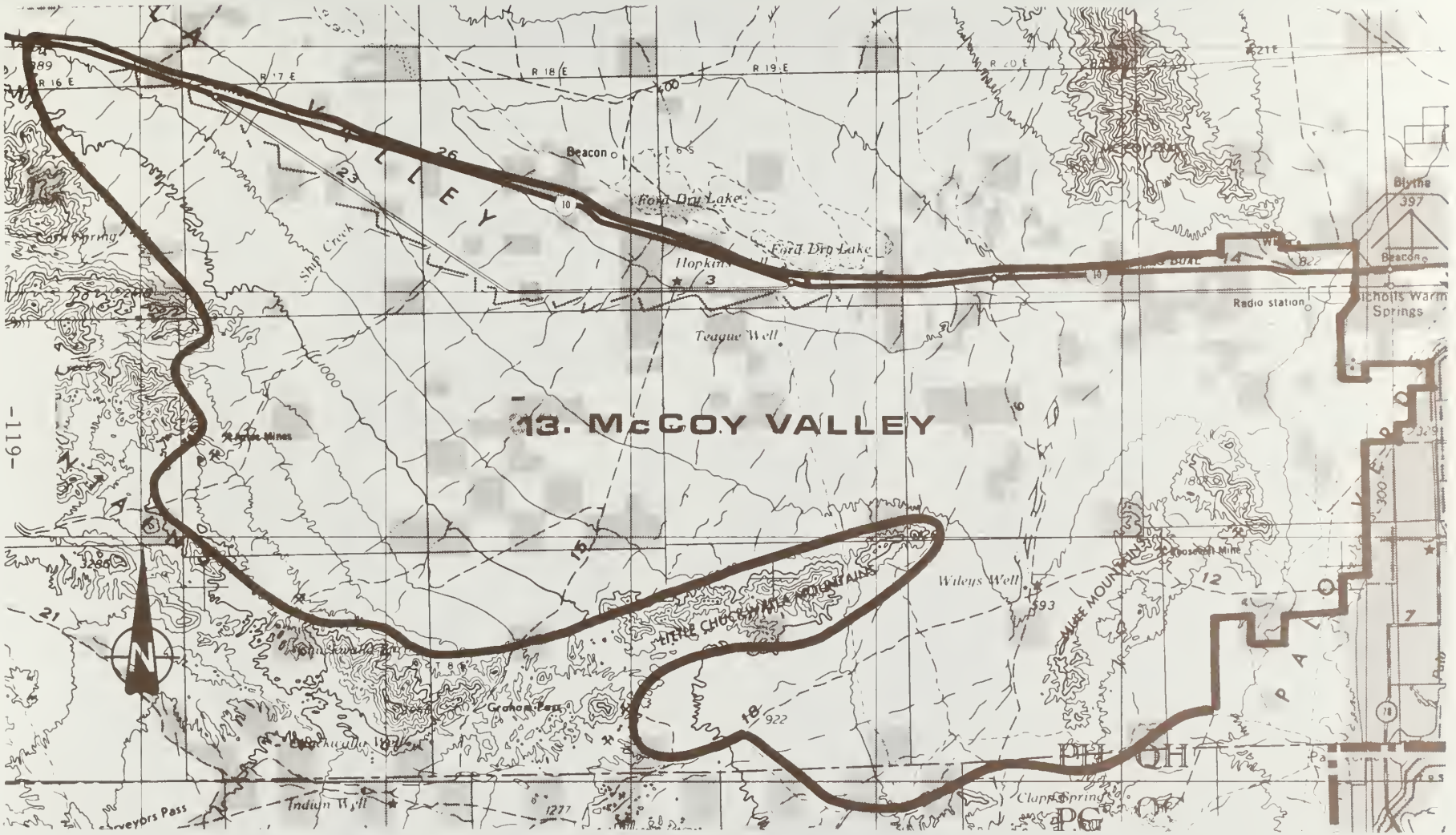
MAP V-5-10

12. JOHNSON VALLEY STUDY AREA   RECOMMENDED OPEN AREA   NOT RECOMMENDED

MAP V-5-11

13. McCOY VALLEY STUDY AREA SOUTH HALF

NOT RECOMMENDED



Scale 1:250,000

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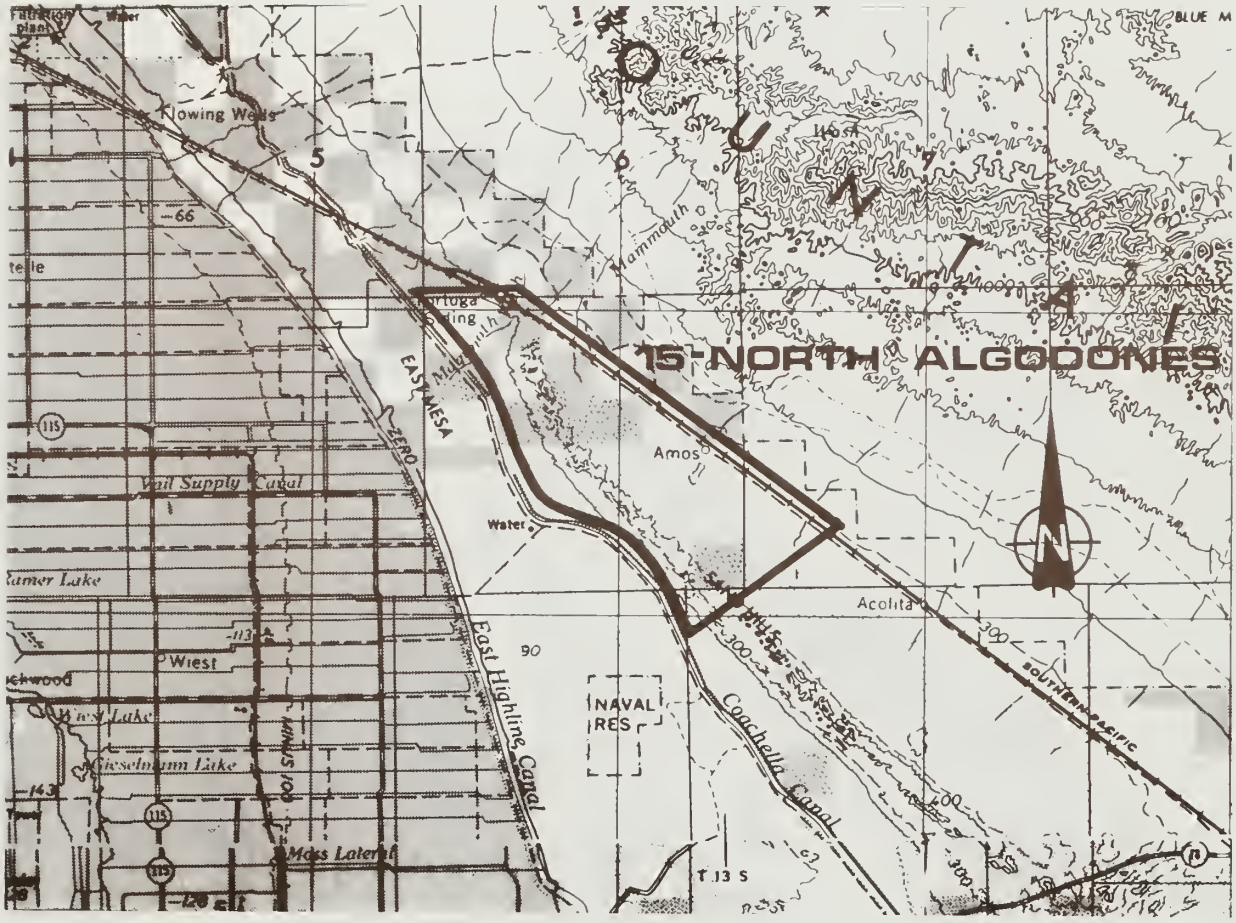
5 0 5 10 15 Kilometers

MAP V-5-12

15. NORTH ALGODONES STUDY AREA

NOT RECOMMENDED



Scale 1:250,000

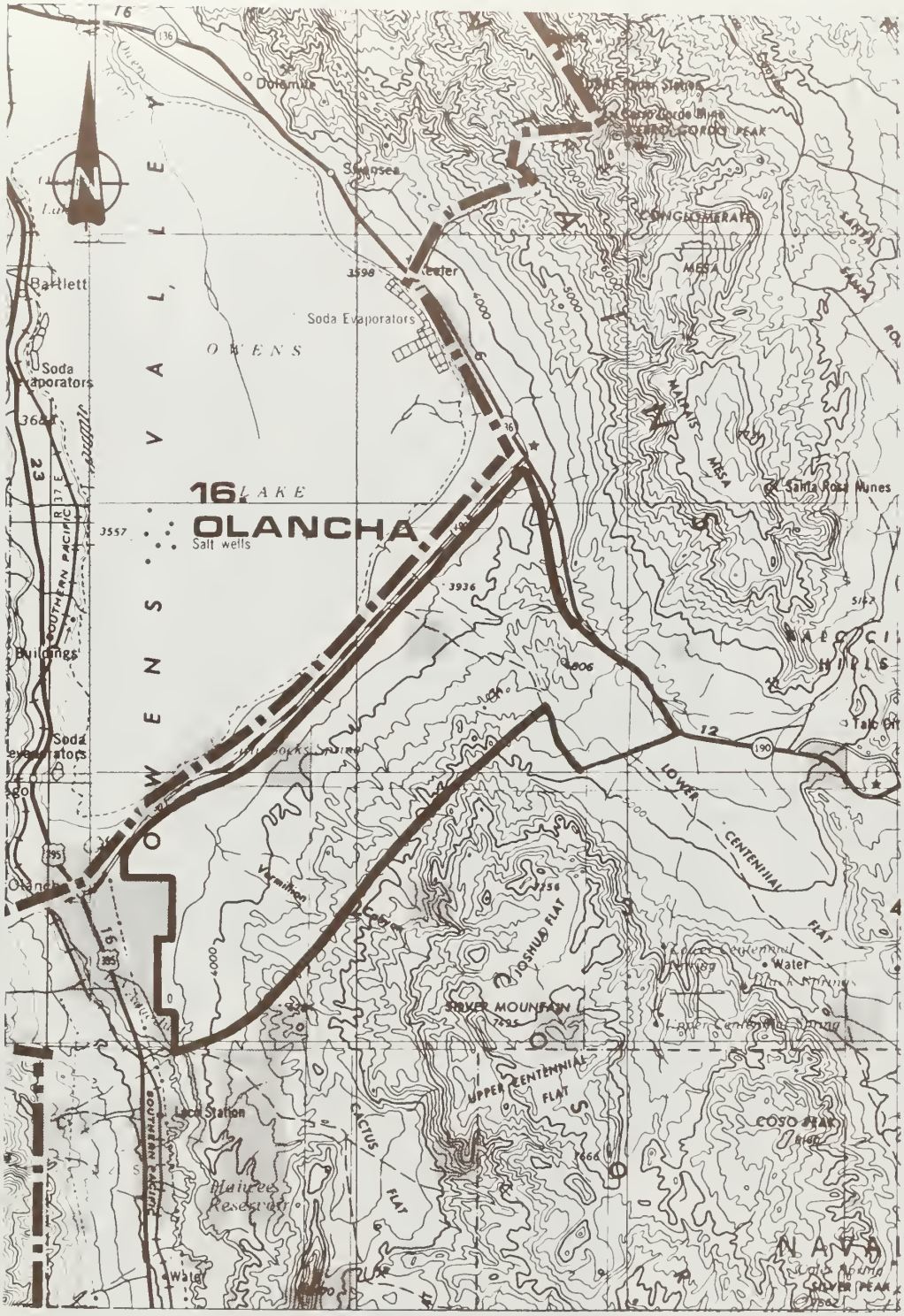
5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

MAP V-5-13

16. OLANCHA STUDY AREA

NOT RECOMMENDED



Scale 1:250,000

5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

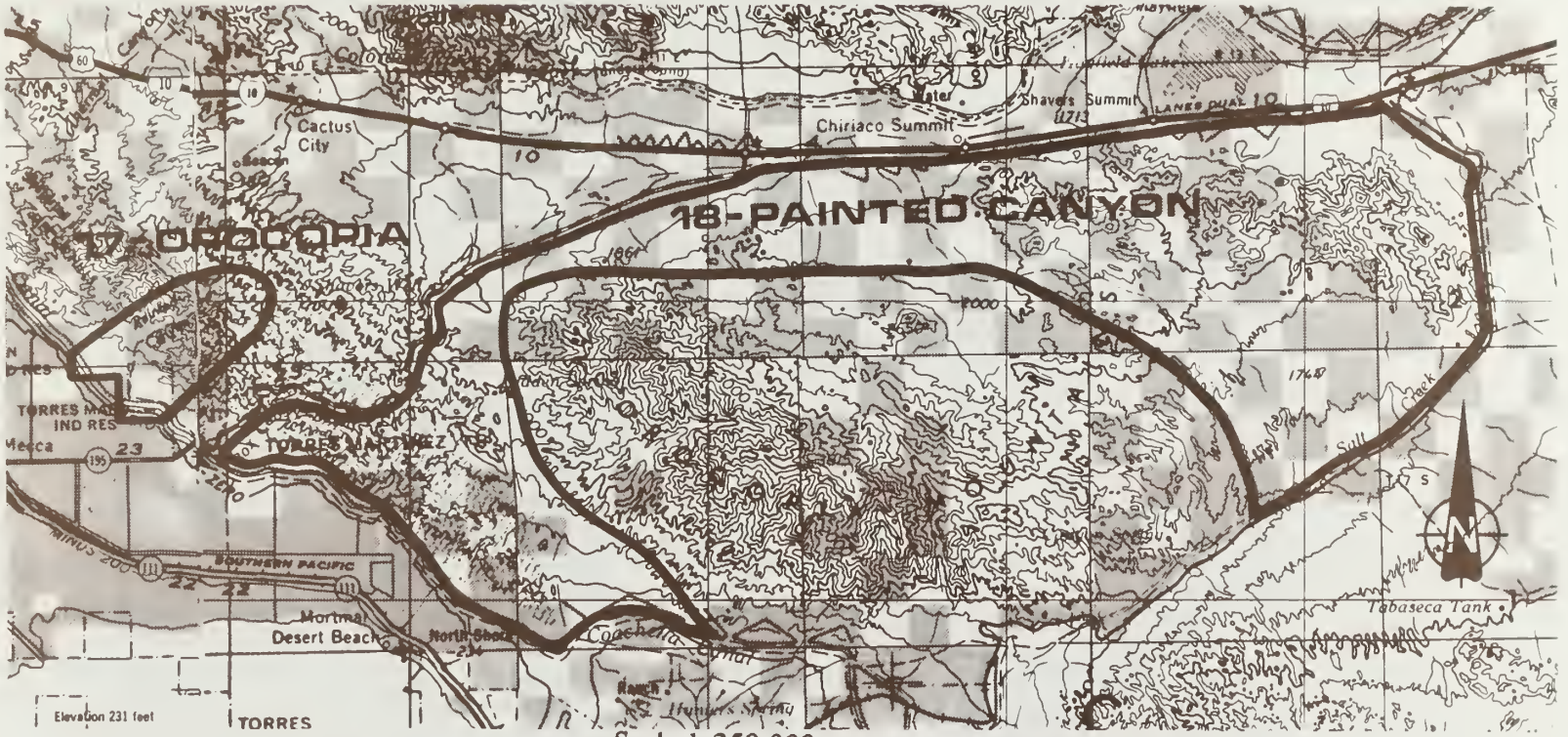
MAP V-5-14

17. OROCOPIA STUDY AREA

NOT RECOMMENDED

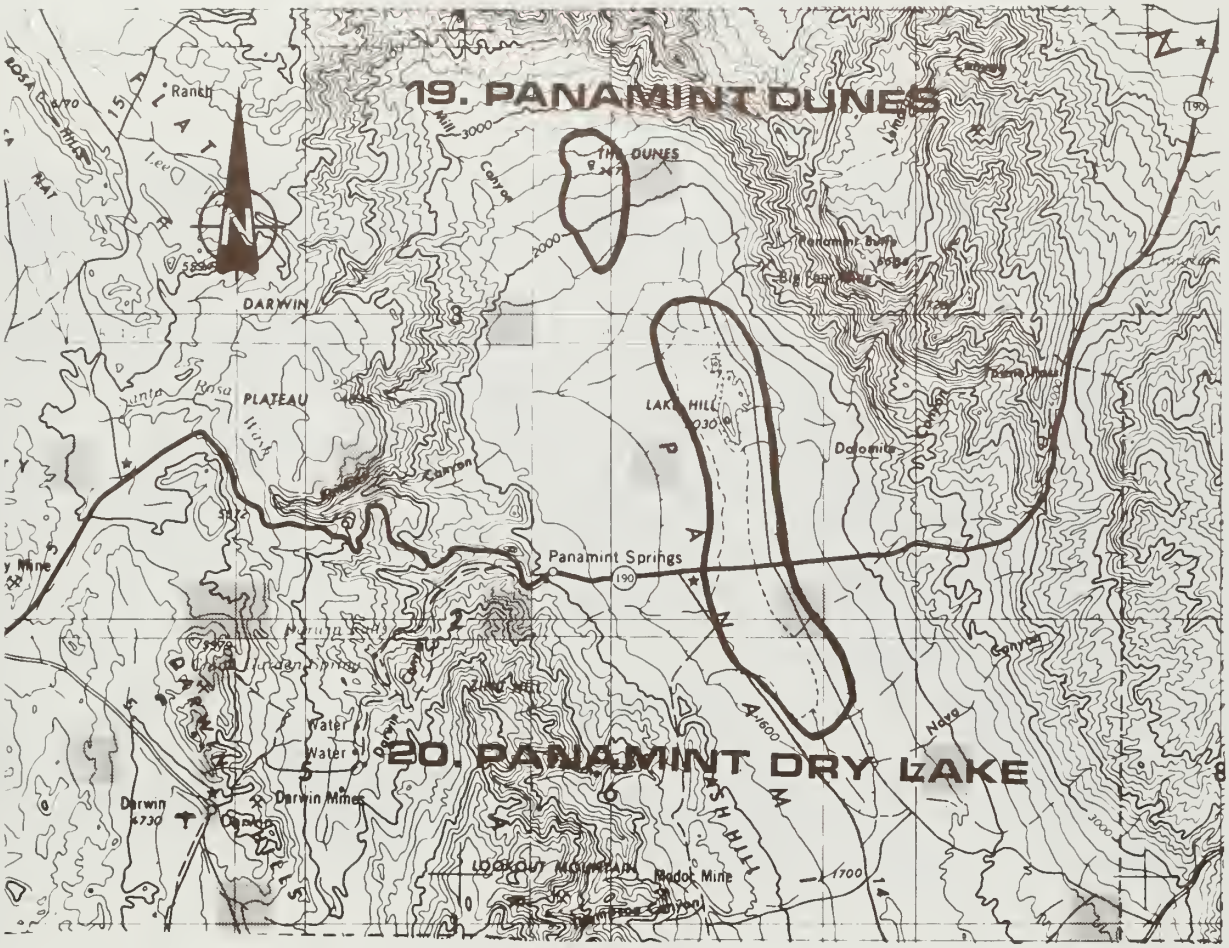
18. PAINTED CANYON STUDY AREA

NOT RECOMMENDED



MAP V-5-15

19. PANAMINT DUNES AND
20. PANAMINT DRY LAKE
STUDY AREAS
NOT RECOMMENDED

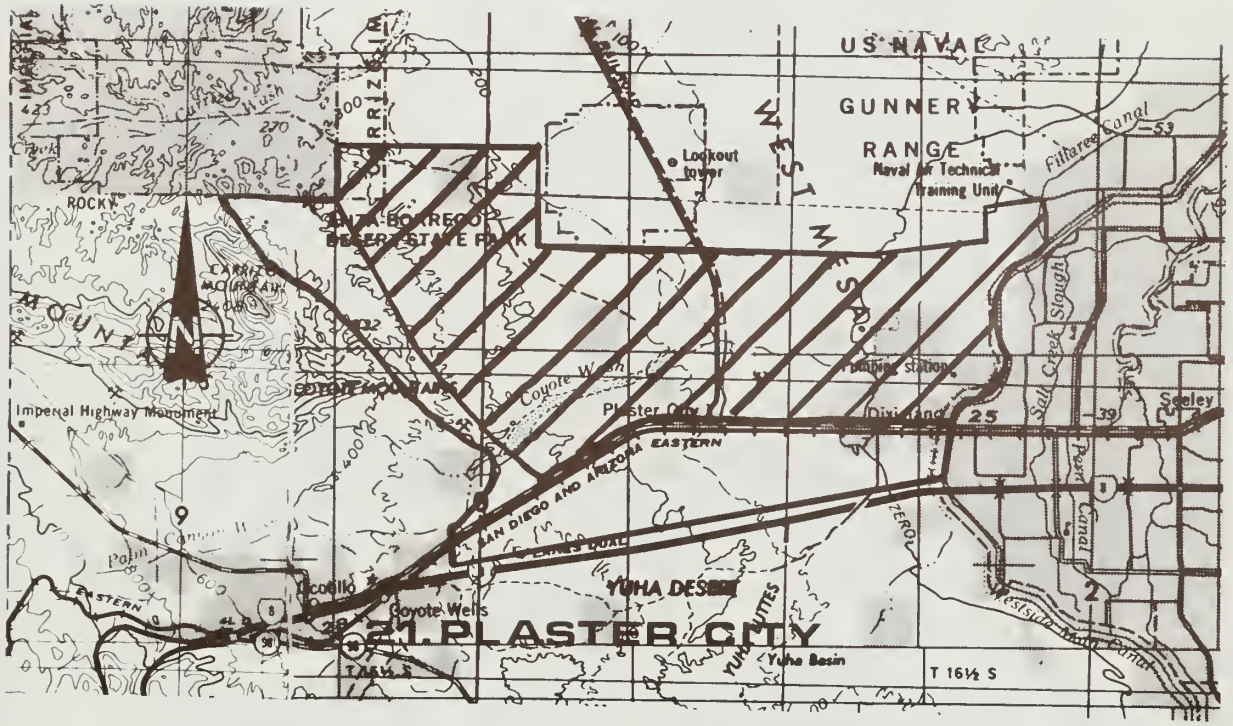


MAP V-5-16

21. PLASTER CITY STUDY AREA

RECOMMENDED OPEN AREA

NOT RECOMMENDED



Scale 1:250,000

5 0 5 10 Statute Miles

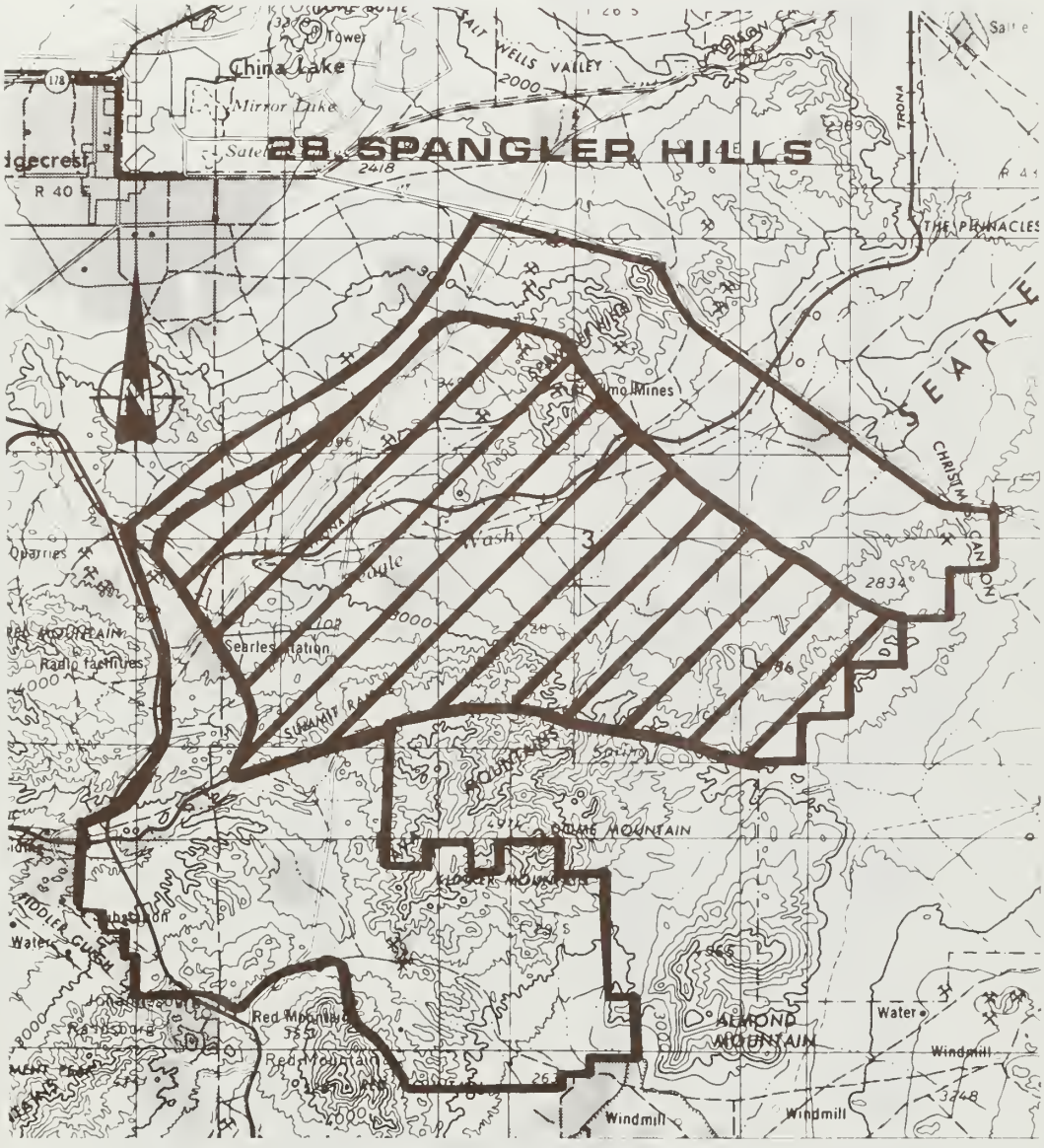
5 0 5 10 15 Kilometers

MAP V-5-17

28. SPANGLER HILLS STUDY AREA

RECOMMENDED OPEN AREA

NOT RECOMMENDED



Scale 1:250,000

5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

MAP V-5-18

31. WARD VALLEY STUDY AREA (NORTH)

NOT RECOMMENDED

Scale 1:250,000

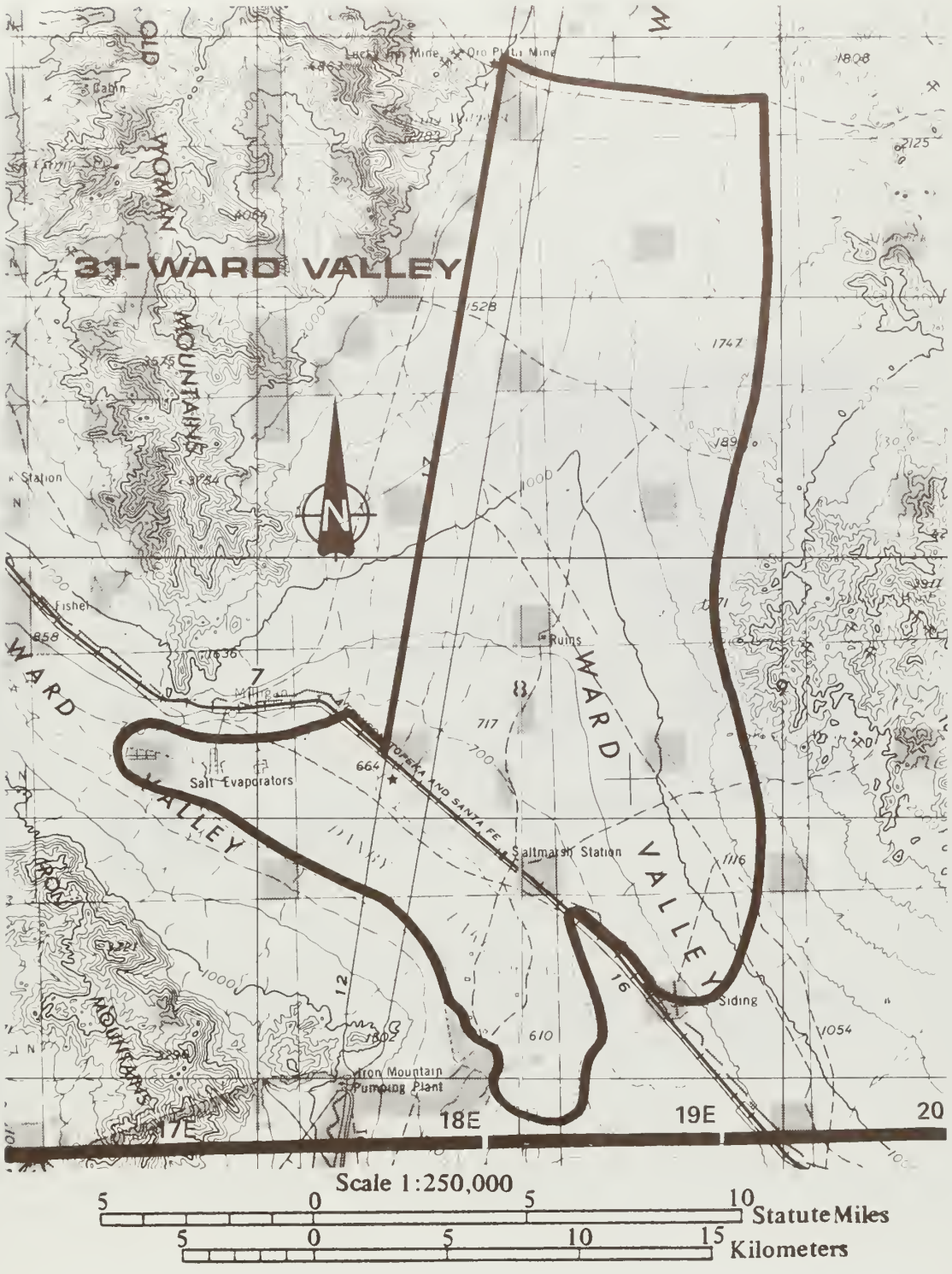
5 0 5 10 Statute Miles

5 0 5 10 15 Kilometers

MAP V-5-19

31. WARD VALLEY STUDY AREA (SOUTH)

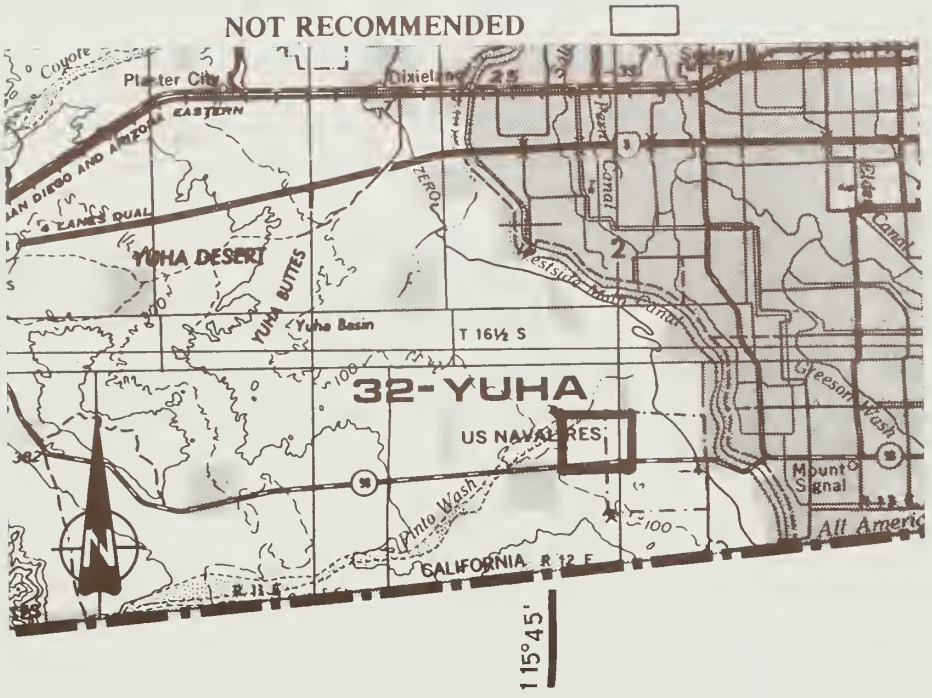
NOT RECOMMENDED



MAP V-5-20

32. YUHA STUDY AREA

NOT RECOMMENDED



MAP V-5-21

Part 5

Description and Analysis of All Candidates
For Motorized Vehicle Free-Play Areas

1. ARROYO SALADA AREA (See Map V-5-1)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a small block of public, private, and State-owned lands lying adjacent to and west of State Route 86 in northwestern Imperial County. It contains 7,700 acres of land. It lies 25 air miles northwest of the community of Westmoreland and seven miles north of State Route 78, and is two miles wide by seven miles in length. There are jeep trails throughout.

The terrain is flat with the deep incision made by the arroyo which drains from the southwest corner to the northeast corner. Elevational changes vary from a low of -135 feet as indicated by the bench mark near Route 86 in central Section 4, T. 11., R. 10 E., SBM., to a high of 100 feet near the southwestern corner.

The land ownership pattern is a checkerboard with 320 acres remaining in State ownership, 3,530 acres in private ownership, and the remainder under the jurisdiction of the Bureau of Land Management.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of T. 11., Rs. 9 & 10 E., SBM (San Bernardino Meridian).

FIGURE A-1

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA	Sensitive	
Resource Values Considered	Yes[2]	No
Soil/Slope	___	X
Plants & Wildlife	X	___
Cultural Resources	X	___
Native American	___	X
Wilderness	___	X
Scenic Quality	___	X
Recreation	___	X
G-E-M	___	X

CRITERIA	Suitable	
Site Values Considered[1]	Yes	No
Terrain Diversity	X	___
Acessibility	X	___
Traditional Use	X	___
Proximity to Users	X	___
Size	X	___
Manageable Boundaries	X	___

Other Site Values Considered	Sensitive	
	Yes[3]	No
Res./Pvt. Owner	___	X
Agriculture	___	X
Educ./Research	___	X
Other Agencies	___	X
Safety	___	X
Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Arroyo Salada Area contains three important habitats for wildlife: proposed critical habitat for the flat-tailed horned lizard; prairie falcon foraging habitat; and Salton Sea lakeshore habitat which is of great importance to such species as the desert pupfish, brown pelican, bald eagle, and osprey.

Flat-tailed horned lizard. This species is limited in distribution to the Colorado Desert and is found only in certain areas with windblown sand. It is currently a BLM "proposed sensitive" species and is under status review by the Office of Endangered Species. Four areas of crucial habitat have been outlined (Turner, pers. comm.); one, the Borrego Crucial Habitat Area, has nine square miles within the Arroyo Salada. Crucial habitat for the Colorado fringe-toed lizard is similarly located.

Prairie falcon. There is overlap of an estimated two to three square miles of probable prairie falcon foraging area for one pair of falcons.

Effects of a motorized vehicle free-play area on critical lakeshore habitats along the Salton Sea. The Area includes several linear miles of habitat along the southwestern corner of the Salton Sea and several square miles of lakeshore habitat with small marshes, inlets, etc. There is habitat for such important species as the desert pupfish, a BLM "sensitive" species in the process of being proposed for Federal endangered listing, the bald eagle and brown pelican, both federally listed endangered species, and the osprey, a BLM "sensitive" species.

Cultural Resources

This Area was occupied aboriginally by the Kamia Indians. Approximately 9,600 acres of known high cultural sensitivity will be directly impacted by proposed motorized vehicle free-play areas. At least 300 archaeological sites with a very high probability of destruction are predicted for this Area. Two linear miles of historic trails also occur. There is a very high potential for buried sites within the entire Area.

Although the western portion of the Area is not included in the high-sensitivity polygon, it is likely that it is highly sensitive because of its nearness to the Lake Cahuilla shoreline. This Area has high research potential in regard to the study of human adaptation along Lake Cahuilla. Known site types include pottery scatters, lithic scatters, temporary camps, a village, and an historic trail.

SITE VALUES CONSIDERED

Terrain Diversity

The Area provides an excellent variety of landforms ranging from flat areas to rolling hills and deeply dissected canyons.

Acesssibility

This Area is readily accessed via State Route 78. Within the site itself, several grade and dirt roads make much of it easy to reach.

Traditional Use

Arroyo Salada is well known as a free-play area and has received much use historically. In 1978, more than 33,000 visitor use days (VUDs) of primarily motorized vehicle play were recorded there.

Proximity to Users

The Area is near the El Centro desert community and within good driving distance from metropolitan San Diego. The Area is also adjacent to the Ocotillo State Vehicle Recreation area.

Size

The Area is adequate in size and configuration to afford opportunities for an assortment of vehicle events and activities.

Manageable Boundaries

Boundaries are well defined by roads and power corridors and can be easily managed and supervised.

SUMMARY OF PUBLIC COMMENT

No public response was received in regard to this area.

MANAGEMENT DECISION RATIONALE

Decision: Appropriate for motorized vehicle free play with configuration change and reduced over-all acreage. The boundary change reduces the size of the Area and will eliminate conflicts between motorized vehicle activity and sensitive resources.

Because of the nearby Ocotillo Area, contact will be initiated with the State of California to work out a joint program for managing vehicle activity.

Rationale: This is an outstanding Area for motorized vehicle free play. It serves both Imperial Valley and metropolitan San Diego. Impacts

on important wildlife habitat and significant cultural sites have been greatly reduced through adjustments to the size and configuration of the Area.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Erosion will be increased on badlands slopes when the surface is disturbed by motorized vehicles. Dust production will occur on the undifferentiated and dissected fans. The sand-covered terrain will generally produce less dust and will typically compact less readily than soil on the undifferentiated or dissected fans.

Vegetation

Because of the sparseness of the vegetation, removal will be considerably less than in other areas and will be considerably less than 0.3 tons/acre; probably, in most cases, less than 0.1 tons/acre. The total area impacted will amount to about 7,700 acres.

Wildlife

Flat-tailed horned lizard and Colorado fringe-toed lizard. Approximately 16,640 acres (3 percent) of the Colorado fringe-toed lizard habitat in the California Desert Conservation Area (CDCA) will receive negative impacts.

Desert kangaroo rat. Approximately 1,640 acres (0.1 percent of the habitat in the CDCA will be lost.

Cultural Resources

Management of this Area for motorized vehicle free-play will have minimum adverse impacts upon cultural resources.

Native American

The location of an ethnographically identified village (James 1969:39) and associated resources could be destroyed. Little specific data are available on possible impacts, however. The general area has been utilized by Kamia, Diegueno, and Cahuilla, and these groups should be contacted for further information on impacts.

2. BLYTHE AREA (See Map V-5-2)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Blythe Area[1], which is mostly flat to rolling, is nearly oblong with its axis in a northwest-southeast direction. It comprises 79,000 acres of public, private, and State-owned lands located almost adjacent to and northwest of the community of Blythe in east-central Riverside County. A major portion of its southeast boundary lies along the edge of the privately owned lands just to the north of Blythe; the southwestern point comes to within one-half mile of Interstate 60; then the boundary runs northwest along the 800-foot contour line, along the foothills, along the eastern edge of the McCoy Mountains, to an intersection with the Black Jack Mine-Inca road; thence east across the Atchison, Topeka and Santa Fe Railroad (AT&SF) tracks, thence northeast to the lower foothills of the Big Maria Mountains, and thence southeast to the point of beginning. There are numerous trails and routes suitable for jeeps and trucks throughout the parcel.

The terrain of the Blythe study area consists of a broad alluvial wash known as McCoy Wash, which covers the central portion of the Area and drains to the southeast. The elevation varies from a low of 450 feet north of the Blythe Airport to a high of 800 feet near the foothills of the McCoy Mountains.

There is a remnant ownership consisting of 640 acres in State land. There are 5,200 acres in private land. The remainder is under the jurisdiction of the Bureau of Land Management. There are no other impediments in the form of withdrawals.

There is the one railroad right-of-way (AT&SF), two multiline power line rights-of-way running east and west through the parcel along the south edge, one pipeline right-of-way, east-west along the south, and another almost transecting the parcel north and south through the center.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of T/s. 4 & 5 S., R. 20 E., T/s. 4, 5 & 6 S., Rs. 21 & 22 E., SBM.

FIGURE A-2

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			**Site Values Considered**[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	X	___	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X			
Recreation	___	X	**Other Site Values Considered**		
Range	___	X		Sensitive	
G-E-M	___	X		Yes[3]	No
			Res./Pvt. Owner	X	___
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	X	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography includes 55 percent dissected and highly dissected alluvial fans, 40 percent undifferentiated alluvial fans, and 50 percent riverwash. A large part of the dissected and highly dissected alluvial fans is covered with well-developed desert pavement. The undifferentiated alluvial fans occur on gentle to moderate slopes. They have a wide range of textures, but most are sandy. Riverwash soils are generally sands.

Some of the desert pavement is covered by considerable numbers of tracks. These may include old tank tracks as well as newer disturbances by motorized vehicles. Mining activity covers about 170 acres and is visible.

Wildlife

Desert tortoise. The desert tortoise is a BLM sensitive species and is under status review by the Office of Endangered Species. The Blythe Area contains 56.9 square miles, 36,400 acres, of desert tortoise habitat. This is 75 percent of the McCoy Wash population, with populations ranging from 20 to 50 tortoises/square mile.

Mule deer. The Area contains 5.4 square miles (3,456 acres) of a mule deer population concentration area along the southeastern slopes of the Big Maria Mountains.

Desert bighorn sheep. As this is a transient range for the desert bighorn sheep, impacts on this Area will affect a relatively small percentage of the total number of sheep utilizing this portion of the desert. Approximately 34.1 square miles (21,824 acres) of bighorn transient range is present in this Area.

Unique habitat. The McCoy Wash, located in the eastern section of this Area, is one of special concern for wildlife populations. McCoy Wash, containing a lush assemblage of plant growth dominated by desert ironwood and palo verde, is utilized by diverse wildlife. A total of 19.8 square miles (12,672 acres) of wash habitat, representing 73 percent of the entire wash system, is present within the Blythe Area.

Cultural Resources

This Area was occupied aboriginally by the Chemehuevi and Halchidoma Indian groups. Approximately 8,500 acres of high and 1,280 acres of very high sensitivity/significance would be directly impacted by motorized vehicle free-play. Known site types include trails, sherd scatters, and rock alignments. At least 400 prehistoric and 40 historic sites are predicted in this region. However, the integrity of the Area is quite low because of prior impacts by motorized vehicle use and vandalism. The most significant resources are located in the extreme eastern portion of the polygon.

Native American

The Area has been traditionally employed by the Mohave, Chemehuevi, Quechan, and Halchidoman. Temporary campsites, primarily affiliated with use by the Chemehuevi and Mohave, are distributed along the eastern portion of the polygon.

SITE VALUES CONSIDERED

Terrain Diversity

The terrain ranges from the broad, flat, valley plains running through much of the central portion to rolling bajadas and steep rugged washes penetrating the valley from its eastern and western boundaries. Much of the Area is uniformly flat with relief located along its border the McCoy Mountains on the west and the Big Maria Mountains on the east. There are challenging slopes and rugged terrain associated with the nearby mountains.

Accessibility

This Area is easily reached from Interstate 10 and State Route 62 via the paved Midland Road which bisects it. Several dirt roads and washes make much of the Area readily accessible to vehicle use.

Traditional use

The Area has received a low amount of recreational use traditionally. Less than 2,000 VUDS of concentrated use were recorded in 1978.

Proximity to users.

The Area is located near the small desert community of Blythe, and Blythe residents are thought to be the major users. The area is well beyond the average distance traveled by the majority of desert users who reside in the Los Angeles and San Diego metropolitan areas.

Size

The Area is of adequate size to provide for all types of motorized vehicle free-play activity. The Area could accommodate large numbers of visitors and a wide variety of motorized vehicle activities.

Manageable Boundaries

Definable boundaries surround the Area and make indentification and supervision of the boundaries quite possible.

OTHER SENSITIVE VALUES

Adjacent land use

This Area is located adjacent to the Blythe city limits and could conflict with the urban values of the city.

SUMMARY OF PUBLIC COMMENT

The correspondence which dealt with this Area favored protection of archaeological, wildlife, and scenic features.

MANAGEMENT DECISION RATIONALE

Decision: Not appropriate for motorized vehicle free-play area. Proposed Class M will allow organized competitive events.

Rationale: Highly significant wildlife values, cultural resources, Native American sites, and sensitive soils have been identified in this Area. Based on the evaluation criteria, it has been decided that this Area should not be open to motorized vehicle free-play use.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Minimal negative impact is expected from the restrictions on vehicle play. Less than 2,000 VUDs of concentrated use were recorded for this Area in 1978.

Almost all of the recreation use has occurred along and within the Midland Road corridor. Primary recreational activities include sightseeing and driving for pleasure, camping, picnicking, and four-wheel drive touring and access.

This Area is essentially flat in character and has not attracted the historical use that more diverse vehicle free-play areas closer to urban centers have traditionally attracted.

Much of this Area will be managed in Multiple-Use Class M which will allow motor vehicle race events and pit-stop sites where compatible with the resource values.

3. BRISTOL AREA (See Map V-5-3a, V-5-3b)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a large, irregularly shaped block of public, private, and State-owned land consisting of approximately 478,000 acres. It lies six miles south of Baker and 10 miles west of Kelso in east-central San Bernardino County. Interstate 15 runs within five miles of most of the north and northwestern border, Kelbaker road within three miles of northeast, and Interstate 40 runs along the southwestern border. There are numerous right-of-way maintenance roads and other jeep and truck trails throughout.

The Area includes several valleys and several small mountain formations. Along these are Broadwell Lake (a dry lake bed) in the southwest, Little and Big Cowhole Mountains in the north, Cady Mountains in the west, Bristol Mountains in the south-central, and numerous other unnamed ridges and mountainous Areas throughout. In addition, there is a large Area of some 122,000 acres known as the Devil's Playground located in the northern portion.

The terrain varies from flat playa, to rolling, to rough and mountainous. The elevation varies from a low of 1,000 feet in the northwest near the Mojave River drainage to a high of 3,609 feet at the top one of the central peaks of the Bristols.

The land ownership pattern in the northeastern one-fourth is nearly solid public domain with only those sections previously granted as school sections, i.e. 16 and 36, presently not federally owned. The other three-fourths of the ownership pattern includes one in which Sections 16 and 36 were also previously granted to the State. In addition, every fifth alternate-numbered section was granted to the railroad as a construction subsidy. Several of the school sections in this portion are still under State jurisdiction. There is some private land, and the remainder is under the jurisdiction of the Bureau of Land Management.

An underground telephone cable traverses the northern edge from east to west; a multiline power transmission right-of-way transects the Area from the northeast to the southwest; another of the same type runs almost east-west just south of the Kelso dunes through the lower edge of the Bristols and crosses the lower edge of Broadwell Valley near the Area's southwestern edge. There are several communication sites located near the northern edge. In addition to the above, the Union Pacific Railroad has an active railroad

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[1]Portions of T. 8 N., Rs. 6, 7, 8, 9, 10, 11 E.,
Ts. 9, 10 & 11 N., Rs. 5, 6, 7, 8, 9, 10 & 11 E.,
T. 12 N., Rs. 7, 8, 9 & 10 E.,
T. 13 N., Rs. 9 & 10 E., SBM

through the upper center of the parcel running east-west through the Devil's Playground Area and along the Mojave River drainage.

The Area is classified as rural conservation in the San Bernardino County General Plan. The town of Ludlow (75-100 population) is situated at the junction of State Route 40 and the old National Trail Highway 66.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

FIGURE A-3

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended with Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope	X		Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources	X		Size	X	
Native American	X		Manageable Boundaries		X
Wilderness		X			
Scenic Quality	X		Other Site Values Considered		
Recreation	X				
Range	X			Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner	X	
			Agriculture		X
			Educ./Research	X	
			Other Agencies	X	
			Safety	X	
			Adjacent Land Use		X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography includes 28 percent hills, 19 percent undifferentiated fans, 19 percent sand dunes, 9 percent sand-covered fans, 9 percent sand-covered plains, 9 percent dissected and highly dissected fans, 5 percent mountains, 1 percent dry playa, and 1 percent riverwash. Steep slopes which often may have limited depths of soil (hills and mountains) total 33 percent of the Area. About 38 percent of the Area is sandy on the surface (sand dunes, washes, and sand-covered fans and plains). A substantial amount of well-developed desert pavement is on the 9 percent of the Area covered by dissected and highly dissected fans. Most of the remainder of the Area is covered by undifferentiated alluvial fans on gentle to moderate slopes. These soils have a wide range of properties, but most are sandy.

In general, very few impacts from motorized vehicle activity are visible in aerial photographs. About 20 acres of highly compacted pit Areas are adjacent to the Kelso Dunes. Soil has been removed for highway materials on about 550 acres near State Route 40.

Vegetation

The Area encompasses at least one unusual plant assemblage, the desert willow (Chilopsis linearis) community which occupies that portion of the Mojave Sink at the east end of Afton Canyon. There is probably no assemblage of desert willows in the entire CDCA which approaches it in areal extent. Most of the plant cover in the Afton Canyon Area is evenly divided between desert willow and mesquite with traces of tamarisk, cheesebush, Thurber sandpaper plant, and Russian thistle.

Taken as a whole, the vegetation of the region is dominated by creosote bush; however, extensive stands of big galleta occur on many of the sand sheets which are liberally distributed throughout the Area. Allscale scrub composed of Atriplex polycanpa and other halophytes as well as mesquite thickets are the predominant vegetation associated with playas such as Soda Dry Lake, Bristol Dry Lake, and Broadwell Dry Lake.

No rare plants are known to occur within the Bristol Area.

Wildlife

The Area contains habitat for such species as the "proposed sensitive" golden eagle, the BLM "sensitive" desert bighorn sheep and the significant prarie falcon. There is also potential habitat for several species of endemic beetles which have been discovered on the adjacent Kelso Dunes.

Golden eagle and prairie falcon. There is 60 square miles of prarie falcon habitat and 220 square miles of golden eagle habitat in the Area. These locations include one eyrie for prairie falcons and the adjacent foraging Area, and four eyries for golden eagles, with foraging Areas for five pairs.

The Bristol core areas are believed to contain about the minimum populations necessary for survival, provided, however, that the core areas are managed for maintenance and protection of raptors.

Desert bighorn sheep. The Area contains important Desert bighorn sheep habitat and is also adjacent to two mountain ranges with permanent bighorn sheep range. Within the Bristol Area, there is the Cady Mountains population which consists of 25 sheep (Weaver et al. 1969). It occupies 72 square miles. There is permanent and seasonal range as well as a concentration area within the 72 square miles. This population is only a remnant of a once more numerous, widespread population.

There are also 200 square miles of transient range within the Bristol Mountains. Sheep apparently move back and forth from the Cady Mountains to the Bristols and perhaps into the Old Dad, Kelso, and Granite mountain populations. In addition, the Bristol Area abuts on and includes part of the permanent range (2 square miles out of 15 square miles) in the Old Dad Mountains. This small mountain range has a declining herd of only five sheep. The Area also touches on the Kelso Mountains where there is permanent range for 25 sheep. Weaver (pers. comm. to Karen Boyer) said that the Kelso Mountains range is the only area in the entire CDCA where bighorn sheep populations may be increasing.

Rare and endemic beetles in the Devil's Playground. The Kelso Dunes, and presumably the sand sheets that make up Devil's Playground, have seven species of beetles which are endemic to this dune system (Andrews et al. 1979). Five are members of the family Curculionidae, one is in the Scarabaeidae, and one in the Tenebrionidae. In terms of endemic arthropods, the Kelso Dunes rate second in diversity in the California Desert. These rare species are likely to be found in parts of the Bristol Area in the vicinity of the Devil's Playground.

Cultural Resources

This Area was occupied aboriginally by the Chemehuevi and Vanyume Indian peoples. An entire range of site types is represented in this region, including villages, rock art, temporary camps, lithics, trails, milling stations, and historic sites. At least 70 sites are recorded in this Area, and more than 2,000 surface prehistoric sites and 250 historic sites are predicted. Approximately 13,440 acres of known very high and 69,760 acres of known high sensitivity/significance are located throughout the entire Area. Specifically, the most significant identified resources are located along the playa margins and higher lake stands. Also, at least 304,640 acres of the Area has a high to very high potential for early buried sites.

Native American

The Bristol Area has been extensively employed by Native American groups including the Mohave, Chemehuevi, and Panamint-Shoshone. Chemehuevi (EN 34) and Mohave continued salt collection in the Area until the recent historic period. Deer and small-game hunting has been described by the Chemehuevi,

primarily in the mountains southwest of the Area. Extensive seasonal use of the Area for mountain sheep hunting and food collection has been historically recorded with reference to the Chemehuevi (EN 4-42).

Wilderness

The Area incorporates a portion of WSAs 243, 249, 250, 256, 251 and all of WSAs 251a and 252. These WSAs rated as follows in the ranking of 137 WSAs:

WSA	Location	Ranking
243	Old Dad Mountain	91
249	Kelso Mountains	89
250	Kelso Dunes	11
256	Bristol/Granite Mountains	30
251	Cady Mountains	92
251a	Mesquite Spring	33
252	Sleeping Beauty Mountain	130

Its value as a potential wilderness area is enhanced by its large size and wide spectrum of landforms and vegetation: Dry lakes, bajadas, sand dunes, sand flats, hills, mountains, valleys, and canyons are all represented in some degree. Specific features include all or part of the following: Kelso Sand Dunes, Bristol Mountains, Cady Mountains, Afton Canyon, Mesquite Hills, Soda Dry Lake, Devil's Playground, Old Dad Mountains, Soda Mountain and Cowhole Mountains. Vegetation varies from areas void of vegetation, such as dry lake beds, to pinyon-juniper forests.

Scenic Quality

Scenic quality reflects a large degree of diversity. The Area is so large that it includes a sampling of most typical desert scenes. Lack of intrusions, and the colors displayed throughout the landscape were the two most significant assets identified during the inventory.

Scenic quality ratings throughout this vast Area vary considerably. Although predominantly "low" and "medium," a large Area of "high" exists in the northeastern portion. Generally, the lowest scores are found in the flat lowlands with medium scores in sites where the topography and vegetation offer greater contrasts.

Range

Bristol Area lies partially on two grazing allotments. The west end of the Area is in the Afton Canyon allotment, which is an ephemeral cattle lease. Cattle are authorized to graze only when adequate forage is produced. The east side of the Area extends into the Granite Mountain allotment.

SITE VALUES CONSIDERED

Terrain Diversity

Excellent opportunities for all type terrain and relief exist in this Area.

Accessibility

The Area is easily accessed via Interstate Highway 15 and State Route 127. Numerous roads and trails throughout this Area allow one to reach almost any point in the proposed free-play Area.

Traditional Use

This Area receives much traditional use, and there are many sites of concentrated use within it. Over 57,000 visitor use days of recreational use were recorded for this Area in 1978.

Proximity to Users

The Area is within the average weekend travel distance for much of the Los Angeles, and Orange County population centers.

Size

This Area is of excellent size for motorized free play.

Manageable Boundaries

Much of the Area has definable management boundaries, but portions are without good identifiable boundaries.

OTHER SENSITIVE VALUES

Residential/Private Lands

There are several medium sized blocks of land in this Area in private ownership. The small town of Baker is within this Area.

Education and Research

The Fort Soda National Natural Landmark and several other sites in the Bristol Area are visited and used by many colleges and universities.

Other Agencies

Some State lands, local government lands, and Southern Pacific land are dispersed within the large Bristol Area.

Safety

Mining activity and exploration sites are considered potential hazards in this Area.

SUMMARY OF PUBLIC COMMENT

Comments reflected the many prehistoric and historic values in the Area. One commented that zoning in the Area "is needed for preservation of archaeological and paleontological materials."

MANAGEMENT DECISION RATIONALE

Decision: Limit proposed motor vehicle free-play designation to a small part of the Bristol study area located near Crucero Crossing at the west end of the Devil's Playground.

Rationale: The proposed Area is popular among dune buggy and four-wheel-drive enthusiasts. Its accessibility and terrain features attract substantial weekend noncompetitive use. The remaining part of the Bristol study area is judged not suitable for this type of use based on the criteria. Consideration here must be given to the variety of resource values which could be impacted.

ANALYSIS OF EXPECTED IMPACT ON AREA FROM MOTORIZED VEHICLE USE

Soils

Approximately 95 percent of the area is sand-covered plains. Sand-covered hills make up the remainder.

Vegetation

No rare, threatened or endangered plants are known to exist within this Area. Two unusual plant assemblages have been identified, namely a mesquite thicket assemblage and a desert willow assemblage. It is expected that only light impacts would occur to the dominant shrubby plant species in each unusual plant assemblage. However, the understory shrubs and annuals would tend to decline allowing weedy annual plant species to invade the area.

Wildlife

Unrestricted motorized free-play vehicle use will cause a general degradation of wildlife resource values throughout this Area. One small vertebrate to be affected by this use will be the Mojave fringe-toed lizard. Populations of this species will decline on approximately 6,000 acres (6 percent) of its

habitat. Declines in small vertebrates will also decrease the suitability of approximately 2,400 acres of golden eagle foraging habitat.

The potential effects of motorized vehicles use on a newly discovered special of Ethmia, a lepidopteran, are not known. However, it could eliminate the only inown population. Wash habitats and mesquite thickets would be damaged, leading to declines in bird and other wildlife populations. These habitats support more bird species and at higher densities than typical desert habitats.

Cultural Resources

This Area was occupied aboriginally by the Chemehuevi and Vanyume Indian groups. Approximately 20 square miles of high and 2 square miles of very high sensitivity/significance are located within this polygon. Numerous sites have been recorded in this region, most of which are associated with ancient Lake Mojave. A wide range of site types are represented in the Area, including temporary camps, lithic scatters, sherd scatters, rock art, rock alignments, and many isolated tools. Historic material consists of railroad features, structures, trash dumps, and mining remains.

Although the entire Area is extremely sensitive, the highest density of archaeological remains occur in the southern portion of the polygon in the Mesquite Hills/Crucero region. More than 30 sites have been recorded in there.

This Area provides excellent research opportunities for studies of human adaptations to fluctuating lacustrine environments.

Over-all impacts to cultural resources are expected to be severe. All sites in this region are surface manifestations, and are highly vulnerable to damage or destruction from motorized vehicle use. Indirect impacts to surrounding regions would also be severe as a result of spillover from the proposed Area.

Native American

Approximately 3 square miles of a Chemehuevi salt collection site overlaps the northern border of this Area. The Chemehuevi tribal council should be consulted. The Mesquite/Crucero ACEC, which contains unique intaglios, is located adjacent to the southwest boundary and could receive indirect negative impacts.

Wilderness

Approximately 5 percent of WSA 243 overlaps the proposed free-play area. This portion will be managed within the Interim Critical Management Guidelines until Congress finds the WSA is suitable or nonsuitable for wilderness. The proposed Plan does not recommend WSA 243 as a proposed wilderness area.

4. COYOTE DRY LAKE AREA (See Map V-5-4)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a nearly oval-shaped parcel of public and privately owned land comprising 6,100 acres. It is 25 miles northeast of Barstow in northwestern San Bernardino County. The parcel lies approximately 2 1/2 miles southeast of the Camp Irwin Road. There is one jeep trail traversing the southeast quarter from southwest to northeast. In addition there are numerous other dirt roads in the immediate vicinity.

The terrain of the Area is quite flat, as is typical of a playa (desert dry lake bed). The elevation around the perimeter of the playa is 1,703 feet. (Ref: 15-Min. USGS Quad. OPAL MOUNTAIN, published 1948).

The land ownership is remnant of one in which Sections 16 and 36 were originally granted to the State for school purposes and then every fourth section, beginning with Section 1, was granted to the railroad for construction subsidy. At present there are only 770 acres of privately owned land in the area. The Bureau of Land Management has jurisdiction over the remainder.

Figure A summarizes characteristics of sensitivity and suitability for this area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Sections 2-4, 8-16, 22 and 23,
T. 11 N., R. 2 E.,
Sections 26-28, 33-35, T. 12 N., R. 2 E., SBM.

FIGURE A-4

SUMMARY EVALUATION OF SITE CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERATION

Decision: _____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
	Sensitive			Suitable	
	Yes[2]	No		Yes	No
Soil/Slope	___	X	Terrain Diversity	X	___
Plants & Wildlife	X	___	Acessibility	X	___
Cultural Resources	X	___	Traditional Use	___	X
Native American	___	X	Proximity to Users	X	___
Wilderness	___	X	Size	X	___
Scenic Quality	___	X	Manageable Boundaries	X	___
Recreation	___	X	Other Site Values Considered		
Range	___	___		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Coyote Dry Lake Area includes a variety of wildlife values, including 640 acres of the range of the Mojave fringe-toed lizard, a significant species. All species of fringe-toed lizards are declining as a result of habitat declines. The Mojave fringe-toed lizard is no exception.

There has not been an aquatic invertebrate survey done on this body of water. However, Kubly and Cole (1978) have noted that a number of these species may be rare in the California Desert. This dry lake may include some rare species.

Waterfowl often congregate at dry lakes during the winter when lakes contain water, and food supplies (e.g., invertebrates) are high. Dry lakes may be essential to migratory and wintering waterfowl.

Cultural Resources

The Area was occupied aboriginally by the Chemehuevi (Kroeber 1929). There are 320 acres of high cultural resource sensitivity within the area and 31,360 acres of high sensitivity surrounding it. Approximately 20 archaeological sites are predicted to occur within the Area. The high sensitivity locale is situated around the lakeshore of Coyote Lake. Site types include lithic scatters, quarries, and temporary camps. The area is of potential research value in regard to the study of human adaptation to ephemeral lacustrine environments.

SITE VALUES CONSIDERED

Terrain Diversity

The dry lake is uniformly flat with no terrain diversity. The lake bed becomes very soft and pliable when wet preventing virtually all access onto it.

Accessibility

The Area can be readily accessed via the maintained and graded Fort Irwin Road.

Traditional Use

Traditionally this Area has not received concentrated recreational use.

Proximity

This Area is in close proximity to Barstow and the main population centers in the Los Angeles and Orange County areas.

Size

Its size was not a deterring factor in considering this dry lake as a free-play area.

Manageable Boundaries

The area has identifiable and manageable boundaries.

SUMMARY OF PUBLIC COMMENT

Most of the comments received claimed the Area should permit some development and mineral exploration.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle free play. Coyote Dry Lake lies within a proposed Multiple-Use Class M area.

RATIONALE: Coyote Dry Lake does not meet the criteria for suitable motorized vehicle free-play use. It lacks features which attract this type of use. In addition, there are significant cultural values around the lake which would be exposed to heavy surface disturbance if the Area were opened to such use.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

No significant negative impacts are expected to motorized vehicle recreation with the closure of the dry lake. Historically, no concentrated recreational use by motorized vehicles has been noted in this area. Further, the uneven surface, which becomes mushy and very pliable and soft when wet, presents a potential safety hazard to recreationists.

5. DOVE SPRINGS AREA (See Map V-5-5)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] consists of 3,000 acres. It is an irregularly shaped parcel of land three to four miles long lying in the bottom of Dove Springs Creek Canyon in Kern County. It lies approximately 36 air miles north of Mojave and about 1-1/2 miles northwest of State Route 14 where it exits from Red Rock Canyon State Park north toward Owens Valley. There is good access to the area via the jeep-truck road traversing the center of the parcel through the bottom of the canyon parallel to the creek bed. Also, the satellite maintenance roads for the Los Angeles Aqueduct furnish access to the lower portion of the Area.

The terrain varies from steep to rolling in a general southeasterly sloping direction following the Dove Creek drainage. The elevation varies from a high of 4,000 feet near the northwestern edge to a low of 3,000 feet near the southeastern edge. (Ref: USGS Quad., CROSS MOUNTAIN, 1943).

The major portion of land ownership surrounding the Area is Federal. However, Sect. 1, T. 29 S., R. 36 E., and a portion of Sect. 9, and all of Sect. 16, T. 19 S., R. 37 E., M.D.M., comprising a total of 1,317 acres, are privately owned.

A major transmission line traverses the southeastern portion of the Area. An existing utility line and a two-mile utility corridor are proposed for placement along State Route 14.

The Land Use Element of the Kern County General Plan designates this area as "recreational."

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of Sections 35 & 36, T. 28 S. R. 36 E.,
Section 1,T. 29 S., R. 36 E.,
Section 4, 5, 6, 7, 8, 9, 16, 17 & 21, T. 29 S., R. 37 E., MDM.

FIGURE A-5

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: X Area Recommended with Boundary Adjustments

_____ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope	X		Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources		X	Size	X	
Native American		X	Manageable Boundaries	X	
Wilderness		X			
Scenic Quality		X	Other Site Values Considered		
Recreation		X			
Range	X			Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research		X
			Other Agencies	X	
			Safety		X
			Adjacent Land Use		

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography is approximately 40 percent undifferentiated fans, 35 percent dissected fans, and 25 percent riverwash. About 35 acres are pit areas and hillclimbs with no vegetation and very high compaction. Concentrated use as seen by 1973 aerial photos occurs within a one-mile segment of the riverwash terrace escarpment used for hillclimbs. As shown by low-level transects, highly compacted trails cover approximately 13 percent of the Area adjacent to the pit areas.

Wildlife

Dove Springs Canyon contains a number of important wildlife resources, such as golden eagle and prairie falcon foraging areas, Mojave ground squirrel habitat, upland game bird habitat, a rich ecotonal area, burrowing owl and desert kit fox habitat, and a number of other resource values.

Mohave ground squirrel. This species is confined to the western Mojave Desert and has a geographic range that extends from immediately south of Owens Lake/Olancha south into the Antelope Valley, and east generally to Searles Valley and the vicinity of Fort Irwin in the north, to Apple Valley in the south. Almost half of the geographic range is privately owned and/or has been developed. The area contains about eight square miles of habitat. None of this area is included in proposed crucial habitat for the species, however.

Golden eagle and prairie falcon There are 12 square miles of prairie falcon habitat and 12.5 square miles of golden eagle habitat in the Area. These areas include foraging habitat for one pair of prairie falcons and one pair of golden eagles. These foraging areas have been identified by England (1979) as part of eight crucial core habitats for raptors in the CDCA. The core areas have the highest known densities currently and historically of prairie falcons and golden eagles in the CDCA.

Burrowing owls and desert kit fox. These two species are considered "significant" species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List) and the desert kit fox is fully protected by California Department of Fish and Game Codes.

Upland game birds. Dove Springs Canyon once had some of the finest upland game bird populations found anywhere in the California Desert. Because of its location on the eastern face of the Sierra Nevada, the canyon receives more moisture than most desert areas, thereby supporting a richer flora with more cover and forage. There were mountain quail, Gambel's quail, California quail, and chukar, as well as mourning dove. The mountain quail could be found in the creosote bush scrub habitats along the eastern border of the area.

Range

The Area lies within the Rudnick Common Allotment, but is small when compared to the entire allotment.

SITE VALUES CONSIDERED

Terrain Diversity

This Area is one of two outstanding hillclimb areas in the entire CDCA. The terrain is primarily steep with adequate flat and rolling relief to allow staging areas for preparation before hillclimbers challenge the steep canyon slopes.

Accessibility

The Area is easily accessed via State Route 14.

Traditional use

This Area is well known and receives very heavy use. This use is fairly consistent and reaches approximately 50,000 visitor use days annually.

Proximity

The Area is not considered close to the major urban populations of Southern California, but, because of its almost unique hillclimb opportunities, the distance does not seem to be a deterrent.

Size

The Area is considered small when compared to the majority of free-play areas. However, for the opportunities it provides, it is considered adequate in size.

Manageable Boundaries

Much of the Area is defined by identifiable and manageable boundaries. However, because the Area receives so much use and is surrounded by important natural and cultural resources, other measures as fencing, signing, and increased BLM field presence are proposed.

SUMMARY OF PUBLIC COMMENT

Many comments favored allowing the traditional use. Some felt motorized free-play activity should take place only in past free-play areas and no new free-play areas be added. Others commented that people were being eliminated from close-in energy conserving recreation sites. Still others opposed free play area here, citing conflicts with many of the resources present.

MANAGEMENT DECISION RATIONALE

Decision: This Area is proposed for motorized vehicle free-play use. This decision carries with it a commitment to increase the level of management to ensure containment of vehicle activity to the designated free-play Area.

Rationale: This popular hillclimb area meets the criteria for motorized vehicle free play provided such activity is strictly limited to the defined Area. There is concern that the "spillover effect" will continue to impact adjacent sensitive locations.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Very high intensities of compaction have been produced by motorized vehicles in the pit area. Near field-moisture capacity, soil mechanical impedence values of 600 to 900 pounds per square inch have generally been measured with a penetrometer (unpublished BLM study, 1979). These values are much higher than those which have been determined to be restrictive to root growth of agricultural plants and desert annuals.

Heavily used hillclimb areas in Dove Springs have soil strength values in the top six inches of soil which generally range from 300 to 450 psi, very high for effective root growth. Adjacent, undisturbed hillsides have values for mechanical impedence which generally average about 100 psi.

The intensively used hillclimbs at Dove Springs have a great deal of soil displaced by water erosion and direct mechanical displacement downslope by tires of vehicles. Snyder, et al. (1976), measured losses of up to a foot of soil between 1973 and 1975 on heavily used hillclimbs in Dove Springs. Iverson and Hinckley (unpublished study, 1979) studied runoff and sediment yield from study plots subjected to simulated rainfall in Dove Springs. They reported that sloping plots on hills, when subjected to intense, simulated 20-minute rainfalls, had sediment yields which increased 10 to 20-fold following vehicular slope modification when compared to undisturbed sites.

Many areas in the wash through Dove Springs Canyon have intense compaction in the top two or three inches even though the soil is very sandy. The increased potential for runoff from the hillclimbs, resulting from such features as decreased vegetation, reduction of infiltration through soil compaction, channeling of water down tracks, and smoothing of slope topography will cause additional water to flow into the more impervious wash. A likely result would be a greater discharge of water from Dove Springs Canyon.

Sufficient fine particles are present in much of the soil to produce high concentrations of airborne dust during intensive motorized vehicle activity.

Vegetation

Dove Springs has historically received intense use, particularly on hillclimb areas. Soil compaction is particularly severe in camping areas and on trails in the canyon bottom. Vegetation on hillsides has already suffered a 64 to 100 percent reduction in plant cover. Heavy use will continue to have a negative impact on vegetation.

Wildlife

Mohave ground squirrel. Motorized vehicle activity can be expected to deteriorate the habitat of this species and to be responsible for extirpations, both local and widespread, within five years. Cross-country activity affects the ground squirrel and its habitat by: (1) direct mortality from vehicles; (2) crushing vegetation used for cover and forage; (3) crushing burrows; and (4) through noise, which is likely to cause deafening, resulting in behavioral changes and increased susceptibility to predation.

The studies by Bury et al. (1977) and Byrne (1973) in the western and west-central Mojave Desert have amply demonstrated impacts of motorized vehicles on small vertebrates in moderately and intensively used areas as well as pit areas. Bury et al. (1977) found that vertebrate numbers were decreased by 55 percent, 20 percent and 17 percent in these areas, respectively. Although there are little data available for impacts of motorized vehicles on Mohave ground squirrels, similar patterns to those found for the Bury et al. (1977) study can be assumed. Further, Byrne (1973) noted with regard to Dove Springs Canyon (referring to areas where the squirrel occurs in relatively undisturbed habitat) that "judging by the results of . . . trapping, this squirrel would not continue to survive in this area if damage became more extensive." Since Byrne (1973) undertook the Dove Springs study, the habitat damage has become more extensive, as noted above.

Golden eagle and prairie falcon. According to the Harmata et al. 1978 study, prairie falcons avoided parts of their foraging areas which were used by weekend recreationists and returned only when the visitors had left.

Another important problem results from motorized vehicle impacts on the small vertebrates. The animals studied by Bury et al. (1977) are those that are included in the diet of these raptors (Thelander 1974; Garrett and Mitchell 1973). Prey would be substantially reduced in the foraging areas. Thelander (1974) has noted: "Those areas where human activity has included the destruction of golden eagle foraging areas, prey populations or nesting sites, permanent exclusion of nesting golden eagles has occurred." (The same can be expected of prairie falcons.)

Impacts to foraging areas for prey species can be expected to be permanent. That is, 12 square miles of prairie falcon and 12.5 square miles of golden eagle foraging habitat could be lost permanently or denuded to the point where prey species would either no longer exist or be in such low numbers that the raptors could not survive.

Burrowing owls and desert kit fox. Both of these species suffer from moderate to intense motorized vehicle free-play activity. Their population densities are naturally low, and they rely on burrow or den systems for cover. They also are dependent on a good supply of rodents for food. Motorized vehicle activity would have serious impacts on both the prey supply (see earlier references to Byrne (1973 and Bury et al. 1977) and on burrows or dens.

Effects of Dove Springs Area on nearby Sierran canyons. The impacts in Dove Springs Canyon extend beyond the immediate boundaries. There are several canyons north of Dove Springs Canyon along the eastern face of the Sierra, including Birds Springs Canyon, Sage and Horse Canyons, Cow Heaven, Indian Wells, and others. Dove Springs Canyon has been a focus for intensive motorized vehicle use. During the past 5 to 10 years, that use has spread north along the canyons of the east Sierran face, particularly to Horse and Sage canyons. These two canyons were included in special wildlife management areas in the El Paso Management Framework Plan and also were proposed as part of an Eastern Sierra Area of Critical Environmental Concern.

Cultural Resources

Management of this Area as Class I will have mild negative impacts upon cultural resources. Approximately 600 acres of high sensitivity/significance are located in the extreme western portion of the proposed Area. Although a large occupation site is present in this region, the extremely poor integrity would suggest that site-specific salvage projects would adequately mitigate adverse impacts.

Native American

Impacts may occur on the village site in the canyon which is affiliated with the contemporary Tehachapi-area Kawaiisu.

Wilderness

Continuation of present motorized vehicle use in the Area will have little impact if restricted to fixed borders. Both wilderness and scenic values have deteriorated to the point where continued use could not further lower their quality. Major problems exist because of the long, unidentifiable and unmanageable boundary between the Class I and Class L areas.

Scenic Quality

See Wilderness above.

General Recreation

This proposal provides for Class I designation of the Dove Springs Area. Some present recreational values may decline under these conditions, such as floral displays, opportunities, etc.

Range

Direct impacts will occur if the motorized vehicle enthusiast and the cattle in the allotment occupy the Area at the same time. Cattle could be disturbed or harassment could occur. The area of conflict is small, so occurrence of the conflicts would be few.

An indirect impact would occur to cattle if vehicles caused reduction of the available forage. Again the area of disturbance is small (500 acres), so the amount of forage lost would not be great.

6. DUMONT DUNES AREA (See Map V-5-6)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is an irregularly shaped parcel consisting of 2,300 acres of public and privately owned lands located 30 miles north of the small tourist community of Baker. State Route 127 is approximately 1-1/2 miles to the southwest, at the nearest point. However, there is additional access to be obtained from a point about 1-1/2 miles northwest (via State Route 127 and Amargosa Canyon Road).

The terrain is rolling to flat, typical of wind-blown sand-dune complexes. The elevation varies from 640 feet along the southwestern edge to 1,000 feet along northern edge, with the highest point being 1,127 feet at the apex near the southwest center of the dune.

There are approximately 200 acres of the State-owned land in School Section 36, T. 20 N., R. 7 E., S.B.M., encroaching upon the Area in the northeast corner of the dunes. All of the Area is embraced in a BLM-administered protective withdrawal known as the Amargosa Canyon Protective Withdrawal (PLO 5337).

The San Bernardino County General Plan designates the dunes and sourrounding area as Rural Conservation. The County permits motorized vehicle events under County regulations and in locations approved by the BLM.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]A portion of T. 19 -20., R. 7 E., SBM.

FIGURE A - 6

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended with Boundary Adjustments

_____ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope		X	Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources		X	Size	X	
Native American		X	Manageable Boundaries	X	
Wilderness		X			
Scenic Quality		X	Other Site Values Considered		
Recreation		X			
Range		X		Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research		X
			Other Agencies		X
			Safety		X
			Adjacent Land Use		

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

Dune systems are unique, isolated habitats, essentially small islands surrounded by other habitat types.

The Dumont Dunes Area contains 95 percent of the habitat of one species of beetle, Trigonoscuta n. sp. (vide E.L. Sleeper) which may be endemic to this dune system only (Andrews, Hardy and Giuliana 1979). This dune system, although quite small, may have contained and may still contain a number of other endemic arthropods.

SUMMARY OF PUBLIC COMMENT

Many comments supported designation of the Area for motorized vehicle free play. Other comments supported continued use of all popular motorized vehicle free-play areas. Still others opposed free-play designation, listing the many nearby resources which could be jeopardized. Some commenters requested that no sand dunes be open to vehicle free-play activities.

MANAGEMENT DECISION RATIONALE

Decision: Dumont Dunes is recommended as a motorized vehicle free-play area subject to increased management to protect the adjacent Salt Springs and Amargosa Canyon from impacts.

Rationale: Consideration was given to Native American values, wildlife resources and possible effects on adjacent sensitive areas. The decision was made in favor of "open" designation because of the popularity of the Area and the high recreational use it receives. It is one of only two major dune systems which have been open to motorized vehicle use in the CDCA.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soil

Same as Panamint Dunes. Dissected alluvial fans with desert pavement occur one-half to three-fourths mile north and northeast of the dune areas. Traffic on the pavement could produce high impacts.

Vegetation

Historic use of Dumont Dunes has been relatively high (3,501 VUDs/mi^2/yr.) in areas of concentrated use (about 1.1 square miles). Vegetation in concentrated use areas would be obliterated; outside of the concentrated use areas, a 30 to 60 percent reduction in vegetative cover is expected. Stabilized areas of the dunes might become destabilized, resulting in burial of vegetation not directly impacted by motorized vehicle.

Wildlife

This dune system can be expected to lose the habitat of the beetle, Trigonoscuta and perhaps many other endemic forms in the Area. Hardy and Andrews (1976) summarize how use of vehicles on dunes can adversely affect arthropods: (1) by destruction of host plants for those species which require living plant material on the dunes; (2) by destruction of plant material on the areas around the dunes, thus removing the source of wind-drifted vegetable matter; (3) by breaking up accumulations of dead vegetation either on or near the surface of the sand, thus exposing immature stages to unnatural environmental conditions; (4) by breaking up and mixing crustal layers of compacted sand, depriving burrow-forming animals of suitable substrate; and (5) by disrupting reproductive behavioral patterns of highly adapted species. Hardy and Andrews (1976) noted that endemic, sand-living beetles would be exposed to one or more of the above factors, and face possible extinction or population decline if habitat destruction occurs.

Dumont Dunes support the northernmost population of fringe-toed lizard, a species restricted to sandy habitats. Approximately 3,200 acres (3 percent) of the habitat of this lizard in the CDCA will be lost within 5 to 10 years.

Cultural Resources

Accelerated soil movement because of vehicular use may expose and destroy possible burial sites.

Indirect impacts from continued motorized vehicle free-play area designation for the Dumont Dunes are extremely severe. In the case histories of the historic section of the report entitled "An Impacts Study of California Desert Cultural Resources," the "traffic" is identified as overlapping into surrounding areas and causing extreme damage.

Native American

The Dumont Dunes have been identified as significant by the Mohave (Krochern 1919, Mgt. 17) and the general area has been identified by Panamint Shoshone as an area of "Ballena grass" (seasonal spring) collection activities. The impacts to Native American resources which are anticipated would be concentrated along the perimeter of the dune primarily in the southwest portion of the proposed Area. A management plan should be coordinated with the Panamint Shoshone and Chemehuevi and Fort Mohave reservations to establish the possibility of mitigation.

Wilderness

The Area currently lacks wilderness values. Consideration must be given to the fact, however, that the southern portion of the site borders WSA #222 which rated sixth out of 137 sites. Management of this border between two conflicting uses would be difficult, and noise from dune activities would degrade the wilderness quality for a distance within the WSA.

Scenic Quality

The scenic quality polygon in which this dune system is located was highly rated, even when the dunes were identified as an "open area."

General Recreation

Because of the high concentrated use in the Dumont Dunes and the traditional use patterns, defined management boundaries and stepped-up supervision will be necessary to maintain and protect the natural and scenic resources and reduce potential conflicts between uses.

7. EAST MESA AREA (See Map V-5-7)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The East Mesa Area[1] consists of a "shoe-shaped" area of public and privately owned lands. It lies approximately 14 miles east of Brawley and 16 miles east of El Centro in the southeastern portion of Imperial County. The Area is bounded on the north by State Route 78, which leads from Glamis to Brawley. The boundary runs west along the East High Line Canal, thence southwest to the Mexican border along the All-American Canal; thence east along the Mexico-California border. The Area is bordered on the east by the Coachella Canal.

Within the Area there is a unique land pattern consisting of a number of privately owned parcels of former State lands. In addition, there are a few parcels of private lands located along the western edge of the Area and along the cultivated Imperial Valley. There are now no State-owned lands within this block of land. Altogether there are 12,200 acres of private lands, with the remainder being public lands under the management of the Bureau of Land Management. There is also a 60-foot strip along the Mexico-California border which has been withdrawn by Executive Order for Border Patrol purposes.

The Area is covered principally with a creosote bush vegetative association. The terrain is rolling to flat, with the flatter area lying along the western front. The elevation varies from a low of 0.0 feet along the East Highline Canal to a high of no more than 150 feet above sea level in the southern portion.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Involving: T. 12 S., Rs. 15, 16 & 17 E.,
T. 13 S., Rs. 17 & 17-1/2 E.,
T. 14 S., Rs. 16, 17 & 18.,
T. 15 S., Rs. 16, 17 18 & 19.,
T. 16 S., Rs. 16, 17, 18 & 19.,
T. 17 S., Rs. 16, 17, 18 & 19., all in SBM.

FIGURE A-7

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	___	X			
Range	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	X	___		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The entire East Mesa Area falls within Mojave flat-tailed horned lizard habitat. The Area encompasses approximately 150,000 acres of lizard habitat representing 9 percent of the species' range in the CDCA. One of five flat-tailed horned lizard concentration areas occurs in the Area. It is one of the largest of the concentration areas (100,000 acres).

Colorado fringe-toed lizard also occurs throughout the East Mesa Area. The area includes approximately 25 percent of this species range.

Vermilion flycatchers (a proposed BLM sensitive species) have been recorded breeding around small ponds near the Republic East Mesa geothermal test well.

Cultural Resources

The Area was occupied aboriginally by the Kamia (Gifford: 1931). There are 42,240 acres of very high cultural resource sensitivity where approximately 595 archaeological sites are predicted to occur. The very high sensitivity area involves a linear strip from Mammoth Wash to the Mexican border.

Only a portion of the very high sensitivity area is located within the proposed motorized vehicle free-play area. The peripheral sites could be indirectly and directly impacted if access were not limited. Site types include villages, trails, hearths, temporary camps, fishing stations, pottery scatters, lithic scatters, and an historic site. The Area is extremely sensitive and would be of high potential research value for the study of human adaptation to the Lake Cahuilla shoreline environment.

Another area of high cultural resource sensitivity is located outside of but adjacent to the open area. Both direct and indirect adverse impacts would occur to this area if access were not limited.

Native American

The East Mesa Area has been utilized traditionally by a large number of Native American groups. Thus, it is of importance to many contemporary ethnic groups. The Alamo River area has been a region of occupation employed by Chemehuevi, Quechan, and Kamia. This portion of the valley ranging to the dunes is known as Ha-Withl-Mat-High. Several collection activities by Kamia and Quechan have occurred throughout the southern portion of the Area primarily in spring and early summer.

Geology-Energy-Minerals

Excellent geothermal resources are known to exist in this Area. Geothermal development could conflict with motorized vehicle free play.

SITE VALUES CONSIDERED

Terrain Diversity

This Area is relatively flat with little topographic relief.

Accessibility

Easy access is available via State Route 78, I-8, and the Coachella Canal and access road.

Traditional Use

There is traditional use primarily for activities other than those involving cross-country vehicles. Most of the traditional activity in this Area could take place in Multiple-Use Classes M or L.

Proximity to Users

This Area is adjacent to the large El Centro desert community and is within easy access of the San Diego population center.

Size

The Area is extremely large and entirely adequate in size for a motorized vehicle free-play area.

Manageable Boundaries

Roads and canals make the Area easily identifiable and to a large degree confinable as well.

SUMMARY OF PUBLIC COMMENT

The one comment received recommended that the Area's archaeological and geological values be protected.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle use.

Rationale: This Area has received some spillover from the popular Glamis and Buttercup dune areas. It is not, however, a popular play or competitive event area. It lacks interesting and challenging topography. The wildlife and cultural values outweigh significance of this Area for intensive motorized vehicle use.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

This Area is thought to serve as an overflow for the popular nearby Buttercup and Glamis dunes motorized vehicle free-play areas, rather than a destination

in its own right. If the Area is not designated, impacts to motorized vehicle play opportunities are expected to be minimal and only on peak use weekends would direct negative impacts be expected. Of the 42,000 VUDs recorded in 1978, a majority of this use is camping, vehicle touring, hunting, shooting, and picnicing, all of which could still be accommodated in Multiple Use Class M designation. Because this Area is relatively flat and uniform in terrain, prime motorized vehicle cross-country play occurs to the east in the Imperial dunes. However, a small amount of recreational use in this mesa Area may be cross-country vehicle oriented. On peak weekends, this use would be directly impacted and displaced if the Area were not open to motorized vehicle free play.

8. EL MIRAGE AREA (See Map V-5-8)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is shaped like an inverted boomerang and is approximately 7.7 square miles in size. It is located about 10 miles from Adelanto and about 1 1/2 miles north of the oiled road leading from Adelanto to Lancaster, 35 miles to the west. There are numerous roads and trails leading to and intersecting the Area from all directions.

The terrain is typical of the desert playa (desert dry lake bed) in that it is extremely flat and hard during the drier months of the year. Elevation around the perimeter of the playa, which lies in the bottom of El Mirage Valley, is 2,835 feet. (Ref: USGS 7 1/2 min. Quad. - SHADOW MOUNTAINS, 1955).

Land ownership is about half private and half public under the jurisdiction of the Bureau of Land Management.

There are no withdrawals on the area.

There are no existing transmission lines or pipelines transecting the Area, nor are there any proposed for the future.

Neighboring land use consists of scattered homes and alfalfa farms. Lack of camping or sanitary facilities has led to trespassing and occasional acts of violence by users of the dry lake bed.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Secs. 1, 2, 3, 4, & 12, T. 6 N., R 7 W.,
Sec. 1, T. 6 N., R. 6 W.,
Secs. 32, 33, 34, 35, & 36, T. 7 N., R. 7 W., SBM.

FIGURE A -8

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	___	X	Proximity to Users	X	___
Cultural Resources	___	X	Size	X	___
Native American	___	X	Manageable Boundaries	X	___
Wilderness	___	X			
Range	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Range	___	X			
Recreation	___	X		Sensitive	
G-E-M	___	X		Yes[3]	No
			Res./Pvt. Owner	X	___
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	X	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SITE VALUES CONSIDERED

Terrain Diversity

This Area is flat with little to no relief on the lake bed.

Accessiblity

The Area is easily accessed via a dirt road from U.S. 395. The access crosses private land and is a de facto road easement.

Traditional Use

The Area receives some of the heaviest use in the CDCA. It is well known and in 1978 accounted for 95,000 recreational VUDs.

Proximity to Users

The Area is considered close to the Los Angeles and Orange county population centers.

Size

Although the Area is small in respect to other free-play areas in the CDCA, it is considered adequate in size because of its outstanding opportunities and the high level of traditional use. Acquisition of nearby private land would reduce the trespass potential, consolidate land ownership, and offer the possiblity of enlarging the free-play Area.

Manageable Boundaries

The dry lake boundary is definable and could be manageable. Because of heavy use and cross-country activity, there is some traffic movement past the Area's boundaries. Signs, fencing, and a BLM field presence may be needed to protect private land and supervise the intense recreational activity.

OTHER SENSITIVE VALUES

Residential/Private Lands

The entire dry lake and adjacent lands have a checkerboard land ownership pattern. Heavy use in the Area raises the potential of trespass on private land.

Safety

The unstructured motorized and non-motorized activities create safety problems, particularly when there is intense visitation. Safety problems stem primarily from incompatible or conflicting recreational use.

SUMMARY OF PUBLIC COMMENT

Many comments favored designation of El Mirage as a motorized vehicle free-play area. One comment indicated concern for "close-in" vehicle recreation sites which help conserve fuel. Very few comments opposed use of this Area for motorized vehicle play. Some comments stated that dry lakes in general should not be used for vehicle play.

MANAGEMENT DECISION RATIONALE

Decision: El Mirage is recommended for motorized vehicle free-play designation.

Rationale: Consideration was given to the problems associated with (1) managing this Area for the many forms of use it attracts including sand sailing, motorized vehicles, and various forms of aircraft and (2) surrounding private ownership of the land. It was decided that the Bureau should continue to manage this Area as open to motorized vehicle use.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Dust production on the dry lake surface and margins was shown to be in excess of State and Federal total suspended particulate standards during weekend activity (unpublished BLM study by Hans Giroux, 1979). Wind erosion may also be increased. The Jan. 1, 1973 Landsat scene shows dust plumes being generated just south of the playa and near the east end. Nakata and Wilshire (1976) attributed a major part of this plume to disturbance by motorized vehicles. Increased compaction will occur adjacent to the playa surface.

Vegetation

The vegetation is the same as that of the Bristol Area.

Wildlife

The loss of the entire El Mirage Dry Lake Mojave fringe-toed lizard population (est. 3 mi^2 habitat area) is expected.

Cultural Resources

Local, indirect impacts to likely prehistoric surface sites in the outlying area are possible as a result of sanctioned vehicular use on the playa. However, these impacts are assessed to have minimal negative impacts overall to cultural resources.

Native American

Few effects have been identified which would directly impact known resources. Increased indirect impacts on surrounding areas, eg., Kwanea Hills, Shadow Mountains, have been identified. Information on potential impacts and possible mitigations should be solicited from the Kawiisa and Kitauemuh Indians.

9. GRANITE MOUNTAIN AREA (See Map V-5-9)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is an irregularly Barstow in north central San Bernardino County. It is bounded on the north by a dirt road running east-west which is known locally as the Sidewinder Road. The latter intersects the Barstow-Lucerne Valley Road. The eastern, southern, and western boundaries of the subject are delineated by the northern edges of the privately owned lands beyond. The central portion of the Area is dominated by the small mountain range known locally by the name of Granite Mountains. There are other roads leading into this Area from the side.

The terrain of the subject varies from rolling to flat in the small, narrow valleys to quite rough and mountainous throughout the central portions. The elevation varies from a low of 3,000 feet above sea level near the western, southern, and eastern edges to a high of 5,133 feet at a point atop one of the promontories on the southwestern corner of the Granite Mountains. (Ref.; 15-Min. USGS. Quad. APPLE VALLEY, 1957).

The land pattern is a remnant of one in which Sections 16 and 36 were granted to the State of California for school purposes and, at a later date, title transfers were made to private citizens by means of the homestead entry laws and the Small Tract Act. At this time there are approximately 1,300 acres of privately owned lands within the delineated study.

There is potential for the production of power along the western edge of the Area.

The Area is classified as "rural conservation" in the San Bernardino County General Plan.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of T. 4 N., Rs. 1 and 2 W.,
T. 5 N., Rs. 1 and 2 W.,
T. 6 N., Rs. 1, 2 and 3 W., all in SBM.

FIGURE A-9

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	___	X
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	X	___
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Granite Mountains Area contains one of the largest concentrations of known prairie falcon and golden eagle eyries in the California Desert. Five prairie falcon eyries and six golden eagle eyries have been reported within the boundaries.

This group of nests represents 5 percent and 7 percent respectively of all eyries recorded in the CDCA. The Area falls within a potential five-mile foraging radius of seven prairie falcon and eight golden eagle eyries.

Raptor eyries found in the Granite, Ord, Rodman, and Newberry Mountains are in one of seven large geographic areas in the CDCA where the large majority of eyries have been recorded. The Newberry/Granite Mountains Raptor Breeding Area is one of two areas currently receiving the most intense human use. As a result, it was proposed for Habitat Management Plan development in the Draft Desert Plan. The Granite Mountains Area would encompass 38,000 acres (15 percent) of this Special Habitat Area, and 36 percent of the prairie falcon and 32 percent of the golden eagle eyries recorded in this Newberry/Granite Mountains Raptor Breeding Area. One of three minor populations of desert tortoise in the CDCA occurs along the southeastern flank of the Granite Mountains on the western side of Lucerne Dry Lake. This population covers approximately 12,000 acres at 20-50 tortoise per square mile; roughly 3,000 acres (25 percent) falls within the proposed Granite Mountains Area.

Cultural Resources

Ethnographically this open area falls within the Vanyume (branch of Serrano) core area. Over-all, site density in this expansive area is relatively low with perhaps a maximum of two sites per square mile. The great majority of past remains are prehistoric with some historic mining (e.g. Sidewinder Mine) and transportation (e.g. 1980s Hay Road and Stoddard Well) activity.

Native American

The Area within this polygon has been employed through historic times by the Kawaiisu and Serrano. Seasonably occupied campsites are distributed throughout the Area and are concentrated in the northern portion of the polygon in the Sidewinder Mountain area. Little specific ethnographic data are available.

SITE VALUES CONSIDERED

Terrain Diversity

Much of the Area contains rugged mountain slopes interlaced with valley floors and lower mountain slopes and is not traversable by vehicle.

Accessibility

The area is readily accessible via State Routes 247 and 18.

Traditional Use

No traditional recreational use is known to occur.

Proximity to Users

This Area is within reasonable driving distance for most of the southern California urban population centers.

Size

Size is adequate for motorized vehicle free play.

Manageable Boundaries

The very complex border is one that would be difficult to identify and manage.

OTHER SENSITIVE VALUES

Education/Research

The University of California has identified and uses many sites in this area for study and research.

Safety

This Area includes steep terrain and decomposed granite which could be hazardous to vehicular cross-country travel.

SUMMARY OF PUBLIC COMMENT

No public comment was received for this Area.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended.

Rationale: This Area was considered for a possible extension of the Stoddard Open area located to the north. However, lack of suitable terrain and potential impacts in resources particularly wildlife were the deciding factors in proposing that this area not be designated open.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Impacts to motorized vehicle use are expected to be minimal and not significant in terms of opportunities lost or recreationists displaced with the closure of this area.

10. IVANPAH DRY LAKE AREA (See Map V-5-10)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is an elongated parcel of public and privately owned land consisting of approximately 8,300 acres lying 45 miles northeast of Baker in northeastern San Bernardino County. Interstate 15 (I-15) runs northeast through the far northern portion of the parcel. The parcel lies in a southeasterly direction within the bottom of the broad Ivanpah Valley. The old highway lies adjacent along the northern edge. There is one jeep road running east-west across the southern half toward the railroad siding some 2-1/2 miles away, and there is the remnant of the old, historic traction grade built and intended for the hauling of borax ores from the north to the mines. The latter runs north-south through the center of the parcel.

The terrain is very flat, being quite typical of desert playas (dry lake beds). The elevation is 2,640 feet around the perimeter of the Area.

Ownership is one in which Sections 16 and 36 were granted to the State of California for school purposes, with a small acreage transferred to private ownership. There are no State-owned parcels remaining, only 780 acres in private ownership and the remainder under the jurisdiction of the Bureau of Land Management.

There is one existing telephone right-of-way running northeast, one multiline powerline right-of-way, and two pipelines (oil and gas) running northeast-southwest parallel to I-15 through the western portion of the Area.

Figuare A summarizes characteristics of sensitivity and suitability for this area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of Secs 13, 14, 25, and 36, T. 17 N., R. 14 E.,
Secs 4-10, 15-17, 20-23, T. 16 N., R. 15 E.,
Secs 7 and 8, 17-20, 29-32, T. 17 N., R. 15 E., all in SBM.

FIGURE A -10

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[2]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[1]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	X	___
Native American	___	X	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Adjacent Land Use	___	___
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X

[1] Sensitive Resources are discussed in detail.
[2] Discussion of all site values considered follows.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

Approximately 2,560 acres of desert tortoise habitat in the Ivanpah Dry Lake Area falls within the Ivanpah Crucial Habitat. This is one of four major, high density, viable tortoise populations known to exist. Invertebrate values are unknown because this lake bed was not sampled. However, Kubly and Cole (1978), in their report on invertebrate faunas of California desert playas, note that a number of invertebrates are restricted to only a few lake beds in California. Although there is not enough information to determine rarity of these species, some are likely to be quite rare.

Cultural Resources

The area under consideration was occupied aboriginally by the Chemehuevi (Kroeker 1929). There are 1,280 acres of very high and 640 acres of high cultural resource sensitivity within the proposed Area. Approximately 30 archaeological sites are predicted to occur within these locations of sensitivity. Thirty archaeological sites are predicted to occur within the entire Area. The site types include temporary camps, lithic scatters, historic trails and roads, and a historic ranch-mining complex.

SITE VALUES CONSIDERED

Terrain diversity

The terrain is uniformly flat with little to no relief.

Accessibility

Excellent access is available via Interstate 15 which bissects the Area.

Traditional use

This Area receives traditional use primarily for vehicle cross-country travel but not for motorized vehicle free play. More than 5,000 VUDs were recorded in 1978.

Proximity to users

This Area is not considered close to the Las Vegas area, not is it located within good traveling distance for the southern California urban population where the majority of desert users reside.

Size

The dry lake is small but is considered adequate in size for a vehicle free-play area.

Manageable Boundaries

The Area is surrounded by identifiable and manageable borders.

SUMMARY OF PUBLIC COMMENT

Comments favored allowing mineral exploration in this Area.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a motorized vehicle free-play area.

Rationale: This Area has not received much vehicle use and is not considered suitable for motorized vehicles. Non-motorized use in sand sailing is an important potential. Ivanpah Lake is one of a limited number of dry lakes in the CDCA which have suitable surface conditions necessary for this type of activity. Motorized vehicle use is not generally considered compatible with sand sailing. Consideration was also given to cultural and wildlife values.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Ivanpah Dry Lake is important recreationally; however, it is of insignificant value to cross-country vehicle users. The dry lake is completely flat and uniformily covered with sand, for the most part. This flat terrain in conjunction with sparse vegetation and good wind conditions provides excellent recreational opportunities for nonmotorized activities such as sand sailing, skate sailing, and gyrocoptering, to list a few.

Bisected by I-15 and located adjacent to the Nevada border in the CDCA, Ivanpah Dry Lake is easily accessed and a tracts much of its use from the Las Vegas area. More than 5,000 VUDs of concentrated recreational use were recorded in 1978. Primary recreational pursuits in the area included picnicking, sand sailing, and camping. Because of its flat character, distance from the Southern California urban centers, and current nonmotorized use, the closure of this area to motorized vehicle free play is expected to have insignificant negative impact in terms of both opportunities lost and potential uses displaced.

11. JAWBONE CANYON AREA (See Map V-5-5)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] consists of 5,570 acres (8.9 square miles). It is an irregularly shaped parcel of land lying astraddle of the bottom of Jawbone Canyon in an east-west direction. It lies approximately 20 miles north of Mojave and less than one-half mile from State Route 14 leading from Mojave to Owens Valley and points north. There is good access to the area by way of a well-used road running east-west through the parcel along the bottom of the canyon. There are also several side roads leading into the canyon. One, the Kelso Valley road, exits onto the Jawbone Canyon road near the west end of the Area; another leads from the north near the Butterbread Spring-Alphie Spring areas to an area near Blue Point; a second from the north traverses Sugarloaf Park and the upper reaches of Los Angeles Aqueduct which passes north-south through the eastern third of the Area. In addition, there are several trails leading from the canyon to the south into the canyons and mining endeavors found there.

The terrain is very steep along the side of this canyon with sharp intersecting canyons from either north or south. Those small drainages to the north drain south into Jawbone Canyon; those to the south drain to the north into it, while the main canyon drainage proceeds to the east-southeast. The elevation varies from a high of 4,345 feet near the southwestern tip to a low of 2,200 feet near the junction of the Jawbone Canyon Road with State Route 14. (Ref: USGS Quad. - CROSS MOUNTAIN, 1943).

The land ownership is a checkerboard with approximately one-half of it privately owned.

There is a stock driveway embracing 883 acres of the public land in Secs. 18 and 20, T. 30 S., R. 37 E., M.D.M., in the southeast portion of the Area.

There is an existing transmission facility traversing the lower portion of the parcel near the southeast. Another transmission facility and branch of the Southern Pacific Railroad are located near State Route 14.

The land use is classified as "recreational" in the Kern County General Plan.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of T. 30 S., R. 36, 36 1/2 & 37 E., M.D.M.

FIGURE A-11

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: X Area Recommended with Boundary Adjustments

_____ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope	X		Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources	X		Size	X	
Native American	X		Manageable Boundaries		X
Wilderness		X			
Scenic Quality	X		Other Site Values Considered		
Recreation		X			
Range		X		Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research	X	
			Other Agencies		X
			Safety	X	
			Adjacent Land Use		

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography has approximately 40 percent mountains, 25 percent hills, and 35 percent riverwashes. The steeper terrain frequently has shallow to very shallow layers of soil. Most soils in the riverwashes are sandy.

Pit areas and hillclimbs with no vegetation and very intense compaction cover approximately 35 acres. Adjacent areas (200+ acres) have many compacted trails.

Wildlife

Jawbone Canyon Open Area contains a number of important wildlife resources, such as desert tortoise habitat; prime reptile habitat; golden eagle and prairie falcon foraging areas; mule deer habitat; adjacent potential reintroduction sites for the California bighorn sheep; adjacent prime bird habitat in Butterbread Canyon and Springs; and a generally rich ecotonal area.

Desert tortoise habitat. The desert tortoise is a BLM sensitive species and is under status review by the Office of Endangered Species. It will be proposed as a Federal threatened species to the Office of Endangered Species in late 1980. The Jawbone Canyon Area contains nine square miles of tortoise habitat at densities of 20 to 50 tortoises per square mile. None of this area is within proposed critical habitat however. (Berry and Nicholson 1979).

Prime reptile habitat. Reptile species diversity is exceptionally high here and includes 38 species of lizards and snakes (Rado 1979). Rado reports, "the Jawbone Canyon road has long been recognized as an exceptional road to 'night-drive' for snakes, and is often used for this purpose in May and June. Highly prized snakes, such as the desert rosy boa and Panamint rattlesnake have been collected here." There is an estimated 8.7 square miles of prime habitat.

Prairie falcon and golden eagle. Prairie falcons are considered to be BLM significant species and golden eagles are on the BLM "sensitive" species list. The Jawbone Canyon Area includes foraging habitat for two pairs of prairie falcons and two pairs of golden eagles, with a total of about 7.8 square miles of habitat for each species. However, this is "overlapping" habitat for foraging and thus the figure might be doubled. These foraging areas have been identified by England (1979) as part of eight crucial core habitats for raptors in the CDCA. The identifed core areas have the highest known densities of prairie falcons and golden eagles in the CDCA, both historically and currently.

Mohave ground squirrel. The Jawbone Canyon Area contains about 2.2 square miles of habitat. None of this area is included in proposed crucial habitat for the species, however.

Burrowing owls and desert kit fox. These two species are considered "significant" species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List) and the desert kit fox is fully protected by California Department of Fish and Game Codes.

Mule deer. There are seven square miles of mule deer habitat, which is part of the 70 to 80 square miles of habitat supporting approximately 50 deer in the Lone Tree-Tehachapi Mountain region.

Cultural Resources

This Area was occupied aboriginally by the Kawaiisu Indians. Approximately five sites are recorded in the polygon, consisting of temporary camps, pictographs, and a cremation locus. Approximately one square mile of very high and three square miles of high sensitivity/significance are included in the western portion of the proposed Area.

Native American

The Jawbone Canyon Area contains a wide profile of Native American values of primary importance to the Kawaiisu. Resources which would be in immediate jeopardy include Blue Point and several areas of mythic association. A historic village located on the south slope of the canyon across from Blue Point has been severely impacted by motorized vehicle activities.

Extensive distributions of Kawaiisu cairn burials are in jeopardy throughout the Canyon and in the adjacent territory. A complex of surface burials is also located within one mile of the proposed Area (EN 9).

Scenic Quality

Rugged terrain, with eroded crests offer a rounded, smooth image. Very few outcrops exist to alter the pattern, which in spots approximates a moonscape. The site reflects intense color displays in the vicinity of Blue Point. Vegetation varies from creosote bush, low desert shrubs and grasses to Joshua tree, rabbitbrush, and others. Easy access to the area attracts many motorized vehicle users, and most hills show evidence of use. Unimproved campsites, fire rings, and trash can be found.

SITE VALUES CONSIDERED

Terrain diversity

Outstanding slopes for hillclimbing are located in this Area. A broad variety of rounded foothils and challenging canyon slopes attract intense recreational use.

Accessibility

This Area is easily accessed from the nearby State Route 14 via the Jawbone Canyon Road.

Traditional use

This is one of two major hillclimbing areas in the entire CDCA. This Area is well known and consistently enjoyed by motorized vehicle enthusiasts.

Proximity to users

The Area is considered a long drive, but within the average weekend driving distance of most desert recreationists residing in the Los Angeles and Orange County population centers.

Size

This Area is small when compared to many of the other motorized vehicle free-play areas. However, it was considered adequate in size because the excellent hillclimbing activities it offers have use patterns which require little open space.

Manageable boundaries

Identifiable and manageable boundaries surround the Area. However, intense use requires special border delineation at times. Signs, fences, and an increased BLM field presence are methods management may employ to confirm boundaries.

OTHER SENSITIVE VALUES

Education/research

The Jawbone Area receives several visits annually from educational institutions for visit and study.

Safety

Intense use and crowded conditions create increased opportunities for accidents here.

SUMMARY OF PUBLIC COMMENTS

Much correspondence favored adoption of Use or No Action alternatives. Some believed elsewhere throughout the surrounding Red Rock Canyon limited vehicle use should be reinstated. Others commented that people were being eliminated from energy-conserving, close-in recreation sites. Some opposed free play, citing conflicts with resources in the Area.

MANAGEMENT DECISION RATIONALE

Decision: Open, with management commitment to protect adjacent areas from "spillovers" and degradation of sensitive resources.

Rationale: Careful consideration has been given to problems associated with containment of vehicle use within Jawbone Canyon itself if the Area is to remain open. Weight, however, was given to the importance of this Area to those who enjoy hillclimbing and related vehicle use in the decision. This decision carries a commitment to develop a management plan and appropriate actions to protect surrounding desert resources.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Future impacts will be similar to those described for Dove Springs. Many of the hillclimbs are on longer slopes than in Dove Springs which could result in even greater rates of erosion on each trail up the slope.

Vegetation

Jawbone Canyon has historically received highly intense use, particularly on hillclimb areas. Soil compaction is particularly severe in camping areas and on trails in the canyon bottom. Continued use will have a negative impact on vegetation. (See Table V-5-1).

Table V-5-1

SUMMARY OF EXPECTED IMPACTS ON VEGETATION FROM CONTINUED MOTORIZED VEHICLE USE IN JAWBONE CANYON

VEGETATION TYPE	Area	% Change in Vegetation Cover From Control
Creosotebush	Hillside-Sparse Trails	-35%
Creosotebush	Hillside Dence Trails	-52%
Creosotebush	Pit Area	-100%
Creosotebush	Trails	-91%

Wildlife

Desert tortoise habitat. Motorized vehicle use affects tortoises by (1) direct killing on the surface and in subsurface burrows; (2) crushing of nests of eggs; (3) damaging of habitat used for cover by compacting soils crucial for burrow construction, crushing burrows, destroying perennial and annual vegetation used for cover; and (4) damaging of habitat components used for forage by crushing annuals used for food, compacting soils so food plants won't germinate, fostering growth of unpalatable weeds, etc. (Bury 1978, Berry and Nicholson 1979). Another source of impact is noise. Based on

recent studies by Bondello and Brattstrom (1979) on other desert reptiles, there are strong indications that motorized vehicle noise may deleteriously affect tortoise hearing sensitivity.

Prime reptile habitat. Continued intensive motorized vehicle use can destroy this area for reptiles. Although night-driving and snake collecting removes animals along the road, it does not destroy habitat; the animals can still reproduce. In contrast, motorized vehicle activity virtually consumes land and species.

Prairie falcon and golden eagle. According to the Harmata et al. (1978) study, prairie falcons avoided parts of their foraging areas that were used by weekend recreationists and returned only when the visitors had left. Harmata et al. performed their studies in the nearby Red Mountain-Spangler Hills area so the data are directly applicable. Raptor nests are known to be in the vicinity of the Jawbone Area.

The same kinds of avoidance reactions and disturbance can be expected to occur with golden eagles. With increased and continued human use, the possibility for continued and increased disturbances exists.

Another important problem is the effect of motorized vehicles on the foraging area of these raptors. Thelander (1974) has noted: "those areas where human activity has included the destruction of golden eagle foraging areas, prey populations or nesting sites, permanent exclusion of nesting golden eagles has occurred." The same can be expected of prairie falcons.

Although only a 12 to 20 percent portion of the forgaging habitat of the prairie falcon and a 16 to 30 percent portion of the foraging habitat of the golden eagle will be affected by the intensive use in Jawbone, the loss of this amount of foraging habitat can be expected to have deleterious impacts on these species. Productivity of the nests can be affected, as well as maintenance of the pair during periods of stress. Loss of this amount of habitat may cause failure of all four eyries.

With continued use of the Jawbone Area, the El Paso-Red Mountain-East Sierra Raptor Core Area can be expected to decline by a maximum of 15 percent for golden eagles and 15 percent for prairie falcons. Impacts to foraging areas as habitat for prey species can be expected to be permanent. That is 7.8 square miles of prairie falcon and 7.8 square miles of golden eagle foraging habitat could be lost permanently or denuded to the point where prey species could either no longer exist or be in such low numbers that the raptors could not survive.

Mohave ground squirrel. Cross-country vehicle activity can be expected to deteriorate the habitat of this species. Motorized vehicle activity affects the ground squirrel and its habitat by: (1) direct mortality from vehicles; (2) crushing vegetation used for cover and forage; (3) crushing burrows; and (4) through noise, which is likely to cause deafening, resulting in behavioral changes and increased susceptibility to predation.

Burrowing owls and desert kit fox. Both of these species suffer from moderate to intense motorized vehicle activity in their habitats. Their population densities are naturally low, and they rely on burrow or den systems for cover. They also are dependent on a good supply of rodents for food. Motorized vehicle activity would have serious impacts on both the prey supply (see earlier references by Byrne (1973) and Bury et al. (1977) and on burrows and dens.

Burrowing owl and desert kit fox populations would decline and be immediately reduced, perhaps extirpated, in the vicinity of heavy use and pit areas.

Mule deer. Based on studies of other animals, about 10 percent of the habitat will be severely damaged and eventually destroyed (probably within 10 to 20 years). Essentially, 10 percent of the mule deer habitat in the Lone Tree complex will be destroyed.

Jawbone ecotone. The Jawbone Canyon region is located at the junction of the western Mojave Desert and the Sierra Nevada range, and it has influences from the San Joaquin Valley and transverse ranges. This is an important region where four major floras and faunas intermingle. The habitat was once very rich and diverse but is fast becoming degraded. The region has great importance for the study of many species and their niches, especially those that reach the limits of their ranges here.

Cultural Resources

It is felt that management of this area as a Class I area will have moderate negative impacts upon cultural resources. This Area has already been heavily impacted by extensive motorized vehicle use and vandalism. Because of the extremely low integrity of the site, site-specific salvage would adequately mitigate adverse impacts to cultural resources located within the proposed Area.

Native American

Motorized vehicle damage to the ethnographic village within the canyon has resulted in nearly total destruction of the site. The greatest potential impact to identified resources could occur to the identified mortuary sites adjacent to the Area. Motorized vehicle damage has been recorded within 150 feet of some of these burial areas. Management and protection guidelines for BLM adjacent properties should be coordinated with the Tehachapi-area Kawaiisu Indians.

General Recreation

Large numbers of hillclimb enthusiasts utilize the area's steep-sided, spectacular slopes to test the mettle of themselves and their machines. Hunting, birdwatching, floral displays, interpretation education and research all stand to suffer some impacts if motorized vehicle activity is allowed to persist in this area without additional resource management.

12. JOHNSON VALLEY AREA (See Map V-5-11)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a large block of public, private and State-owned lands comprising 358 square miles (229.000 acres) and lying about 25 air miles southeast of Barstow. The northwest corner of the Area is withdrawn for the Twentynine Palms Marine Corps Training Base. The northern boundary proceeds southwest from this point (Sec. 24, T. 7 N., R. 4 E.,) along the privately owned maintenance road, along the multiline power transmission line, to an intersection with a dirt road in Sec. 13, T. 6 N., R. 3 E., thence northwest along this dirt road in Sec 30, T. 7 N., R. 3 E., thence along the latter to the southwest corner of Sec. 23, T. 5 N., R. 1 E., thence south to the top section line of Sec 2, T. 4 N., R. 1 E., thence southeast along the north edge of the privately owned lands just to the north of the Johnson Valley and just north of the road leading from Yucca Valley to Appley Valley, thence to the northern township line of T. 2 N., R. 5 E., to the intersection with the boundary of the Twentynine Palms Marine Corps Base and thence northwest along its boundary to point of beginning.

In addition to the abovementioned perimeter roads and the nearby Johnson Valley road, there are numerous jeep and truck trails crisscrossing the area throughout.

The terrain is rough to very mountainous in the northern and northeastern portion whereas the southern and southwestern portion is intermittently rolling to mountainous with valleys and abundant playas. Soggy, Means, Melville, and Emerson are the largest dry lakes. They are located in the southern and southwestern portion of the subject area. Elevation varies from a low of 2,600 feet in the southeast to a high of 4,391 feet atop Red Hill in Upper Johnson Valley.

The railroad was granted every fourth section in the upper one-third of the parcel. Sections 16 and 36 were granted to the State. The lower two-thirds of the parcel is outside the limits of the railroad grant and was subject to state school section grants, i.e., Sections 16 and 36. Of the private land remaining, the major portion is still owned by the railroad.

There is one BLM-administered type withdrawal on the land: public water reserve #22 withdrawn by Executive Order of Sept. 8, 1914. The reserve involves the southern half of Section 24 and northern half of Section 25, T. 4 N., R. 4 E., SBM.

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[1]Portions of T. 3 N., Rs. 4, 5 & 6 E., SBM
T. 4 N., Rs. 2, 3, 4 & 5 E., SBM
T. 5 N., Rs. 2,3, 4 & 5 E., SBM
T. 6 N., Rs. 2, 3, 4 & 5., SBM
T. 7 N., Rs. 3 & 4 E., SBM

There are five facilities for transporting fuel or power travers the parcel. A proposed power plant being constructed in the upper eastern Johnson Valley on privately owned lands.

The Southern California Edison Co. has obtained approval of a site for a 1500 MW power plant on three sections in the north central part of the area about six miles of Soggy Lake. Transmission lines from the site will cut across the proposed motorized vehicle free-play.

FIGURE A-12

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended with Boundary Adjustments

_____ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope	X		Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources	X		Size	X	
Native American	X		Manageable Boundaries	X	
Wilderness		X			
Scenic Quality		X	Other Site Values Considered		
Recreation					
Range	X			Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner	X	
			Agriculture		X
			Educ./Research	X	
			Other Agencies	X	
			Safety	X	
			Adjacent Land Use	X	

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

SENSITIVE RESOURCE VALUES

Soils

The topography is 44 percent undifferentiated fans, 25 percent hills, 5 percent pediments, 5 percent sand dunes, 5 percent sand-covered pediments, 5 percent dry playa surfaces, 5 percent sand-covered fans, 2 percent sand-covered dissected fans, 2 percent dissected fans, and 2 percent riverwash. Sand-covered terrain (sand dunes,riverwash, sand-covered pediments, and sand-covered fans) total 19 percent of the area. Hills frequently have shallow to very shallow soils on steep slopes. Pediments have generally relatively thin layers of undifferentiated soil on moderately steep to steep slopes. Undifferentiated fans have soils with a wide range of properties but they are typically sandy.

Large amounts of soil disturbance have occurred from motorized activity in Johnson Valley. Approximately 400 acres of highly compacted pit areas and about 4,100 acres with many highly compacted trails were estimated from aerial photographs. About 80 acres of soil have been distrubed by mining.

Vegetation

No rare, threatened or endangered plant species are known to be present within or adjacent to the Johnson Valley Area. Several stands of ancient creosote bush rings (UPA) are within and adjacent to the open area and are being and will continue to be impacted. A small section of one of these stands has been designated as an Area of Critical Environmental Concern (ACEC).

Wildlife

The Johnson Valley Area contains habitat for BLM sensitive and proposed sensitive species such as the desert tortoise and golden eagle, habitat for significant species like the prairie falcon, a portion of the special Newberry-Granite Mountain Raptor Breeding Area (a special wildlife habitat management area), and other key wildlife resources. Motorized vehicle use will significantly affect habitat and local populations.

Desert tortoise. The Johnson Valley Area contains one of the three or four minor tortoise populations in the CDCA. The Johnson Area contains about 70 square miles (44,800 acres) of proposed critical desert tortoise habitat.

Golden eagle and prairie falcon. There are 102 square miles (65,300 acres) of prairie falcon and 126 square miles (80,640 acres) of golden eagle foraging habitat in the Area. These two areas overlap and include foraging habitat for two pairs of prairie falcons and four pairs of golden eagles, as well as one prairie falcon and two golden eagle eyries. These foraging areas

have been identified by England (1979) as part of eight crucial core habitats for raptors in the CDCA.

Burrowing owl and desert kit fox. These two species are considered "significant" species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List) and the desert kit fox is fully protected by California Department of Fish and Game Codes.

Desert bighorn sheep. Mountain ranges such as the Ord, Rodman, and Newberry lie immediately adjacent to or close to the Area. These ranges include habitat that was formerly used by desert bighorn sheep.

Cultural Resources

Ethnographically, this Area falls within the territory exploited by the Vanyume. Undoubtedly the Serrano proper exploited at least the southern portions of this area seasonally as well (Kroeber, 1925; Strong, 1929). Water resources are quite limited in this area as a whole. It is likely that this area was, therefore, somewhat marginal in land use for these people.

Historically, the area was utilized primarily for mining. Earlier mines included the Elsie Gold Peak (1906) and Gold Pin (1909). Later discoveries included the Emerson (1923), Johnson, and Los Padres mines.

Generally, these past activities have resulted in the following known and expected site types and distribution. Prehistoric sites consist mainly of lithic scatters, artifact isolates, small temporary camps, petroglyph loci, and various other special activity sites (e.g., milling stations). Perhaps as many as 560 such aboriginal sites exist in this expansive (358 square miles) Area. These sites would occur primarily along the margins of playas and atop alluvial fans. Obviously these landforms cover a good deal of the proposed area. One could, therefore, expect to have these sites dispersed across the entire area.

Historic, mainly mining, sites are located primarily in the mountainous regions with a very few sites in the flatlands (e.g., Mean's Well, Emerson Mill and Well). The majority of the known activity centered in the Fry Mountains, Iron Ridge and smaller mountains along the eastern boundary of this open area. As many as 140 historic sites are predicted within the entire Area.

Six major areas of known cultural sensitivity/significance are located within the proposed open area. Essentially, these areas are located along the northern and eastern margins.

Native American

The Johnson Valley Area and adjacent Newberry Mountains contain numerous resources seasonally exploited by groups including the Serrano, Mohave and occasionally Kawaiisu (D 80 1/20/60 p. 9).

Range

This Area falls within approximately half of the proposed Johnson Valley Allotment. This allotment is ephemeral and is capable of high production of annual vegetation.

SITE VALUES CONSIDERED

Terrain diversity

Excellent opportunities exist for motorized vehicle drivers to experience terrain and topographic relief. Steep slopes, rolling hills, flat dry lakes and open expansive country can all be found in this Area.

Accessibility

The Area is readily accessed by State Route 247, Camp Rock Road, Bessemer Mine Road and several powerline right-of-way roads. Within the area, access to almost any site can easily be obtained on the crisscross network of roads and trail available.

Traditional use

The Area has received intense and consistent recreational use. It is well known and a number of organized competitive events occur annually. Approximately 75,000 VUDs of primarily motorized vehicle use occur annually.

Proximity to users

Location is excellent in terms of being close to the southern California population centers and near the desert communities of Barstow, Victorville, and Lucerne Valley.

Size

As recommended in the Proposed Plan, this will be the largest motorized vehicle free-play area in the California Desert.

Manageable boundaries

The entire Area has good identifiable boundaries which can easily be confirmed and managed. The eastern boundary abuts Twentynine Palms Marine Corp Training Center and is clearly defined to prevent trespass and to avoid hazards.

OTHER SENSITIVE VALUES

Residential/private

Residential and private lands in and adjacent to this large free-play Area present possibilities for trespass.

Education/research

Currently, one institution is utilizing the southern half of the area for education and research, presumably to study the creosote rings. Other education and research potential exists to the east and south, primarily geological faulting and volcanism.

Safety

Mining sites, exploration digs, and the adjacent military training center present potential hazards to cross-country vehicle travel.

SUMMARY OF PUBLIC COMMENTS

Most of the comments relating to this Area supported vehicle free play. A few were concerned about mining exploration. One concerned commenter indicated that the Area should be closed because of potentially hazardous unexploded ordnance.

MANAGEMENT DECISION RATIONALE

Decision: Recommended as a motorized vehicle free-play Area.

Rationale: Consideration was given to sensitive resources including wildlife, sensitive soils, cultural and Native American values. Consideration was also given to potential impacts on grazing allotments. The decision to continue the open designation gives preponderance of weight to the fact that this is one of the most heavily used vehicle areas in the desert. Excellent terrain diversity, closeness to southern California population centers, and size all support the high level of suitability for this type of use.

ANAYLSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Motorized vehicle activity is intensively compacting soil in the Johnson Valley Area. The pit areas (about 400 acres as seen in a 1977 aerial photo) have very high maximum soil compaction values in the top six inches of soil. The potential for revegetation on this soil is gretly reduced because the soil strength values have been shown to be very limiting for plant root growth.

Compaction values for intensively used motorcycle trails radiating out from the pit area are generally excessive. An area of approximately 3,600 acres immediately around the pit area has an extremely heavy density of intensely compacted ORV trails. A surrounding area many times larger, but of unknown total extent, is crossed by numerous, highly compacted trails.

Johnson Valley has sufficient fine particles in the soil to exceed limits for Federal and State regulations of total suspended particulate concentrations in the vicinity of intensive motorized vehicle activity. Giroux (unpublished BLM study, 1979) reported that dust exposure levels to participants and spectators could be exceeded manyfold even on sandy soils.

Disturbance of soils in Johnson Valley will increase wind erosion because most of the soils are naturally stabilized by surface crusts or rock or gravel cover, and loosening will permit wind erosion to begin at a much lower velocity. Gillette et al. (unpublished BLM study, 1979) reported that when crusts are present on such soils they protect the soil fairly well with erosion threshhold friction velocities from 90-190 cm/sec. (infrequent winds), but when crusts are broken, wind erosion friction velocities of 20 to 50 cm/sec. are sufficient (frequent winds) to initiate wind erosion.

Dr. Chester Leathers (unpublished BLM studies, 1977, 1979) isolated valley fever spores from soil samples collected in Johnson Valley in both 1978 and 1979. The organism is a human pathogen which may, in some cases, cause serious illness or even death. Motorized vehicle activity may cause dispersal of the infective spores.

Although it is clesar that impacts to soils from motorized vehicle are high in Johnson Valley, some data caps exist. The main uncertainty is how much total area is actually covered by trails which are highly compacted.

Vegetation

Motorized vehicle free-play would result in 100 percent removal of vegetation in pit and camping areas. The total area of impact would be 61,400 acres.

However, damage to vegetation would drop off with increasing distance from pit and camping areas but could average out to 33 percent or greater permanent reduction in perennial plant cover throughout the Area. This represents and average biomass reduction of at least 0.60 ton per acre in creosote bush scrub. This would total about 36,000 tons or more throughout the Area.

About 90 percent of the Johnson Valley Ancient Creosote Bush Rings (UPA) unique plant assemblage would be moderately to severely impacted.

No rare, threatened or endangered plant species are known to occur within the Area.

Cover of annual plant species would be severely reduced in severely impacted areas by 90 percent or more, and about 30 percent over-all. Grasses would be affected less than native wildflowers.

Noxious weeds, such as Salsola spp. and Brassica tournefortii would be encouraged within the open area at the further expense of native vegetation.

Wildlife

The Johnson Valley Open Area contains habitat for BLM "sensitive" species such as the desert tortoise, golden eagle and habitat for significant species like the prairie falcon.

Motorized vehicle activity will have serious and long-lasting impacts on these species and their habitats. It will significantly affect habitat and local populations and to some extent cover a wide-ranging area.

Desert Tortoise. The Johnson Valley Open Area contains about 48 square miles (30,700 acres) of desert tortoise habitat; 13 square miles (8,320 acres) of tortoise densities of 20 to 50 per square mile and 35 (8,320 acres) square miles of densities of 50 to 100 per square mile. The tortoise habitat area is part of the Lucerne Valley Desert Tortoise proposed critical habitat of about 35 square miles (22,400 acres).

This Area once contained densities in excess of 100 to 200 or more tortoises per square mile. Declines could exceed 50 percent of the population per year, with virtual extirpation or declines to levels below the threshhold of recovery within five years in intensively used areas. Populations are now fragmented into two groups and both are very small with some densities of 50 to 100 per square mile, almost below the threshhold level for revovery.

Golden eagle and prairie falcon. There are 31 square miles (19,840 acres) of prairie falcon habitat and 24 square miles (15,360 acres) of golden eagle foraging habitat in the Johnson Valley Area. These areas include foraging habitat for five pairs of prairie falcons and four pairs of golden eagles. These foraging areas have been identified by England (1979) as part of eight crucial core habitats for raptors in the CDCA. The core areas have the highest known densities currently and historically of prairie falcons and golden eagles in the CDCA.

The particular core area found here is known as the Newberry-Granite Mountains Raptor Breeding Area. It contains 15 of the 93 prairie falcon and 21 of the 67 golden eagle eyries that should be managed as crucial, core habitat for these two species. The Newberry-Granite core area contains 31 percent of the golden eagle and 16 percent of the prairie falcon eyries in the eight core areas of the California Desert and is thus a very important core area.

With continued motorized vehicle use of the Johnson Valley Area, the Newberry-Granite Mountain Raptor Breeding Area may be expected to decline by a maximum of six percent for prairie falcons and 14 percent for golden eagles. Declines could occur within 5 to 10 years.

Burrowing owl and desert kit fox. Burrowing owl and desert kit fox populations existing in this area would decline over a period of time possibly eventually be extirpated. This trend would be accelerated, in the vicinity of heavy use and pit areas.

For further details on wildlife impacts, see the Stoddard Area.

Cultural Resources

Over-all negative impacts to cultural resources can be expected. Surface sites in the disturbed central and western areas will continue to be destroyed. Of concern are expected severe negative impacts to major areas of cultural sensitivity along the northern and eastern margins. Over the 20-year planning horizon, impacts to virtually all of the predicted 560 prehistoric and 140 historic sites in this area are expected if the Area is subjected to motorized vehicle use.

General Recreation

If the area is declared a motorized vehicle free-play area, interpretation and educational activities, as well as research, could receive negative impacts from increased motorized vehicle activity. Floral displays, hunting, and National Recreation Lands could all receive slightly negative impacts. Rockhounding access would be enhanced.

A number of positive side effects would be generated by establishment of the free-play area. Such action would (1) concentrate a major portion of CDCA motorized vehicle use in the Johnson Area; (2) provide much needed, additional area to vary race event courses; (3) stimulate participation in sanctioned events; (4) encourage membership in sponsored clubs; (5) take pressure off WSAs and sensitive areas in the surrounding environment; (6) encourage use by drawing more motorized vehicle enthusiasts to the Area; and (7) provide possibility for creating a deferred use system within the Area to allow partial rehabilitation of heavily used locations.

Range

The Area falls within approximately half of the proposed Johnson Valley Allotment. This allotment is ephemeral and is capable of high production of annual vegetation.

Wilderness

The Area does not meet wilderness criteria. Establishment of a free-play area would not affect it.

13. McCOY VALLEY AREA (See Map V-5-2)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a large, complex parcel of public, private and State-owned land consisting of 251,400 acres lying adjacent to and west of the Palo Verde Valley-Blythe area in eastern Riverside County. Interstate 10 (I-10) traverses the parcel from east to west along the Chuckwalla Valley and just south of Ford Dry Lake. The Area is bounded on the northeast by the lower foothill portion of the McCoy Mountains, on the north by the lower foothills of the Palen Mountains, and along the south-southwest by the Little Chuckwalla and the Chuckwalla Mountains. A neck of land extending to the north is bounded by the Palen Mountains on the east and the Palen Dry Lake and drainage basin on the west. In addition to I-10 there is an occasional frontage road with numerous roads leading both north and south from it.

There are one or more dry lakes on the Area, Ford's Dry Lake being the principal one. There are several small, rough mountainous hills throughout the Area. However, the terrain is generally flat to rolling to steep. The elevation varies from a low of 250 feet near the east edge of the area to a high of 800 feet along both the northern and southern boundaries.

The land ownership pattern is a remnant of one wherein the school sections 16 and 36 were the only patented lands. However, in the fairly recent past there have been several transfers of title to private citizens, either by small tract act or by the Desert Land Act, with the result that about one-fifth of the subject is now privately owned, with the major portion of the remainder being under the jurisdiction of the Bureau of Land Management. It should be noted that a corner of the southeastern portion of the subject is adjacent to a large parcel recently obtained for a nuclear power site.

There is one utility line running northeast-southeast through the southern portion of the parcel. Four other utility lines run parallel to I-10 along the bottom of Chuckwalla Valley.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of T. 5 S., R. 16 E.,
Ts. 3, 4 & 5 S., Rs. 17, 20, 21 E.,
T. 6 S., Rs. 17, 18, 19, 20, 21 E.,
Ts. 7 & 8 S., Rs. 18, 19, 20 20, 21 & 22 E.,
T. 9 S., Rs. 19 & 20 E., SBM.

FIGURE A -13

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	X	___	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	___	X
Wilderness	X	___			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	X	___
			Safety	X	___
			Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

RESOURCE DESCRIPTION

Soils

The topography of the McCoy Valley Area has approximately 40 percent undifferentiated fans, 20 percent dissected and highly dissected fans, 8 percent sand-covered plains, 8 percent sand-covered fans, 8 percent sand dunes, 5 percent plains, 5 percent hills, 3 percent riverwash, and 3 percent dry playa surface. The sand-covered areas (sand dunes, washes, sand-covered plains and fans) total 27 percent. Hills often have shallow soils on steep slopes. Large areas of well-developed desert pavement occur on the dissected and highly dissected fans.

There are many tracks on some of the desert pavement. Large numbers of these tracks may have been produced by tanks during World War II.

Wildlife

The McCoy Valley Area contains several important wildlife resources including, but not limited to desert tortoise, and the proposed critical tortoise habitat; prairie falcon; bighorn sheep; mule deer; California leaf-nosed bat and pallid bat; and the proposed Chuckwalla Bench Ecotonal Area, (an Area of Critical Environmental Concern). The Area also contains the proposed Milpitas Wash ACEC or special wildlife habitat management area.

Cultural Resources

The proposed Area fell within the ethnographic boundaries of the Halchidons until approximately 1826. Following that date, the Area was occupied by the Chemehuevi. Approximately 14,080 acres of very high and 37,120 acres of high sensitivity/significance would be affected should the area be accepted for motorized vehicle free play.

At least 100 sites are recorded in this Area, including villages, temporary camps, rock art, trails, rockshelters, sherd scatters, milling stations, and historic sites. More than 1,900 prehistoric and 200 historic sites are predicted in this region. At least 50 linear miles of historic roads and trails also crosscut the polygon. Approximately 32,000 acres of the polygon has high potential for early human buried sites.

In addition, two areas have been nominated to the National Register of Historic Places (McCoy Spring and the Sundesert Nuclear Plant Site near Palo Verde).

Native American

The Area includes portions used by the Mohave, Cahuilla Halchidhoma and Quechan (D 80 1/20/60 p 13). Mohave villages located in the foothills are highly sensitive for some traditional residents of the Colorado River Indian Tribes reservation. The Mule Mountains adjacent to the Area are highly sensitive for Mohave traditionalists (EN 34).

Wilderness

The Area incorporates all, or part of, many roadless areas and Wilderness Study Areas. Specifically, all of roadless areas 351, 351A, 349 and most of 330, along with portions of WSAs 350, 348, and 325.

The four roadless areas were dropped from further wilderness consideration because the presence of man is highly visible throughout. The remaining WSAs have had their borders adjusted to eliminate all unnatural features. Those portions which remained met all FLPMA requirements. Out of 137 Wilderness Study Areas, the remainder rated: (1) WSA 325, 33rd; (2) WSA 348, 56th; and (3) WSA 350, 95th.

The area incorporating these WSAs is immense and includes many notable natural features. Although the primary features have been excluded from the Area's borders, these borders do include hundreds of square miles of land with significant wilderness values.

SITE VALUES CONSIDERED

Terrain Diversity

May outstanding rolling bajadas, washes, and narrow canyons provide topographic diversity at a maximum.

Accessibility

The entire area is easily reached since Interstate 10 crosses it along an east-west axis. Several well-defined and some graded roads emanate from the interstate and join a network of roads which crisscross the entire area.

Traditional Use

This Area traditionally has received much intense use, primarily motorized vehicle oriented. The network of available roads and trails is used to reach points of interest. Vehicle free play is probably less important in this area than other forms of vehicle use.

Proximity of Users

This Area is not considered to be within the average weekend driving range for the majority of desert users who reside in the Southern California and Las Vegas population centers.

Size

The Area is large and is capable of accommodating heavy recreational vehicle use.

Manageable Boundaries

While the majority of the Area is enclosed by definable borders, some of the parameter is without clearly identifiable boundaries. Confirming and managing the borders of this large area could be difficult.

OTHER SENSITIVE VALUES

Safety

Mining and exploration sites present many potential hazards.

Other Agencies

A nuclear power plant site has been identified within this Area and potential for construction does exist.

SUMMARY OF PUBLIC COMMENT

Comments indicated the presence of archaeological and cultural values, particularly in the Mule Mountain area. Other comments supported this free-play area because of its traditional past use.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended.

Rationale: Consideration was given to the features of this area which have made it popular for cross country travel. The decision, however, is based on protection of sensitive resources particularly the Bighorn Habitat Area which includes an important route between bighorn sheep ranges.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

It is expected that the closure of the Area to motorized vehicle free play will have a significant negative impact on this recreational activity. A major portion of the McCoy Valley area was designated "open" in the Interim Critical Management Plan (1973).

Historically, many concentrated use zones occur through the McCoy Valley Area and more than 94,000 VUDs were recorded in 1978.

Primary recreational activities in the area are camping, four-wheel drive and motorcycle play and touring, sightseeing, rockhounding, shooting, and picnicing. The loss of this area for four-wheel drive and motorcycle free play will cause negetive impacts, potentially displacing an unknown, but substantial, number of these users.

The opportunities for race events through much of the McCoy Valley would receive only minimal impacts at most by disallowing cross-country travel.

Most of the traditional free-play area is designated as multiple use Class M which allows for race events and pit areas.

The rough and rugged Chuckwalla mountains, the expansive bajadas, numerous washes and many narrow canyons make McCoy Valley a diverse and important recreation area. The excellent rock collecting hobby prospecting, good deer, quail, and chukar hunting and the excellent camping and access in this area would receive only minimal negative impacts at most from the Class M designation.

14. MESQUITE DRY LAKE AREA (See Map V-5-10)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a small, oval shaped parcel of public land consisting of approximately 5,900 acres lying 45 air miles northeast of Baker in the northeastern corner of San Bernardino County. There is one jeep-truck trail running north-south through the west edge of the parcel. It leads from the southwest to the low pass known as Mesquite Pass, thence south to the multiline powerline right-of-way along the shoulder of Clark Mountain. The parcel is less than one-half mile from the Nevada-California state line to the northeast.

The terrain of the Area is very flat as is typical of playa (desert dry lake beds). The elevation is 2,650 feet around the perimeter. There are growths of mesquite surrounding the playa edge.

There is no ownership other than that of Federal government which has assigned jurisdiction to the Bureau of Land Management.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Sections 3-6, 8-11, T. 18 N., R. 13 E.,
Sections 27-34, T. 19 N., R. 13 E., SBM.

FIGURE A-14

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[2]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	X	___		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

Soil characteristics are not significant.

Wildlife

The Mesquite Lake Area includes a variety of wildlife values. Although a detailed survey of aquatic invertebrates has not been completed at this site, Kubly and Cole (1978) have noted a number of species which may be rare in the California Desert. It is probable that Mesquite Dry Lake supports some of these populations.

Waterfowl often congregate at California Desert dry lakes during the winter when lakes contain water and adequate food supplies. These dry lakes may be essential to the survival of many migrating and wintering waterfowl.

Cultural Resources

This entire Area falls within a very high sensitivity/significance polygon. Mesquite Lake lies at 2,540 feet above sea level and is surrounded by mesquite and sand dunes. The presence of mesquite is highly conducive to aboriginal occupation. Seven sites have been recorded in this area, most of which represent temporary camps. The predicted occurrence of sites is 6.73 sites per square mile for mesquite zones and 2.76 per square mile for the playa. The range of artifacts represented at these sites includes projectile points, lithics, knives, scrapers, millingstone, shell beads, hammerstones, and pottery. It is believed that these sites probably represent heavy seasonal occupation over a long period of time.

Native American

The Mesquite Lake Area has been employed by both Chemehuevi (and Pahrump Valley Southern Paiute) and Panamint Shoshone from the Death Valley, Furnace Creek area. The use of the area ethnographically is primarily restricted to seasonal collection of food and crafts materials.

Range

The Clark Mountain grazing lease extends onto Mesquite Lake. During the summer months, cattle forage on the mesquite beans which occur there. The Clark Mountain burro herd also extends on to Mesquite Lake. The herd has an estimated 325 individuals in it, but only a small percentage would use the Area.

SITE VALUES CONSIDERED

Terrain Diversity

The dry lake is uniformly flat with mesquire hummocks dotting the lake bed.

Accessibility

Access is considered adequate via graded mining roads and powerline maintenance roads.

Traditional Use

Concentrated use is very low and is assumed to be primarily sightseeing and exploring activity by local residents in the nearby Mesquire Valley.

Proximity to Users

The Area is considered remote and well beyond the average distance traveled by desert recreationists for weekend relaxation.

Size

The Area itself is of good size. However, impenetratable mesquite thickets effectively reduce the dry lake's size, making it too small for motorized vehicle free-play.

Manageable boundaries

Clearly identifiable boundaries border the entire Area.

OTHER VALUES CONSIDERED

Safety

Low, thick vegetative cover blocks vision and creates unsafe cross-country travel conditions.

SUMMARY OF PUBLIC COMMENT

Comments received identified this Area as having known exceptional mineral potential.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended.

Rationale: This is not an important vehicle play area. Most visits are related to sightseeing and use of existing routes of travel. This decision is based on protection of resource values, particularly cultural sites.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Significant negative impacts to motorized vehicle free play are not expected if the Mesquite Dry Lake Area is closed. In 1978 some 3,000 VUDs were counted there. The primary activity is sightseeing and touring which is not free-play oriented. Impacts to motorized vehicle free-play use are expected to be slight and not significant in terms either opportunities lost or displacement of free-play recreationists.

A potential for negative impacts on general access to the dry lake is possible and is expected to be most noticed by the local residents who are thought to be the predominant users.

15. NORTH ALGODONES DUNES AREA (See Map V-5-13)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a small block of public, private and State-owned lands comprising 20,160 acres. It lies between the Southern Pacific Railroad right of way on the northeast boundary and the Coachella Canal on its western boundary and is located in north-central Imperial County. The north boundary is synonymous with the top of T. 12 S., R. 16 E., SBM., and the southeast boundary proceeds in a southwest direction from a point on the Southern Pacific Railroad near the southwestern corner of Section 29, T. 12 S., R. 17 E., SBM, to where it intersects with the Coachella Canal at a point near the northeast quarter of Section 7, T. 13 S., R. 17 E., SBM. There are access routes along both the railroad and the canal.

The terrain is rolling to flat typical of a windblown dune complex. The elevation varies from a low of 130 feet near the northern border to a high of 350 atop some of the small dunes near the southern edge.

The land ownership pattern is a remnant of a checkerboard ownership with alternate even sections being owned either by the State or the Federal Government. At present, the State still owns fee title to 640 acres; private lands total 3,680 acres, and the remainder under the jurisdiction of BLM.

There is one utility right-of-way along both the east and west boundaries of the subject.

The Imperial County General Plan designates this area as "preservation."

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Ts. 12 and 13 S., Rs. 16 and 17 E., SBM.

FIGURE A-15

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	___	X	Manageable Boundaries	___	X
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	X	___
			Agriculture	___	X
			Educ./Research	X	___
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

This free play area contains such important wildlife resources as habitat for several species of endemic beetles, butterflies and moths; habitat for the Colorado fringe-toed lizard and flat-tailed horned lizard; and habitat for the black rail and yellow warbler.

Rare and endemic beetles. The Algodones Dunes contain habitat for at least eight endemic species of beetles and another possble four species, making this dune system the most diverse in terms of rare beetles in the CDCA (Andreas et al. 1979). In a 1979 study, Algodones Dunes were found to contain 100 percent of the habitat for three of five endemic species of beetles under investigation (Hardy et al. 1979). One of these arthropods, the Andrews scarab beetle (Pseudocotalpa andrewsi), has been proposed for Federal threatened status. This species was found to have wide distribution on the main dune mass but was not found elsewhere.

Rare species of moths and butterflies. Powell (1978) reported the presence of a small species of moth (Suleima n. sp.) which was found on the endemic and rare Algodones sunflower (Helianthus niveus spp. tephrodes) at the north end of the Algodones.

Colorado fringe-toed lizard and flat-tailed horned lizard. The area contains habitat for the Colorad fringe-toed lizard and some habitat for the flat-tailed horned lizard, a BLM sensitive species, and a species under status review by the Office oF Endangered Species.

Spadefoot toads. There are remnant, relict populations of Couch's spadefoot toad along the eastern edges of the Algodones Dunes (Mayhew 1962, Dimmitt 1977).

Desert kangaroo rat. This area is prime habitat for this large species of kangaroo rat. This is a species of limited distribution and localized occurrence. It is found only in areas of windblown sand and is considered to be highly specialized.

East Mesa Black Rail Habitat. The East Mesa Black Rail Habitat in and adjacent to the canals abuts on the North Algondones Dunes Area. The habitat was proposed as a special wildlife habitat management area for the black rail, a species whose habitat is very limited and has gradually disappeared. The black rail has been classified as a "rare" species by the State of California. Also within this special habitat area is habitat for migrating yellow warblers (on the BLM sensitive species list).

Cultural Resources

This Area was occupied aboriginally by the Kamia and Quechan Indian peoples. Approximately 320 acres of high cultural sensitivity would be directly impacted if the Area were open for vehicle free play. At least 45

prehistoric sites could possibly be disturbed. The most significant resources are located in the vicinity of Amos. Amos is of historical significance. It was a railroad siding and Mammoth Tank Wagon Stop and historic graves are located in the Amos area.

SITE VALUES CONSIDERED

Terrain Diversity

Rounded to steep sloping dunes agumented by flat land in the Mammoth Wash provide good terrain diversity.

Accessibility

While not considered convenient to the user, this Area can be reached via the Niland Glamis Road on the east and the Coachella Canal access road on the west. Both roads intersect with State Route 78 to the south.

Traditional Use

There has been intense and consistent use, primarily by motorized vehicles. Some 22,000 VUDs of recreational use were recorded in 1978.

Proximity to Users

Considered within average driving distance from the large San Diego population centers, the Area is also near the desert community of El Centro.

Size

It is of adequate size for motorized vehicle free play.

Manageable Boundaries

The southern boundary is not definable, and virtually nothing prevents vehicle travel into the adjacent Sand Hills National Natural Landmark designated to protect critical endemic plant species.

OTHER SENSITVE VALUES

Residential/Private Owners

Much of the area is in a checkerboard land-ownership pattern. A free-play area would encourage tresspass onto private lands in this area.

Education/Research

Indirect impacts could be expected on the adjacent Sand Hills National Natural Landmark where much research and study takes place.

SUMMARY OF PUBLIC COMMENT

Some comments opposed motorized vehicle free play on the north side of State Route 78 near the Natural Landmark. Others supported continued use as a free-play area. A few comments identified sand dues, in general, as inappropriate for free-play activities.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a motorized vehicle free-play area.

Rationale: This Area is recognized as traditionally an important four-wheel drive play area and consideration was given to this fact in arriving at a decision. Management problems associated with protecting the adjacent closed area and avoiding trespass on adjacent and intermingled private lands outweighed user benefits, however, resulting in a decision to close the area and extend the proposed Wilderness boundary to the north.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Significant negative impacts are expected both in terms of opportunities lost and in displacement of motorized vehicle free-play recreationists. In the Interim Critical Management Plan, the dunes and washes were designated "open," providing excellent opportunities for dunebuggying and four-wheel drive free play and touring, camping, shooting, hunting and sightseeing. The majority of the recreational use occurring in this area is vehicle oriented and most of the 22,000 VUDs of recreational use recorded in 1978 would be displaced. The Multiple-Use Class L designation of this Area in the proposed Plan will severely limit the traditional use of the Area, creating negative impacts to both race events and general free play.

16. OLANCHA AREA (See Map V-5-14)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a rectangular block of land three to four miles wide by 14 miles long with its main axis running northeast-southwest. There are 30,720 acres of public and privately owned lands lying with the southwestern portion within two miles of the small community of Olancha in west-central Inyo County. The northwest boundary of subject is the oiled paved highway leading northeast from Olancha to State Route 180, thence along this highway to the south-southeast about 4.2 miles, thence southwesterly across the lower foothills of the Coso Range to a point near the south quarter corner of Section 27, T. 19 S., R. 37 E., MDM., thence west to the corner common to Sections 27, 28, 34 & 35, thence north along the section line common to Sections 27 and 28 to a corner common to Sections 15, 16, 21 & 22, all in same township and same range. Then the boundary runs west to the corner common to Sections 16, 17 20 & 21, T. 19 S., R. 37 E., MDM., thence north to an intersection with the oiled paved road or point of beginning. The Owens Valley and Owen Lake lie almost immediately adjacent to the northwest. There are numerous other dirt roads leading from the above-mentioned paved road to the southeast into the Coso.

The terrain varies from nearly flat along the whole of the northwest edge to very rough and mountainous along the southwest two-thirds. The elevation varies from a from a low of 3,620 feet above sea level along the paved road near the western corner, with the high being 5,314 feet above sea level atop a small pinnacle near the southeast edge of the parcel.

The land pattern is a remnant in which Sections 16 and 36 were granted to the State of California for school purposes and an occasional private transfer of title was made in the recent past. There are now only 1,440 in private ownership, with the remainder either being under withdrawal or under the jurisdiction of BLM.

There is one withdrawal covering a major portion of the subject land, Executive Order 6206, which withdrew all of the Owens Valley water basin for protection purposes for the benefit of the Department of Power and Water, City of Los Angeles.

There is one energy production and uility facility running along the northwest edge of the parcel parallel to the paved road.

Figure A summarizes characteristics of sensitivity and suitability determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of T. 17 S., R. 38 E.,
T. 18 S., Rs. 37, 28 & 39 E.,
T. 19 S., R. 37 & 38., all in MDM.

FIGURE A-16

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	X	___	Traditional Use	X	___
Plants & Wildlife	___	X	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	X	___
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

RESOURCE DESCRIPTION

Soil

The topography has 25 percent sand-covered plains, 25 percent undifferentiated alluvial fans, 15 percent fans, 10 percent sand dunes, 10 percent hills, 5 percent sand-covered fans, 5 percent playas, 3 percent mountains, and 2 percent plains. Sand-covered terrain (sand dunes and sand-covered fans and plains) comprise 40 percent of the Area. The undifferentiated alluvial fans would generally be more susceptible to dust production and compaction than the sand-covered areas.

Some motorized vehicle activity is visible on desert pavement areas on dissected alluvial fans.

Cultural Resources

The Area under consideration was occupied originally by the Panamint Shoshone (Stewart: 1938). There are 6,400 acres of high and 1,600 acres of very high cultural resource sensitivity within this area. Approximately 190 archaeological sites are predicted to occur within these sensitive areas. The site types include lithic scatters, temporary camps, pottery scatters, a cairn, and an historic road.

Native American

The resources in the proposed Area include numerous sites and locations of importance to both the Shoshone and Paiute of Owens Valley. An historic village is located along the border of the area (at Dirty Socks Springs) which was traditionally occupied by Lone Pine area Shoshone. A record village location occurs along the northwest borders of the polygon. Much of the area of this polygon continues to be employed seasonally by members of the Lone Pine, Big Pine and Bishop reservations for the collection of grasses and herbs. The Owens Valley Paiute have continued to use areas along the southern boundary of the polygon primarily for domestic secular collections (EN 31).

Wilderness

The Olancha Area incorporates all of WSA 130 and the northern portion (outside of WSA borders) of roadless area 131.

Topography is diverse, with smooth mountains, gentle sloping bajadas, interior valleys and sheet bluffs. The mountains rise gradually from the bajadas and display smooth ridges and rounded peaks. Within the mountains, relatively large interior valleys exist. Bluffs with sheer faces add to the diversity. Bajadas slope gradually into Owen Dry Lake. An area of small, building sand dunes exists. Vegetation is dominated by creosote bush and supported by low desert shrubs and grasses.

A few ways exist in the hills along the bajadas, and surface grading scars are located in the northern portion. All significant impact areas have been eliminated from wilderness consideration. WSA 130 ranked 134th out of 137.

SITE VALUES CONSIDERED

Terrain Diversity

Terrain varies from flat to low sloping bajadas to steeply rising canyon walls and mountain foothills.

Accessibility

The Area is easily accessed via State Route 190, which forms the northern boundary, and from many other maintained dirt roads.

Traditional Use

Receiving little concentrated use, this generally well-known Area appears to attract only small numbers of visitors. In 1978, some 4,500 VUDs of recreational enjoyment were recorded.

Proximity to Users

The distance traveled to reach the Area from most southern California population centers is considered more than most desert users are willing to travel.

Size

The Area is of very adequate size for motorized vehicle play.

Manageable Boundaries

Defineable boundaries surround the entire Area.

OTHER VALUES CONSIDERED

Other Agencies

State and local government lands within the Olancha Area would conflict with free-play management.

SUMMARY OF PUBLIC COMMENT

Comments received supported protection of the Area, citing cultural resource and Native American values.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle free play.

Rationale: Limited vehicle use has occurred in the Olancha Area in the past. However, the Area is important as the only vehicle use area serving the northern part of the CDCA and more specifically residents of the Owens Valley.

Cultural resources in this Area are significant and outweighed other considerations in arriving at the decision.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Potential exists for moderate negative impacts for motorized vehicle enthusiasts with the closure of this Area to cross-country, free-play activities. This is the northernmost traditional free-play area in the California Desert and was designated as an "open" area in the Interim Critical Management Plan.

While this Area is not highly important on a desert-wide basis, it is of importance to residents of small urban centers near Owen Lake who are thought to account for most of the use recorded. In 1978, about 4,500 VUDs of motorized vehicle use were recorded. The loss of this Area will eliminate free-play opportunities for those persons.

17. OROCOPIA MOUNTAINS AREA (See Map V-5-15)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is the remainder of a large, nearly oval parcel of public and privately owned lands. It comprises approximately 49,300 acres and lies adjacent to State Route 60 along its northern boundary. The Area is located in south-central Riverside County. Its northwestern boundary is delineated by the road running southwest down Shavers Valley and Box Canyon (State Route 195); the southwest boundary by the Coachella Canal and the east by the industrial railroad and road along Salt Creek. The south boundary of the subject is the lower northern edge of the Orocopia Mountains. The Area lies 25 miles east of the small city of Indio.

The terrain is flat to rolling to rough, with Shavers Valley in the northern edge being broad and quite flat. In addition to the roads mentioned above, there are many trails and roads transecting the Area throughout. Elevation varies from a low of 80 feet near the Coachella Canal in the westernmost point to a high of 2,600 feet in the northeastern portion.

There is a checkerboard land-ownership pattern with 640 acres still in State ownership, 21,700 acres in private ownership, about 240 acres within the jurisdiction of the Bureau of Indian Affairs, and the remainder under the Bureau of Reclamation and Bureau of Land Management.

Section 12, T. 7 S., R. 9 E., SBM was withdrawn by Secretarial Order of March 9, 1909 for the Torres Indian Reservation. Section 18, T. 7 S., R. 10 E., SBM., was withdrawn for reclamation purposes for the Colorado River Reclamation Project by Secretarial Order of April 4, 1930. Portions of the Area are contaminated by possible presence of unexploded ordnance left from World War II military maneuvers.

There are two existing utility rights-of-way along the southern side of Route 60 (near the northern edge of Area).

Figure A summarizes characteristics for this Area.

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[1]Portions of T. 7 S., R. 9 E.,
Ts. 6 & 7 S., R. 10 E.,
T. 6 S., R. 11 E.,
Ts. 6 & 7 S., Rs. 12. 13 & 14 E., SBM.

FIGURE A-17

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ___ Area Recommended With Boundary Adjustments

_X_ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	X	___	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries		
Wilderness	X	___			
Scenic Quality	X	___	Other Site Values Considered		
Recreation	X	___			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography includes 15 percent badlands, 25 percent hills, 25 percent dissected and highly dissected fans, and 35 percent undifferentiated fans. Hills and badlands which often have limited depths of soil, cover about 40 percent of the Area. Well-developed desert pavement underlain by silty soil occurs frequently on the dissected and undissected alluvial fans and on the undifferentiated fans having sandier soils.

Soil impacts have been produced by excavation for highway construction materials as well as motorized vehicle activity.

Vegetation

No rare, threatened or endangered species are known to occur within the Area; however Ditaxis californica is known to be present in the Mecca Hills and potential habitat for this species exists within the Area. This is true also for Coryphantha vivipara var. alvensonii and Macaeranthera cognati. No unusual plant assemblages are known to occur in this site. The overall composition of the vegetation is Larrea tridentata (2-4% cover), Ambrosia dumosa (1%), and Hymenoclea salsola (1.5%). Also present are Yucca Schidigera, Fouquieria splendens Circidium floridum, Ferocactus acanthodes, Olneya tesota, and Bebbie juncia. Availble biomass estimates range from 800-1800 kg/ha (700-1600 lbs/acre), although the vegetation appears to be rather sparse.

Wildlife

Desert tortoise. The Orocopia Area contains 65 square miles (41,600 acres) of prime desert tortoise habitat, including 54 square miles (34,560 acres) of densities of 20 to 50 tortoise per square mile and 11 square miles (7,040 acres) of densities of 50 to 100 tortoises per square mile. This Area, located on an ecotonal zone of overlap between the Mojave and Colorado deserts, contains 50 square miles (32,000 acres) of the proposed Chuckwalla Desert Tortoise Wildlife Habitat Management Area. This represents 13 percent of the total area recommended for management. This desert tortoise population is of critical importance to the conservation of this species because it represents a significant portion of a high-density tortoise region, the population of which has a much better change of survival than that of other states and most other locations in California.

Prairie falcon. There are 38 square miles (24,320 acres of foraging area utilized by three nesting pairs of prairie falcons present. A single prairie falcon eyrie is located in the Orocopia Mountains in the southern portion of this Area.

Desert bighorn sheep. The desert bighorn sheep, a BLM sensitive species, is found in 17 square miles of this Area. This represents 21 percent of the entire seasonal range utilized by a herd of desert bighorns in the Orocopia

Mountains. Herd density has been estimated at 40 (Weaver 1975) and is thought to be holding.

Desert shrew. The desert shrew, a small sensitive species of limited distribution in the CDCA, is present in 5.4 square miles. This represents 14 percent of the total area known to contain this species within the CDCA.

Cultural Resources

Resources are present within 640 acres of very high and 5,120 acres of high sensitivity/significance. The localities currently gauged to be sensitive are roughly concentrated in the western third of the Area. Potentially sensitive zones also occur along Salt Creek and throughout the zone south of the Hayfield Lake and north of the Orocopia Mountains.

In the western third of the Area is a small unnamed dry lake with a recorded temporary camp. The number of recorded sites within the Orocopia Planning Unit are few, and temporary camps are even rarer. Other sites are likely around this dry lake, and they should be investigated in relation to the extensive prehistoric trail network which crisscrosses the Hayfield Valley and the Salt Creek to the south.

A second area of high sensitivity is also in the western third of the open area and includes five northeast-southwest trending trail segments as part of two site complexes.

A third area of potential sensitivity is the Salt Creek area where the historic Bradshaw Trail passed through.

Locations of cultural resource sensitivity outside the open Area include the Orocopia Mine (uncertain location), and a portion of the Lake Cahuilla shoreline on the southwest side of the Coachella Canal. Included in the latter are two temporary camps, one lithic and sherd scatter, and one trail.

Density estimate from three sampling strata in the Orocopia Planning Unit can be extrapolated to the Area as follows: wells and playas (4.0 site/mi^2), valley bottoms (3.0 sites/mi^2), and mountain slopes)0.53 sites/mi^2). This does not include the badlands in which no sites were found.

Native American

Traditional use of the Area includes shaman training, residence, and extensive hunting and collection throughout the Mecca-Orocopia region. Dos Palmas spring, known to the Cahuilla as Par-nes-pa (EN 22), is a sacred site used for the training of religious practitioners and healers. The environs of Hunter Springs is known as Pa-sup-np-ka-put, an area of traditional residence for many of the people now living at the Torres Martinez and Cabazon reservations. The general vicinity (Pah-hem-on-gash-veh) continues to be employed for traditional hunting and collection purposes (EN 30).

Wilderness

The Area is located within roadless area 344. Approximately 60 percent of the Area covers lands excluded from Wilderness Study Area consideration. The remaining 35 percent overlaps lands which did meet the criteria and are included in WSA 344 (Orocopia Mountains). This WSA ranked 59th out of 137.

The WSA includes both the Orocopia Mountains and the southeastern portion of the Mecca Hills. It is in the Mecca Hills that the conflict between wilderness and motorized vehicle free-play exists: at the popular Sheep Hole Oasis, Hidden Springs, and "the grotto." Water found at Hidden Springs supports coyote, rabbits, and bighorn sheep. Ironwood, palo verde, smoke trees and palm enclaves also can be found in these locations.

Scenic Quality

The Area incorporates a number of scenic quality polygons which range from "high" to "low."

In the Mecca Hills, the scenery reflects great geological upheaval. Immense layers of strata have been tilted, folded, uplifted, and subsequently exposed. Various colors of strata stand out and contrast with each other and the surrounding environment.

The southern portion of the Orocopias also display colorful geologic features, including stratified canyon walls, fault scarps, and cliffs. Vegetation is sparse throughout the mountains Creosotebush is the visually dominant plant, but in the mountain washes smoketree and palo verde also are found. The lower flat areas to the north generally lack major scenic values.

General Recreation

Several interpretive resources dot the Orocopia Area, with most of them located in the western portion. Salt creek, the only natural perennial stream flowing into the Salton Sea from its eastern shore, is rated "high" as an interpretive resource. Sites inventoried and ranked as having medium interpretive values include Dos Palmas Springs, a spring along the San Andreas encarpment Grotto Canyon, Hidden Spring, Palm Oasis, and Sheep Hole. As many as six additional interpretive areas are within or adjacent to this Area, but have not been rated as yet.

One teaching and research site along the western border attracts eight or more pre-college, college and university classes annually.

"Good" floral opportunities abound along the entire northern boundary and up to a mile into the Area. Also in the western tip are "good" dove hunting opportunities. "Fair" rockhounding opportunities exist for bacon onyx in the eastern portion.

SITE VALUES CONSIDERED

Terrain Diversity

the terrain is diverse, challenging, and interesting. Ranging from flat to rolling hills and bajadas to rugged mountains and steep canyons, the Orocopia Area provides outstanding terrain diversity.

Accessibility

The Area is reached easily via State Routes 60, 195 and 111 and maintained roads.

Traditional Use

The Area receives a moderate amount of traditional and concentrated use. However,motorized vehicle free play does not account for all of the majority of the 26,000 VUDs attributed to the Area in 1978. Camping, vehicle touring, sightseeing, picnicking, shooting, and hobby prospecting are also pursued.

Proximity to Users

The Area is suitably located from most of the southern California population centers. The Area is also located near the Palm Springs and Coachella Valley urban areas.

Size

The area is large and capable of accommodating a broad variety of motorized wehicle free-play activities.

Manageable Boundaries

Definable boundaries surround all sides.

OTHER VALUES CONSIDERED

Safety

Mining sites and exploration pits present potential hazards to cross-country vehicle use. Some unexploded ordnance may possibly contaminate portions of this Area.

SUMMARY OF PUBLIC COMMENT

The few comments relating to this Area generally supported motorized vehicle use. One response stated that "the Use and No Action alternatives seemed best for the area. They are balanced and fair, but the Protection is too restrictive."

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle free play.

Rationale: Consideration has been given to the free-play potential of the Orocopia Area which was designated "open" in the ICMP. Only a moderate amount of use has occurred. Sensitive resources including soils, wildlife, plants, cultural resources, Native American values, wilderness, and scenic quality out weigh the motorized vehicle recreation potential, resulting in the decision to propose that the area not be recommended.

ANAYLSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Potential negative impacts may occur from both the loss of opportunity and the displacement of motorized vehicle free-play enthusiasts. The hilly slopes, dissected canyons, large washes, and rolling bajada create the rugged character of this Area which attracts a diverse assortment of recreationists. Primary recreational activities include camping, four-wheel drive and motorcycle free play and touring, sightseeing, picnicking, shooting, and hobby prospecting.

This Area was designated as "open" in the Interim Critical Management Plan, and it is readily accessible from major urban centers, which could make it potentially important for motorized vehicle free play. Much of the more than 26,000 VUDs recorded in 1978 is expected to be lost or displaced if the Area is closed.

No significant impact is expected on such activities as sightseeing, vehicle touring, picnicking, shooting, and hobby prospecting. With much of the Orocopia Area in Multiple-Use Class M, pit stops and race events may occur on identified routes. No significant impacts are expected for participants in organized competitive events.

18. PAINTED CANYON AREA (See Map V-5-15)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a small, almost oval-shaped parcel of public and privately owned lands consisting of 4,600 acres located in the southwestern edge of the Mecca Hills in south central Riverside County. Its dimensions are approximately 2-1/2 miles by 3-1/2 miles with its northeast edge lying about four miles south of Cactus City on State Route 60 (leading from Los Angeles to Needles). Its southwestern edge is contiguous with a portion of the eastern right-of-way for the Coachella Canal. This portion lies about three miles northeast of the small farming community of Mecca. There is one jeep-truck trail traversing most of the canyon bottom.

The terrain is deeply intersected by small side canyon drainages leading into the main drainage making the whole quite picturesque and scenic. The elevation varies from a low of 32 feet above sea level at a point near the Coachella Canal to a high of 1,270 feet atop a small promontory near the extreme northeastern corner of the parcel. (Ref: USGS 15-Min. Quads. COACHELLA, 1956, and COTTONWOOD SPRING, 1958).

There are 760 acres of privately owned lands, with the remainder held in trust either by the Bureau of Indian Affairs or managed by the Bureau of Land Management.

There are no utility lines in the Area, and the only ones to be considered will be nearby to the southeast.

Figure A summarizes characteristics of sensitivity and suitability for this area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Secs. 23, 24, 25, 26, 27, 33, 34, 35 & 36, T. 6 S., R. 9 E.,
Secs. 19, 30 & 31, T. 6 S., R. 10 E.,
Secs. 1, 1 & 3, T. 7 S., R. 9 E., all in SBM.

FIGURE A-18

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[2]	No	Accessibility	X	___
Soil/Slope	X	___	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	___	X
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	X	___	Other Site Values Considered		
Recreation	X	___			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use		

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

Topography in the Painted Canyon Area includes 75 percent badland, 15 percent undifferentiated alluvial fan, and 10 percent riverwash. The badland soils are generally on steep terrain and of limited depth. Undifferentiated fans are on gentle to moderate slopes. They have a wide range of soil textures, but most are sandy. Riverwash is primarily sand.

Vegetation

One rare plant species occurs within this open area: Ditaxis californica (FWS, 1980). General vegetational makeup includes creosote bush, bursage, pinyon cedar (Pencephiflum schotlis), and Hoffmanngeggia (Hoffmannseggia microphylla).

Wildlife

Mule deer. The Painted Canyon Area contains 4.3 square miles (2,752 acres) of a mule deer population concentration area located in the Mecca Hills. This represents 8 percent of the total area utilized by this herd, estimated at 100.

Prairie falcon. There are nine square miles (5,760 acres) of foraging area utilized by one nesting pair of prairie falcons in this open area. A single prairie falcon nesting site is located in the center of this area.

Desert bighorn sheep. The desert bighorn sheep, a BLM sensitive species, is found in 3.6 square miles (2,300 acres) of this proposed Area. This represents 2.8 percent of the entire seasonal range utilized by a herd of desert bighorns in the Orcopia Mountains. Herd density has been estimated at 40 (Weaver 1975) and is thought to be holding.

Cultural Resources

Painted Canyon is situated in the Mecca Hills. Ethnographically, it was within the bounds of the Desert Cahuilla. There are unconfirmed reports of a village site near the mouth of Painted Canyon. (Indian Claims Commission Hearing Docket #148, p. 140). To the south of this canyon in the vicinity of Surprise Valley there are reports of collecting by Cabazon Indians. It appears that this collecting location is not within this Area.

The Mecca Hills were included in the Orocopia study area within the badlands sampling stratum. Within the entire stratum, two transects were surveyed although no sites were recorded. This is in part attributable to the fact that the Mecca Hills are heavily dissected, and the transect included these zones rather than the more open wash areas.

Native American

The general area of Painted Canyon/Mecca Hills is known to the Cahuilla as Katamikosh. The area includes several long-occupied permanent village sites and the associated graveyards of clans now living on the Torres Martinez and Cabazon Indian reservations. The canyon area is considered sacred by many Cahuilla elders (EN 22,26) and has also been employed as an area for initiation and training of medicine people (EN 22). The Area continues to be of special significance to many Cahuilla traditionalists.

Wilderness

This Area contains the extremely colorful, deeply eroded and sparsely vegetated terrain of roadless area 343. The northern and western portions of this roadless area are more gently sloping and include large desert washes. This northern portion is generally "checkerboard" or private land. The Area is currently used by motorized vehicles, but much of the use occurs in the washes where visible alteration of the character of the land is not apparent. Some ways occur in the hills, and erosion has taken place. Although visible, the intimacy and extent of the canyon systems within the Mecca Hills greatly reduce the impact. The only portion within the Mecca Hills which has been excluded as not containing wilderness values is the Riverside County maintained road and the campground in Painted Canyon.

Scenic Quality

Scenically, the area possesses some outstanding values. Obtaining the majority of its uniqueness from geologic formations and associated color displays rather than vegetation, it is one of the highest rated scenic units in the CDCA. Vegetation is sparse and limited to typical low desert shrubs in the hills, and smoke tree and desert willow in the washes. Intrusions are limited, with the developed campground in the canyon being the main one.

General Recreation

Rugged hills and steep eroded sandstone cliffs, sometimes reaching 500 feet from the canyon floor and colorfully banded with soft pastel earth tones, characterize Painted Canyon and surrounding Mecca Hills. Both of these areas are rated as "high" in interpretive resources.

Two teaching and research sites are in or border on the Painted Canyon Area. They attract as many as seven pre-college, college or university classes to this area annually.

A motorized vehicle closed area identified in the Interim Critical Management Plan is adjacent to and overlaps this Area's boundary. A county campground is situated at the mouth of Painted Canyon.

Opportunities for "good" hunting occur throughout the Painted Canyon Area. Dove is the primary game sought here.

This Area is small, but because it is readily accessible for urban populations it attracts wide recreational use. Motorized vehicle recreationists were recorded at 6,500 VUDs in 1978.

Within the canyon itself, primary recreational activities include camping, picnicking, four-wheel drive and motorcycle play, and touring. Sightseeing and shooting, hiking, horseback riding and hang gliding are also enjoyed in and around Painted Canyon.

Route 195, the convenient access, carries more than 200 vehicles per day and is a county eligible scenic route.

SITES VALUES CONSIDERED

Terrain Diversity

Steep canyon walls and narrow canyon washes restrict much of the vehicle activity to the natural maze of washes preventing, in most cases, cross-country travel in this area.

Accessibility

The area is conveniently accessed via State Route 195.

Traditional Uses

Consistent concentrated recreation use occurs in th area, but in moderate numbers. A broad variety of recreation is enjoyed in this unique area and vehicle cross country travel is not necessarily considered a major activity. Some 6,500 VUDs were recorded for Painted Canyon in 1978. Dominant recreational activities include camping, picnicing, and vehicle touring.

Proximity to Users

The area is easily reached from most of the Southern California population centers, and is located near Palms Springs and Coachella Valley urban areas.

Size

It would be of adequate size for a motorized vehicle free-play area except for the steep terrain. This substantially reduces the effective area available for cross-country travel and makes the actual usable area for free play inadequate in size.

Manageable boundaries

The entire border is clearly delineated and indentifiable.

SUMMARY OF PUBLIC COMMENT

Public response was divided between opening the area to motorized vehicle free play and limiting use to designated routes of travel. Some responses favored protecting the area altogether, and others favored limiting access. A suggestion to add the "painted Canyon Area and the Chuckwalla Mountains to Joshua Tree National Monument" probably typifies the type of management the public desire for ths Area.

Decision: Not recommended

Rationale: Consideration was given to potential for motorized vehicle free play in the canyon area. Conflict with other forms of recreation and impacts on resources, however, provided the basis of the decision to propose that the canyon area not be open to motorized vehicle free play. This is consistent with the special recreation activity plan being prepared for the Mecca Hills area.

ANALYSIS OF EXPECTED IMPACTS TO MOTORIZED VEHICLE RECREATION FROM AREA CLOSURE

Negative impacts on motorized vehicle free play are expected to be slight both in terms of opportunities lost and displacement of motorized vehicle enthusiasts. Much of the Painted Canyon Area is deeply dissected, with small narrow canyons occurring throughout. This natural maze, by its nature, limits most of the cross-country free-play opportunities.

The Painted Canyon Area is small, but because it is easily accessed from large population centers it attracted more than 6,500 VUDs recreational use in 1978. Continuing to date, major recreational activities are camping, picnicking, four-wheel drive and motorcycle play and touring. Sightseeing, hiking, horseback riding and hang gliding are also enjoyed in this area. Only motorized vehicle free play is expected to receive negative impacts, and they may well be slight. Multiple Use Class M designation of the Area in the proposed Plan will not curtail organized competitive race events. Pit site and race events are allowed on existing routes.

19. PANAMINT DUNES AREA (See Map V-5-16)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is oval-shaped and consists of approximately one square mile of land lying 35 air miles north east of Olancha. It falls within the northernmost portion of the Panamint Valley. It lies approximately 10 miles north of State Route 190, the east-west route between Olancha and Death Valley National Monument.

The terrain is gently sloping to the southeast or to the bottom of the Panamint Valley drainage. The elevation of the subject varies from 2,400 feet on the southern edge to 2,672 feet at the apex of the dunes, somewhat near the north center of the dunes. (Ref: USGS 15 Min. Quad. - PANAMINT BUTTE, 1951).

The only patented or private lands are those on the nearby State-owned school lands within Section 16, T. 17 S., R. 42 E., M.D.M. There are no withdrawals on these lands.

There are no utility corridors present or proposed in the future in the vicinity of the Area.

The Area is designated "conservation/recreation" in the Inyo County General Plan.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Secs. 17 and 18, T. 17 S., R. 42 E., M.D.M.

FIGURE A-19

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[2]	No	Acessibility	___	X
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	___	X
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	X	___	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt.	___	X
			Agriculture	___	X
			Education/Res.	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Vegetation

The most significant vegetative resource present on the Panamint dune system is Astragalus lentiginosus sp. micans, a threatened species of native plant life (Draft Federal Register Notice of Review List of Candidate Endangered, Threatened and possibly Extinct Species of plants for California and Nevada). The dune, itself and the immediate vicinity constitute a landform which is relatively rare within the CDCA. The plant assemblage which grows upon the dune is considered to be unusual and therefore the Area was posed as an Area of Critical Environmental Concern (ACEC).

Total vegetation cover on the Panamint Dunes does not amount to more than 1 percent over a total dune area of 21 square kilometers (8 mi^2). The cover consists primarily of A. lentiginosus var. micans, Coldenia plicata and Larrea tridentata. The dune system is in part considered simple and active, with sand sheets, hummocks and blow sand (13 km^2), and in part complex, with sand mountains (8 km^2). Although small in area, the dunes exhibit a substantial amount of relief. Sand peaks toward the center are dominant.

Wildlife

Dune systems are unique, isolated habitats, essentially small islands surrounded by other, wide-ranging habitat types. The Panamint Dunes are no exception.

The Area contains 100 percent of the habitat of two endemic species of beetles, Trigonoscuta n. sp. (vide E.L. Sleeper) and Phobetus sleeperi hardy (Andrews, Hardy, and Giuliani 1979). This dune system, although quite small, is likely to contain a number of other endemic arthropods. At this time, only the beetles have been surveyed.

Cultural Resources

The northern end of Panamint Valley was occupied predominantly by Shoshone with some admixture of Kawaiisu.

The North Dunes system is three miles northwest of Lake Hill and covers an area of approximately three square miles. The occupancy of this Area extended through all of the Archaic substages, a period extending several thousands of years.

The North Dunes area appears never to have been intensively occupied. Rather it seems that occasional camping occurred at this location as a result of its strategic placement. In other words, this locality is situated at the base of pinyon-forested mountains, (where pine nuts were available) and along the route to the Indian Ranch Dunes, where both water and mesquite were obtainable. Also, from the North Dunes, it was possible to cross the Cottonwood Mountains to the east, shortcutting into Death Valley, via Circle Village.

Prehistoric site density estimates were derived for the valley bottom sampling stratum on the basis of transects within sites. An average of 15 sites/sq. mi. for the entire Panamint Valley is estimated. As no historic sites were recorded within transects in the valley bottom, there is no estimate of historic site density.

Native American

The Area itself is not highly sensitive in the context of Native American resources identified by the Owens Valley Paiute and Shoshone. A large, particularly significant village site is, however, located within a mile of the Area and would be exposed to significant danger of direct impact (EN 17).

Wilderness

Wilderness Study Area 127 encompasses the entire northern portion of Panamint valley. This WSA rated extremely high in relation to other WSAs. Out of a total of 137 WSAs, this Area ranked seventh. One of the primary reasons the Area ranked so high was the diversity of landforms enclosed within the mountain ranges: plateaus, low rolling hills, bajadas, rocky outcrops, rugged mountain canyons, valleys, peaks, and a small dune system.

This dune system, which is an integral part of the WSA, is relatively small and building. It is visible from the heights of Hunter Mountain to the north, and Route 190 to the south. This Area, which adjoins Death Valley National Monument,is one of the most unique of the Wilderness Study Areas.

Scenic Quality

The Panamint Dunes are located at the northern end of the valley. The dunes are surrounded on three sides by rugged mountains and are visible from almost anywhere in the site. The mountains provide a sense of enclosure to the valley and tend to focus attention inward. Although small, in relation to surrounding mountains, the dune system and adjoining dry lake tend to dominate the scenery. The sandy tan color provides sharp contrast against the darker colors of the surrounding area.

Few intrusions are evident. An unimproved mining road from an abandoned mine runs the length of the eastern edge of the Area.

The Area's over-all evaluation was "excellent" (the highest possible rating) with exceptionally high ratings in "landform" and "uniqueness." The dunes themselves were classified as an outstanding scenic feature.

SITE VALUES CONSIDERED

Terrain Diversity

The Area contains gentle slopes and rolling sand dune hills, providing good diversity of terrain.

Accessibility

The site could be accessed easily from State Route 190; however, to date no roads reach this Area.

Traditional Use

Use of the dunes is low and no known consistent concentrated use occurs here.

Proximity to Users

It is located beyond the average driving distance for desert users.

Size

While the size is adequate for a minimal number of users, it could quite easily become congested with increased vehicular use.

Manageable Boundaries

Boundaries are definable and manageable.

SUMMARY OF PUBLIC COMMENT

Much public comment supported protection of the Area.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle free play.

Rationale: The Area has low suitability for motorized vehicle recreation from the standpoint of proximity to users and past and present interest. This fact coupled with resource values which include wildlife, archaeological, Native American, wilderness and scenic quality, form the basis for the decision not to open this area to vehicle use.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Impacts to motorized vehicle use are expected to be minimal and not significant in terms of either opportunities lost or motorized vehicle free-play recreationists displaced if the Area is closed.

20. PANAMINT DRY LAKE AREA (See Map V-5-16)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is an elongated parcel consisting of approximately 35 square miles running north-south from Section 34, T. 17 S., R. 42 E., M.D.M., south to Sections 11-12 in T. 19 S., R. 42 E., M.D.M., and lying 35 miles from Olancha. It is in the bottom of the upper Panamint Valley. The land is centrally traversed by east-west State Route 190 leading from Olancha to Death Valley National Monument. In addition, there are several other minor access routes to or close to the Area: a jeep-truck route running north and south along the eastern edge of the valley the full length of the Area, a jeep trail running south from Route 190 through the center of the playa and exiting from the southeastern portion, and one running about one-half mile southwest and parallel to the Area.

The terrain of the Area is relatively flat as is typical of dry lake bed complexes. Its elevation varies from 1,560 feet around the playa's perimeter to 1,542 at the lowest point near the extreme southwestern corner of the parcel. (Ref: USGS Quad. - PANAMINT BUTTE, 1951).

There are no withdrawals embracing any of the Area lands. Patented lands include those of the State-owned school section, approximately 50 acres, encroaching the Area from Section 36, T. 18 S., R. 42 E., M.D.M. and State-owned school lands in Section 16, T. 18 S., R. 42 E.

The Area is designated "conservation/recreation" in the Inyo County General Plan.

Figure A summarizes characteristics of sensitivity and suitability for this area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of T. 17 S. - 19 S., R. 42 E., M.D.M.

FIGURE A-20

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	X	___	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

This Area occurs in a sparsely vegetated alkali sink-creosote bush scrub/playa community. The foraging area of one sensitive species, the golden eagle, and one significant species, the ΩΩprairie falcon, occurs here. There are 1.8 square miles of foraging habitat for each of these species, which would be 5 to 10 percent of their potential foraging area used around each eyrie during the breeding season (Harmata et al. 1978; Olendorff, pers. comm.).

Cultural Resources

This Area was also occupied ethnohistorically by Shoshone with some admixture of Kawaiisu.

The Area contains the oldest and most accepted Early Human site in the CDCA. Two soil layers have been radiocarbon dated. These layers date a bog or lake level probably related to cultural layers containing Lake Mojave and Silver Lake diagnostic points. According to Davis (1970:919, "It is reasonable to assume that habitation of the island or peninsula called Lake Hill was contemporaneous with a late presence of at least a seasonal lake about 10,500 years ago." Following dessication of the lake, the site was probably occupied only during those few occasions when water accumulated after a heavy rain; water fowl were probably obtainable during those periods.

On the basis of the number of sites recorded from transects in this stratum, 5.3 prehistoric sites and 1.3 historic sites per square mile are predicted. This does not include sites which were buried by periodic fluctuations of the lake. One must use caution in applying these playa estimates as they include the usually sterile lake beds in the area sampled. A 15.0 prehistoric sites per square mile estimate for valley bottom areas farther from the lake may be more relevant.

Native American

There are no identified high-sensitivity locations implicated directly by this Area, although activities outside of the specified Area could adversely affect a number of Native American values such as collection, occupation, and burial sites.

Wilderness

Wilderness Study Area 127 encompasses the entire northern portion of Panamint Valley. This WSA rated extremely high in relation to other WSAs. Out of a total 137 WSAs, WSA 127 ranked seventh. The diverse landforms enclosed within the mountain ranges, plateaus, rolling hills, bajadas, rocky outcrops, rugged mountain canyons, valleys, peaks, dry lakes, and a small building dune system, were the primary basis for the high rating.

Panamint Dry Lake is an integral part of WSA 127 and is visible from Route 190 to the south and Hunter Mountain to the north. The WSA adjoins Death Valley National Monument.

Scenic Quality

That part of Panamint Dry Lake under consideration is actually only the northern half of the entire feature. The entire lake is divided roughly in half by Route 190. Since the southern edge of the dry lake is formed by a well-traveled road, a large percentage of the valley is highly visible.

The Areas's over-all evaluation was excellent (the highest possible rating) with exceptionally high ratings in "landform" and "uniqueness." The dry lake provides a major contribution to the over-all quality.

SUMMARY OF PUBLIC COMMENTS

Some favored protecting the entire valley. Others stated that it would be a mistake to allow motorized vehicle free play and mining, mentioning the paleo Indian artifacts and petroglyph sites in the Area.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a motorized vehicle free-play area.

Rationale: The decision is based on potential for impacts on adjacent sensitive resources, particularly archaeological sites. This is coupled with the fact that the Area has not attracted much motorized vehicle use in the past. It should be noted that the Area contains the oldest early human site in the CDCA.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

No significant negative impacts are expected in terms of motorized vehicle free-play opportunity lost if the Area is closed.

21. PLASTER CITY AREA (See Map V-5-17)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a nearly rectangular block of public and privately owned lands comprising 41,000 acres. It lies 15 miles west of El Centro in south-central Imperial County. State Route 80 runs parallel to the San Diego and Arizona Railroad through the southern half of the Area. Interstate 80 (I-80) bounds the subject on the south. The eastern boundary lies on the section line contiguous to Sections 13 and 14 T. 16 S., R. 11 E., SBM. The boundary then runs north to a line common to Sections 23 and 26, T. 15 S., R. 11 E., SBM, thence west generally to Coyote Mountains routes, thence southeast to an intersection with both of the above-mentioned routes. The small industrial community (cement plant) of Plaster City lies near the southern center of the proposed Area. An industrial railroad and its satellite maintenance road proceed to the north from Plaster City to the Fish Creek Mountains en route to a mineral source for the plant operation. There are numerous other trails and roads throughout the Area.

The terrain is flat to rolling to steep and mountainous with several intermittent streambeds and dry washes draining into the main Coyote Wash, all of which drain to the northeast corner of the Area. The elevation varies from a low of -10 feet below sea level in the northeastern corner to over 1,000 feet in the northwestern quarter. (Ref: USGS 15-Min. Quad. PLASTER CITY, 1957)

The original ownership pattern was one in which only the school Sections 16 and 36 were granted to the State with an occasional transfer of title to private citizens in the recent past. At present 3,750 acres are in private ownership with the remainder under some type of Federal management, principally that of the Bureau of Land Management.

There are several withdrawals covering the eastern three-fourths of the Area. There is a small protective withdrawal on S. 1/2, S. 1/2 and N.12, SE.1/4, Section 31, T. 15 S., R. 10 E., SBM (PLO 5224)., and a townsite withdrawal for the expansion of Plaster City in the N.1/2, NE. 1/4, Section 8, T. 16 S., R. 11 E., SBM, by Executive Order of October 28, 1926.

The Imperial County General Plan classifies this area as (1) industrial (surrounding Plaster City), (2) recreation (northern portion adjacent to Navy lease, and western section), and (3) preservation (a north-south strip between [1] and [2]

Figure A summarizes characteristics of sensitivity and suitability for this Area determined during review following publication of the Draft Plan/EIS.

[1]Portions of Ts. 15 & 16 S., Rs. 9 & 10 E., SBM.

FIGURE A-21

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Plaster City Area contains four valuable wildlife resources: habitat for the flat-tailed horned lizard, habitat for the Colorado fringe-toed lizard, representative Colorado Desert alkali sink habitat, and potential bighorn habitat in the nearby Coyote Mountains.

Important ecotonal habitats. The Coyote and Fish Creek mountains on the west form a boundary between the mesic habitats of coastal southern California and the xeric Colorado Desert communities. In this region coastal species reach the eastern limits and desert species encounter western limits of their geographic range. The lists of species reaching either their eastern or western limits are long. Certain species pairs meet and may hybridize or intergrade, ie. the coast and desert horned lizards, orange-throated and western whiptails, Pacific and canyon tree frogs. There is also a zone of intergradation between coastal and desert subspecies. In general this zone is considered biologically rich and important; unfortunately little is known about it and further studies are necessary (Berry, et al. 1974)

Cultural Resources

This Area falls within the ethnographic boundaries of the Kamia Indians (Gifford 1931). Human use of the Area changed greatly through prehistory in response to periodic fluctuations in a once expansive fresh-water body, Lake Cahuilla. During the most recent high stand (circa 1400-1500 A.D.) aboriginal groups heavily exploited the lacustrine environment. Numerous camps and special activity loci are predicted in the eastern end of the Area within approximately two miles above and below the 42-foot beach line. During periods of basin abandonment by fresh water, aboriginal activity continued but consisted primarily of trails, lithic workships, and occasional pottery scatters (late prehistoric). The latter classes of surface sites are predicted to occur throughout the Area. In total, 300 prehistoric sites are minimally predicted.

Major areas of cultural resource concentrations include: (1) The area between I-8 and the San Diego and Arizona Eastern Railway has more than 100 recorded sites including lithic workshops, temporary camps, trails, and pottery loci within approximately 8,300 acres of a known highly significant cultural resources area. Much of this sensitive area is within a recently nominated Yuha Basin National Register property. (2) On the western edge, between Coyote Wash and Coyote Mountain is an area of 1,250 acres. Only three known sites occur. However, the lithic assemblages at two sites are heavily patinated and may be of some antiquity. A trail cuts across the sensitivity area and may ultimately lead to known rock shelters in the Coyote Mountains and open-air occupation sites to the northeast. This sensitive area has been designated as an ACEC in light of the above-mentioned values, as well as paleontological values directly to the east.

Native American

The general area has been traditionally employed by Kamia (S. Diegueno) and occasionally used by the Quechan/Cocopa. An aboriginal village, enthnographically identified by S. Diegueno lies in the northwestern portion of the study area. A Kami trading route also bisects the polygon and runs east/west from a campsite south of Plaster City (Lucus 1979: EN 23).

Wilderness

Roadless areas 370, 371, and the southern portion of 372 are in the Area. The site is relatively flat and sparsely vegetated, and majority of it is heavily impacted with the presence of man evident throughout. A small portion, the northwest corner, lies within WSA 373.

SITE VALUES CONSIDERED

Terrain Diversity

The Area ranges from flat with little relief to more dissected and rugged terrain near the mountain uplifts, providing diverse of challenging motorized vehicle opportunities.

Accessibility

Adjacent State Route 80 offers easy access.

Proximity to Users

The Area is convenient to the large San Diego urban population and the El Centro desert community.

Size

Size is adequate for several types of organized competitive events, as well as sufficiently open for interesting cross-country travel.

Manageable Boundaries

Clearly indentifiable existing boundaries need little additional confirmation.

OTHER SENSITIVE VALUES

Residential/Private Lands

Plaster City itself and the city's cement plant are adjacent to and located in the free-play area, respectively. A conflict potential exists.

Safety

The railroad and adjoining maintenance road, which cut almost completely through the central eastern portion of this Area to deliver raw source material (mud) for the cement plant, present potential hazards to cross-country recreation.

MANAGEMENT DECISION RATIONALE

Decision: Recommended for motorized vehicle free play.

Rationale: Consideration was given to cultural, Native American, wilderness, and wildlife sensitivities. However, in this decision, greater weight has been given to those factors which have made this area highly popular for competitive events and free play use by both local residents and visitors from the San Diego metropolitan area. The northwestern boundary was cut back to avoid the Coyote Mountains which control sensitive wildlife, vegetation and wilderness values.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Soils

Motorized vehicle activity is intensively compacting soil in parts of the Plaster city Area. Soil compaction in the pit site was measured with a recording penetrometer in a BLM study, and compaction was very high. Heavily used vehicle trails also had very high values.

Disruption of soil stabilization will significantly increase potential for wind erosion. Sufficient fine particles exist in the soils to produce high concentration of airborne dust during intensive vehicle activity. Prevailing west winds may carry dust into the populated areas to the east.

Vegetation

The nature of the impacts is the same as in the Rand Johnson or Stoddard Valley Area, and impacts could be expected to affect 31,700 acres.

Historical use of this Area is very high. Much damage to the vegetation has already been done. If levels of use continue as they are at present, a 30 to 60 percent removal of vegetation (in vegetated areas) can be expected. Hillclimbs, campgrounds, and permanent competition sites will lose vegetative cover entirely. The Coyote Mountain Primitive Area would protect some populations of Pilostyles thurberi and its host plant. This species is also known from several collection sites in Anza-Borrego State Park.

Wildlife

Flat-tailed horned lizard. The Plaster City Area includes six square miles of horned lizard habitat of which three square miles are in potential crucial habitat. This figure represents 49.5 square miles (31,700 acres) of habitat.

Colorado fringe-toed lizard. The impacts would be the same as those for the flat-tailed horned lizard. In addition, Bury's 1978 report outlined impacts specifically on the Colorado fringe-toed lizard. He found 61 fringe-toed lizards in three two-hectare control plots where there was no motorized vehicle use, but he found only three lizards in the same sized plots where motorized vehicles were common, a difference of 20-fold. There is an estimated 20 square miles of habitat here, an estimated two percent of the total range of this species.

Cultural Resources

Over-all impacts to cultural resources will be moderately negative, with impacts to the eastern end, the southern sector center of the open Area, and the Fages-De Anza Trail National Register property, since the area has already been severely impacted.

Native American

An historic village site lies along the eastern edge of the area (Egifford 9:9). Impacts along the northwest tip of the Area include the potential destruction of a Kamia mortuary site (Lucus 1979,Von Worloff 1979). Several Kamia permanent village sites have been alluded to along the eastern edge of the Fish Creek Moutains, and these areas would be heavily impacted. A few aboriginal trails and a campsite south of Plaster City (EN 23) would most probably be completely obliterated by the proposed activity. This Area was historically used by the Kamia, some of whom have expressed concern about losing resources of ongoing cultural value.

General Recreation

Potentially significant negative impacts to interpretive resources, particularly the Butterfield Stage Route, are likely. Teaching and research sites, parts of a proposed primitive area, and "good" hunting areas also could suffer negative impacts.

22. RAND AREA (See Map V-5-5)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is irregularly shaped, about 13.5 miles wide and 10 miles long, and covers approximately 59,300 acres. Most of it lies in Kern County with a narrow strip in San Bernardino County on the east. It is bounded on the north by the Southern Pacific Railroad and by privately owned land in the northeast portion of the Fremont Valley. Its eastern border is State Route 395, and on the south it abuts the limits of California City. The western edge follows the western boundary of R. 28 E.

The Area is traversed in a southwest to northeast direction by the Rand Mountains which rise gradually from the southeast and drop off steeply on the northwest. Maximum elevation is about 4,600 feet. There is much evidence of mining activity in the mountains. The land in the northern portion east of Koehn Lake is relatively flat and was formerly used for agriculture. The Randsburg-Red Rock Road traverses the northern portion in an east-west direction. A road from Randsburg to Mojave cuts across the southeastern corner. Numerous trails and jeep tracks crisscross the Area; many of them serve the mining activities.

The towns of Randburg and Johannesburg are adjacent to the northeast boundary of the Area. This section is classified as "urban influence area" in the Kern County General Plan and "commercial" in the San Bernardino County Plan. To the west and southwest of this "urban" area there is a Natural Resource Area, probably so designated because of mineral resources. The remainder of the study area is designated as "recreational" except for small parcels of "rural residential" in Sec. 36, T. 29 S., R. 3g E., Secs. 16 and 36, T. 30 S., R. 40 E., and Sec. 16, T. 30 S., R. 39 E.

Residents of Randsburg number about 300; many are miners. They generally favor motorized vehicle recreation in the desert as a boost to the economy. In contrast, residents of nearby Johannesburg want more control of vehicle recreationists in order to mitigate their destructive activities and vandalism.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1] T. 29 S., R. 38, 39, 40
T. 30 S., R. 38, 39, 40, 41 E.

FIGURE A-22

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	X	___	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	___	X
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	X	___		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research.	x	___
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography consists of 30 percent undifferentiated fans, 20 percent dissected fans, 20 percent pediments, 15 percent hills, and 15 percent mountains. Thirty percent of the area is on steep terrain (hills and mountains) with soil profiles which are often shallow. Some areas of desert pavement occur on the dissected alluvial fans, but these areas do not have a large cover of well-developed pavements. The undifferentiated fans tend to be sandy.

Vegetation

Vegetation within the open area is primarily creosote bush (5 percent cover); bur sage (4 percent cover); goldenhead (1 percent cover); and cheesebush (1 percent cover). Standing crop varies between 1,800 and 3,100 kg/ha (2,700 lb/ac). Other common species include hopsage, Indian rice grass (Onyzopsis humenoides), boxthorn (hycium andersonii), saltbush (Atiiples spp), indigo bush (Dalia fremontii), California buckwheat (Eriogonum fasciculatum), and pigmy cedar (Pencephyllum schottii).

Rare Threatened or Endangered Species. Sclerocactus polyancistrus, a threatened species (FWS, 1980), and Pholisma arenarium (CNPS, 1974) are both present within the Area, and Chorizanthe spinosa (T3; FWS, 1980) and Kenizoniz auda (E, FWS, 1980) are present in nearby Red Rock Canyon; the latter two may also be present.

Wildlife

Desert tortoise. The Rand Area contains about 110 square miles of prime tortoise habitat, including 5.5 square miles of densities of 50 to 100 tortoises per square mile, 38.5 square miles of densities of 100 to 200 per square mile, and 66 square miles of densities in excess of 250 tortoises per square mile (Berry and Nicholson 1979). This region is of critical importance to the conservation of the desert tortoise for a number of reasons:

1. It contains the highest known densities of the desert tortoise in the world and includes 35 percent of the highest known density habitat.

2. The land ownership pattern is almost entirely Federal, and the area is only one of two public land blocks where high density tortoise populations exist.

3. The other high density tortoise population on a solid block of public land does not contain such high tortoise densities. Also, that area is being leased for oil and gas development.

4. The Rand Area is one of four areas of proposed critical habitat in the California Desert.

5. The desert tortoise populations in this region have a better chance of survival than in other states and most other locations in California because of the current high reproduction rate (Berry and Nicholson 1979).

Mohave ground squirrel. This is an officially listed species, categorized by the California Department of Fish and Game as "rare." Its habitat is entirely confined to the western Mojave Desert. About 110 square miles of prime habitat occur in the Area. Of this, 38.4 square miles are proposed crucial habitat for the species, the Fremont Valley crucial habitat. There are six such crucial habitats proposed for the Mohave ground squirrel.

Burrowing owl and desert kit fox. These two species are considered "significant" species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List), and the desert kit fox is fully protected by California Department of Fish and Game Codes.

Prairie falcon and golden eagle. There are 44 square miles of foraging habitat for each species (total, 88 square miles of raptor habitat).

Upland game populations. California Department of Fish and Game experts stated that the Rand Mountains (and neighboring El Paso Mountains) provided some of the best chukar and quail hunting in the California Desert.

Western Mojave Desert creosote bush ecosystems. The Rand Area contains the last block of public land characteristic of a once widespread and rich Mojave Desert ecosystem, the creosote bush scrub-rich/high diversity type.

Koehn Dry Lake alkali sink habitat. There are some exceptionally fine examples of alkali sink habitat on the shores of Koehn Dry Lake, perhaps the richest alkali sink habitat in the CDCA. There is no known duplicate example. This dry lake supports desert tortoise and Mohave ground squirrel populations and also populations of the yucca night lizard. The yucca night lizard is typically found in Joshua tree woodlands but occurs here in good densities. Another significant species is the chisel-tooth kangaroo rat, Dipodomys microps. There is a small population around the edge of the lake. This species has limited occurrences in the CDCA, and the Koehn Lake location may represent 5 to 8 percent of its habitat.

Koehn Lake Marsh. The Koehn Lake Marsh was proposed as a 5 square mile Area of Critical Environmental Concern (ACEC). Of the 5 square miles, 4.5 are public lands. The marsh supports a number of shore and water birds, as well as raptors. The Koehn Lake Marsh meets wetland criteria as identified in Executive Order 11990 (Protection of Wetlands, May 24, 1977).

Cultural Resources

Ethnographically, this Area falls almost solely within Kawaiisu territory (Zigmond 1933; Kroeber 1925). Nonetheless, the Koso (Panamint Shoshone) certainly regarded this area as an exploitable resource base area (Hall and Barker 1974). Occasional or infrequent use of the area by Chemehuevi, Serrano subgroups (Kitanemuk and Vanyume), and Tubatulabl is presumed. Rock art loci, shelters, temporary camps, and milling stations occur from the lower slopes of the El Paso to their interiors. A "village" is recorded near Koehn Dry Lake which may have served for local plant collecting and possibly salt collection/trade. Little aboriginal use is known for the southeastern half of the Rand Area.

Historically, the Area has been dominated by mining spurred on by initial discoveries at Laurel Mountain, just north of the Rand Area, in 1863. Subsequent, intense mining efforts included borax exploitation at Koehn Lake (1870s) and hard rock exploitation in the Goler Mining District (1893), Rand Mountain (1895), Yellow Aster/ Randsburg (1898), and Atolis (1906). Subsequent influxes of miners, laborers, and support facilities (Rand Siding, Garlock, Johannesburg, etc.) left a richness of cultural remains varying from single prospects or mining artifacts/features to complete settlements across the Rand Area.

The Area as a whole has been severely impacted as have the extant cultural resources. The better preserved historic sites are found on patented lands where residents have accorded the resources a modicum of protection.

Native American

The area of Government Peak has been identified by Kawaiisu experts as associated with myths of migration and hero tales. A Kawaiisu/Kitanemuk collection area (apparently historic) of approximately 225 square miles is included in the northern half of the polygon. Temporary and a few permanent campsites are distributed primarily in the northern half of the polygon. A few of these areas continue to be occasionally employed as seasonally occupied campsites by Native American people. Mesquite collection was indicated in the Koehn Lake Cantil area (EN 9). The sparse remaining mesquite groves would be significantly and adversely affected by motorized vehicle free play.

Range

The Area falls within the Cantil Common Allotment. Sheep graze on annual feed there about four out of every ten years.

SITE VALUES CONSIDERED

Terrain Diversity

Outstanding opportunities ranging from flat to rolling terrain to rugged mountains and canyons exist.

Accessibility

The entire Area is easily accessed via State Route 14 which forms the western border and State Route 395 which forms the eastern border.

Traditional Use

There is important and intense traditional vehicular recreational use. In 1978, 150,000 VUDs of recreational use were recorded. Rand is one of the most heavily used areas in the CDCA.

Proximity to Users

The Area is conveniently located for most of the southern California desert users.

Size

Size is more than adequate to support a motorized vehicle free-play area.

Manageable Boundaries

Much of the Area is bounded by complex private land ownership. Because of this, approximately 80 to 90 percent of the entire border is often indefinable.

OTHER SENSITIVE VALUES

Education/Research

Colleges and universities use sites in the Area to conduct studies and for other educational and research purposes.

Safety

A mining site and an old exploration pit left exposed in this Area are hazards to cross-country travel.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended (Class M limited competitive events will be allowed).

Rationale: This popular area has been the scene of motorcycle racing for many years and was designated "open" in the ICMP. The decision not to designate this area as "open" in the Proposed Plan is based on the highly crucial tortoise habitat which has declined over the years as a result of heavy recreational use. Other values were also considered. The decision to allow competitive events (Class M) to continue carries with it a strong commitment

by the Bureau not to allow free play around pit areas and to limit racing to an approved course.

SUMMARY OF PUBLIC COMMENTS

Comments received were divided. Many desired that the Area maintain its prior motorized vehicle free-play status. About as many supported more protection, primarily of wildlife and archaeological values.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Potentially severe negative impacts may arise with the closure of this area to motorized cross-country free play, including a significant loss of opportunities and an unknown, but expected amount of displacement of many vehicle free-play enthusiasts. Further, the loss of this traditional free-play area would reduce the amount of motorized vehicle free-play opportunity in the CDCA.

This Area was designated "open" in the Interim Critical Management Plan and is one of the most important motorized vehicle cross-country and free-play areas in the entire California Desert. The Area provides a wide diversity of terrain including the Rand Mountains to 5,000 feet, steep canyons, deep valleys, bajadas, and large level areas for flat-out running. In all, the Area provides the topographical diversity and size needed to enjoy many free-play activities.

Almost 150,000 VUDs of recreational use were recorded in 1978. The vehicle is of primary importance in the recreational picture for this Area. Primary recreational activities include camping; motorcycle; four-wheel drive and dunebuggy free play; competition and touring; shooting; hunting; rock collecting; and hobby prospecting. Under the Multiple-Use Class "M" designation proposed for this Area in the Proposed Plan, only the vehicle cross-country free play would be negatively impacted. Other types of recreation, including organized vehicle competitive race events are not expected to receive any significant negative impacts. Pit areas and race events are to be allowed on identified routes of travel.

23. SHADOW MOUNTAIN AREA (See Map V-5-8)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area is a complex, irregularly shaped block of public and privately owned land comprising nearly 102,000 acres[1]. It lies nearly adjacent to and just east of Edwards Air Force Base, 10 miles north of George Air Force Base and 18 miles southwest of Barstow in west central San Bernardino County. State Route 95 leading from San Bernardino to Reno via Owens Valley traverses north-south through the center of the Area. Shadow Mountain Road, a hard packed dirt road, traverses the area from east to west across the south half, and another similar type of road traverses the area in a northeast-southwest direction. The latter was built as a maintenance road for a telephone right of way which was never constructed. Numerous other roads and trails crisscross the Area.

The terrain varies from rolling to flat on the northeast to slightly rough and mountainous toward the southwest stop the Shadow Mountains. The elevation for the area varies from a low 2,600 feet near the northeastern edge to a high of 3,967 atop one of the promontories on Shadow Mountains in the southwest. (Ref: 7-1/2 Min. USGS Quad. SHADOW MOUNTAIN.)

The land ownership pattern is a remnant of one in which Sections 16 and 36 were granted to the State of California for school purposes and every remaining fourth section, beginning with Section 1, was granted to the railroad. Since that time an occasional parcel has been transferred to private ownership to the extent that now approximately one-third of the land within the Area is patented. The remainder is under the jurisdiction of the Bureau of Land Management.

There are three north-south power lines running parallel to Route 95 and an additional telephone line right of way about 1-1/2 mile east of Route 95 running parallel in a northerly direction, and two electronic sites located within the northwestern portion of the subject. There is proposed for placement in the future a five-mile-wide energy production and utility corridor to run northeast-southwest across the northern third of the Area.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]A portion of T. 6 N., R. 6 W.,
T. 7 N., Rs. 5, 6 and 7 W.,
T. 8 N., Rs. 5, 6 and 7 W.,
T. 9 N., Rs. 6 and 7 W., all in SBM.

FIGURE A-23

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	___	X	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	X	___		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	X	___
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The proposed Shadow Mountain Area falls entirely within the range of the Mohave ground squirrel, an animal officially classified as rare by the State of California. The approximately 124,000 acres of noncrucial Mohave ground squirrel range in this Area represent approximately 11 percent of this species' range occurring within BLM planning polygons. Approximately 120,000 acres in the Area support desert tortoise at densities greater than 50 per square miles (36,000 acres at 50-100 per square mile and 84,000 acres at 100-250 per square mile). Roughly 86 percent (103,000 acres) of the Area is within the Fremont-Stoddard Valley Desert Tortoise crucial habitat. Approximately 8,000 acres fall within a five-mile radius of a prairie falcon eyrie near the Mojave River; this area represents 16 percent of the potential foraging area used by falcons and birds at this site.

Cultural Resources

The Area was occupied aboriginally by the Vanyume (Krober: 1929). There are 2,880 acres of high and 2,560 acres of very high cultural resource sensitivity within the area. Approximately 330 archaeological sites are predicted to occur within these areas of sensitivity. Six hundred eighty archaeological sites are predicted to occur within the entire Area. The site types include historic mining, town and ranches, lithic scatters, quarries, an aboriginal trail, rock shelters, rock arts, temporary camps, and a village site. Only a portion of this very high cultural resource sensitivity location lies within the Area. The remainder nearby sites would, however, be directly and indirectly negatively impacted if access were not limited.

Range

Three ephemeral sheep allotments fall within the Area.

SITE VALUES CONSIDERED

Terrain diversity

The terrain is diverse: rugged and mountainous to rolling and flat.

Accessibility

The site is conveniently accessed via State Route 95 which traverses the center.

Traditional Use

Much of the use comes from the adjacent El Mirage Dry Lake. The Shadow Mountain Area attracts only moderate amounts of consistent recreational use.

Proximity to Users

The Area is well located and within the average distance most southern California desert users travel for desert recreation.

Size

A sufficient land base is available for a motorized vehicle free-play area.

Manageable Boundaries

Identifiable borders surround the Shadow Mountains with private landownership boundaries accounting for less than 20 percent of the entire border. Private landownership borders are generally indefinable and must be signed or fenced.

OTHER SENSITIVE VALUES

Residential/Private

A checkboard land ownership pattern covers portions of this area.

Safety

Exposed mining shafts and exploration holes present safety hazards to cross-country vehicle enthusiasts.

SUMMARY OF PUBLIC COMMENT

No specific comments were received for this Area.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended.

Rationale: This motorized vehicle Area has been heavily used by recreationists in the past. It is traditional for competitive events and meets the criteria for free-play designation except for the fact that more than one-third of the land is in private ownership and highly fragmented. The decision is based on the land ownership problem. Because of the large number of owners, the possibility of acquisition through exchange or purchase of these inholdings was considered impractical.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

With the designation of the nearby El Mirage Area as a motorized vehicle free-play area, negative impacts are not expected in terms of opportunities lost or vehicle free-play enthusiasts displaced with the closure of the Shadow Mountain Area to cross-country travel.

24. SILURIAN DRY LAKE AREA (See Map V-5-6)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] 1,330 acres lying near the upper end of Salt Creek and about 20 miles north of Baker in northeastern San Bernanrdino County. State Route 127 is close to its western edge. There are dirt roads or trails traversing the Area east-west, with one across the upper half and another across the lower one-quarter.

Salt Creek, an intermittent stream, drains into the Area from the south and out of the Area to the northwest during inclement weather. The terrain of the subject is very flat as is typical of dry lake beds. The elevation around the perimeter is 675 feet above sea level. (Ref: 15-Min. USGS Quad. SILURIAN HILLS, 1956).

All of the land involved is federally owned under the jurisdiction of the Bureau of Land Management.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Secs. 24 and 25, T. 17 N., R. 7 E.,
Secs. 19, 29-32, T. 17 N., R. 8 E., SBM.

FIGURE A-24

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	___	X	Size	X	___
Native American	X	____	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The proposed Area includes a variety of wildlife values. The proposed BLM sensitive golden eagle occurs here and 640 acres of the Area are included in its foraging area.

Waterfowl often congregate at California Desert dry lakes during the winter when lakes contain water and adequate food supplies including aquatic invertebrates. These dry lakes may be essential to the survival of many migratory and wintering waterfowl.

Native American Interests

Silurian Dry Lake has been traditionally employed by Chemehuevi/Pauite for seasonal collection in the spring and early summer (Kroeber 1925, Driver 1953). Temporary campsites of some contemporary significance are distributed throughout the valley and adjacent foothills. An aboriginal trail, identified by the Chemehuevi runs east-southeast along the northern border of the proposed Area (EN 34).

SITE VALUES CONSIDERED

Terrain Diversity

The terrain is uniformly flat with little relief. It allows for safe flat-out running of vehicles.

Accessibility

Most use enters from the adjacent State Route 127.

Traditional Use

Much of the use in this area emanates from the Dumont Area. The dry lake is near these dunes and assists in supporting the intense recreational use the entire area generally receives.

Proximity to Users

The Las Vegas population provides the majority of visitors.

Size

The Area is small in respect to many other free-play areas, but is adequate to support the identified use.

Manageable boundaries

The boundaries are definable.

SUMMARY OF PUBLIC COMMENT

Some comments referred to the known exceptional mineral potential in the Area and proposed that development be permitted. Other comments supported limited access for protection of archaeological and cultural resource values.

MANAGEMENT DECISION RATIONALE

Decision: Recommended for a free-play area.

Rationale: Consideration was given to potential conflict between motorized vehicle free play and sensitive resources. The potential of this Area for motorized recreation outweighed these considerations in the decision.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTORIZED VEHICLE USE

Soils

Accelerated dust emission will occur from the playa center, but the greatest potential for dust production will be on playa margins which are very silty but lower in clay than the center.

Vegetation

The effects of motorized vehicle recreation on desert dry lakes within the lake proper are negligible. However, considerable removal of vegetation may occur along the lake periphery in the saltbush communities which form the vegetation there. The extent of this removal is a function of the degree of use, but would probably drop off with distance from the main recreation area (i.e. the dry lake).

Wildlife

Declines of potentially rare or endangered aquatic invertebrates can be expected if heavy motorized vehicle use occurs.

Migrating and wintering waterfowl depending on flooded dry lakes for habitat and aquatic invertebrates for food will decline if the Area becomes open to unrestricted vehicle use.

Cultural Resources

Over-all impacts to cultural resources are expected to be minimal because of the scarcity of recorded archaeological sites in the area. If buried sites

exist, they could be exposed through aeolian erosion as a result of vehicle activity.

Native American Interests

Few impacts to known resources of Native American values are anticipated. Potential exists for sites of cultural value neccessitating coordination with the implicated Native American groups.

General Recreation

No apparent negative impacts on general recreation are expected except for damage to the playa surface which could preclude sand sailing.

25. SILVER DRY LAKE AREA (See Map V-5-3)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a small block of public, private and State-owned lands 2-1/2 miles wide by 7 miles long comprising 6,200 acres. It lies 2 miles north of the small highway community of Baker in northeastern San Bernardino County. State Route 127 from Baker to Shoshone traverses the general area within one-quarter of a mile of the full length of the eastern edge. A hard-surfaced road transects the Area across the upper tip from east to west. A maintenance road runs parallel to the multiline powerline right-of-way which is within 1/8 mile from the northern tip of the Area.

The terrain is typically flat. Elevation is 907 around the perimeter of the playa. (Ref: 15-Min. USGS Quad. BAKER, 1956.)

Sections 16 and 36 were originally granted to the State for school purposes. During the recent past this pattern has changed with an occasional transfer of title. There are now 115 acres of State-owned land and 270 acres privately owned. The remainder is under the jurisdiction of the Bureau of Land Management.

An energy production and utility corridor 2 miles wide is proposed to run along the present right-of-way of the multiline powerline.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of Sections 21-22, 26-29, 33-36, T. 15 N., R. 8 E.,
Sections 1-3, 10-15 and 24, T. 14 N., R. 8 E., All in SBM.

FIGURE A-25

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	X	___			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Mojave fringe-toed lizard occurs within the boundary of the Area. Approximately 1,280 Acres of Mojave fringe-toed lizard habitat are included within the Area.

The invertebrate fauna of Silver Lake has been surveyed (Kubly and Cole 1978). One significant species, Moina brachycephala (cladocera), was found in Silver Lake and seven other of 22 lakes sampled. This dry lake ranks fifth among 22 dry lakes censused in terms of the numbers of invertebrate species found.

As noted in earlier analyses, waterfowl often congregate at California desert dry lakes during the winter when lakes contain water and adequate food supplies including aquatic invertebrates. These dry lakes may be essential to the survival of many migrating and wintering waterfowl.

Cultural Resources

The area under consideration was occupied aboriginally by the Chemehuevi (Kroeber 1929). There are approximately 960 acres of high and very high cultural resource sensitivity in the Area where 22 archaeological sites are predicted to occur. Site types include temporary camps, lithic scatters, pottery scatters, isolated flaked stone tools, rock art, an historic railroad (the Tonopah and Tidewater), an historic road, and an historic well with occupational debris. Approximately 13,280 acres of high and very high sensitivity surround the Area.

Only a portion of this very high cultural resource sensitivity area lies within the Area. The remaining acreage would, however, be severely impacted both directly and indirectly if access were not limited.

Native American

The Silver Lake area has been traditionally employed by Native American groups including the Chemehuevi and Panamint Shoshone. Historically, the lake bed has been occasionally employed for salt collection. An aboriginal trail followed the foothills along the perimeter of the lake toward the Owlshead Mountains (Eddy 1979).

Wilderness

Silver Dry Lake is a part of Wilderness Study Area 242. The Area, along with most of the roadless area, was determined to meet all of the FLPMA criteria for wilderness designation. The northern end of the lake is divided by a utility right of way and road. The smaller portion was too small for wilderness consideration.

SITE VALUES CONSIDERED

Terrain Density

Quite flat with little topographic relief, the dry lake affords safe cross-country travel.

Accessibility

State Route 127 provides convenient access.

Traditional Use

The Area receives low amounts of traditional use. Approximately 2,000 VUDs were recorded in 1978.

Proximity to Users

Much of the visitation comes from the Las Vegas population center in Nevada.

Size

The dry lake is of adequate size to support a motorized vehicle free-play area.

Manageable Boundaries

The Area is bordered by definable boundaries.

SUMMARY OF PUBLIC COMMENT

Comments for this Area supported some development and exploration of known high mineral potential.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a motorized vehicle free-play area.

Rationale: Weight is given to sensitive resources in this decision. This includes wildlife, cultural and Native American sites, and wilderness quality. It is recognized that this Area provides unique motorized vehicle free-play opportunities. However, these opportunities will be provided at Silurian Dry Lake located nearby.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

No significant negative impacts are expected from loss of opportunities for or displacement of motorized vehicle free-play enthusiasts. Nearby Dumont

Dunes, Silurian Dry Lake, and the Bristol Area are capable of handling any use displaced by the closure of Silver Dry Lake.

26. SODA DRY LAKE AREA (See Map V-5-3)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a block of public, private, and State-owned lands comprising 17,500 acres. It is 12 miles long from north to south with the northern tip lying within the edge of the small highway community of Baker in northeastern San Bernardino County. The parcel varies in width from 5 miles near the southern portion and narrows to less than 1 mile for the last 4 miles of its northern portion. The northern tip has access to Interstate 15 at Baker. A county road known locally as ZZYXX Road runs along the southwestern edge. Other roads transect the parcel, one east and west across the south quarter and one along the east edge in a north-south direction.

The terrain is typical of playas in that it is extremely flat. However, this one is not completely dry throughout the year. There are several live springs arising along the western edge. In fact, this is the principal source of the water for the historic site of old Fort Soda (ZZYXX Springs) located just off the Area in NW 1/4, Section 11, T. 12 N., R. 8 E., SBM. The elevation for the major portion of the playa is about 920 feet. The old Tonopah and Tidewater Railroad grade runs north-south through the parcel and lies at a slightly higher elevation. (Ref: 15-Min. USGS Quad BAKER, 1956.)

The land ownership is one wherein the Sections 16 and 36 were granted to the State of California for school purposes, with an occasional transfer of title to private citizens at a later date. At present, there are 640 acres owned by the state, 796 owned by private citizens, and the remainder are under the jurisdiction of the Bureau of Land Management.

The W. 1/2, Section 11, NW 1/4, Section 14, T. 12 N., R. 8 E., and W. 1/2, Section 35, T. 13 N., R. 8 E., SBM, were withdrawn from entry for the protection of all public and natural values by Public Land Order 5437. The above withdrawal was for the purpose of protecting these and the adjoining lands to the west in an attempt to implement the safeguarding of the Old Fort Soda site and remnants.

The above same land was also embraced in a withdrawal for public water reserve under Serial No. CA 3344, BLM , Interpretation of Public Water Reserve No. 107.

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[1]Portions of Sec. 1-2, 11-13, 23 and 24, T. 12 N., R. 8 E.,
Sec. 1-2, 11-14, 24-26, 35 and 36, T. 13 N., R. 8 E.,
Sec. 36, T. 14 N., R. 8 E.,
Sec. 4-9, 15-22, 28-30, T. 12 N., R. 9 E.,
Sec. 19, 30-33, T. 13 N., R. 9 E., SBM.

There is one underground telephone cable right-of-way transecting the Area across the upper portion from east to west. There is also an oil and gas pipe line right-of-way transecting the Area in a northeast-southwest direction across the upper portion of the parcel.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

FIGURE A -26

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	X	___
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

Resource Values. The Area includes a variety of wildlife values. All of the habitat of the endangered Mohave chub (Federal and State) is included within the boundaries of this Area. The Area is also in an ACEC.

Part of a proposed BLM Sensitive golden eagle foraging area is included within the Area. Approximately 8,960 acres (19%) of the estimated foraging area is included within this Area.

This Area also includes approximately 2,560 acres of Mojave fringe-toed lizard habitat.

Fort Soda, a special wildlife habitat, which includes rare marsh habitat, is also included within this proposed Area. Approximately 1,920 acres of this special habitat area is included within Soda Dry Lake Area.

Soda Dry Lake is ranked first among the 22 lakes sampled in terms of resident invertebrate species (Kubly and Cole 1978). Twenty species were found in this lake, including two significant species, a beetle (Deronectes oelamboides) and a fly (Scatella cf. arizonensis). These species are restricted to the southwestern United States, but each has been found, only in this dry lake out of the 22 dry lakes sampled.

Waterfowl often congregate at California desert dry lakes during the winter when lakes contain water and adequate food supplies, including aquatic invertebrates. These dry lakes may be essential to the survival of many migrating and wintering waterfowl.

Cultural Resources

The Area under consideration was occupied aboriginally by the Chemehuevi (Kroeber 1929). There are 640 acres of high cultural resource sensitivity within the Area where 64 archaeological sites are predicted to occur. A high sensitivity area of 35,840 acres surrounds the Area. Aboriginal site types include a village, temporary camps, pottery scatters, lithic scatters, and isolated flaked stone tools.

Prehistoric sites located around the lake margin are thought to date back 10,000 years. The Area is of potential research value in regard to the study of human adaptation to ephemeral lacustrine environments. Historic site types include historic habitation areas, historic roads, and historic railroads. Fort Soda has had historic use documented as far back as the 1860s. The Tonopah and Tidewater Railroad, also located within the Area, served Death Valley from 1906 to 1939.

Native Americans

A major trading route employed through historic times by the Chemehuevi and Serrano with apparent occasional use by Mohave runs along the southern portion of the polygon into the Afton Canyon area (D80 1/20/60 p. 12). The lake area has been employed for salt collection historically (Eddy 1979) and is associated with the intensive aboriginal use of the Afton Canyon area.

SITE VALUES CONSIDERED

Terrain Diversity

The Area is extremely flat; however, several springs fill portions of the lake bed with water year-around.

Accessibility

Easy access is available from Interstate 15 via the ZZYXX road.

Traditional Use

Little recreational use takes place on this dry lake. Use that occurs is usually associated with Ford Soda National Natural Landmark which is located at the very northern tip of the lake.

Proximity to Users

This Area is within the average weekend driving distance of the Los Angeles basin.

Size

Adequate space is available for cross-country free play.

Manageable boundaries

The lake bed is clearly discernible from the surrounding area, and its border is definable.

OTHER SENSITIVE VALUES

Safety

Salt evaporation ponds and other mining activities on the dry lake pose potential hazards to cross-country free-play recreationists.

SUMMARY OF PUBLIC COMMENT

The few comments received supported protection of prehistoric and historic values. Cross-country vehicle free-play was not favored by any of the comments received.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a motorized vehicle free-play area.

Rationale: This is not even a moderately popular recreation area. It offers little to motorized vehicle activity in the way of challenge. In addition, hazardous conditions related to the ponding of runoff from the Mojave River can cause vehicles to become mired. Weight was also given to cultural values which occupy the shoreline of the lake and are considered highly significant.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Impacts to recreation are expected to be minimal and insignificant in terms of either opportunities lost or motorized vehicle enthusiasts displaced by the closure of this Area.

27. SOUTH ALGODONES DUNES AREA (See Map V-5-7)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is a large block of public, private and State-owned lands comprising approximately 261,000 acres. The block, shaped like an inverse cone, lies approximately 25 miles east of El Centro in southeastern Imperial County. The eastern-northeastern boundary is contiguous with the right-of-way of the Southern Pacific Railroad leading from Imperial Valley to Yuma, Arizona. The southern border is the International Boundary between Mexico and the United States. The west boundary is along the east edge of the right of way for the East Highline Canal running north along the western edge of the East Mesa. The latter effectively divides the Area from the more highly developed flat and irrigated lands of the Imperial Valley to the west. Running diagonally northwest through the parcel almost through the center of the Area is the Coachella Canal. Parallel to each of the above-mentioned right of ways are maintenance roads used by railroad and canal personnel as well as by the general public. In addition, there is the northern border delineated by State Highway 78 which leads from Glamis to Brawley across the north edge of the parcel. Also, there are other roads and trails throughout the Area, including the U.S.-built road leading south from State Route 78.

The terrain is very sandy and is rolling to flat throughout. The elevation varies from about sea level near the western edge of the Area to a high of nearly 600 feet near the northern edge (near Osborne Park, south of Route 78).

The land ownership indicates one in which Sections 16 and 36 have been granted to the State with a few parcels transferred in title during the recent past. There are 1,990 acres remaining in State ownership and 26,440 acres in private ownership. The remainder is in public management, principally that of the Bureau of Land Management by virtue of a cooperative agreement with the Bureau of Reclamation.

Bureau of Reclamation withdrawals exist for the Yuma Reclamation Project. In addition, the Area is contaminated by the presence of possibly unexplored military ordnance as a result of World War II military maneuvers during the 1940s.

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[1]Portions of: T. 12 S., Rs. 15, 16, and 17 E.,
T. 13 S., Rs. 16, 17, 17-1/2 and 18 E.,
T. 14 S., Rs. 16, 17, 18, and 19 E.,
T. 15 S., Rs. 16, 17, 18, and 20 E.,
T. 16 S., Rs. 16, 17, 18, 19, 20 and 21 E.,
T. 17 S., Rs. 16, 17, 18, SBM.

Two utility facilities presently exist on or adjacent to the Area, one along the railroad right of way and one along the Coachella Canal right of way.

There is an approved power plant site in the southwestern corner of the Area. Studies indicate there are also potential geothermal sites in the north and in the southwest.

The general plan of Imperial County designates this Area as "recreation."

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

FIGURE A-27

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: __X__ Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Accessibility	X	
Soil/Slope		X	Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources	X		Size	X	
Native American	X		Manageable Boundaries	X	
Wilderness	X				
Scenic Quality	X		Other Site Values Considered		
Recreation		X			
Range		X		Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research		X
			Other Agencies		X
			Safety		X
			Adjacent Land Use		X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The South Algodones Dunes Area contains important habitat for several species of endemic beetles, butterflies, and moths; habitat for the Colorado fringe-toed and the flat-tailed horned lizards; and habitat for the black rail and yellow warbler.

Rare and endemic beetles. The dunes contain habitat for at least eight endemic species of beetles and another possible four species, making this dune system the most diverse in terms of rare beetles in the CDCA (Andrews et al. 1979). One of these arthropods, the Andrews scarab dune beetle (Pseudocotalpa andrewsi), has been proposed for Federal threatened status. This species was found to have wide distribution on the main dune mass, but was not found elsewhere.

Rare species of moths and butterflies. Powell (1978) reported the presence of a small species of moth (Suleima n. sp.) which he reared from the endemic and rare Algodones sunflower (Helianthus niveus spp. tephrodes) collected at the north end of the South Algodones Dunes. Powell suggests that this is a rare, endemic species of moth which is dependent on the Helianthus for part of its life cycle.

Habitat for Colorado fringe-toed and flat-tailed horned lizards The Area contains about 234 square miles (150,000 acres) of habitat for the Colorado fringe-toed lizard. This represents 23 percent of the available habitat for the species. This Area also contains some habitat for the flat-tailed horned lizard, a BLM "sensitive" species and a species under status review by the Office of Endangered Species.

Spadefoot toad. There are relict populations of Couch's spadefoot toad along the eastern edges of the dunes (Mayhew 1962, Dimmitt 1977). The Area includes 48,000 acres (5%) of the known spadefoot toad habitat in the CDCA.

Desert kangaroo rat habitat. There is approximately 194 square miles (7%) of the prime habitat for this large species of kangaroo rat. This is a species of limited distribution and localized occurrence.

Indian Wash Proposed Area of Critical Environment Concern. Studies have demonstrated populations of both breeding and wintering birds in Indian Wash to be more diverse and more abundant than virtually all other habitat types within the CDCA, with the exception of true riparian habitats (Tomoff 1977, 1979). Total bird densities varied from 3 to 40 times greater than other non-riparian desert habitats during the breeding season and 3 to 15 times greater in the winter. Migrant species make extensive use of this wash during spring and fall.

Cultural Resources

The archaeologically sensitive areas include 12 currently recorded sites including trails, cleared circles, intaglios, ceramics, and lithic sites. The area is mentioned in myths of various ethnographic groups and contain rare and unique site types. In addition the Plank Road passed through this Area. Locations of moderate cultural resource sensitivity include the deflated basins of the dunes. Some of these were "judgmentally" examined by flying into them with a helicopter and performing on-the-ground visual examinations. Based on the presence of pottery scatter in these basins, it appears that prehistoric inhabitants crossed the dunes and perhaps camped in the somewhat better protected basins.

Native American

The dunes have been traditionally employed by the Kamia, Southern Diegueno, and Quechan (D319.2/20/58 p. 8., Kroeber P. 42 1925). The Pilot Knob area on the extreme southwestern tip is sacred to the Quechan (EN 1,2). The Area is the originating point for the Kerruk mourning ceremony of the Quechan. Generally known as Avikunly to the Quechan, burials are located within the Area.

Wilderness

Wilderness Study Area 362 is located in the central portion of the dune system. Unlike the area to the north, with its steeper sandy slopes, the central portion includes more gently rolling dune masses dotted with thickets of mesquite and palo verde. This portion of the dunes is relatively less challenging to motorized vehicles, and this partially accounts for its undisturbed appearance. The varied shapes and sizes of the dunes as well as thick stands of vegetation contributed to the rating of 40 out of 137 WSAs. In terms of dunes, the size of the WSA makes it unique.

Scenic Quality

The polygon encompasses a large portion of the entire dune system. It consists of smooth-surfaced, rounded slopes; sharp, curving ridgelines; and steep slip faces. Vegetation is sparse on the main dunes, although the surrounding area supports some dense patches of dune-related plants. The area rated high in terms of visual quality, with very high scores in landform variation, color, and uniqueness.

SITE VALUES CONSIDERED

Terrain Diversity

Both the Gecko (north) and Buttercup (south) areas provide excellent terrain diversity.

Accessibility

Access is available along State Route 78 and the Gecko campground road. Interstate 8 provides access to the adjacent Buttercup Valley area.

Traditional Use

The most intense and highest amount of concentrated recreational use in the entire CDCA occurs in these two areas. In 1978, more than 450,000 VUDs were recorded for these areas.

Proximity to Users

South Algodones Dunes is well located and attracts much of its use from the San Diego population center, as well as from nearby El Centro.

Size

Gecko and Buttercup represent the largest sand dune free-play areas in the California Desert.

Manageable Boundaries

For the most part both areas have definable borders. Only the south boundary of the Gecko area needs to be clearly defined.

SUMMARY OF PUBLIC COMMENT

The majority of comment received supported motorized vehicle free-play. Some comments indicated concern for protecting the sand hills north of State Route 78. A few general comments stated that sand dunes were inappropriate for motorized vehicle activities.

MANAGEMENT DECISION RATIONALE

Decision: The northern portion (Gecko) and the southern portion below I-8 (Buttercup) are recommended for motorized vehicle free-play areas. The central dunes separating the two proposed free-play areas will be designated Multiple-Use Class L, with an exception to management guidelines provided to open the center to vehicle access.

Rationale: The two free-play areas receive the highest amount of motorized vehicle free-play in the CDCA and have for many years. Opportunities for vehicular recreation are outstanding in these areas and present few conflicts with other land uses or resources. The more sensitive central part of the dune system, however, receives very low volumes of recreational use and possesses wildlife, scenic quality, vegetation, wilderness, and cultural values which need protection. The little recreational use the central dunes attract is generally for touring and

access, rather than for competition. Intense management of this activity is not believed to be necessary. However, continued monitoring of these areas will keep management appraised of the amount and type of recreation taking place. As deemed appropriate, management may implement additional restrictions.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTORIZED VEHICLE USE

Soils

Penetrometer measurements indicate that dune sands are not highly compacted as a result of motorized vehicle activity. Also studies made by Dr. Dale Gillette in cooperation with the BLM show that wind erosion threshold velocities are similar for dunes in both disturbed and undisturbed conditions. Virtually no dust will be produced by driving on dunes because of the absence of fine particles. Giroux (BLM unpublished study, 1979) reported that sand plumes almost never rose above one meter behind even the most active vehicles on dunes before gravitational settling cleared the air within seconds. Water erosion on sand dunes is not increased after motorized vehicle traffic because infiltration remains extremely high after disturbance (Babcock and Sons, 1973).

Vegetation

All rare, threatened, and endangered plant species (with the exception of A. lentiginosus var. borreganus) occur within the closed area of the dune and are therefore protected.

Wildlife

Rare and Endemic Beetles. The Gecko Area occupies approximately 8.1 percent of the habitat of these rare species. Motorized vehicle activity here, especially of the intensive sort, can be expected to adversely impact 77 percent of the beetle habitat.

The Buttercup Area occupies approximately 3.5 percent of the habitat of these rare species. Vehicular activity there, especially of the intensive sort, can be expected to adversely impact 3.5 percent of the habitat of these rare species.

Most invertebrates of dune systems have not been studied, so it is highly likely that the Algodones will contain habitat for many other endemic forms of arthropods, arachnids, etc.

Rare Species of Moths and Butterflies. These could be threatened and negatively impacted by vehicle use.

Colorado fringe-toed lizard and flat-tailed horned lizard. The Gecko Area contains about 13,440 acres and the Buttercup Area contains 7,680 acres of Colorado fringe-toed lizard habitat. Studies by Bury et al. (1977) on other

species of lizards and small vertebrates in general indicate that heavily used vehicle areas and pit areas have severe impacts on these species.

Spadefoot toad. The Gecko Area includes 5,120 acres (0.6%) of the known spadefoot toad habitat in the CDCA; the Buttercup Area includes 2,560 acres. It is anticipated that spadefoot toad populations within and adjacent to the dunes free-play area would be most severely impacted.

Desert Kangaroo Rat Habitat. There are 14,000 acres of the prime habitat for this species in the Gecko Area and 6,400 acres (0.4%) in the Buttercup Area. It is expected kangaroo rats would be severely impacted in heavily used areas.

Cultural Resources

Portions of the historic Plant Road which ran through the sand dunes could possibly be disturbed, although at this time there appears to be very few portions of the road extant; the probability of aeolian erosion uncovering additional portions is low, although free-play area designation is likely to disturb the integrity of the general vicinity.

Native American

The dunes themselves have few identified material resources, but the Area has been identified as the traditional boundary between the Kamia and Quechan. These groups should be contacted to solicit recommendations.

Wilderness

In as much as the Area covers the entire roadless area, it includes WSA 362. In spite of the fact that the Area was designated as open under the ICMP, the WSA portion received relatively little use and still met wilderness criteria. Maintaining the open area designation within the entire roadless area will result in the continued loss, at a gradual rate, of wilderness values.

Scenic Quality

Impact on scenic quality will be minimized by the sandy surface and sparse vegetation. Vehicle tracks are soon covered, and with the exception of damaged vegetation, signs of intrusions are soon gone.

28. SPANGLER HILLS AREA (See Map V-5-18)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a large block of public, private, and State-owned lands comprising 85,800 acres located mostly in the northwestern corner of San Bernardino County. A strip about one mile wide along its western edge is within the northeastern corner of Kern County. The Area is north of Red Mountain and Johannesburg between China Lake Weapons Center and Mojave "B" Range. It is bounded on the west by State Route 395, from Johannesburg north to an unpaved road about 1-1/2 miles east of the Ridgecrest Road. The northern boundary follows this dirt road in a "V" shape to just east of the San Bernardino-Kern County line, after which it zigzags northeastward to the Randsburg Wash Road. Then it follows the road eastward to the Mojave "B" Range where the boundary of the military range becomes the southeast border of the Area. The southern boundary proceeds from this point in a westerly direction along the north slope of the Lava Mountains, then south along the western edge of the mountains to the Steam Wells Road which it follows west to the Trona Road and then to the southern point near Johannesburg.

The terrain is rolling to flat in the north and northeast tending to more rough and mountainous in the western and southwestern portion. The elevation varies from a low of 2,000 feet near the Spangler Hills station in the northeastern part of the Area to a high of 3,880 atop one of the promotonries about two miles north of the small mining community of Johannesburg (Ref 15 - Min. USGS Quads. El Paso and Klinker Mountain). The Area includes Golden Valley, Summit Range, Teagle Wash, and a portion of the Spangler Hills.

A trunk line of the Southern Pacific Railroad branches off from the main line north of Searles station and cuts accoss the Area northeastward toward Trona.

A surfaced road crosses the Area in a north-south direction, and numerous jeep roads and trails are also present.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

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[1]Portions of Ts. 27, 28 and 29 S., R. 40 E.;
T. 30 S., R 41 E.;
Ts. 27 & 28 S., Rs. 41, 42 & 43 E., MDM.

FIGURE A-28

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: X Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Acessibility	X	
Soil/Slope	X		Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources	X		Size	X	
Native American	X		Manageable Boundaries	X	
Wilderness		X			
Scenic Quality		X	Other Site Values Considered		
Recreation		X			
Range		X		Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research		X
			Other Agencies		X
			Safety	X	
			Adjacent Land Use		X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

Topography is highly varied with an estimated 40 percent undifferentiated alluvial fans, 35 percent hills, 5 percent mountains, 5 percent badlands, 5 percent undifferentiated plains, 5 percent undifferentiated pediments, and 5 percent dissected to highly dissected fans. The undifferentiated fans are gently to moderately sloping with a wide range of soil properties. Most soils are relatively sandy; however, desert pavement occurs frequently on the dissected to highly dissected fans. Forty-five percent of the terrain (hills, badlands, and mountains) has steep slopes with frequently shallow soils. Plains are level to nearly level with a wide range of types of generally deep soils, and the pediments are moderately steep to steep with generally thinner layers of undifferentiated soils.

Wildlife

The Spangler Hills Area contains habitat for one officially listed species, the Mohave ground squirrel; two sensitive species, the desert tortoise and golden eagle; and one significant species, the prairie falcon.

Cultural Resources

The area has been variously described as being exploited ethnographically by the Koso (Panamint Shoshone) and/or the Kawaiisu. Actual boundaries are unclear (Steward 1938; Kroeber 1925; Zigmond 1933; and Grosscup 1977). Nonetheless, one may assume that both groups appear to have utilized the area as a major resource base. Occasional use by Tubatulabal, Chemehuevi, and subdivisions of the Serrano likely occurred but is of secondary significance.

Known prehistoric sites in the area would tend to show, that aboriginal use mainly consisted of temporary habitation (rock shelters and open campsites) related to resource exploitation (lithic scatters and food processing sites).

Historically, the area was most heavily utilized by mining and, subsequently, by railroading. Some of the earliest Anglo period mining in the California desert occurred in this area, beginning in the El Paso Peaks just to the west of the Spangler Hills Area. Actual site importance within the Area was overshadowed by the hard rock riches to the west and the evaporite resources of Searles Lake to the northeast. Continued interest in the surrounding areas, resulted in artifacts and features dispersed throughout the Area.

Historic railroads bisect the area. The Randsburg Railway (1897) reaches the southwest corner of the open area. The Nevada and California Railroad (1880s) cut across the western end of the open area. The Trona Railway (1914) cuts diagonally across the entire open area. Sites relating to the construction and maintenance of these lines are predicted to occur along the routes themselves and, specifically, at sidings/stops or at major construction features of the lines.

Native American Interests

The proposed free-play area has fairly extensive historic and contemporary Native American values. Resources in the area include a ritually associated site at Bird Spring, extensive seasonal collection areas for grasses employed both for food and basketry and several rock art sites identified through contemporary informants. The most sensitive area is Bird Spring lying to the southeast.

SITE VALUES CONSIDERED

Terrain Diversity

Outstanding topographic relief includes flatlands, rolling hills, and rugged mountains.

Accessibility

Several good roads provide access from State Route 395.

Traditional Use

The Area is well known and consistently receives intense recreation use. It has been and continues to play a key role in providing motorized vehicle free-play opportunities in the CDCA.

Proximity to Users

The size is adequate to provide a diverse variety of free-play events and activities.

Manageable Boundaries

Definable boundaries surround the majority of the Area with only a small portion of the southeastern border needing additional confirmation.

OTHER SENSITIVE VALUES

Safety

Mining and exploratory shafts are exposed in this Area and present potential hazards to cross-county vehicle users.

SUMMARY OF PUBLIC COMMENTS

Many commenters favored motorized vehicle free-play area designation. Others favored permitting mineral exploration and development because of high mineral potential known to occur in the Area.

MANAGEMENT DECISION RATIONALE

Decision: Recommended for motorized vehicle free-play but as a reduced area (moved from the Golden Valley WSA to protect natural and cultural values). The adjacent Radamaker area will be Class M to allow for competive motorcycle events.

Rationale: The area was reduced in size to avoid conflict with sensitive resources including wildlife, cultural values, and Native American values. It is recognized that this has been a favorite free-play and competition area for many years. The adjacent Radamaker area was also an important vehicle area particularly for competitive events which will be allowed in Class M. The crucial tortoise habitat was the principal consideration in deciding to propose Class M for the Radamaker.

SUMMARY OF PUBLIC COMMENTS

Many commenters favored motorized vehicle free-play designation. Others favored permitting mineral exploration and development because of high mineral potential known to occur in the Area.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTORIZED VEHICLE USE

Soils

Approximately 45 percent of the Area (hills, badlands, and mountains) has steep slopes making these soils very susceptible to water erosion if disturbed. Much of the soil in these areas is very shallow to shallow (<20 inches) resulting in a major impact on the soil profile if soil is lost because of accelerated erosion.

The soils occurring on alluvial fans and plains (45 percent) on gently to moderately sloping surfaces have a wide range of surface textures which would be susceptible to compaction. Low level photos show approximately 15 percent of the area in Teagle Wash covered by visible tracks with 4 percent of these highly compacted with very low potential for revegetation.

Pit areas with no vegetation and very high compaction as measured from 1973 aerial photos in the Spangler Hills and Teagle Wash area total approximately four acres.

Impact to arable soils would be in the concentrated use areas which are very highly compacted but limited in extent.

Vegetation

There has been or will be 60 to 100 percent removal of vegetation in concentrated zones. In Spangler Hills this amounts to about 24 square miles. Thus at least 11,483 tons of vegetation could eventually be removed in comparison to an equivalent unused area. The entire proposed area covers 162

square miles in this alternative. Up to 375,000 tons of vegetation could be removed from the Area as opposed to non-use.

Wildlife

Mohave ground squirrel. This species is confined to to the western Mojave Desert. The Area contains about 134 square miles of habitat. None of this area is included in proposed crucial habitat for the species, however.

Motorized vehicle activity can be expected to deteriorate the habitat of this species significantly.

Desert tortoise. The Spangler Hills Area contains about 95 square miles of desert tortoise habitat. About 13 square miles of this area is crucial habitat for the species and lies within the proposed Fremont-Stoddard crucial habitat. The area contains about one percent of the proposed Fremont-Stoddard crucial habitat. Expected declines are in excess of 50 percent of the population per year, with declines to levels below the threshhold of recovery within five years in intensively used areas. The entire Spangler Hills Area could be below the threshhold of recovery within several years. It is important to note that much of the Spangler Hills Area now has populations of only 20 to 50 tortoises per square mile, a density level which is below threshhold recovery rates.

Golden eagle and prairie falcon. There is 120 square miles of prairie falcon habitat and 106 square miles of golden eagle habitat in the Area. This includes foraging habitat for five pairs of prairie falcons and two pairs of golden eagles. Impacts to foraging areas as habitat for prey species can be expected to be permanent. That is, 120 square miles of prairie falcon and 106 square miles of golden eagle foraging habitat could be lost permanently, or prey species would be in such low numbers that the raptors could not survive.

Burrowing owls and desert kit fox. These two species are considered "significant" species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List) and the desert kit fox is fully protected by California Department of Fish and Game Codes. Both of these species suffer from moderate to intense motorized vehicle activity. It is estimated that burrowing owl and desert kit fox populations would decline over a period of several years and perhaps eventually be extirpated.

Cultural Resources

Management of this area as a vehicle free-play area will result in serious negative impacts upon prehistoric and historic resources. Although minimal survey work has been done in this area, over 20 prehistoric and numerous historic sites have been recorded in the vicinity. It is felt that more can be expected. Approximately 6,400 acres of very high and 10,880 acres of high sensitivity/significance will be directly impacted through motorized vehicle free-play.

Specifically, the most sensitive cultural resources are located in the Spangler Hills, Summit Range, and near Christmas Canyon. All sites in the Spangler Hills are related to mining activities. Resources include stone and wood structures, an historic well, and a number of mines, shafts and prospects. These resources are highly visible, easily accessible, and very vulnerable to vandals, etc. In the Summit Range area one lithic scatter and a number of historic sites are related to railroad construction and operation, including a Chinese workers' camp and a 4,340 foot tunnel built in the 1889s.

Sixteen prehistoric sites have been recorded in the Christmas Canyon area, including rockshelters, lithic scatters, and temporary camps. The rockshelters are vulnerable to damage by vandals and pothunters, and the surface sites will be virtually destroyed by vehicle use.

Native American Interests

The area of the Spangler Hills, particularly in the vicinity Bird Spring, has an established history of use (Kroeber 1919, 1925) and would be subject to severe impact from a motorized vehicle play area. Native American use by some groups has been reduced because of the areas distance from contemporary reservations and Native American populations (Green 1980). Potential investigation and management recommendations should be solicited from Kawaiisu and Kernville area Kawaiisu-Kitanemuk. The decline in areas of mesgranite, chia, and seasonal herb production can be anticipated as an impact of this designation.

Wilderness

The Spangler Hills Area free-play area designation is a continuation of the historical use of the area. This arrangement could bring about management problems and potential conflict with the nearby Golden Valley WSA to the south. Potential exists for slightly negative impacts.

Range

The direct impacts would occur if both the motorized vehicles and the bands of sheep were in the same area of the allotment at the same time. The vehicle activity would disrupt the sheep and make it difficult for the herder to keep control. Indirectly, the impacts from vehicles would cause a reduction in the amount of available forage. The amount of reduction is directly related to the amount and/or intensity of vehicle activity. If the forage is scarce, them the ability of the animals to gain weight is limited. Heavy continued use for motorized vehicle free play would reduce the Area's forage production potential.

29. STODDARD VALLEY AREA (See Map V-5-9)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The proposed Area[1] is a large, irregularly shaped block of public, private, and State-owned land consisting of 114,000 acres and commencing two miles south of the city of Barstow.

The parcel is approximately 21 miles wide and 26 miles long. Its northwest boundary coincides with that of the east edge of the right of way for the Interstate 15 leading from Los Angeles to Las Vegas, Nevada via Barstow. Its northeastern tip touches State Route 40 (from Barstow to Needles) at Daggett. Its eastern boundary is delineated by the Camp Rock Road proceeding southeast from Daggett to the western point of the Newberry Mountains; the southern boundary is delineated from this point in a southwestern direction by following an unnamed dirt road to its intersection with the Barstow Road near the south end of Stoddard Valley. Ord Mountain Road also leads south from Route 40 through the parcel from north to south nearly bisecting it. There are numerous other roads and trails crisscrossing the Area throughout. In addition, there is a privately owned road used principally for the maintenance of a multiline powerline right of way running diagonally northeast to southeast through the study area.

The terrain in the east and northeast is mostly rough and mountainous; the remainder is rolling to flat.

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[1]Portions Ts. 6, 7, 8 & 9 N., Rs. 1, 2, & 3 W., SBM;
T. 7 N., R. 1 E., SBM;
Ts. 8 & 9 N., R 1 E., SBM

FIGURE A-29

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: X Area Recommended With Boundary Adjustments

_____ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	
	Yes[2]	No	Acessibility	X	
Soil/Slope		X	Traditional Use	X	
Plants & Wildlife	X		Proximity to Users	X	
Cultural Resources		X	Size	X	
Native American		X	Manageable Boundaries	X	
Wilderness		X			
Scenic Quality		X	Other Site Values Considered		
Recreation		X			
Range	X			Sensitive	
GEM		X		Yes[3]	No
			Res./Pvt. Owner		X
			Agriculture		X
			Educ./Research		X
			Other Agencies		X
			Safety		X
			Adjacent Land Use		X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Area contains habitat for BLM sensitive species such as the desert tortoise, golden eagle, and desert bighorn sheep; habitat for significant species like the prairie falcon; part of the special Newberry-Granite Mountain Raptor Breeding area (a special wildlife habitat management area); and other key wildlife resources.

Desert tortoise. The Area contains about 100 square miles (64,000 acres) of desert tortoise habitat: 9 square miles (5,760 acres) of densities of 20 to 50 tortoises per square mile; 70 square miles (44,800 acres) of densities of 50 to 100 tortoises per square mile; 18 square miles (11,520 acres) of densities of 100 to 250 per square mile, and 8 square miles (5,120 acres) of densities of more than 250 per square mile. All of this Area is contained within the proposed Fremont-Stoddard critical habitat. The Fremont-Stoddard is one of four proposed critical/crucial habitat areas for the desert tortoise in the California Desert (Berry and Nicholson 1979).

Golden eagle and prairie falcon. There are 120 square miles (76,800 acres) of prairie falcon habitat and 154 square miles (98,560 acres) of golden eagle habitat in the Area. This includes foraging habitat for eight pairs of prairie falcons and seven pairs of golden eagles as well as three prairie falcon eyries and three golden eagle eyries. These foraging areas have been identified by England (1979) as part of eight crucial core habitats for raptors in the CDCA. The core areas have the highest known densities currently and historically of prairie falcons and golden eagles in the CDCA. The particular core area found here is known as the Newberry-Granite Mountains Raptor Breeding Area. The Newberry-Granite core area contains 31 percent of golden eagle and 16 percent of prairie falcon eyries of the eight core areas and is thus very important.

Burrowing owls and desert kit fox. These two species are considered significant species by BLM. The burrowing owl is on the Audubon Society's list of diminishing species (Blue List), and the desert kit fox is fully protected by California Dept. of Fish and Game Codes.

Range

This motor vehicle area contains the Stoddard Mountain grazing allotment. This ephemeral allotment is used by sheep during years of good vegetation production.

SITE VALUES CONSIDERED

Terrain Diversity

Outstanding opportunities exist for vehicle users to experience all types of terrain.

Accessibility

Interstate 15 and State Route 40 form the boundaries and serve as major routes from which to access the Area.

Traditional Use The Area is well known and traditionally receives consistently intensive recreational use.

Proximity to Users

Located within easy travel distance from the majority of Southern California's population centers, it is a convenient drive for most desert recreationalists.

Size

This is the second largest free-play area in the entire CDCA.

Manageable Boundaries

The Area is bordered by well-defined boundaries which are for the most clearly observable.

SUMMARY OF PUBLIC COMMENTS

The few comments relating to this specific Area supported designation for motorized vehicle free play.

MANAGEMENT DECISION RATIONALE

Decision: Recommended as a motorized vehicle free-play area with boundary adjustment.

Rationale: Consideration has been given to resources, and where possible sensitive resource areas have been avoided. Motorized vehicle recreation has taken place here in the past, and the opportunity for free play and competitive event activity is considered outstanding. This factor was the prime consideration in the proposed designation.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTORIZED VEHICLE USE

Soils

Most soils will be susceptible to increased compaction and dust emission. Motorized vehicle activity on hills will result in increased erosion which can have a major impact on the frequently shallow soil profiles on steep slopes.

Vegetation

History of use within this Area has been one of intense activity; 87,680 acres would be impacted.

In comparison to similar but unused areas, 100 percent reduction of vegetation can be expected in pit areas (1.6 to 1.8 ton/acre). Up to 100 percent reduction of vegetation cover will take place on climb areas, 99 percent on raceways, and 35 to 73 percent (.6-1.3 tons/acre) in free-play areas. An analysis of expected change follows.

Table V-5-2
CHANGES IN VEGETATION COVER PRODUCED BY
MOTORIZED VEHICLES IN STODDARD VALLEY OPEN AREA

VEGETATION	Area	% Change in Cover
Creosotebush scrub	Pit Area	- 100%
Creosotebush scrub	Hillside	- 92%
Creosotebush scrub	Raceway	- 99%
Saltbush scrub	Pit Area	- 98%

Wildlife

Deserte tortoise. Declines in excess of 50 percent of the Area's desert tortoise population per year, or declines to levels below the threshhold of recovery within five years in the intensively used areas can be expected. It is important to note that much of the Stoddard Area now has populations of 20 to 50 and 50 to 100 tortoises per square mile, a density level which is close to threshhold level for recovery.

Golden eagle and prairie falcon. With continued motorized vehicle free-play use of the Stoddard Valley Area, the Newberry-Granite Mountain Raptor Breeding Area may be expected to decline by 50 percent for the prairie falcons and 33 percent for the golden eagles.

Burrowing owls and desert kit fox. It is estimated that burrowing owl and desert kit fox populations would decline in the vicinity of heavy use and pit areas.

Cultural Resources

Cultural resources (less than 2 square miles of highly sensitive area) would receive mild, over-all negative impact. Areas of cultural significance are (1) the area south of Stoddard Well where a rock art site is located and (2) the historical mining area. At this latter location occasional mining features as well as aboriginal lithic scatters and temporary camps may be expected. However, the great majority of these sites would fall just south of the proposed Area proper.

Range

In pit areas of high intensity use by motorized vehicles, cover of most vegetation is eliminated. This eliminates grazing in these areas because of lost forage species. In other areas heavily used annual vegetation may still be produced, but the composition may consist of a higher percentage of undesirable forage species. As vehicular use becomes less intensive in areas the vegetation change would be minimal.

30. SUPERIOR DRY LAKE AREA (See Map V-5-4)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] is an elongated 4,000-acre parcel of public and privately owned lands lying at the bottom of Superior Valley about 30 miles north of Barstow in the northwestern portion of San Bernardino County. There are numerous dirt roads traversing the perimeter of the Area as well as an occasional one intersecting the lakes in various directions.

The Area is composed of three separate dry lake beds with a connecting land bridge of low-lying, hummocky sand between them. The playas are typically flat with elevation of the two eastern lake beds' perimeters at 3,000 feet and the western at 3,009 feet. (Ref: USGS 15-Min. Quad. OPAL MOUNTAIN, 1955.)

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Portions of Sections 11-13, 23 and 24, T. 31 S., R. 45 E., Sections 7-20, T. 31 S., R. 46 E., MDM.

FIGURE A-30

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Accessibility	X	___
Soil/Slope	___	X	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

Although a detailed survey of aquatic invertebrates has not been completed at this site, Kubley and Cole (1978) have noted a number of species that may be rare in the California deserts. It is probable that Superior Dry Lake supports some of these organisms.

As noted previously, waterfowl often congregate on desert lakes during the winter when lakes contain water and adequate food supplies including aquatic invertebrates. These dry lakes may be essential to the survival of many migratory and wintering waterfowl.

Cultural Resources

Although the area under consideration may have been occupied aboriginally by the Kawaiisu, Koso, or Chemehuevi, the boundaries are at best tenuous (Kroeber 1929). There are 1,600 acres of high cultural resource sensitivity within the Area. Approximately seven archaeological sites are predicted to occur within these areas of sensitivity. Twenty-five archaeological sites are predicted to occur within the entire Area. The site types include a village site, rock art site, an isolated flaked-stone tool site, and temporary camps. The areas are of potential research value in regard to the study of human adaptation to ephemeral lacustrine environments.

Native American

The Area includes territory traditionally employed seasonally by Kawaiisa, Shoshone, and Serrano. The pattern of use includes several collections of plants for domestic and crafts purposes and widely distributed areas of traditional occupation which continue to be of significance and concern to contemporary people (Quillen 1980). A potential exists for the disturbance and possible destruction of occupation sites adjacent to the Area on the southwest portion of the valley.

SITE VALUES CONSIDERED

Terrain Diversity

Like most desert dry lake playas, this Area is quite flat with very little topographic relief.

Accessibility

Maintained dirt roads provide access to the dry lake at several points. Copper City Road provides the primary access.

Traditional Use

No traditional or intense recreational use has been recorded.

Proximity to Users

The dry lake is located within convenient driving time for most of the Southern California population centers.

Size

Superior Dry Lake is of adequate size for a motorized vehicle free-play area.

Manageable Boundaries

The dry lake bed is clearly identified from the surrounding area, providing an observable border.

SUMMARY OF PUBLIC COMMENT

The few comments received on this Area supported development of the mineral resources -- in particular, zeolite production.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended.

Rationale: Consideration was given to the potential of this Area for motorized vehicle free play. However, this is one of only several playas, and it is suitable for nonmotorized vehicle play such as sand sailing, for example. Motorized and nonmotorized vehicle play are not compatible. The area is being reserved for nonmotorized vehicle activity. Consideration was also given to sensitive resources, particularly on the shoreline.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Significant negative impacts to recreation -- loss of opportunity or displacement of users -- are not expected to occur because of closure of this Area to motorized vehicle free play. Traditionally, this Area has attracted very low amounts of recreational use, less than 25 VUDs per square mile per year. Only recently has the dry lake been discovered to have many good qualities for such recreational activities as sand sailing, skate sailing, and gyrocoptering. Historically, the dry lake has not attracted motorized vehicle use; however, the Area is becoming increasingly interesting to nonmotorized vehicle recreationists.

31. WARD VALLEY AREA (See Map V-5-19, V-5-20)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The Area[1] and State-owned land comprising some 184,500 acres and lying along the lower level of the broad and long Ward Valley. The latter lies about 15 air miles southwest of Needles in east-central San Bernardino County. The block of land runs in a north-south direction for 45 miles from Interstate 15 at the north edge to where it runs along the right of way of the Atchison, Topeka, and Santa Fe Railroad along the south-southwest. The Area varies in width from 4 to 8 miles. Its northeast boundary runs southeast along the private mining road leading from Camino to Section 27, T. 10 N., R. 20 E., SBM, then south along the lower foothills of the Stepladder Mountains and then turns in a large circle to the southwest at the southwest foot of the Turtle Mountains to the intersection with the above-mentioned railroad right of way. From a point where a telephone right of way crosses the railroad right of way in Section 16, T. 2 N., R. 18 E., SBM, the boundary proceeds north along the telephone maintenance road right of way to Section 31, T. 6 N., R. 18 E., SBM, and then in a northerly direction until it again intersects Interstate 15 on the north edge. There are numerous other trails and roads throughout the Area.

The terrain is gently rolling to flat with the principal drainages sloping gently to the south-southwest into Danby Dry Lake on the nearly adjacent lands across the railroad grade. There is a broad, intermittent stream known locally as Homer Wash along the eastern edge. The elevation varies from a low of 640 feet near the railroad to a high of 2,400 feet near the northwestern corner of the parcel.

Two basic land ownership patterns are found on the Area. On the northern half, there are the remnants of the railroad grant where Sections 16 and 36 were granted to the State for school purposes, and where beginning with Section 1, every fourth section was granted to the railroad for construction subsidy. The south half is the original ownership wherein only Sections 16 and 36 were granted to the State. Approximately one half of the State lands are still in State ownership; the rest have been transferred to private ownership. The remainder are under the jurisdiction of the Bureau of Land Management.

Portions of the Area are potentially contaminated by unexploded military ordnance from World War II military training maneuvers.

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[1]Portions of: Ts. 2, 3, 4, ' 5 N., R. 18 E.;
Ts. 1-11 N., R. 19 E.;
T. 8, 9 & 10 N., R. 20 E., SBM.

There are two north-south telephone line right of ways running southeast through the north quarter, four pipelines (oil and gas) running east-west generally through the center of the Area, and one northeast-southwest through the top half.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined furing the review process following publication of the Draft Plan/EIS.

FIGURE A-31

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: ____ Area Recommended With Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	X	___
	Yes[2]	No	Acessibility	X	___
Soil/Slope	X	___	Traditional Use	___	X
Plants & Wildlife	X	___	Proximity to Users	___	X
Cultural Resources	X	___	Size	X	___
Native American	X	___	Manageable Boundaries	___	X
Wilderness	X	___			
Scenic Quality	X	___	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	X

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Soils

The topography has 75 percent undifferentiated fans, 20 percent sand-covered fans, 3 percent dissected fans, 2 percent riverwashes, and less than 1 percent hills. The undifferentiated fans have soils with a wide range of characteristics, but most are sandy. The dissected fans have areas of desert pavement.

Many trails and some racecourses are visible in aerial photographs. Many of the trails (some undoubtedly old tank tracks) are on desert pavement.

Wildlife

Desert tortoises occur on approximately 136,000 acres (66%) in the northern portion of the proposed Ward Valley Open Area. Densities range from 20 to 250 per square mile (74,000 acres at 20-50 per square mile, 52,000 acres at 50-100 per square mile, and 10,000 acres at 100-250 per square mile). Approximately 52 percent (108,000 acres) of the Area falls within the Fenner-Chemehuevi Desert Tortoise Crucial Habitat, one of the four major high density and viable populations known to exist. The Area covers 11 percent of this crucial habitat and nearly bisects existing tortoise populations.

One known prairie falcon eyrie occurs in the northern end of the Area. Approximately 60 percent (29,000 acres) of the potential foraging habitat within a five-mile radius of this eyrie occurs within the Area. Less than 10 percent (2,000 acres) of potential foraging habitat for an additional prairie falcon and a golden eagle eyrie also occurs in the proposed open area.

Ward Valley Area is located between stable bighorn sheep populations in the Turtle and Old Woman Mountains.

Cultural Resources

The Area under consideration was occupied aboriginally by the Chemehuevi (Kroeber 1929). There are 3,200 acres of known high cultural resource sensitivity within the Area. At least 17 archaeological sites are predicted to occur within these sensitive areas; a total of approximately 630 archaeological sites are predicted to occur throughout the entire Area. The site types include lithic scatters and a historic mine.

Native American Interests

The Area contains a number of resources of primary concern to the Chemehuevi, Ft. Mohave, and Panamint Shoshone (Death Valley) area residents. Seasonally exploited hunting territories employed by the Chemehuevi lie directly within the proposed Area (EN 23, 24). Salt collection areas were identified both in expert testimony of the land claims hearings (D 80 1/20/60 p. 12) and by contemporary Chemehuevi (EN 19). Aboriginal trails, ethnographically identified by Chemehuevi and Mohave, run east-west, northwest-southwest, and

north-south through the Area. Hunting camps have been described as distributed throughout the Area by contemporary Chemehuevi (EN 34) experts.

Wilderness

This extremely large area, includes roadless areas 289, 291, 296, 306 and portions of Wilderness Study Areas 288, 295, 294 and 307. The roadless areas 289 and 291 are generally flat with creosote being the dominant vegetation.

Generally those parts of WSAs 307, 294, 295, and 288 which fall within the boundaries of the Area are all in Ward Valley. The Area is basically a broad, open bajada transected by numerous shallow washes with relatively lush vegetation. Visual impacts such as ways and vehicle tracks tend to be absorbed by the dense vegetation.

Scenic Quality

Bordered by mountains which enhance the visual quality, the valley's vastness is its most impressive feature. It is covered by a good stand of creosote bush and mixed shrubs, with scattered cholla, yucca, and patches of trees.

The valley is crossed lengthwise by two powerlines. The accompanying high quality graded roads provide easy access into the valley but are impacts to the landscape. The valley is cut by several gas pipelines, utility lines, and unimproved roads.

SITE VALUES CONSIDERED

Terrain Diversity

Terrain relief is broadly varied.

Accessibility

State Route 62 provides the primary access. The Area is easily accessed from a number of other roads and ways.

Traditional Use

No traditional recreational use of significant intensity has been recorded. Recreational use that may take place is generally dispersed and of low volume.

Proximity to Users

The Area is generally not well located for the majority of potential desert users in southern California.

Size

The Area is large and more than adequate for a motorized vehicle free-play area.

Manageable Boundaries

Manageable borders surround approximately 80 percent of the Area. The remainder will need to be clearly delineated.

SUMMARY OF PUBLIC COMMENT

No comments specific to the Area were received.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended for motorized vehicle free play.

Rationale: This has never been a popular area for motorized vehicle use. Sensitive resources including soils, wildlife, cultural sites, Native American sites, and wilderness outweighed the potential for vehicle play in the decision not to propose open designation for the Ward Valley.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Significant negative impacts are not expected from the closure of the Ward Valley Area to motorized vehicle cross-country or free-play use. Traditionally, it has not attracted concentrated use. Only low amounts of primarily dispersed vehicle activity (less than 25 VUDs per square mile per year) are thought to occur in the Area.

The Parker 400 race has traditionally been routed through the Ward Valley Area. Multiple-Use Class M designation provides for organized race events to occur on identified routes. Pitstops are also allowed when necessary. No significant negative impacts to organized race events are expected. Organized race events are not incompatible with Multiple-Use Class M designation which requires race events to occur on only identified routes of travel.

32. YUHA AREA (See Map V-5-21)

GENERAL DESCRIPTION OF MAXIMUM AREA CONSIDERED

The small area[1] of 640 acres lies approximately 20 air miles southwest of El Centro in south-central Imperial County. Old State Route 98 traverses the area within one-eighth of a mile along the southern boundary.

The terrain is rolling to flat and rough with a broad wash (Pinto Wash) running northeast through the northwestern half. The Area is very sandy and gravelly. The terrain varies from a low of 50 feet at the northeastern edge to 100 feet near the southwestern corner. (Ref: USGS 15-Min. Quad. HEBER, 1957).

All of the parcel is public land in an area where the land ownership is one in which only Sections 16 and 36 were originally patented or granted to the State.

The subject is covered by two Bureau of Reclamation withdrawals, one on October 19, 1920 and the other on June 21, 1928, both by Executive Orders.

There is proposed placement of an energy production and utility corridor to run adjacent to or parallel to the above mentioned highway.

Figure A summarizes characteristics of sensitivity and suitability for this Area which were determined during the review process following publication of the Draft Plan/EIS.

[1]Sec 10, T. 17 S., R. 12 E., SBM

FIGURE A-32

SUMMARY EVALUATION OF CHARACTERISTICS
FOR MAXIMUM AREA CONSIDERED

Decision: _____ Area Recommended with Boundary Adjustments

__X__ Area Not Recommended for Motorized Vehicle Free Play

CRITERIA			CRITERIA		
Resource Values Considered			Site Values Considered[1]		
				Suitable	
				Yes	No
	Sensitive		Terrain Diversity	___	X
	Yes[2]	No	Acessibility	X	___
Soil/Slope	___	X	Traditional Use	X	___
Plants & Wildlife	X	___	Proximity to Users	X	___
Cultural Resources	X	___	Size	___	X
Native American	___	X	Manageable Boundaries	X	___
Wilderness	___	X			
Scenic Quality	___	X	Other Site Values Considered		
Recreation	___	X			
Range	___	X		Sensitive	
GEM	___	X		Yes[3]	No
			Res./Pvt. Owner	___	X
			Agriculture	___	X
			Educ./Research	___	X
			Other Agencies	___	X
			Safety	___	X
			Adjacent Land Use	___	___

[1] Discussion of all site values considered follows.
[2] Sensitive Resources are discussed in detail.
[3] Other sensitive values are discussed in detail.

SENSITIVE RESOURCE VALUES

Wildlife

The Yuha Area consists of about one square mile of habitat in the Yuha Basin. This Area contains two important wildlife resources, habitat for the flat-tailed horned lizard and habitat for the Colorado fringe-toed lizard. Habitat for these two species will be deleteriously affected by motorized vehicles.

Flat-tailed horned lizard. This lizard is currently a BLM sensitive species and is under status review by the Office of Endangered Species.

Four areas of crucial habitat have been outlined (Turner, pers. comm.). One, the Pinto Wash-Yuha Basin crucial habitat, contains the Yuha Area. The Pinto Wash-Yuha Basin crucial habitat contains the best populations (highest densities) of this rare species known.

Cultural Resources

This Area falls within the ethnographic boundaries of the Karuia Indians. Five archaeological sites are recorded in the Area, including a temporary camp, a lithic scatter, a broken ceramic pot, and two isolated scraping tools. More than 25 sites (mostly prehistoric) are predicted for this region and 640 acres of high sensitivity/significance could be impacted by a vehicle free-play area.

SITE VALUES CONSIDERED

Terrain Diversity

The terrain is rough because the locale has been used for a gravel borrow pit. This soil structure is not generally stable and is susceptible to slide and sloughing on many of the slopes.

Accessibility

State Route 98 is adjacent.

Traditional Use

This has been used traditionally as the pitstop for many of the race events within the Yuha Basin.

Proximity to Users

The major San Diego County population centers are within convenient weekend driving distance.

Size

The site is much too small to meet the criteria as a motorized vehicle free-play area.

Manageable Boundaries

Clearly defined boundaries surround the entire Area.

SUMMARY OF PUBLIC COMMENT

The majority of comments supported protection of the significant archaeological finding in the area, and many believed that cross-country motorized activity should be prohibited.

MANAGEMENT DECISION RATIONALE

Decision: Not recommended as a vehicle free-play area. Class M is proposed which will permit competitive events. An ACEC is proposed to provide additional protection to sensitive resources.

Rationale: The decision was based on the need to protect wildlife (flat-tailed horned lizard) and highly significant cultural sites. The subsequent decision to propose Class M and overlay the area with an ACEC is intended to allow competitive events only under tightly controlled conditions.

ANALYSIS OF EXPECTED IMPACTS TO RECREATION FROM AREA CLOSURE

Significant negative impacts to motorized vehicle free play are not expected with the closure of this area to such activity. Traditionally, the area has been used heavily for organized competitive events and not for free-play activity.

Organized competitive events are not incompatible with the proposed Multiple-Use Class M guideline. The Yuha Management Framework Plan delineates several major race routes in the Yuha area. No signficant negative impacts are expected on the traditional competitive events since Class M guidelines allow organized races on identified routes of travel, and pit stop areas are allowed when necessary.

Part 6

Criteria for Permitted Race Events in Multiple-Use Class L

To afford diversity in race routes and to reduce the possibility of overuse of identified race corridors, BLM will allowed race events to occur in Multiple-Use Class L areas. This policy provides more course options for sponsors of organized group races, and it allows BLM to mitigate impacts on these temporary race routes through deferred use. Because of potential sensitive resources in Multiple-Use Class L, special guidelines, in addition to those mentioned in the multiple-use class guidelines, must be applied when preparing for and designing permitted event routes which pass through L areas. These special guidelines follow. All criteria are in addition to those required by 43 CFR 8372 and BLM Manual 6260.

1. All courses shall remain on routes of travel which have been "approved" for motorized vehicle use in Class L. Any existing routes of travel be designated as an approved route of travel for a permitted event. Factors employed to designate a vehicle route as an approved route are listed in Section C, Implementation, of the Motorized Vehicle Access Element. All decision criteria for route approval must be met before a permitted event can pass through a Class L area. Beyond the route approval process, the route of the event is subject to the environmental analysis process prior to permitting. Event routes on special areas such as washes, dunes, and dry lakes will be governed by the Class L guidelines and any special management objectives dictates for the Area. Special limitations such as ACEC management prescriptions, special speed limits, seasonal closures, monitoring requirements, etc., may be needed to protect the resource values in the area.

2. Pit, start, finish, and spectator areas will not be allowed. Course verification points or checkpoints, where race officials will monitor riders and verify that they have followed the prescribed course, are allowed. No mechanics' services or fuel stores are allowed at these checkpoints. The checkpoint areas must be accurately located on the racecourse map and submitted with the "Special Recreation Application and Permit."

3. Fragile and/or significant resource areas shall be avoided or mitigated if permitted, including, but not limited to:

a) Identified significant areas and Areas of Critical Environmental Concern.

b) Habitats of endangered, threatened, rare or protected species.

c) Wilderness, primitive, natural, educational and research areas.

d) Archaeological and historical areas and features.

e) Sensitive soils and susceptible windborne-dust areas.

f) Wetlands and riparian habitats.

g) Areas near urban populations.

4. BLM shall require the event's sponsors to mitigate potential negative impacts and rehabilitate impacted areas. For example, the sponsor may have to provide official observers at mandatory checkpoints to ensure that racers comply with the designated course. Also, course route damages such as trash or "whoop-de-doops" would have to be removed. In situations where repeated or significant violations of the event's permit occur, BLM could decline permits for future events proposed by the sponsor who was responsible.

5. All racecourses are temporary and may not be used on a consistent basis, pending specific resource studies. All approved racecourse routes are temporary and exist only for the life of the specific event for which the route was designed. Pending resource studies on event routes in Class L, which may or may not indicate that an Area is suitable and capable of tolerating such use, no approved route may experience more than one event annually. In some cases, the route may be used even less frequently. It would be considered rare that an approved route could receive more than a single annual race event.

6. Long-term adverse impacts will not be permitted to accumulate. Adverse impacts or scars predicted to remain on the resource beyond one to five years are, in general, considered long-term and are not tolerated in Class L areas. Specifically, the final determination on whether or not an adverse impact is long-term is made by resource specialists and the authorized permitting official. The decision as to what constitutes long-term adverse impacts could vary markedly from Area to Area, depending on the resources involved, the type of requested event, and the number of expected participants. However, all identified adverse impacts in Class L areas will be avoided or complete mitigation will have to be shown to be possible within a reasonable time frame, not to extend beyond five years from the date of the event.

7. Event participants may have to traverse Class L areas under controlled, yellow flag conditions. This criterion is conditional and depends on such factors as management objectives for the Area, special resources, length of course, dust conditions, type of event, season of use, etc. This option provides not only protection of

valuable resources, but also safety for the race participants where hazards may exist.

8. Route length of the event which passes through Class L areas will be a key factor in determining use. All events will have a specified approved route length. As the approved route length increases, it can be generally expected that more controlled race requirements, such as yellow flag conditions, may be mandated.

9. Width of course will be the minimum practicable for resource protection and public safety. Permitted events will be limited to the number of participants identified in the "Special Recreation Application and Permit." All approved routes must be capable of tolerating the number of persons and vehicles expected to enter the Area. As with the length of route, the number of participants may constrain the route options available and/or limitations on speed, etc., which may be dictated.

10. Because of certain variable factors (e.g., rainfall, nesting periods, etc.), seasons of acceptable use shall be identified by BLM, where necessary.

11. Race-event vehicles must comply with fire-control and noise-emission standards outlined in the Federal Register, subpart 8343.1, Vehicle Operation Standards.

12. Special recreation use permits are required for all events (BLM Manual 6260). No events will be permitted if BLM determines that specific guidelines cannot be met.

Part 7

Criteria for Permitted Pits, Start, and Finish Areas in Multiple-Use Class M

Pits, start, and finish areas are allowed in Multiple-Use Classes M and I motorized vehicle free-play areas. To prevent undue resource impacts in M areas, precautionary steps need to be identified.

1. Pits, start, and finish areas will be located in areas identified as having low resource sensitivity and values.

2. Each event will have a specified maximum number of entrants.

3. Course, pit, start, and finish areas will have their specified area clearly identified.

4. Mitigation and rehabilitation of these areas by the sponsor will be necessary if deemed so by the BLM authorizing official.

5. Fragile and/or significant resource areas shall be avoided or mitigated. See Multiple-Use Class L criteria for further definition of fragile and significant resource areas.

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APPENDIX VI

MOTORIZED VEHICLE ACCESS

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APPENDIX VI

MOTORIZED VEHICLE ACCESS

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MOTORIZED VEHICLE ACCESS

Part 1

Selected Laws, Executive Orders, and Regulations
Affecting CDCA Vehicle Access Designation/
Management Policy

1. Federal Land Policy and Management Act (FLPMA)

Section 601 (a)

(4) the use of all California desert resources can and should be provided for in a multiple use and sustained yield management plan to conserve these resources for future generations, and to provide present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles. (Emphasis added)

Section 501 (a)

The Secretary, with respect to the public lands and, the Secretary of Agriculture, with respect to lands within the National Forest System (except in each case land designated as wilderness), are authorized to grant, issue, or renew rights-of-way over, upon, under or through such lands for-

(6) roads, trails, highways, railroads, canals, tunnels, tramways, airways, livestock driveways, or other means of transportation except where such facilities are constructed and maintained in connection with commercial recreation facilities on lands in the National Forest System; or

(7) such other necessary transportation or other systems or facilities which are in the public interest and which require rights-of-way over, upon, under, or through such lands.

Section 503

In order to minimize adverse environmental impacts and the proliferation of seperate rights-of-way, the utilization of rights-of-way in common shall be required to the extent practical, and each right-of-way or permit shall reserve to the Secretary concerned the right to grant additional rights-of-way or permits for compatible uses on or adjacent to rights-of-way granted pursuant to this Act. In designating right-of-way corridors and in

determining whether to require that rights-of-way be confined to them, the Secretary concerned shall take into consideration national and State land use policies, environmental quality, economic efficiency, national security, safety, and good engineering and technological practices. The Secretary concerned shall issue regulations containing the criteria and procedures he will use in designating such corridors. Any existing transportation and utility corridors may be designated as transportation and utility corridors pursuant to this subsection without further review.

Section 505

Each right-of-way shall contain:

(a) terms and conditions which will:

(1) carry out the purposes of this Act and rules and regulations issued thereunder;

(2) minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment;

(3) require compliance with applicable air and water quality standards established by or pursuant to applicable Federal or State law;

(4) require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance of or for rights-of-way for similiar purposes if those standards are more stringent than applicable Federal standards; and

(b) such terms and conditions as the Secretary concerned deems necessary to:

(1) protect Federal property and economic interests;

(2) manage efficiently the lands which are subject to the right-of-way or adjacent thereto and protect the other lawful users of the lands adjacent to or traversed by such right-of-way;

(3) protect lives and property;

(4) protect the interests of individuals living in the general area traversed by the right-of-way who rely on the fish, wildlife, and other biotic resources of the area for subsistence purposes;

(5) require location of the right-of-way along a route that will cause least damage to the environment, taking into consideration feasibility and other relevant factors;

(6) otherwise protect the public interest in the lands traversed by the right-of-way or adjacent thereto.

Section 507

(a) The Secretary concerned may provide under applicable provisions of this title for the use of any department or agency of the United States a right-of-way over, upon, under or through the land administered by him, subject to such terms and conditions as he may impose.

(b) Where a right-of-way has been reserved for the use of any department or agency of the United States, the Secretary shall take no action to terminate, or otherwise limit, that use without the consent of the head of such department or agency.

Section 701(a)

Nothing in this Act, or in any amendment made by this Act, shall be construed as terminating any valid lease, permit, patent, right-of-way, or other land use right or authorization existing on the date of approval of this Act.

2. Executive Order (E.O.) 11644, Use of Off-Road Vehicles on Public Lands

An estimated 5 million off-road recreational vehicles--motorcycles, minibikes, trail bikes, snowmobiles, dune-buggies, all-terrain vehicles, and others--are in use in the United States today, and their popularity continues to increase rapidly. The widespread use of such vehicles on the public lands--often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity--has demonstrated the need for a unified Federal policy toward the use of such vehicles on the public lands.

NOW, THEREFORE, by virtue of the authority vested in me as President of the United States by the Constitution of the United States and in futherance of the purpose and policy of the National Environmental Policy Act of 1969 (42 U.S.C. 4321), it is hereby ordered as follows:

SEC. 1. Purpose. It is the purpose of this order to establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.

SEC. 2. Definitions. As used in this order, the term:

(1) "public lands" means (A) all lands under the custody and control of the Secretary of the Interior and the Secretary of Agriculture, except Indian lands, (B) lands under the custody and control of the Tennessee Valley Authority that are situated in western Kentucky and Tennessee and are

designated as "Land Between the Lakes," and (C) lands under the custody and control of the Secretary of Defense;

(2) "respective agency head" means the Secretary of the Interior, the Secretary of Defense, the Secretary of Agriculture, and the Board of Directors of the Tennessee Valley Authority, with respect to public lands under the custody and control of each;

(3) "off-road vehicle" means any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any military, fire, emergency, or law enforcement vehicle when used for emergency purposes, and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract; and

(4) "official use" means use by an employee, agent, or designated representative of the Federal Government or one of its contractors in the course of his employment, agency, or representation.

SEC. 3. Zones of Use. (a) Each respective agency head shall develop and issue regulations and administrative instructions, within six months of the date of this order, to provide for administrative designation of the specific areas and trails on public lands on which the use of off-road vehicles may be permitted, and areas in which the use of off-road vehicles may not be permitted, and set a date by which such designation of all public lands shall be completed. Those regulations shall direct that the designation of such areas and trails will be based upon the protection of the resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various users of those lands. The regulations shall further require that the designation of such areas and trails shall be in accordance with the following-

(1) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.

(2) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.

(3) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(4) Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

(b) The respective agency head shall ensure adequate opportunity for public participation in the promulgation of such regulations and in the designation of areas and trails under this section.

(c) The limitations on off-road vehicle use imposed under this section shall not apply to official use.

SEC. 4. Operating Conditions. Each respective agency head shall develop and publish, within one year of the date of this order, regulations prescribing operating conditions for off-road vehicles on the public lands. These regulations shall be directed at protecting resource values, preserving public health, safety, and welfare, and minimizing use conflicts.

SEC. 5. Public Information. The respective agency head shall ensure that areas and trails where off-road vehicle use is permitted are well marked and shall provide for the publication and distribution of information, including maps, describing such areas and trails and explaining the conditions on vehicle use. He shall seek cooperation of relevant State agencies in the dissemination of this information.

SEC. 6. Enforcement. The respective agency head shall, where authorized by law, prescribe appropriate penalties for violation of regulations adopted pursuant to this order, and shall establish procedures for the enforcement of those regulations. To the extent permitted by law, he may enter into agreements with State or local governmental agencies for cooperative enforcement of laws and regulations relating to off-road vehicle use.

SEC. 7. Consultation. Before issuing the regulations or administrative instructions required by this order or designating areas or trails as required by this order and those regulations and administrative instructions, the Secretary of the Interior shall, as appropriate, consult with the Atomic Energy Commission.

SEC. 8. Monitoring of Effects and Review. (a) The respective agency head shall monitor the effects of the use of off-road vehicles on lands under their jurisdictions. On the basis of the information gathered, they shall form time to time amend or rescind designation of areas or other actions taken pursuant to this order as necessary to further the policy of this order.

(b) The Council on Environmental Quality shall maintain a continuing review of the implementation of this order.

RICHARD NIXON

THE WHITE HOUSE,
February 8, 1972

E.O. 11989, Off-Road Vehicles on Public Lands

By virtue of the authority vested in me by the Constitution and statutes of the United States of America, and as President of the United States of

America, in order to clarify agency authority to define zones of use by off-road vehicles on public lands, in furtherance of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), Executive Order No. 11644 of February 8, 1972, is hereby amended as follows:

SECTION 1. Clause (B) of Section 2(3) of Executive Order No. 11644, setting forth an exclusion from the definition of off-road vehicles, is amended to read "(B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and".

SEC. 2. Add the following new Section to Executive Order No. 11644;

"SEC. 9. Special Protection of the Public Lands. (a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence.

"(b) Each respective agency head is authorized to adopt the policy that portions of the public lands within his jurisdiction shall be closed to use by off-road vehicles except those areas or trails which are suitable and specifically designated as open to such use pursuant to Section 3 of this Order."

JIMMY CARTER

The White House
May 24, 1977

3. Bureau of Land Management Regulations
Code of Federal Regulations (CFR), Title 43, 8340
8340.0-1 Purpose

The purpose of this part is to establish criteria for designating public lands as open, limited or closed to the use of off-road vehicles and for establishing controls governing the use and operation of off-road vehicles in such areas.

CFR Title 43,8341, Conditions of Use

8341.1 Regulations governing use.

(a) The operation of off-road vehicles is permitted on those areas and trails designated as open to off-road vehicle use.

(b) Any person operating an off-road vehicle on those areas and trails designated as limited shall conform to all terms and conditions of the applicable designation orders.

(c) The operation of off-road vehicles is prohibited on those areas and trails closed to off-road vehicle use.

(d) It is prohibited to operate an off-road vehicle in violation of State laws and regulations relating to use, standards, registration, operation, and inspection of off-road vehicles. To the extent that State laws and regulations do not exist or are less stringent than the regulations in this part, the regulations in this part are minimum standards and are controlling.

(e) No person may operate an off-road vehicle on public lands without a valid State operator's license or learner's permit. Exceptions are: (1) A person under the direct supervision of an individual 18 years of age or older who has a valid operator's license and who is responsible for the acts of the person supervised. (2) A person certified by State government as competent to drive off-road vehicles after successfully completing a State approved operator's training program. (3) Operation of an off-road vehicle in areas of Alaska designated by the Bureau's State Director for Alaska.

(f) Any person supervising a nonlicensed driver shall be responsible for the operation of the vehicle and shall be responsible for the actions of the driver.

(g) No person shall operate an off-road vehicle on public lands:

(1) In a reckless, careless, or negligent manner;

(2) In excess of established speed limits;

(3) While under the influence of alcohol, narcotics, or dangerous drugs;

(4) In a manner causing, or likely to cause significant, undue damage to or disturbance of the soil, wildlife habitat, improvements, cultural, or vegetative resources or other authorized uses of the public lands; and

(5) During night hours, from a half-hour after sunset to a half-hour before sunrise, without lighted headlights and taillights.

(h) Drivers of off-road vehicles shall yield the right-of-way to pedestrians, saddle horses, pack trains, and animal-drawn vehicles.

(i) Any person who operates an off-road vehicle on public lands must comply with the regulations in this part, and in 8341.2 as applicable, while operating such vehicle on public lands.

8341.2 Special rules.

(a) Notwithstanding the consultation provisions in 8342.2(a), where the authorized officer determines that off-road vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the authorized officer shall immediately close the areas or trails affected to the types(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence. Such closures will not prevent designation in accordance with procedures in part 8342 of this subpart, but these lands shall not be opened to the type(s) of off-road vehicle to which it was closed unless the authorized officer determines that the adverse effects have been eliminated and measures implemented to prevent recurrence.

(b) Each State director is authorized to close portions of the public lands to use by off-road vehicles, except those areas or trails which are suitable and specifically designated as open to such use pursuant to Subpart 8342 of this part.

CFR Title 43, 8343-Vehicle Operations

8343.1 Standards.

(a) No off-road vehicle may be operated on public lands unless equipped with brakes in good working condition.

(b) No off-road vehicle equipped with a muffler cutout, bypass, or similar device, or producing excessive noise exceeding Environmental Protection Agency standards, when established, may be operated on public lands.

(c) By posting appropriate signs or by marking a map which shall be available for public inspection at local Bureau offices, the authorized officer may indicate those public lands upon which no off-road vehicle may be operated unless equipped with a properly installed spark arrester. The spark arrester must meet either the U.S. Department of Agriculture--Forest Service Standard 5100-1a, or the 80-percent efficiency level standard when determined by the appropriate Society of Automotive Engineers (SAE) Recommended Practices J335 or J350,. These standards include, among others, the requirements that: (1) the spark arrester shall have an efficiency to retain or destroy at least 80 percent of carbon particles for all flow rates, and (2) the spark arrester has been warranted by its manufacturer as meeting this efficiency requirement for at least 1,000 hours subject to normal use, with maintenance and mounting in accordance with the manufacturer's recommendation. A spark arrester is not required when an off-road vehicle is being operated in an area which has 3 or more inches of snow on the ground.

(d) Vehicles operating during night hours, from a half-hour after sunset to a half-hour before sunrise, shall comply with the following: (1)

Headlights shall be of sufficient power to illuminate an object at 300 feet at night under normal, clear atmospheric conditions. Two- or three-wheeled vehicles or single-tracked vehicles will have a minimum of one headlight. Vehicles having four or more wheels or more than a single track will have a minimum of two headlights, except double tracked snowmachines with a maximum capacity of two people may have only one headlight. (2) Red taillights, capable of being seen at a distance of 500 feet from the rear at night under normal, clear atmospheric conditions, are required on vehicles in the same numbers as headlights.

CFR Title 43 8363.4 State and Local Laws

Except as otherwise provided by law, State and local laws and ordinances shall apply. This refers, but is not limited, to laws and ordinances governing:

(a) Operation and use of motor vehicles, aircraft, and boats.

(b) Hunting and fishing.

(c) Use of firearms.

(d) Injury to persons or destruction of property.

(e) Air and water pollution.

(f) Littering.

(g) Sanitation.

(h) Use of fire.

CFR Title 43, 8364-Closures

8364.1 Closure of lands.

In the management of lands to protect the public and assure proper resource utilization, conservation, and protection, public use and travel may be temporarily restricted. For instance, areas may be closed during periods of high fire danger or unsafe conditions, or where use will interfere with or delay mineral development, timber, and livestock operations, or other authorized use of the lands. Areas may also be closed temporarily to:

(a) Protect the public health and safety.

(b) Prevent excessive erosion.

(c) Prevent unnecessary destruction of plant life and wildlife habitat.

(d) Protect the natural environment.

(e) Preserve areas having cultural or historical value.

(f) Protect scientific studies, or preserve scientific values.

8364.1-1 Closure of access.

Roads, trails, and lands providing access to other public lands may be closed entirely or open only for specifically authorized travel in the interest of public health and safety or preservation and protection of public lands and resources.

CFR Title 43, 3802-Exploration and Mining, Wilderness Review Program

3802.0-1 Purpose.

The purpose of this subpart is to establish procedures to prevent impairment of the suitability of lands under wilderness review for inclusion in the wilderness system and to prevent unnecessary or undue degradation by activities authorized by the United States Mining Laws and provide for environmental protection of the public lands and resources.

3802.0-2 Objectives.

The objectives of this subpart are to:

(a) allow mining claim location, prospecting, and mining operations in lands under wilderness review pursuant to the United States Mining Laws, but only in a manner that will not impair the suitability of an area for inclusion in the wilderness system unless otherwise permitted by law; and

(b) assure management programs that reflect consistency between the United States Mining Laws, and other appropriate statutes.

3802.1 Plan of operations.

An approved plan shall include appropriate environmental protection and reclamation measures selected by the authorized officer that shall be carried out by the operator. An operator may prepare and submit with a plan measures for the reclamation of the affected area.

3802.1-1 When required.

An approved plan of operations is required for operations within lands under wilderness review prior to commencing:

(a) Any mining operations which involve construction of means of access, including bridges, landing areas for aircraft, or improving or maintaining such access facilities in a way that alters the alignment, width, gradient size, or character of such facilities;

(b) Any mining operations which destroy trees 2 or more inches in diameter at the base;

(c) Mining operations using tracked vehicles or mechanized earth moving equipment, such as bulldozers or backhoes;

(d) Any operations using motorized vehicles over other than "open use areas and trails" as defined in Subpart 6292 of this title, off-road vehicles, unless the use of a motorized vehicle can be covered by a temporary use permit issued under Subpart 8372 of this title;

(e) The construction or placing of any mobile, portable or fixed structure on public land for more than 30 days;

(f) On mining operations requiring the use of explosives; or

(g) Any operation which may cause changes in a water course.

CFR Title 43,3809-Surface Management (Proposed Regulations)

3809.0-1 Purpose.

The purpose of this subpart is to establish procedures to afford environmental protection to public lands and their resources by preventing impairment of wilderness suitability or undue or unnecessary degradation of the lands and resources which may result from mining operations authorized by the United States mining laws (30 U.S.C. 22-54).

3809.0-2 Objectives.

The objectives of this regulation are to:

(a) Allow and not unduly hinder mineral entry, exploration, location, operations and purchase pursuant to the United States Mining Laws, in ways that will protect the scenic, scientific and environmental values of the public lands against impairment of wilderness values and undue or unnecessary damage and to provide that management with respect to mineral operations is coordinated with appropriate State and local governmental agencies.

(b) Assure management programs that reflect consistency between the United States mining laws and other appropriate statutes.

3809.1 Plan of operations.

An approved plan of operations shall include appropriate environmental protection and reclamation measures selected by the authorized officer that shall be carried out by the operator. An operator may prepare and submit with a plan of operations measures for the reclamation of the affected area.

3809.1-1 When required.

An approved plan of operations is required prior to commencing:

(a) Any mining operations which involve construction of roads, bridges, landing areas for aircraft, or improving or maintaining such access facilities in a way that alters the alignment, width, gradient, size or character of such facilities;

(b) Any mining operations which destroy trees two or more inches in diameter at the base;

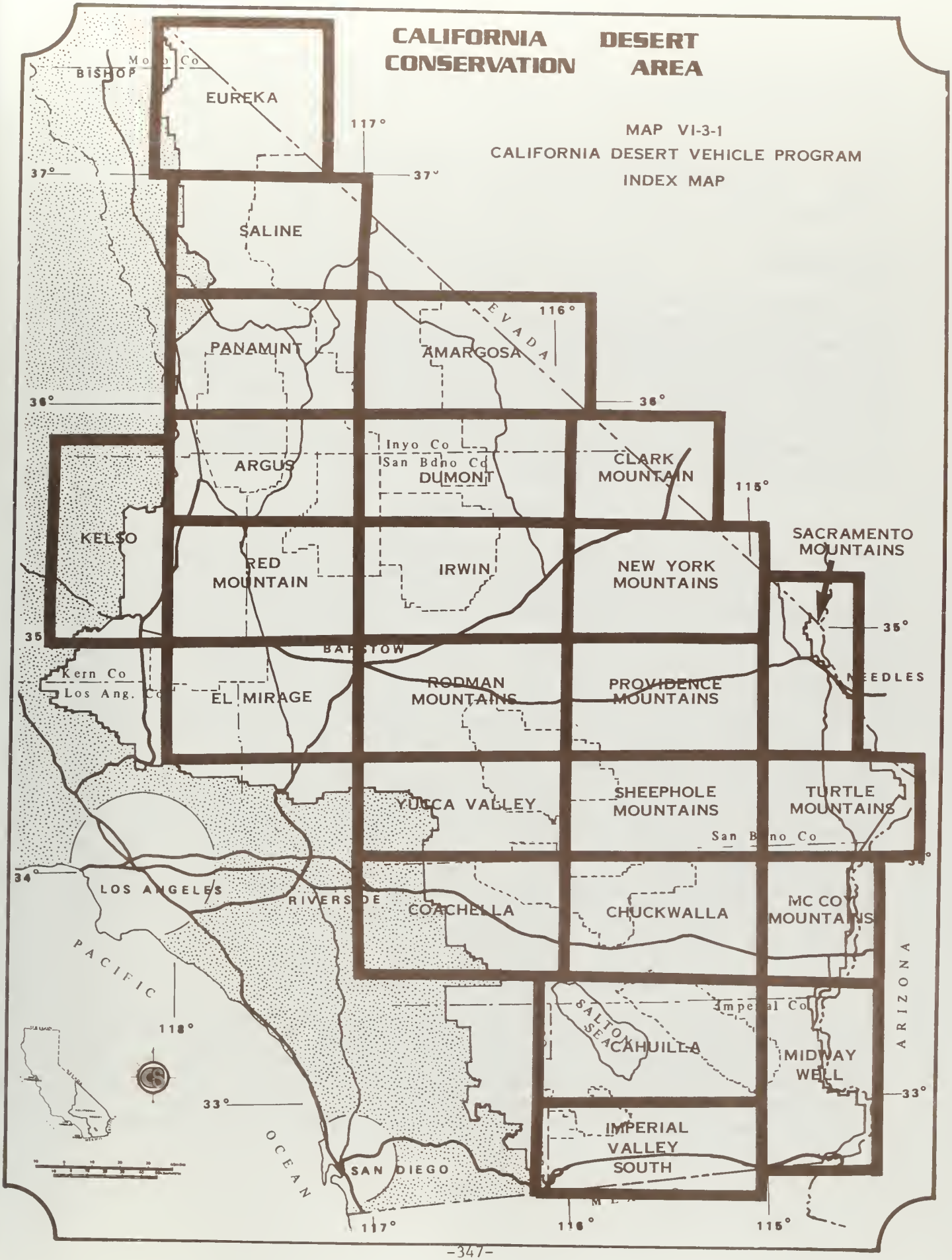
(c) Mining operations using tracked vehicles or mechanized earth moving equipment, such as bulldozers or backhoes;

(d) Any mining operations using motorized vehicles over other than "open use areas and trails" as defined in Subpart 8340 of this title. Off-Road Vehicles, or which violate the restrictions of limited areas or tracts unless the use of a motorized vehicle is covered by a temporary use permit issued under Subpart 8372 of this title.

(e) The construction or placing of any mobile, portable or fixed structures on public lands for more than 30 days;

(f) Any mining operations requiring the use of explosives; or,

(g) Any operation which may cause changes in a water course.


CALIFORNIA DESERT CONSERVATION AREA
MAP VI-3-1
CALIFORNIA DESERT VEHICLE PROGRAM
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EL MIRAGE
RODMAN MOUNTAINS
PROVIDENCE MOUNTAINS
YUCCA VALLEY
SHEEPHOLE MOUNTAINS
TURTLE MOUNTAINS
COACHELLA
CHUCKWALLA
MC COY MOUNTAINS
CAHUILLA
MIDWAY WELL
IMPERIAL VALLEY SOUTH
SALTON SEA
PACIFIC OCEAN
ARIZONA
BISHOP
BARSTOW
NEEDLES
LOS ANGELES
RIVERSIDE
SAN DIEGO
Inyo Co
San Bdno Co
Kern Co
Los Ang. Co
Imperial Co
117°
116°
115°
118°
37°
36°
35°
34°
33°

Part 2

Off-Road Vehicle Monitoring Guidelines
Developed for Region 1, U.S. Forest Service

INTRODUCTION

The effects of the use of off-road vehicles (ORV) on National Forest lands are to be monitored as required by 36 CFR 295.5 and FSM 2355.5. The responsibility for the development and implementation of such monitoring plans has been delegated to Forest Supervisors by FSM 2350 ID No. 13 (October 13, 1978). Each National Forest is to develop a monitoring plan by December 31, 1979.

This guideline for an ORV monitoring plan can be adopted or modified according to individual Forest needs.

ASSUMPTIONS

Several assumptions were used in the development of the monitoring plan. First, based on the amount and degree of ORV use and resulting effects in R-1, it has been assumed that intensive monitoring is needed only where ORV-induced problems occur or are likely to occur. The bulk of National Forest lands in R-1 have not nor are likely to sustain significant impacts as a result of ORVs operating. Therefore, it has also been assumed that most monitoring can be extensive; i.e., based on public and professional input during the annual review of the ORV travel plan that occurs at the Forest level. Further, the plan assumes that the intensity of monitoring reflects the significance of the ORV induced problem; i.e., as the problem intensifies, the more sophisticated the monitoring becomes. Fourth, it has been assumed that several of the required components of the monitoring plan can be conducted through the Forest Land Management Planning process. This process does entail an ORV component as well as provide data needed for some aspects of the monitoring plan. Finally, the development of the ORV monitoring plan assumed that methodologies currently exist to monitor required biophysical elements; Forest and District personnel responsible for ORV monitoring should consult with appropriate staff specialists to become familiar with these methods when necessary.

WHAT THE ORV MONITORING PLAN IS NOT

It is important to recognize that the monitoring plan is not several items. First, the monitoring plan itself does not suggest management action to correct ORV induced effects. (One exception: If ORV operation is causing or will cause considerable adverse effects, then the area/trail must be closed to the type of vehicle causing such effects, and rehabilitation of the area/trail must occur). The monitoring plan simply sets out a process for

observing and documenting the effects of ORV operation. The overall function, however, of the monitoring plan is to provide information to determine when and how management should occur.

Additionally, the monitoring which is required in this plan is not enforcement of the Forest Travel Plan nor is it information activity associated with communicating the Travel Plan to the public. These activities are management activities necessary to secure understanding and compliance with Travel Plan closures.

MAKING THE MONITORING PLAN WORK

There are three prerequisites for the successful implementation of the Forest ORV monitoring plan. First, there must be a recognition of Forest and District personnel that ORV effects are to be monitored and a commitment among those personnel to the monitoring process. Second, there should be an assignment of responsibility at the Forest level for implementation of the monitoring plan. Finally, there is a need for communication with the staff specialists as to monitoring techniques and intensity of ORV effects.

Part 3

National Forest Off-Road Vehicle Monitoring Plan

Section 1. Authority and Goals for Monitoring ORV Effects.

1.1 Authority

Monitoring the effects of ORVs is mandated by section 8(a) of Executive Order 11644, 36 CFR 295.5, and FSM 2355.5

1.2 The monitoring plan has the following objectives:

1. Compare ORV effects to objectives established in ORV and land management plans existing for an area.

2. Determine when ORV use will cause or is causing considerable adverse effects on resources, public safety, or Forest visitors.

Section 2. Identify areas/trails where ORV use will cause considerable adverse effects; identify critical resources or uses requiring monitoring.

2.1 Identify areas/trails sensitive to disturbance by ORVs.

Areas/trails sensitive to disturbance caused by ORVs will be identified in the Forest planning process. Criteria may include soils and land types rating high to very high in erosion potential; areas where visual quality objectives have been established as retention, partial retention, or preservation; and areas where essential delineated habitat for various wildlife species has been identified.

2.2 Identify critical resources requiring intensive monitoring.

Any area identified in sections 2.1 above or 5.2 below will be subject to intensive monitoring.

2.3 Definition of considerable adverse effects.

a. Resources: FSM 2355 definition, see appendix A.

b. Significant cultural and historic sites: Considerable adverse effects will occur when damage to a cultural or historic site is irreparable or when the scientific or educational values of such sites have been irrevocably lost.

Section 3. Establish benchmark conditions for critical resources and existing use patterns as a basis from which to measure change.

3.1 Establish benchmark conditions for each area identified in sections 2.1 above and 5.2 below. The Forest, using appropriate monitoring techniques, will establish benchmark conditions.

3.2 Identify existing ORV use patterns for each area identified in sections 2.1 above and 5.2 below. Where biophysical impacts and/or user conflicts are moderate or higher, the Forest will estimate the type and intensity of ORV use.

Section 4. Identify applicable resource standards and the extent of change acceptable within the framework of land management objectives.

4.1 Identify applicable resource standards where existing or potential biophysical impacts induced by ORVs are moderate or higher. When such conditions occur, resource standards applicable to the area will be developed. Such resource standards include the site's productivity, natural soil and vegetative condition, location with respect to critical watersheds, and delineated essential habitat. Normally, such resource standards will be developed in the Forest planning process.

4.2 Identify amount of change acceptable. For each area where the existing or potential level of biophysical change induced by ORV's is at or above the moderate level, define, in biophysical terms, the limit of acceptable change. Changes beyond this limit are considerable adverse effects.

Section 5. Establish appropriate monitoring methods.

5.1 Introduction.

The purpose of this section is to indicate how the effects of ORVs operating on National Forest lands are to be monitored. The monitoring system involves: (1) identification of locations to be intensively monitored; (2) determination of the level of monitoring efforts; (3) use of methods appropriate to the impact problem; (4) use of a management information system such that monitoring efforts are insured to be systematic and documented.

5.2 Location of monitoring efforts.

Intensive monitoring will occur on those areas/trails open to ORV use where an identified ORV problem exists. Normally, extensive monitoring will be required for the following areas/trails:

a. Areas/trails closed to ORV use year long (designated wilderness, travel plan closures, etc.).

b. Areas/trails open to ORV use but where resource conditions (slope, vegetation density, snow depth, etc.) make such use unlikely.

c. Forest development system roads.

Listed below are guidelines for determining where intensive ORV monitoring may take place:

a. Public and professional input during the annual Forest travel plan review.

b. ORV closures that are routinely violated.

c. Areas/trails whre biophysical impacts, user conflicts, or public safety problems exist as identified in Figure 1 and Table A in section 5.3.

d. RARE II areas recommended for wilderness or further planning, and wilderness study areas.

e. Areas/trails used by ORVs in close proximity to identified signigicant[1] cultural and historical sites.

f. Areas/trails specifically designated and managed for ORV use.

g. Areas/trails located in delineated essential habitat or within one-eighth mile of any identified nesting location of any threatened or endangered species.

h. Areas/trails receiving substantial ORV use and the location and season of such use corresponds to a critical season in the annual cycle of a wildlife species.

i. Areas/trails receiving substantial ORV use located in resources having established visual management quality objectives of preservation, retention, or partial retention.

j. Areas/trails receiving substantial ORV use and rated high to very high in erosion potential or use sensitivity in the Forest land inventory document.

5.3 Level of monitoring efforts.

The level to which effects of ORVs will be monitored is dependent on the biophysical impacts, user conflicts, and public safety problems resulting from ORV operation. Figure 1 is used to determine the level of monitoring required for situations exhibiting differing severities of

[1]36 CFR 60.6. Significant sites are those which are on or eligible for the National Register of Historic Places.

biophysical effects and user conflicts. The level of monitoring required for public safety is determined from Table A.

The following process will be used for determining the level of monitoring required for National Forest lands:

1. Identify the severity of biophysical impacts for all areas/trails open to ORV use meeting criteria in section 5.2. Table B contains definitions of terms used for assessing biophysical impacts.

2. Identify severity of user conflicts for all areas/trails open to ORV use meeting criteria in section 5.2. Table C contains definitions of terms used for assessing user conflicts.

3. Using Figure 1, find the box where the severity of biophysical impacts and user conflicts intersect. The statements in the box indicate the appropriate monitoring techniques(s). Monitoring techniques are described in Appendix B.

4. Identify severity of public safety problems as indicated in Table A. Use appropriate monitoring technique(s).

Figure 1

How to Identify Level of Monitoring

Techniques that may be used are indicated in boxes, described in Appendix B.

Amount of Existing or Potential Biophysical Impacts

	MINIMAL	MODERATE	SIGNIFICANT
MINIMAL	1. Public and professional input (PPI)	1. PPI 2. Identify Capability Areas and ORV use levels 3. Visual inspections 4. Photo points 5. Locate significant cultural and historic sites	1. PPI 2. Identify Capability Areas and ORV use levels 3. Visual inspections 4. Photo points 5. Photo measurements 6. Transects 7. Locate significant cultural and historic sites
MODERATE	1. PPI 2. Identify Capability Areas and ORV use levels 3. Document complaints about ORV operation	1-5. Above 6. Document complaints about ORV operation	1-7. Above 8. Document complaints about ORV operation
SIGNIFICANT	1-3. Above 4. Systematic manager observation	1-6. Above 7. Systematic manager observation	1-8. Above 9. Systematic manager observation

TABLE A

How to determine level of monitoring for public safety

Level of monitoring	Description of situation	Monitoring technique
A. Low	Less than * * ORV accidents resulting in personal injury have ever been recorded on areas/trails. Vandalism (destruction or damage to signs, gates, or facilities) likely from ORV operation infrequent (less than * * incident/facility/year).	Public and professional involvement during annual review of travel plan.
B. High	ORV personal injury accidents occurring on areas/trails at rate of * * per year. Damage to signs, gates, facilities occurring routinely.	Record number and nature of accidents/ vandalism on ORV monitoring form (Figure 2).

* * Use local criteria

Table B

Indicators of the amount of biophysical impact

Description/ points/ stage	Trail width	Erosion	Visual Impact	Wildlife
	Limited to * * width	None Evident	None Evident	Activity does not occur in delineated essential habitat, calving areas, or winter range
	T1	E0	V0	W0
	Trail averages less than * * width of vehicle. Occasional braiding of trail	Only after severe storms	Evident but not dominant in scene	Some possible wildlife disturbance
	T2	E1	V1	W2
	Trail averages more than * * width of vehicle; frequent braiding of trails	Active	Easily visible, codominant or greater in scene	Use occurs in known winter range, calving areas, or delineated essential habitat
	T3	E2	V2	W3

HOW TO USE TABLE: For each area/trail requiring monitoring, rate each indicator as it applies to the overall area/trail situation. Add the appropriate points and use the following to determine significance of impact and appropriate monitoring technique in Figure 1:

Low *0-3*
Moderate *4-6*
High *7+*

Actual points assigned to each category may vary, depending upon the management objectives for the area.

Letters indicate resource indicator stage and are used when impacts are rated moderate or higher.

* * Use local criteria

Table C

Description of the significance of user conflict

Significance	Description
Low	Public complaints about ORV operation are non-existent or infrequent (less than * * per month). ORV's are operated substantial distances from urban areas (more than * * miles) and on resources not desired by other users.
Moderate	Public complaints about ORV operation occur occasionally (less than * * per season). ORV'S operated within * * miles of urban areas or on resources which have the potential of being used during similar time periods by other recreationists.
High	Public complaints about ORV operation frequent (several per month). ORV's operated immediately adjacent to urban areas or on resources used frequently by other recreationists.

* * Use local criteria

5.4 Monitoring Information System.

a. ORV monitoring will be systematic and documented. It is the purpose of this section to describe a suggested ORV monitoring information system to meet the documentation objective.

Documentation occurs in two steps:

1. Recording of monitoring information.

2. Summarization and reporting of monitoring information.

b. Recording of monitoring information.

Recording of information developed in the monitoring effort will provide managers with a more objective estimate of ORV issues and problems than subjective impressions based upon occasional complaints, public contact, or visual observations. Figure 2 shows a suggested format. It would be used for each area/trail receiving public/professional input or requiring some other monitoring format. For monitoring techniques 4, 5, 7, and 9, additional documentation will be necessary.

For each area/trail identified in Section 5.2 requiring monitoring, a separate monitoring form will be utilized. Monitoring forms will be maintained in a looseleaf notebook and ordered according to area name and/or trail number.

All District personnel will be instructed to record public input, comments, etc., on the form when it is determined monitoring is necessary.

c. Summarization and reporting of monitoring information.

Annually, prior to review of Forest travel plan, appropriate District and Forest personnel will summarize monitoring information. This information will be used in the review of the travel plan.

Figure 2

Suggested ORV Monitoring Form

_____National Forest

ORV AREA/TRAIL MONITORING DOCUMENT

Trail # _____Area Description _____ Year _____

Public/Professional Input:

Date	Comment
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ELU: _____

Level and Type of ORV Use:

Type	Estimated Visits
Motorcycle	_____
4 x 4	_____
Snowmobile	_____
Other	_____

Visual Inspection Class:

T1	E0	V0	W0	
T2	E1	V1	W2	
T3	E2	V2	W3	

Location and Condition of Historical/Cultural Resources:

_____

Complaints:

Date	Nature of complaint

Accidents:

Date	Nature of accident

Vandalism:

Date	Incident

Applicable Resource Standards:

Acceptable Soil Loss_____

Acceptable Vegetation Removal_____

Designated Visual Quality_____

Management Objectives_____

Designated Wildlife_____

Management Objectives_____

Appendix A

Draft FSM 2355.04 Definitions

9. Minimize ORV Effects: To reduce ORV effects to the smallest degree feasible short of elimination, consistent with the specific management direction and practices established for the area as determined by economic, legal, environmental, and technological factors.

10. ORV Adverse Effect: Any effect as a result of ORV use that does not meet the standards for the:

a. Maintenance of the long-term productive capacity of the land;

b. Maintenance of air and water quality;

c. Maintenance of wildlife habitat and stable and balanced populations of wildlife;

d. Maintenance of other existing and proposed or potential uses of the Forest.

e. Preservation of cultural and historic resource values.

11. Considerable ORV Adverse Effect: Any adverse effect, as defined above, which: (a) will not meet the planning criteria as identified in FSM 2355.12; and (b) is or may become irreparable due to the impossibility or impracticability of performing corrective or remedial measures. In making this determination, the Forest Officer may consider the following factors:

a. Availability of funding and manpower to prevent or correct adverse effects;

b. Off-site (secondary) impacts;

c. Physical and biological conditions such as slope, vegetation, soil erodibility and compaction, surface and subsurface hydrology, site's natural rehabilitative capability, etc.;

d. Other social and political factors which may impair the ability to correct or prevent adverse effects;

e. Those natural, historic and cultural resources, and areas which are susceptible to irretrievable resource damage.

2355.12 - Planning Criteria 1. The designation of areas and trails as open, restricted, or closed to off-road vehicle use shall be made in a manner which will as a minimum:

a. Promote user enjoyment.

b. Minimize damage to soil, watershed, vegetation, or other natural, cultural and historic resources of the public lands.

c. Minimize harassment of wildlife or significant disruption of wildlife habitats.

d. Minimize conflicts between off-road vehicle use and other existing or proposed uses on the same or neighboring public lands and insure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors of the human environment.

e. Promote the safety of all users of the public lands.

f. Be consistent with the management objectives for the National Forest or management areas within a National Forest within which the areas and trails are located.

2. Within the confines of the foregoing requirements, the designation of open, restricted, and closed areas and trails should also:

a. Promote as wide and balanced a range of opportunities for off-road vehicle use as possible, exclusive of purely challenging driving experiences.

b. Consider local standards for air, noise, and other factors not specifically addressed in the mandatory criteria described above.

c. Minimize conflicts among the various uses of public lands.

d. Recognize the differences between various types of off-road vehicles and the impacts which they may have on the various resources, public safety, and conflicts with other forest visitors.

These criteria should be expanded as necessary to reflect issues, concerns, and opportunities identified through public involvement or to meet management needs.

Appendix B -- Descriptions of Monitoring Techniques Identified in Table A and Figure 1

Use each technique where indicated in Table A and Figure 1.

Technique	Description
1. Public and professional input	Public and professional input serves two functions in the ORV monitoring process: (1) identify ORV problem areas that may need intensive monitoring, and (2) serve as a monitoring technique itself. Normally, most National Forest lands open to some type of ORV use will require only this technique. The technique will be used at all levels of biophysical impact, user conflict, and public safety, and normally will occur principally during the annual review of the Forest travel plan, but may occur at other times. For each area/trail where public or professional input is received, the following documentation will be provided: a. Name and description of area/trail. b. Nature of comment-wildlife, soil erosion, user conflict, public safety, etc. c. Date of comment. d. Source of comment--public, professional, etc.
2. Identify Capability	Using the Forest land management planning process, the Capability Areas units where ORV use Areas and ORV use occurs will be identified, and the type of ORV levels used and number of visits for each ORV type will be estimated. If more than one CA is involved in an ORV area/trail requiring monitoring, then each such CA will be noted on the monitoring form (Figure 2).
3. Visual inspection	Where necessary, ORV use areas will be visually inspected and evaluated by an appropriate National Forest officer. For each area/trail where a visual inspection is necessary the observer will circle the letter(s) on the monitoring form corresponding to the description of the biophysical element described in Table 2.
4. Photo points	Permanent photo points or plots are often useful and descriptive ways of monitoring effects. All photographic techniques will use documented locations and will be repeated periodically. Photo points/plots

will be located so as to show average and/or particularly severe conditions, and will be monitored at about the same time in the year in terms of vegetative development.

Three point techniques may be useful:

a. Small vertical plot photos--see Range Analysis Handbook, section 360. This technique is useful when tread width is less than 2 feet.

b. 35mm color infrared aerial photography--see Range Analysis Handbook, section 350. This technique is particularly useful in open country where ORV travel is not restricted to individual trails.

c. General view photographs--these will be taken from a permanent documented location and will be oriented in such a way as to show visual impacts resulting from ORV operation.

5. Photo measurements — Where necessary, quantitative measurements can be taken from photographs. These measurements may involve area covered by bare soil, length of trails, and changes in vegetative composition. See Range Analysis Handbook, sections 357, 358, and 360.

6. Locate significant cultural and historic sites — Significant sites are those that are on or eligible for the National Register of Historic Places. Any significant site located in close proximity to ORV use areas should be listed on the monitoring form (Figure 2) and its condition noted.

7. Transects and plots — Where appropriate, transects or plots may be used to quantitatively assess resource damage resulting from ORV operation. Such measurements may vary from simple cross sections of ORV trails to more sophisticated plots involving full assessment of soil, vegetative, and wildlife conditions.

8. Document complaints about ORV operation — When user conflicts are moderate to severe, the number and nature of complaints about ORV operation will be recorded.

9. Systematic manager observation — When conflicts between ORV users and nonuser are severe, managers will systematically observe the situation. Such observations may include the number and nature of the groups showing conflict, the time period in which conflicts appear to be most intense, any overt acts against one of the conflicting groups,

	and environmental or cultural factors contributing to the conflict.
10. Record number and nature of public safety incidents	Where the public safety monitoring requirements are high, all incidents known will be recorded. These will involve ORV accidents and vandalism to signs, facilities, and gates likely to be caused by ORV operators.

Part 4

Glossary of Terms Used in the Motorized Vehicle Access Element

Closed Areas and Trails. Designated areas and trails on public lands where the use of off-road vehicles is permanently or temporarily prohibited. Areas or trails will be designated as closed in situations where it is necessary to close an area or trail to all vehicular use to protect resources, promote visitor safety or reduce use conflicts. Only emergency vehicles will be authorized in closed areas.

Considerable Adverse Effect: Any ORV adverse effect which will not meet the established protection criteria of 8342.11; and may become irreparable due to the impossibility or impracticability of performing corrective or remedial action. A determination that a considerable adverse effect is occurring may be influenced by the following:

1. Availability of funds and personnel to prevent or correct the effects;

2. Physical and biological conditions which influence the management capability to prevent or correct the effects;

3. Social and political factors which may impair the ability to correct or prevent the effect;

4. Off-site and secondary impacts;

5. Natural, scenic, historic and cultural resources susceptible to irretrievable damage;

6. Other factors.

Designated Routes of Travel. Designated routes of travel are those vehicle routes (roads, ways, and washes) specifically selected by the Bureau of Land Management as being available for motor vehicle use. Designated routes of travel will be shown on vehicle access maps and posted as "open" along each route and at major route intersections.

Designation. The formal identification of public land areas and trails where off-road vehicle use has been authorized as either open, closed, or limited through publication in the Federal Register. In terms of the Motorized Vehicle Access Element, designation includes the over-all vehicle management classification of an area as well as the selection of specific routes of travel (including on-the-ground implementation).

Existing Routes of Travel. Existing routes of travel are those vehicle routes (roads, ways and washes) identified as being in existence as of December 31, 1977, (the date of full CDCA aerial photo coverage). The term "identified" is used in the context of being recognizable on aerial photographs, maps and records available to the BLM during the preparation of the California Desert Plan.

Limited Areas and Trails. Designated areas and trails on public lands where the use of motorized vehicles is subject to restrictions deemed appropriate by the authorized officer. Restrictions may limit the number or types of vehicles allowed, dates and times of use, and similar matters. Limited areas and trails may be designated for special or intensive use, including but not limited to, organized events and may be subject to, but not limited to, rules set forth in subpart 43 CFR 8341.2. The limited designation will be used where it is necessary to restrict ORV use to meet specific management objectives. Restrictions may include:

-- Number or type of vehicles.

-- Time or season of use.

-- Permitted or licensed use only.

-- Limiting use to existing routes of travel.

-- Limiting use to designated routes of travel.

-- Other limitations where restrictions are necessary to meet management objectives including certain competitive or intensive use areas which have special limitations.

Management Objectives. Management objectives established for specific areas through the Bureau Planning System or other official documents (legislation, designations, withdrawals, etc.). Such objectives include recommendation for specific Bureau actions and are normally considered "allocation" decisions. In terms of the California Desert Plan, management objectives are based on the Multiple-Use Class Guidelines for each Multiple-Use Class.

Open Areas and Trails. Designated areas and trails on public lands where off-road vehicles may be operated, subject to the operating regulations and vehicle standards set forth in subparts 8341 and 8343 CFR 8340. Open designations will be used when necessary to meet management objectives or for intensive areas where there are no special restrictions or where there are no compelling resource protection needs, user conflicts or public safety issues to warrant limiting cross country travel.

Off-road Vehicle. Any vehicle capable of, or designed for, travel on or immediately over land, water or other natural terrain, excluding:

1. Any nonamphibious registered motorboat.

2. Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes.

3. Any vehicle whose use is expressly authorized by the authorized officer or otherwise officially approved.

4. Vehicles in official use.

5. Any combat or combat support vehicle when used in times of national defense emergencies.

For the purposes of the Motorized Vehicle Access Element, the terms Off-Road Vehicle and Off-Highway Vehicle as defined in California Vehicle Code (CVC) Section 38006 are considered synonymous.

Road. A road is a vehicle route which has been improved and maintained by mechanical means to ensure relatively regular and continuous use. A route maintained solely by the passage of vehicles does not constitute a road. For the purpose of the Motorized Vehicle Access Element, the term "road" is considered synomymous with the term "highway" as defined in California Vehicle Code (CVC) Section 360.

Route of Travel. A route of travel is a collective term used to describe any road, way or wash. For the purpose of the Motorized Vehicle Access Element, routes of travel will be designated in Multiple-Use Class (MUC) L areas, WSAs, and some ACECs. Motorized vehicle travel will be permitted on existing routes of travel in MUC M.

Special Area. A "special area" is an area established as a component of the National Trails System, the National Wild and Scenic Rivers System, the National Wilderness System, an area covered by joint agreement between the Bureau of Land Management and a State government as provided for in Title II of the Sikes Act, or any other area where the authorized officer determines that the resources require special management and control measures for their protection.

Vehicle Free-Play Area. An area in which the primary Bureau objective is to facilitate and encourage cross-country recreational vehicle use. Vehicle Free-Play Areas are located only in selected Multiple-Use Class I areas and are designated as "open." However, the designation of "open" or the classification as Multiple-Use Class I, by themselves, do not establish a Vehicle Free Play Area.

Wash. In terms of the Motorized Vehicle Access Element, the term "wash" is defined as a watercourse, either dry or with running or standing water, which by its physical nature (width, soil, slope, topography, vegetative cover, etc.) permits the passage of motorized vehicles.

Way. A way is a vehicle route which does not necessarily show evidence of mechanical maintenance to ensure relatively regular and continuous use, but which does show significant evidence of surface usage resulting from prior

vehicle travel. "Significant evidence" means predominantly devoid of vegetation compared to areas immediately adjacent to the route, so that a track is clearly discernable. Where no appreciable vegetation is present, significant soil disturbances or changes from adjacent ground levels (e.g., wheel ruts) are visible. For the purposes of the Motorized Vehicle Access Element, the term vehicle "trail" is defined as a type of way.