

APPENDIX D
ANALYSIS OF MANAGEMENT SITUATION

Appendix D

Analysis of Management Situation

This section describes how transportation and grazing are currently managed in the WEMO Planning area, with an emphasis on the historical evolution of the route network and grazing and the transportation management and grazing policies in response to legislation, resource considerations, land uses, and social and economic conditions. This section summarizes how resources and land uses have influenced the development of the transportation network and livestock grazing practices in the Planning Area, and how they have resulted in the current transportation network and management policies for that network and livestock grazing in the West Mojave Planning Area. The specific resources, land use needs, and social and economic conditions that may be affected by the transportation network alternatives, including livestock grazing are presented throughout the resource-specific subsections of Chapter 3.

D.1 Legislation and Policies

Federal Land Policy and Management Act (FLPMA)

The BLM's planning process is governed by FLPMA (43 USC 1712) and 43 Code of Federal Regulations (CFR) 1600. FLPMA requires Land Use Plans (LUPs) to be developed, maintained and when appropriate, to be revised to provide for the use of the public lands. In development and revision of land use plans BLM is required to use multiple use and sustained yield principles, achieve integrated consideration of physical, biological, economic, and other sciences, rely on present inventories of the public lands and their resources and values, consider the present and potential use of the public lands, comply with applicable pollution control laws, and consider the policies of state, local and tribal land use plans. As required by FLPMA, public lands must be managed in a manner that protects the quality of public land resources, and that provides for outdoor recreation and human occupancy and use (43 USC 1701(a)(8)).

FLPMA specifically addresses transportation and OHV use, as well as livestock grazing. In addition to the Congressional Declaration of Policy, 43 USC 1701, noted above, Part 6 and Part 7 of Title V, authorizes the issuance of rights-of-way for use of the public lands. Title VI of FLPMA, which established the CDCA, specifies that the use of all California desert resources can and should be provided for in a multiple use and sustained yield management plan, to conserve resources for future generations, to provide for the present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles (ORV/OHVs) (43 USC 1781).

Executive Orders No. 11644, 11989, and 13195

In 1972, Presidential Executive Order No. 11644 established the first uniform policies regarding OHV use on public lands. Each land management agency was directed by this Order to issue directions as to which trails and areas were open for OHV use and which were not. The Order required that OHV use be monitored to assess and minimize associated impacts. The requirements of the Order were implemented by BLM in 43 CFR 8342.1. Executive Order 11989 (42 FR 26959, May. 24, 1977) amended Executive Order 11644 (37 FR 2877, Feb. 8, 1972) by requiring that off-road vehicle areas or trails be closed immediately if an agency

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. Executive Order 13195, January 23, 2001 (66 FR 7391) Trails for America in the 21st Century provides, in part, that Federal agencies will work cooperatively with Tribes, States, local governments, and interested citizen groups to protect, connect, and promote trails of all types throughout the United States.

Federal Regulation 43 CFR 8342.1

The CDCA Plan's motorized-vehicle access element was amended (1982 Plan Amendment Three, approved May 17, 1983) to conform with 43 CFR 8342.1, which states (See Appendix G.1-19):

"The authorized officer shall designate all public lands as either open, limited, or closed to off-road vehicles. All designations shall be based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the following criteria:

- Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness sustainability.
- Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.
- 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.
- Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic, or other values for which such areas are established."

Wilderness Act of 1964 and Omnibus Bill of 2009

The Wilderness Act of 1964 established the National Wilderness Preservation System. Wilderness as defined by the Act is "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions" for the benefit of present and future generations (Wilderness Act, 1964).

The 2009 Omnibus Public Land Management Act of 2009 added more than two million acres of wilderness, more than 1,000 miles of Wild and Scenic Rivers, and established new National Parks, conservation areas, national heritage areas, national trails, and national monuments. The bill created new water conservation, habitat restoration, and land management programs, and gave formal recognition to the 26 million acre National Landscape Conservation System (NLCS)

encompassing BLM's National Monuments, Conservation Areas, Wilderness and Wilderness Study Areas, Wild and Scenic Rivers, and Scenic and Historic Trails.

The WEMO Planning area includes areas designated as wilderness, as well as legislatively designated Wilderness Study Areas (WSA). In addition, the Mojave River in the planning area includes segments that have been determined to be eligible Wild and Scenic Rivers. Other lands in the planning area have not been designated as wilderness or WSA, but retain wilderness characteristics. These various lands are discussed in Section 3.11.

John D. Dingell, Jr. Conservation, Management and Recreation Act

The John D. Dingell Jr. Conservation, Management and Recreation Act, was signed by President Donald J. Trump on March 12, 2019. The Act (Public Law 116-9) makes multiple changes to public lands in the WEMO Plan Area, including:

- Designate three new Wilderness Areas
 - Great Falls Basin
 - Grass Valley
 - Soda Mountains
- Expand one existing Wilderness Area
 - Golden Valley
- Release all or the remaining portions of three Wilderness Study Areas
 - Cady Mountains
 - Soda Mountains
 - Great Falls
- Designate five off highway vehicle recreation areas
 - El Mirage
 - Rasor
 - Spangler Hills
 - Stoddard Valley
 - Johnson Valley
- Transfer lands between BLM and NPS federal agencies
 - Land transfer from BLM to Joshua Tree National Park

The Record of Decision will include an Errata with updated maps reflecting the new designations and necessary changes to the travel and transportation system to ensure the designated route system is consistent with the law.

BLM Travel and Transportation Management Guidance

In recent years, BLM has developed substantial guidance to facilitate the integration of comprehensive travel and transportation management planning into land use planning. Travel and Transportation Manual 1626 (MS-1626, revised September 27, 2016), forms the backbone of this guidance. Many of these developments were in the form of Instruction Memorandums (IMs), which only have temporary applicability until their provisions are formally incorporated into a BLM Manual or Handbook. A summary of the recent IMs and Handbooks is as follows:

- BLM regulations in 43 CFR 8342.1, which requires designation of public lands as open, limited, or closed based on protection of resources of the public lands, safety of all users, and minimization of conflicts among the various uses of the public lands, and in accordance with the minimization criteria provided in the regulation;
- Technical Note 422. Roads and Trails Terminology. November 2006. Implemented in IM 2006-173, dated June 20, 2006.
- IM 2007-030. Clarification of Cultural Resource Considerations for OHV Designation and Travel Management. December 22, 2006.
- IM 2008-014. Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning in the Land Use Planning. October 25, 2007.
- IM-2012-067. Clarification of Cultural Resource Considerations for Off-Highway Vehicle Designations and Travel Management. February, 10, 2012.
- H-8342-1, Travel and Transportation Management Handbook which describes how BLM is to comprehensively manage travel and transportation on public land. March 16, 2012.
- BLM Handbook 1610-1, Appendix C, Comprehensive Trails and Travel Management, which requires delineation of travel management areas and designation of Off-Highway Vehicle Management Areas as open, limited, or closed (March 11, 2005); and
- BLM Handbook 8342, Travel and Transportation Management Handbook,
- BLM Manual 1626, Travel and Transportation Management Manual, which provides detailed policy, direction and guidance for the comprehensive management of travel and transportation on Bureau of Land Management-administered lands.

Livestock Grazing

Within the West Mojave Planning Area, domestic livestock grazing is managed under the authorities contained in the Taylor Grazing Act of 1934, FLPMA, NEPA, Endangered Species Act of 1973 (ESA), the Public Rangelands Improvement Act of 1978 and the CDCA Plan of 1980, as amended. Within the grazing regulations, 43 CFR Part 4100 are specific guidance for the administration of livestock grazing on the public lands.

The Continuing Resolutions authorized by Congress over the past few years have contained language specific to livestock grazing concerning grazing permit and lease renewals, the trailing of livestock across public lands, the administrative review process, grazing transfers and changes in the mandatory terms and conditions.

The Consolidated Appropriations Act of 2012, specifically addresses livestock grazing in the California Desert Conservation Area. This Act allowed for the donation of grazing permits and leases back to BLM and make the land available for mitigation by allocating the forage to wildlife use consistent with any applicable Habitat Conservation Plan, Section 10(a)(1)(B) permit, or Section 7 consultation under the ESA.

Section 3023 of Public Law (PL) 113-291, National Defense Authorization Act (NDAA) 2015, amended Section 402 of FLPMA of 1976 and includes seven provisions related to livestock grazing. Amended Section 402(c)(2), allows BLM to renew expiring grazing permits/leases when BLM is unable to complete the requirements of NEPA and other applicable laws prior to the expiration of a grazing permit or lease under the same terms and conditions of the expiring permit or lease for a period up to ten years. These nondiscretionary grazing permits or leases issued in accordance with Section 402(c)(2) of FLPMA as amended by PL 113-291 are not protestable or appealable under the processes described in 43 CFR 4160 and 43 CFR 4.470 et seq. [1].

Other Agencies

No other federal, state, or local agencies have specific jurisdiction over OHV use and livestock grazing on public lands. The National Highway Traffic Safety Administration (NHTSA) has established Federal Motor Vehicle Safety Standards (FMVSS) for motor vehicles, and these, along with California state regulations established by the Department of Motor Vehicles (DMV), California Air Resources Board (CARB), and California Highway Patrol (CHP), govern the types of vehicles that may be used on highways. In addition, the route network established for the WEMO Planning area must be consistent with the networks established in the adjacent areas by considering “edge-fitting,” in which open routes in the WEMO Planning area would link with open routes in adjacent areas, and the same would occur for closed routes. Within the West Mojave Planning Area, the U.S. Fish and Wildlife Service (USFWS) has issued biological opinions that contain terms and conditions which direct BLM’s livestock grazing program on matters concerning the conservation and recovery of special status species and their habitats.

D.2 CDCA Plan, WEMO Plan, and DRECP LUPA Background

CDCA Plan

By map referenced in statute, the California Desert Conservation Area (CDCA) encompasses 25 million acres of land in southern California. The applicable land use plan, the CDCA Plan of 1980, addressed public-land resources and resource uses on 12 million acres of public land within the 25 million acres of CDCA land in southern California. The CDCA Plan includes 12 plan elements, including a Motorized-Vehicle Access (MVA) Element that establishes the travel management framework for the CDCA, and also includes some activity-level decisions for popular locations, and a Livestock Grazing Element that established geographic boundaries of livestock allotments, the types of forage use, and the upper limits on the stocking levels in each of the allotments. The other elements in the CDCA Plan include a Recreation Element, a Wild Horse and Burro Element, Cultural Resources and Native American Elements, Wildlife and Vegetation Elements, a Wilderness Element, a Land Tenure Adjustment Element, an Energy Production and Corridors Element, and a Geology, Energy and Mineral Resources Element. Since 1980, numerous amendments have been adopted which have changed the CDCA Plan.

Unless otherwise noted, references in this document to specific text within the CDCA Plan are referencing the 1999 reprint version. Multiple amendments to the CDCA Plan have been approved since 1999, including the 2006 WEMO Plan and the 2016 DRECP LUPA.

The MVA Element of the CDCA Plan addresses travel management on public lands in southern California with a focus on recreational vehicular use of and identifies the travel management framework for those various public lands. The MVA Element also outlines the route designation process, specifically restricts motorized vehicle routes to those that existed in 1980 (CDCA Plan, 1999, p. 77), and includes goals that, either in practice or through amendment, have been updated since 1980 to implement current policy. The CDCA Plan considers non-motorized travel in the context of the motorized access necessary in order to reach non-motorized areas and activities within the planning area. The Recreation Element of the CDCA Plan also addresses an aspect of access outside of OHV Open Areas—the routes that can be used for, and adoption of specific courses for, competitive vehicle events.

The goal of the Motorized-Vehicle Access Element of the CDCA Plan is to provide a system and set of rules governing access to the CDCA by motor vehicles. Specific objectives included are:

- Provide for constrained motorized vehicle access in a manner that balances the needs of all desert users, private landowners, and other public agencies.
- When designating or amending areas or routes for motorized vehicle access, to the degree possible, avoid adverse impacts to desert resources.
- Use maps, signs, and published information to communicate the motorized vehicle access situation to desert users. Be sure all information materials are understandable and easy to follow.

In addition to the goals stated in the Motorized Vehicle Access Element, other elements of the CDCA Plan address access needs for various desert uses, as follows:

- The Recreation Element cited access to recreational opportunities using motorized vehicles as being among the most important recreation issues in the desert, and ensuring that access routes necessary for recreation are provided is a primary consideration of the recreation program.
- The Geology, Energy, and Mineral Element requires that BLM continue to provide access and opportunities for exploration and development on public lands which are accessed or have potential for:
 - i) Critical mineral resources (national defense; 50+% importer; net importer)
 - ii) Potential energy resources (geothermal, oil, gas, uranium, and thorium)
 - iii) Minerals of local and State importance (sand & gravel, limestone, gypsum, iron, specialty clays, zeolites)
- The Energy Production and Utility Corridors Element specifies that the Plan will provide space not only for communications sites, but for associated infrastructure such as access roads. In addition, this element allows for the development of renewable and other energy production and transmission facilities, each of which requires access.

The Livestock Grazing Element states that currently and historically, livestock grazing has been and continues to be a significant use of renewable resources on public lands in the California Desert. The goals of the element are:

- Use range management to maintain or improve vegetation to meet livestock needs and to meet other management objectives set forth in this plan.
- Continue to use the California Desert for livestock production to contribute to satisfying the need for food and fiber from public land.
- Maintain good and excellent range condition and improve poor and fair range condition by on condition class, through the development and implementation of feasible grazing systems or Allotment Management Plans (AMPs). Adjust livestock grazing use where monitoring data indicate changes are necessary to meet resource objectives.

Area Designations

BLM's planning regulations (43 CFR 8341) require that all public lands be designated as "open," "limited," or "closed" to OHV use. Within designated "open" areas, all types of vehicle use are permitted anywhere in the area, subject to operating regulations and vehicle standards provided in 43 CFR 8341 and 8342. Within "closed" areas, all OHV use is prohibited. Within "limited" areas, individual roads, primitive roads, and trails can be designated as "open," "closed," or "limited," and BLM must establish permitted types or modes of travel, time or season of use, allowable vehicle types, authorization or permit requirements, and other types of user limitations. OHV area designations are LUP decisions, as opposed to implementation decisions. Specific route designations within area designations are implementation level decisions.

The CDCA Plan adopted landscape-level Vehicle Access designations, presented in Map 10 of the Plan. The Vehicle Access designations were made commensurate with the multiple-use class (MUC) designation for each area. The three Vehicle Access Designations are "open areas," "closed areas," and "limited areas." Vehicle use in open areas was approved subject to restrictions by the operating regulations and vehicle standards described in 43 CFR 8341 and 8342. Closed areas included all public lands within designated wilderness areas, and other specified areas closed by the CDCA Plan or specific activity-level management plans. Page 76 of the CDCA Plan (1999 reprint) in Table 8 and for four listed areas immediately before the table, includes areas designated as closed prior to the CDCA Plan which remain closed under the CDCA Plan, and will remain closed under the Plan unless modified by subsequent implementing action. Table 9 includes significant sand dune areas or dry lake beds which have either been opened or closed under the CDCA Plan (CDCA Plan, p.78, 1999 reprint).

Within the limited areas, the CDCA Plan stated that "Limited" vehicle access means that motorized-vehicle access is allowed only on "routes of travel." According to the language of the CDCA Plan, at the minimum, use will be restricted to existing routes of travel. BLM would work with the public to determine which routes needed to be closed or limited in some other way, in consideration of the criteria listed in 43 CFR 8342.1.

Route Designations

The designation of individual roads, primitive roads, and trails are addressed as an implementation level plan tiered from the LUP. These decisions can be developed as stand-alone TMPs, or can be incorporated into activity management plans,

The CDCA Plan provided the following definitions for open, closed, and limited routes.

- Open Route. Access on the route by motorized vehicles is allowed. Specific uses with potential for resource damage or significant conflict with other use may require specific authorization.
- Closed Route. Access on route by motorized vehicles is prohibited except for: (1) fire, military, emergency or law enforcement vehicles when used for emergency purposes; (2) combat or combat support vehicles when used for national defense purposes; (3) vehicles used for official purposes by employees, agents, or designated representatives of the federal government or one of its contractors. Use must be consistent with the multiple use guidelines for that area.
- Limited Route. Access on route is limited to use by motor vehicles with respect to number of vehicles, type of vehicles allowed, time or season of vehicle use, permit or license requirements, and speed limits.

The definition of limited routes is further defined in the 2012 TTM Handbook (H-8342-1) to include consideration of types or modes of travel; identification of roads, primitive roads, and trails; time or season of use; types of vehicles (OHV, motorcycle, ATV, high clearance, etc.); authorizations or permits for vehicles or users; and BLM administrative use only or other types of limitations.

Implementation Strategies in CDCA Plan

The CDCA Plan specified on-the-ground implementation of the OHV Area designations made in the Plan, as follows:

- Open areas were signed and identified on maps for public distribution. In open areas that abut private lands, BLM encourages users to avoid unauthorized use through the use of signs, brochures, on-site personnel, and placement of permanent kiosks. Signs and maps also indicate locations of military land boundaries.
- Closed areas were signed to prevent unauthorized use, and identified on publicly available maps.
- For Limited areas, BLM developed considerations to be used in designating individual routes.

2006 WEMO Plan

In 2006, the BLM approved a comprehensive amendment covering the WEMO area of the CDCA, called the 2006 WEMO Plan, which was analyzed as BLM's component of the 2005 WEMO EIS. The 2006 WEMO Plan is a federal land use plan amendment to the CDCA Plan that presents (1) a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel (MGS) and over 100 other sensitive plants and animals and the natural

communities of which they are a part, and (2) a streamlined program for complying with the requirements of the federal and California Endangered Species Acts (FESA and CESA, respectively) (WEMO, 2006 p. ES-1).

The 2006 WEMO Plan includes modification of the vehicle management program and livestock grazing program to promote the adopted conservation strategy for public lands. The modifications to the vehicle management program are discussed in subsection C.3 below.

Livestock Grazing Decisions in 2006 WEMO Plan

The 2006 WEMO Plan modifications of the livestock grazing program include, among others:

- Elimination of the majority of ephemeral sheep grazing within sheep grazing allotments located in DWMAs;
- Elimination of ephemeral grazing within cattle and horse grazing allotments when forage is inadequate;
- Elimination of ephemeral grazing and temporary non-renewable grazing authorization within cattle grazing allotments located in DWMAs;
- Measures to remove grazing through temporary closures in cattle grazing allotments in DWMAs when forage is inadequate; and
- Measures to allow voluntarily relinquishment of allotments located in DWMAs and other special status species habitat.

The 2006 WEMO Plan Public Land Livestock Grazing Program contained a total of 29 management prescriptions (LG). Key additions to the CDCA Plan Livestock Grazing Objectives made in the 2006 WEMO Plan that are not proposed for change are listed below. The adoption of regional standards and guidelines are dependent upon approval by the Secretary of the Interior.

1. Adopt and Implement Regional Standards of Rangeland Health and Guidelines for Grazing Management in the West Mojave Planning area, consistent with 43 CFR 4180 et seq., and Conform Grazing Activities to the Standards.
2. Discontinue livestock grazing in DWMA allotments that are voluntarily relinquished and reallocate all of the AUMs from livestock forage to wildlife use and ecosystem functions, upon compliance with the terms identified in the land use plan. Voluntarily relinquished allotments would be unavailable for grazing.
3. Further limit livestock grazing in DWMAs and other sensitive areas within the WEMO Planning area. Specific elements of this objective include elimination of ephemeral cattle grazing, substantial limitation of sheep grazing within DWMAs and other sensitive areas (see pages 2-131-133 of the 2005 WEMO FEIS), elimination of ephemeral and temporary non-renewable (TNR) permit authorizations for cattle allotments within DWMAs, and increasing ephemeral forage production requirements before livestock turnout in other desert tortoise habitat. Livestock grazing would continue on the Valley Well Allotment.

The WEMO 2006 ROD incorporates the terms and conditions of the Biological Opinion (BO) issued on January 9, 2006 by the U.S. Fish and Wildlife Service (USFWS) and amended by the USFWS on November 30, 2007 to minimize impacts from the livestock grazing program.

Post WEMO Changes to Vehicle Access Management

In August 2006, a lawsuit was filed challenging the route designation process used in the 2006 WEMO Plan and the route designations resulting from the analysis of impacts in the 2006 WEMO Plan. The court issued a Summary Judgment order on September 28, 2009, and a Remedy Order on January 28, 2011. The Remedy Order remanded the 2006 WEMO ROD to the BLM and directed the BLM to amend the CDCA Plan and reconsider route designation throughout the WEMO Planning area, among other things.

The specific issues related to route designation that were remanded for re-evaluation are as follows:

- **Sufficiency of the No Action Alternative:** According to the Court's Summary Judgment order, the 2005 EIS did not sufficiently explain that the routes contained in the No Action Alternative (inclusive of post-1980 routes), was larger than both the 1980 and 1985-1987/ACEC networks, and was smaller than the 2001-2002 inventoried network. In addition, the discussions of the No Action network throughout the EIS were not consistent. Some specific examples were raised, including Table 3-58 and Table 4-45. Instead of alternatives being compared only to the No Action Alternative, they were also compared to the 1985-1987 network, the 2001-2002 inventory, and the 2003 EA network. The Court stated that a single No Action network needs to be defined, described, and then used as the basis for comparison for all impacts.
- **Inclusion of post-1980 routes in alternatives:** In its discussion of "limited" areas, the CDCA Plan states that "... use will be restricted to existing routes of travel." The Court noted that this statement is problematic in that BLM did not have an inventory of the routes that existed in 1980. The Court interpreted this language to prohibit the designation of any routes as "open" or "limited" that did not exist before 1980. The Summary Judgment order does state that BLM can designate additional routes that did not exist in 1980 (Summary Judgment Order, Pg. 36, lines 13-16). However, to do so, BLM must amend the language that restricts the network to pre-1980 routes. That amendment would need to be done in accordance with NEPA and FLPMA, and would have to explain why inclusion of post-1980 routes is justified.
- **Criteria Used for Route Designations:** The Court ruled that the BLM's rationale for making their route designations was not complete, and did not address the requirements of 43 CFR 8342.1. The Court also cited specific resources (soils, cultural resources, Unusual Plant Assemblages and riparian areas, Mojave fringe-toed lizard, and air quality) for which analyses were not complete, and needed to be re-visited.
- **Reasonable Range of Alternatives:** The Court ruled that the 2005 WEMO FEIS's inclusion of the same route network in each of the evaluated HCP alternatives violated NEPA.

These decisions of the Court provide an additional framework in which the current effort to establish a route network must be developed. Also, the Court left the following specific issues related to travel management, the route network and livestock grazing in place during remand:

- Provisions allowing for grazing allotments to be voluntarily relinquished, certain areas to be designated as not available for grazing, and any subsequent decisions to relinquish or retire grazing allotments;

- The restrictions on motorized vehicle stopping, parking, and vehicular camping;
- The deletion of the portion of the Barstow to Vegas Race Course within the WEMO Planning area;
- All routes that were closed in the ROD remain closed;
- The policy that all routes should be considered closed unless signed “open;”
- Allowable use of OHVs on the route network that are not “street legal;” and
- Route designations made in the Juniper Flats, Wonder Valley, and Edwards Bowl areas.

Specific route network-related issues that were vacated by the Court include:

- Adoption of the route network in the Rand Mountain-Fremont Valley Management Plan;
- Adoption of the route network in the Afton Canyon Natural Area; and
- Establishment of a connector route in the Stoddard Valley to Johnson Valley Corridor.

As specific mitigation measures ordered to be implemented during remand, BLM was required to do the following:

- Provide the Court with a detailed Implementation Plan;
- Update all BLM-produced and available maps to include accurate and up-to-date route information, including a statement regarding restriction of motorized use to “open” routes only;
- Provide the Court with a monitoring plan to determine compliance with route closures and whether new illegal routes were being created;
- Perform additional monitoring regarding air quality, Mojave fringe-toed lizard and its habitat, and riparian areas and Unique Plant Assemblages;
- Provide a plan for maintenance of the open route network;
- Provide a plan for additional enforcement capability; and
- Provide quarterly progress reports.

Other Recent Policy and Planning-Related Post 2006 WEMO Developments

Since the 2006 WEMO ROD, the public lands included within the planning area have been subject to additional BLM planning efforts and CDCA Plan amendments. These amendments to the CDCA Plan are now status quo, or the baseline for consideration of plan requirements. In addition, post-WEMO implementation activities have been undertaken. Major efforts are summarized as follows:

- BLM has completed renewal evaluations, including Environmental Assessments (EAs) and rangeland health assessments, for 28 grazing allotments within the planning area since 2006. Also, several allotments have been voluntarily relinquished since the 2006 WEMO Plan was completed. The EAs all evaluated route designation and OHV use within each allotment as part of their cumulative analysis. Also, several of the EAs specified that the allotments had been modified and, in some cases, voluntarily

relinquished, as part of the 2006 WEMO Plan. The specific information related to the allotments is presented in Section 3.7 of this Draft SEIS.

- In 2012, Congress passed and the President signed the 2012 Appropriations Act (Public Law 112-74, 125 Stat. 1048, Dec 23, 2011). This Act provided that the Secretary of the Interior “shall accept the donation of any valid existing permits or leases authorizing grazing on public lands within the California Desert Conservation Area. With respect to each permit or lease donated under this paragraph, the Secretary shall terminate the grazing permit or lease, ensure a permanent end (except as provided in paragraph (2)), to grazing on the land covered by the permit or lease, and make the land available for mitigation by allocation the forage to wildlife use consistent with any applicable Habitat Conservation Plan, section 10(a)(1)(B) permit or section 7 consultation under the Endangered Species Act of 1973”. Under this authority, two allotments have been donated within the WEMO Planning area—Lava Mountain and Walker Pass Common Allotments. Consistent with the 2012 Appropriations Act, the permanent relinquishment of these two allotments has been accepted, grazing allotment boundaries were updated, and AUMs were reallocated from livestock forage to wildlife use and ecosystem functions.
- Activity-specific route designations: BLM land throughout the WEMO Planning area continues to be available for, and subject to, permit and ROW applications for a variety of activities, as are allowable under BLM regulations and the CDCA Plan. These applications include solar, wind, and energy transmission projects; installation and operation of communications towers and pipelines; access to mining operations and exploratory activities, and permitted recreation events. Most projects require access for project construction and operation, and this access often needs to be provided in whole or in part, through construction and authorization of new routes.
- In July 2012, BLM and the Department of Energy (DOE) published the Final Programmatic Environmental Impact Statement (PEIS) for Solar Energy Development in Six Southwestern States, which included consideration of the WEMO Planning area in California. The PEIS ROD designated lands within the WEMO Planning Area as either exclusions areas or variance areas. Exclusion areas are unavailable for utility-scale solar energy development. The BLM considers any application for utility-scale solar energy development within variance areas after following a process outlined in the PEIS ROD. The PEIS considered the potential impact of solar development on the National Historic Trail System, and on routes of travel. The PEIS noted that solar development may require closure of designated OHV routes. In response to these impacts, the PEIS proposed design features to mitigate impacts, including rerouting roads around solar developments, and considering replacement of acreage for lost recreational opportunities.
- With respect to the BLM, and the Department of the Interior as a whole, Secretarial Order 3347 (signed March 2, 2017) requires each bureau and office of the DOI to work with the Wildlife and Hunting Heritage Conservation Council (WHHCC) and Sport Fishing and Boating Partnership Council (SFBPC) to:
 - (1) Identify specific actions to expand access significantly for recreational hunting and fishing on public lands as may be appropriate.

- (2) Identify specific actions to improve recreational hunting and fishing cooperation, consultation, and communication with state wildlife managers.
- (3) Identify specific actions to improve habitat for fish and wildlife.
- (4) Identify specific actions to manage predators effectively and efficiently.
- (5) Encourage, promote, and facilitate greater public access to all Department lands consistent with applicable laws.

2016 DRECP LUPA

The 2016 DRECP LUPA was developed as an interagency plan by the BLM, the U.S. Fish and Wildlife Service (USFWS), the California Energy Commission (CEC), and the California Department of Fish and Wildlife (CDFW, collectively known as the Renewable Energy Action Team (REAT or REAT Agencies) to (1) advance federal and state natural resource conservation goals and other federal land management goals; (2) meet the requirements of the federal Endangered Species Act, California Endangered Species Act, Natural Community Conservation Planning Act, and Federal Land Policy and Management Act (FLPMA); and (3) facilitate the timely and streamlined permitting of renewable energy projects, all in the Mojave and Colorado/Sonoran desert regions of Southern California. BLM's component of the Interagency DRECP is a federal land use plan amendment to the CDCA Plan. The DRECP LUPA addressed a larger land area than the WEMO Planning Area, but the WEMO Planning Area is entirely encompassed within the DRECP LUPA area. If applicable to WEMO, the land use planning decisions made in the DRECP LUPA apply to the entire WEMO Planning Area.

In the CDCA Plan and 2006 WEMO, many allowable land uses and conservation measures related to both travel and transportation management and grazing were based on land use designations. As a result, many of the planning level decisions considered in the 2015 WMRNP Draft SEIS were based on the land use designations which were in effect at that time, and which have since been modified as a result of the adoption of DRECP LUPA. These changes have resulted in the need to modify some of the proposed plan amendments which were considered in the Draft SEIS. A summary of these changes is as follows:

- The previous designations of multiple use classes have been eliminated, and were replaced with an overlapping set of designations established for resource conservation, recreation, and development.
- The boundaries of previously existing ACECs have been modified. The designation of Desert Wildlife Management Areas (DWMAs), which had previously distinguished between ACECs established for protection of the desert tortoise and ACECs established for protection of other resources, has been eliminated. ACECs established for protection of the desert tortoise are now referred to as desert tortoise ACECs (DT ACECs)
- Areas have been designated as California Desert National Conservation Lands (CDNCLs). Public Law 111-11, the Omnibus Public Lands Management Act of 2009, formally established the National Landscape Conservation System (NLCS), which is made up of BLM-managed nationally significant landscapes with outstanding ecological, cultural and scientific values, and is managed to conserve, protect and restore these values. Within the DRECP LUPA, components identified for inclusion in the NLCS as

lands within the CDCA administered for conservation purposes are referred to as CDNCLs.

- Lands Managed for Wilderness Characteristics have been established. Wilderness values were previously evaluated in the Draft SEIS with respect to Wilderness Areas, Wilderness Study Areas (WSAs), and Lands Inventoried for Wilderness Characteristics. The Lands Inventoried for Wilderness Characteristics have now been eliminated and replaced, where applicable, by Lands Managed for Wilderness Characteristics.
- Visual Resource Management (VRM) classifications have been adopted across the entire CDCA.
- Special Recreation Management Areas (SRMAs) are managed for their recreation opportunities, unique value, and importance. Extensive Recreation Management Areas (ERMAs) have been established to address recreation use and demand.
- Development Focus Areas (DFAs) have been established as areas where renewable energy development is allowed and incentivized. Variance Process Lands (VPLs) are available for renewable energy development, but are not incentivized.

Other specific decisions made in the 2016 DRECP LUPA which are relevant to the WMRNP are as follows:

- Conservation and Management Actions (CMAs) were developed to establish allowable uses, management actions, stipulations, best management practices, and mitigation measures to reduce or avoid impacts on public lands.
- The boundaries of OHV Open Areas were modified, and are now different from those that were analyzed in the Draft SEIS in 2015. The revised Open Areas are described in Table 3.6-2.
- Additional modifications to the livestock grazing program were made in the 2016 DRECP LUPA. The DRECP LUPA did not make changes to the CDCA Plan Livestock Grazing Element goals, but did add additional goals to maintain and enhance various resource values that are relevant to the Livestock Grazing Element (listed beginning on pp. II.3-137 of the 2015 DRECP FEIS). The DRECP LUPA also analyzed and made changes to the Livestock Grazing Element objectives that affect allotments within the WEMO Planning Area, as outlined on page II.3-200 of the 2015 DRECP FEIS. These specific changes include:
 1. Make Pilot Knob, Valley View, Cady Mountain, Cronese Lake, and Harper Lake allotments, allocations unavailable for livestock grazing and change to management for wildlife conservation and ecosystem function. Reallocate the forage previously allocated to grazing use in these allotments to wildlife use and ecosystem functions.
 2. The following vacant grazing allotments within the CDCA will have all vegetation previously allocated to grazing use reallocated to wildlife use and ecosystem functions and will be closed and unavailable to future livestock grazing: Buckhorn Canyon, Crescent Peak, Double Mountain, Jean Lake, Johnson Valley, Kessler Springs, Oak Creek, Chemehuevi Valley, and Piute Valley.

3. Allocate the forage that was allocated to livestock use in the Lava Mountain and Walker Pass Desert allotments (which have already been relinquished under the 2012 Appropriations Act) to wildlife use and ecosystem function and eliminate livestock grazing on the allotments.

D.3 History of Route Designation

Pre-CDCA Plan

Management of OHV use on the public lands is based on Executive Orders, the Federal Land Policy and Management Act of 1976, as amended (FLPMA), and 43 CFR Part 8340. On February 8, 1972, President Richard Nixon issued Executive Order 11644— Use of off-road vehicles on the public lands. This Order established the first uniform policies regarding OHV use on public lands. The Secretaries of Interior, Agriculture, and Defense were directed to develop and issue regulations that would designate areas and trails on public lands on which the use of OHVs might be permitted and those which may not be permitted for OHV use. The Order also required the development of operating conditions, public information, appropriate penalties for violations of regulations adopted pursuant to the order, and the monitoring of the effect of the use of OHV's on lands under their jurisdiction.

FLPMA is considered the “organic act” for the BLM and establishes the agency’s multiple use mandate to serve present and future generations of Americans. FLPMA specifically addresses transportation and OHV access and use in several sections. Title V authorizes the issuance of rights-of-way for use of the public lands for such features as roads, trails, highways, livestock driveways, or other necessary means of transportation which are in the public interest and which require a right-of-way to cross the public lands. Title VI established the CDCA and specifies that the use of all California desert resources can and should be provided for in a multiple use and sustained yield management plan, to conserve resources for future generations, to provide for the present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles (OHVs) (43 USC 1781).

On May 24, 1977, President Jimmy Carter issued Executive Order 11989 –Off-Road Vehicles on Public Lands to amend Executive Order 11644 by adding Section 9. Section 9(a) directs that if a determination is made that OHV use will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources of an area or trail on public lands, that the agency immediately close the area or trail to the type of vehicle causing the damage, until such time as it is determined that such effects have been eliminated and that measures have been implemented to prevent future recurrence. Additionally Section 9(b) authorizes the adoption of policy that parts of the public lands shall be closed to use by OHV except those areas and trails which are suitable and specifically designated as open to such use pursuant to Section 3 of the Order.

FLPMA and these two executive orders formed the basis of the guidance found in Part 8340 of Title 43 of the Code of Federal Regulations, which were developed by the Secretary of the Interior for the Bureau of Land Management. Subparts within Part 8340 establish a definition for OHV, conditions of use, vehicle operations standards, and penalties. Specifically Subpart 8342 outlines the designation criteria, procedures, and changes related to designation of areas and trails available for use by OHVs. All public lands are to be designated as open, limited, or closed to OHVs. These designations are to be based on the protection of the resources of the public

lands, promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands.

1980 CDCA Plan

With the passage of FLPMA the Congress found that “the California desert contains historical, scenic, archeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources that are uniquely located adjacent to an area of large population.” It also found that its resources, “including certain rare and endangered species of wildlife, plants and fishes, and numerous archeological and historic sites” are “seriously threatened by air pollution, inadequate Federal management authority, and pressures of increased use, particularly recreational use.” Congress stated that “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.” To accomplish this, BLM was directed to prepare a plan for the “management, use, development, and protection of public lands within the California Desert Conservation Area” (of which the western Mojave Desert comprises the northwestern third). The plan would “take into account the principles of multiple use and sustained yield in providing for resource use and development, including, but not limited to, maintenance of environmental quality, rights of way, and mineral development.”

The plan that was developed is the California Desert Conservation Area (CDCA) Plan which was completed in 1980. The stated goal of the CDCA Plan is to “provide for the use of the public lands and resources...including economic, educational, scientific, and recreational uses”. To achieve the goal of the Plan management actions are first based on a geographic basis using guidelines establishing four Multiple Use classes. The Multiple Use classes are Class C (Controlled Use), L (Limited Use), M (Moderate Use) and I (Intensive Use). Small areas were left “Unclassified”, due to their scattered or isolated location.

These guidelines are further clarified, refined, and expressed in goals for each Plan Element. There are twelve Plan Elements covering the major resources or issues of public concern that were identified during the CDCA planning process. Those Elements of the CDCA Plan that have access management goals or objectives, or discuss the need for access to desert resources are the Motorized-Vehicle Access; Recreation; Wilderness; Geology, Energy, and Mineral; and the Energy Production and Utility Corridors Elements.

As part of the CDCA Plan, and in accordance with Executive Orders 11644 and 11989, all public lands in the CDCA were designated as open, closed, or limited to vehicle use. The designations were made on the basis of multiple-use classes with certain exceptions set forth in the Motorized Vehicle Access (MVA) Element. These designations are displayed on CDCA Plan Map Number 10 – Motorized-Vehicle Access.

Amendments to the CDCA Plan

The CDCA Plan was written based on the concept that it would provide the framework for management of the CDCA for the next 20 years and in some situations and actions much further into the future. It was recognized at the time of writing that it could not be cast in concrete and

therefore provided for the ability to be amended as needed to adjust to needed changes and to acknowledge better ways of doing things in the future.

Between 1981 and 1990, amendments to the Plan were made on an annual or biennial basis. The CDCA Plan reprint of 1999 includes a full review of the amendments made to the plan between 1980 and 1999. The following is a description of the more significant changes that effected travel management within the WEMO planning area.

Amendments to the Plan that had the largest effect on travel management occurred in 1982 and 1985. The 1982 Amendment revised the Motorized Vehicle Element while the Goals for all Plan Elements were restated in 1985.

The 1982 Amendment incorporated 43 CFR 8340 into the Motorized Vehicle Access Element and made changes and clarified the Open, Closed, and Limited Area designations. While public vehicle travel is permitted anywhere in Open Areas and no public vehicle travel is allowed in a Closed Area, Limited areas are more complicated. Limited vehicle access means that motorized-vehicle access is allowed only on certain “routes of travel.” This was described in the CDCA Plan: “At the minimum, use will be restricted to existing routes of travel.” The 1982 amendment defined that an existing route as “a route established before approval of the Desert Plan in 1980, with a minimum width of two feet, showing significant surface evidence of prior vehicle use or for washes, history of prior use.” Depending on the particular Multiple Use class and the degree of control needed in a particular area, Limited Areas were managed differently:

Class I: “Unless it is determined that further limitations are necessary, those areas not “open” will be limited to use of existing routes.”

Class M: “access will be on existing routes, unless it is determined that use on specific routes must be limited further.”

Class L: “Due to higher levels of resource sensitivity in Class L, vehicle access will be directed toward use of approved routes of travel. Approved routes will include primary access routes intended for regular use and for linking desert attractions for the general public as well as secondary access routes intended to meet specific user needs. Routes not approved for vehicle access will be reviewed and, after opportunity for public comment, those routes deemed to conflict with management objectives or to cause unacceptable resource damage will be given priority for closure... . “All remaining routes of travel will be monitored for either inclusion as approved routes or for closure to resolve specific problems.”

Class C and ACECs: “In Class C areas prior to wilderness designation by Congress, and in ACECs where vehicle use is allowed, vehicle access will be managed under the guidelines for Class L.”

Unclassified areas: “In areas not assigned to a Multiple-Use Class, the route approval process will be applied as needed to resolve specific problems and to establish a cohesive program.”

Additionally, the 1982 Amendment identified the concept of individual Route Designation in addition to Area Designations. Routes could be designated as “open,” “closed,” or “limited” for motor vehicle use which was generally tied to area designation. “OHV Open” routes allowed for access by motorized vehicles. “OHV Closed” routes prohibited motorized vehicles access with

the exception of use for emergency purposes, national defense purposes, use expressly authorized under permit, lease, or contract, and for official purposes. "OHV Limited" routes allowed motorized vehicles to travel on the route but that use could be restricted. Some of the restrictions could be types of vehicles, season of use, or permitted or licensed vehicles only. Route designations could be made in each of the four multiple use classes, in ACECs, and in unclassified lands. Route designations could not be made in Congressionally designated wilderness areas.

Following the concept of designation the MVA Element developed an Implementation approach to the management of vehicle designations. Within this section it was recognized that the implementation of "Limited" areas would "require detailed analysis to insure that each area's limitations are appropriate to the issues and resources involved. Until such limitations are put into effect, these areas will be managed on an interim basis as explained under "Interim Management of Vehicle Access" guidelines. These guidelines specified that "Existing routes of travel may be used in all Class L and M areas, and in those Class I areas not designated open and in unclassified lands, unless other limitations are in effect. In Class C areas, vehicle use will occur as if the areas were Class L until such time as the area formally becomes wilderness, except in those cases where vehicle use could impair wilderness suitability."

1985-1987 Route Designation Effort

Shortly after the completion of the CDCA Plan the route designation process began. In June 1981, the BLM published a set of 21 maps titled Motorized Vehicle Interim Access Guides (IAG), which covered all of the BLM administered public lands within the CDCA. These maps were distributed to the public for their use, input, and review in order to gather information on the existing route network within the CDCA. Also in the fall of 1981 each Resource Area Office developed an Ad Hoc Advisory Committee. These groups were to include a good cross section of desert users. These ad hoc groups held meetings and took field trips with the intent of working towards the goal of helping to develop a designated route system for the public lands.

In addition to the Ad Hoc Advisory Committees efforts, during the early 1980s, BLM staff began gathering existing route data using a collection of 15 & 7 ½ minute United States Geological Survey (USGS) topographic maps, aerial photography, and field checks. No extensive field inventory was conducted at the time. Based on this gathered information and input of the Ad Hoc Committee BLM staff developed a designated route network of motorized vehicle routes throughout the planning area. The staff documented their recommendations for routes on forms titled "Vehicle Route Designation Recommendation/Decision". These forms included space for describing the resource values of special concern for the area, whether the route traveled across or provided access to private lands, the complete text of 43 CFR 8342.1 Designation Criteria, and selection of a recommendation-proposed designation (Open, Closed, Limited). If a Closed or Limited recommendation was chosen the criteria from 43 CFR 8342.1 that the designation was based upon was to be indicated, along with space provide decision rational and explanation of the route's Limited or Closed status. This designation criterion was followed up with space for signatures by the Staff specialist making the recommendation, approval by the Area Manager, and concurrence by the District Manager.

BLM conducted a field and map inventory of OHV routes on public lands throughout the planning area in the mid-1980s and, based upon that inventory, identified a network of open

motorized vehicle access routes. BLM personnel inventoried and evaluated existing routes of travel. Information from existing maps and aerial photos was supplemented by field checks. This information was then utilized to create a known route inventory that primarily consisted of known “two-track” routes (i.e. “single-track” motorcycle routes were generally not part of the inventory). Public meetings were conducted and members of the public also reviewed these route inventories. Criteria for determining which routes were to remain open was based upon public access needs, recreational values and resource considerations. Following public meetings, decisions to designate the route network were announced.

On August 21, 1985, BLM published a Notice in the Federal Register titled Off-Road Vehicle Designation Decisions; Ridgecrest Resource Area, CA (Federal Register, Vol. 50, No. 182). Two years later, on June 19, 1987, BLM published Federal Register notice titled Off-Road Vehicle Route Designation Decisions for the California Desert District (CDD), Barstow Resource Area (Federal Register, Vol. 52, No. 118, p. 23364); and, on September 22, 1987, BLM published a Federal Register notice titled Off-Road Vehicle Route Designation Decisions for the California Desert District, Barstow Resource Area (Federal Register, Vol. 52, No. 183, p. 35589). These notices designated 2,949 miles of OHV routes on public lands as open routes.

These recommendations resulted in the development of Draft Routes of Travel Decision Maps. These maps were sent out to the public, the Ad Hoc Advisory Committee, and were distributed at public meetings being held to solicit input on the proposed route network. At the completion of the public comment period, input was reviewed and changes made to the system as deemed appropriate thus creating the final route designations. These efforts culminated and became effective with the publication of notices in the Federal Register for the Ridgecrest Field Office (50 FR 33856; August 21, 1985) and for the Barstow Field Office (50 FR 23364; June 19, 1987, and 52 FR 35589; September 22, 1987).

Area-Specific Designations

Other route designation efforts occurred before and after the far reaching 1985-87 route designation efforts mainly related to ACECs. Specific area route designations efforts were frequently included as part of the ACEC Plan development efforts to further ACEC management goals and objectives. These efforts generally occurred between 1982 and 1995, and identified motorized vehicle access networks through public lands, collectively identifying 317 miles of open routes. Table D.1 lists these plans, together with the date the route network in each was developed. Some of these lands, which were acquired after the 1985-1987 inventories, were evaluated in subsequent ACEC Plans or the 2006 WEMO Plan. However, other lands acquired after 1987 were not included in the 2006 WEMO Plan baseline. Those lands were included in the 2012 inventories, and are part of the reason for the increase in the inventory of routes from approximately 7,000 miles in 2006 to approximately 16,000 miles for the current SEIS.

Table D.1. Pre-WEMO ACEC Route Networks and Principal Recreation Activities

ACEC Name	Size (Acres)	Year	Route Status	Principal Recreation Activities
Afton Canyon	8,830	1989	26-mile designated route system	Camping, vehicular touring, equestrian, rock hounding, recreational mining on outside edges of area.
Amboy Crater National Natural Landmark	639	NA	One access route to parking area.	Geologic exploration, rock hounding
Barstow Woolly Sunflower	19,079	1982	Mapped routes excluded; vehicles excluded From NW ¼ of Section 11; T11N; R6W	Non-vehicular dependent: Hiking, botanizing
Bedrock Springs	786	1987	Mapped designated route system	Access to prehistoric values and Northern portion of the Golden Valley Wilderness Area
Big Morongo Canyon	24,934	1982 and 1996	Mapped designated route system; Routes designated in 2002 Coachella Valley Plan Amendment	Hiking, wildlife viewing, picnicking
Black Mountain	51,261	1988	26-mile designated route system	OHV recreation and touring, equestrian riding, hiking, camping, prehistoric and historic interpretation, recreational mining on northeastern fringe of area, wilderness recreation, in the southcentral Black Mountain subregion.
Calico Early Man Site	834	1984	Mapped designated route system	OHV touring, hiking, camping, prehistoric and historic interpretation, located in the southern portion of the Calico Mountains subregion.
Christmas Canyon	3,445	NA	No route designation because most of ACEC is within Open area	OHV recreation and touring, historic interpretation. Located in Spangler Hills OHV area and China Lake Naval Weapons Center.
Cronese Basin	8,469	1984	Mapped designated route system	OHV touring, bird-watching, wildlife viewing, in the center of the Cronese Lake subregion.

Table D.1. Pre-WEMO ACEC Route Networks and Principal Recreation Activities

ACEC Name	Size (Acres)	Year	Route Status	Principal Recreation Activities
Desert Tortoise Research Natural Area	22,230	1988	Designated closed to vehicular use; protected by perimeter fence	Hiking and wildlife viewing, located in the southwestern portion of the Rands subregion.
Fossil Falls	1,630	1986	Designated route system	OHV touring, camping, hiking, rock climbing, prehistoric appreciation. Located at north end of Sierra subregion.
Great Falls Basin	9,539	1987	Mapped designated route system	OHV touring, picnicking, bird-watching, wildlife viewing. Located just north of Trona.
Harper Dry Lake	485	1982	Mapped designated route system; all routes within 100 yards of marsh vegetation closed.	OHV touring, bird-watching, equestrian riding. Located southwest of Black Mountain Wilderness Area in the Harper Lake subregion.
Jawbone/Butterbrecht	147,832	1982	133-mile designated route system	OHV touring, bird-watching, wildlife watching, rock-climbing, hunting. Located in the Jawbone subregion.
Juniper Flats	2,387	1988	Mapped designated route system	Equestrian riding, OHV recreation and touring, access to Deep Creek hot springs. Located north of San Bernardino Mountains, in the western portion of the Juniper Flats subregion.
Last Chance Canyon	5,135	1982	Designated route system	OHV recreation and touring, historic appreciation, wildlife viewing. Located south of El Paso Mountains Wilderness Area.
Manix	2,907	NA	None	Paleontological and historic interpretation, OHV touring. Located at the western boundary of the Afton subregion.
Mojave Fishhook	637	1990	Designated route system	OHV touring, botanizing

Table D.1. Pre-WEMO ACEC Route Networks and Principal Recreation Activities

ACEC Name	Size (Acres)	Year	Route Status	Principal Recreation Activities
Rainbow Basin	4,103	1991	30-mile designated route system	Camping, OHV touring, equestrian riding, hiking, geologic, paleontological and prehistoric interpretation. Located in the southwestern portion of the Coolgardie subregion.
Red Mountain Spring (formerly Squaw Spring)	718	1987	Mapped designated route system; area closed to vehicular travel	Prehistoric and historic interpretation. Located in northern portion of Red Mountain subregion.
Rodman Mountains Cultural Area	6,208	NA	Routes outside Rodman Mtns. Wilderness were designated as part of Ord-Rodman Plan	OHV touring and recreation, cultural interpretation, hiking, wilderness recreation. Located in the southern portion of the Rodman Wilderness in the Newberry-Rodman subregion
Rose Springs	838	1985	Routes designated closed	Hiking, wildlife viewing, prehistoric interpretation, hunting. Located in north end of Sierra subregion.
Sand Canyon	2,583	1989	Specific route closures	Hiking, wildlife viewing, bird-watching, hunting, cultural interpretation. Located in southern end of the Sierra subregion.
Short Canyon	754	1990	Most of the ACEC routes are closed because they are within wilderness	Hiking, botanizing, wildlife viewing, bird-watching, hunting. Located in Sierra subregion, borders Owens Peak Wilderness.
Soggy Dry Lake Creosote Rings	184	1982	All vehicular routes closed to protect unique vegetation	Botanizing, hiking. Located just south of Johnson Valley OHV area in the Johnson Valley subregion.
Steam Well	41	1982	Designated route system; All routes closed with inclusion of ACEC in the Golden Valley Wilderness Area	Prehistoric and historic interpretation. Located in southwest edge of Golden Valley Wilderness area.
Trona Pinnacles	4,058	1989	Designated route system	Sightseeing, commercial filming, OHV touring, geologic interpretation. Located in South Searles subregion.

Table D.1. Pre-WEMO ACEC Route Networks and Principal Recreation Activities

ACEC Name	Size (Acres)	Year	Route Status	Principal Recreation Activities
Western Rand Mountains	31,102	1994	128-mile designated route system	OHV touring and recreation. Applied to ACEC and surrounding lands. Located in the Rand subregion
Whitewater Canyon	13,973	1982	Designated route system	OHV touring, wildlife viewing, hiking.

Desert Access Guides

Between the late 1980s and the mid-1990s, BLM published 21 Desert Access Guide (DAG) maps of the CDCA Plan area. Within the Ridgecrest and Barstow field office boundaries, these maps displayed the route networks designated in 1985 and 1987, and the networks designated for the ACECs. These DAGs were distributed for public use.

Listing of the Desert Tortoise

In April 1990 the Mojave population of the Desert Tortoise was listed by the United States Fish and Wildlife Service as threatened.

Ord Mountain Pilot Off-Road Vehicle Designations

In 1995, the BLM issued an emergency closure of routes in the Ord Mountain area in response to the 1994 designation of critical desert tortoise habitat in the area. The emergency closure utilized available on the ground knowledge, topographic maps, and early West Mojave Plan data that had already been collected in this sensitive area, to identify a total of 549 miles of routes in the area and designate 100 miles of routes on public lands as open. In response to public feedback on the emergency network, BLM undertook a pilot project within the Ord Mountain area to test methods to acquire a more complete inventory of routes of travel and revisit the emergency closure designations.

As part of the review, the Natural Applied Research Science Center (NARSC) was contracted to conduct a pilot project using low-level aerial photography to digitally record routes. The data was then captured using early GIS digitizing technology and computer evaluation to verify the inventory in the area. An additional 113 miles of routes was identified based on the aerial data review and field reviews by the public and BLM for a total of 662 miles over an area covering just under 125,000 acres. On public lands, 547 miles were identified on 102,135 acres, which did not include routes and lands received as a result of the recent 11,835-acre Catellus acquisitions in January, 2000. This proposed network was developed from public input and evaluated in the Ord-Mountain Route Designation EA, published and approved in 2000.

The Ord pilot project had some limitations but was considered successful in improving and augmenting on-the-ground inventory information. However, due to its expense, the Ord Pilot project could not be applied on a larger scale. Following the development of the Ord Pilot Project inventory, a large scale satellite-photography based draft route system was developed in

about 1997. This route system was developed using mid-1990's satellite photography and a custom-designed computer program that analyzed the satellite photos and identified linear features possessing shades of gray that matched the gray associated with a route. A computer modeling program was used due to the lack of staffing available to do heads up digitizing at the time. Once the computer based route system was finished it was field checked for accuracy. The field check identified what appeared to be "routes" in the satellite photos were sometimes fence lines and other non-route ground features. Because of these problems this draft system and inventory was abandoned and a GPS field inventory was undertaken beginning in the fall of 2001.

Redesign Effort

In the mid-1990s, BLM began a process to redesign a portion of the existing 1985 and 1987 route networks (WEMO redesign area). The primary focus of the WEMO redesign area became Desert Tortoise critical habitat. Certain other sensitive areas were also included in the redesign of the network. This redesign effort was known as the Western Mojave Desert Off Road Vehicle Designation Project, and it was approved by a Decision Record signed on June 30, 2003 (2003 WEMO Route Designation Project).

2003 Western Mojave Desert Off Road Vehicle Designation Project

The 2003 WEMO Route Designation Project built upon these earlier planning efforts. Its purpose was to update the previous route designation efforts, taking into account new or significant planning issues like the listing of the desert tortoise as a threatened species in 1990. The planning area for the 2003 WEMO Route Designation Project is synonymous with the region that was also addressed by the 2006 West Mojave Plan, an interagency habitat conservation plan that developed conservation strategies for over 100 sensitive plant and animal species.

The 2006 WEMO Plan was prepared through the collaborative effort of city, county, state, and federal agencies which had jurisdiction over lands within the region. To support the development of the 2006 WEMO Plan, these agencies and local jurisdictions cooperated with more than 100 non-governmental organizations (NGOs) including businesses, environmental groups, and user groups. Representatives of the agencies, jurisdictions, and the NGOs comprised the West Mojave Supergroup. In November 1999, the West Mojave Supergroup established four task groups to develop components of the WEMO Plan. Of these, Task Group 2 was developed to address the Motorized Vehicle Access Network.

To assist Task Group 2 and the route designation process, two subcommittees were formed: a field survey advisory group and a route designation technical committee. As the task group process evolved, certain issues would emerge that would result in considerable public interest or controversy, including the design of the motorized vehicle access network. When this occurred, public information meetings were held throughout the desert on an irregular basis. About a dozen of these meetings, attended by a total of approximately 250 persons, were held during the task group process. Many persons who first became involved through these meetings later joined one or another of the task groups.

Due to the size of the area covered by the WEMO Plan, 3.1 million acres of public lands in a larger 9.4 million area of contiguous lands, it was determine that the most effective way to

approach route designation was to subdivide the WEMO Plan area into manageable and recognizable designation planning units. This effort resulted in the creation of 21 “subregions”.

These 21 subregions included: Amboy, Bighorn, Coyote, East Sierra, El Mirage, El Paso, Fremont, Granite, Juniper, Kramer, Middle Knob, Morongo, Newberry-Rodman, North Searles, Ord, Pinto, Ridgecrest, Red Mountain, Sleeping Beauty, South Searles and Superior. These 21 subregions cover approximately 1.3 million acres of public lands which is 42 percent of the overall planning area. In addition to the new subregions the planning effort would also incorporate the route designations efforts for the ACECs where route designation had been completed, the Ord Mountain Pilot Project and the remaining areas covered by the 1985-87 designation efforts. Some of this additional data was within one or more of the twenty-one subregions.

Based on the level of resource sensitivity 11 of the 21 subregions were selected for detailed updating in the Designation Project. A description of the field-surveyed subregions is provided in Table D.2.

Table D.2. Off-Road Vehicle Designation Subregions

Subregion	Principal Recreation Activities	Route Mileage Designated Open 1985-87	Route Mileage 2001 Route Inventory	Comments
Coyote	Rock hounding, off-highway touring/sightseeing, mining.	178	411	Calico Early Man Archaeological Site, Cronese Lakes ACEC, and Soda Mountains Wilderness Study Area. OHV recreation relatively light. Most OHV activity occurs in southwestern sectors.
El Mirage	OHV, recreational mining	49	267	El Mirage OHV recreation area borders subregion to the south. Area of more historic use than current use. Once more popular for races which have since shifted to the Open Areas. Edwards bowl in the western sector popular as a motorcycle area creates some conflicts with adjoining private property owners. Shadow Mountain once very popular with motorcyclists. Use now restricted due to conflicts with hamlet of Shadow Mountain to the south. Bajadas north of Shadow Mountain have been found to have higher than average desert tortoise sign.
El Paso	OHV use, rock hounding, shooting/hunting.	324	465	Last Chance Canyon ACEC and El Paso Mountains Wilderness abut the subregion. Very mountainous area universally popular for a variety of visitor types including jeepers, motorcyclists, miners, campers, rock hounders, equestrians, historical explorers and upland game hunters

Table D.2. Off-Road Vehicle Designation Subregions

Subregion	Principal Recreation Activities	Route Mileage Designated Open 1985-87	Route Mileage 2001 Route Inventory	Comments
Fremont	OHV use, shooting/hunting, rock hounding, equestrian riding, hiking, recreational mining.	214	582	Contains Barstow Woolly Sunflower ACEC, Harper Dry Lake ACEC, and the Black Mountain Wilderness. Northern hilly sectors very popular longstanding MC area; Gravel Hills and Hamburger Mill northwest of Fremont Peak known for long-term historical use. Bajada areas in the southern sectors not nearly as popular as the above-described areas to the north. Bajadas areas in the south and central sector known for historically high populations of desert tortoise.
Kramer	OHV use/dual sport, rock hounding, shooting/ hunting	254	642	Mining and homestead site established in the late 19th and early 20th century exists in the area, some of which may have historical significance.
Middle Knob	OHV touring/sightseeing, camping, hiking, hunting	N/A	91	Cultural resources are significant in the subregion. Contains biological values of special concern, including habitat for nesting birds of prey.
Newberry-Rodman	Equestrian, OHV touring, sightseeing, dual sport, rock hounding, mining	142	210	Subregion contains the Newberry Mountains Wilderness, the Rodman Mountains Wilderness and the adjoining Rodman Mountains ACEC. Rock art and cultural sites are within the subregion.
Ord	Recreational mining, OHV touring/ sightseeing	38	549	The historic Ord Mountain Road and the Daggett Wash Road are accessible by four-wheel drive vehicles and motorcycles (OHV/dual sport). The Stoddard Valley OHV Recreation Area to the west and the Johnson Valley OHV area to the southeast of the subregion provide for OHV/dual sport activities.
Red Mountain	OHV touring/sightseeing, shooting hunting, OHV/ dual sport, hiking, equestrian riding, mining.	234	733	The Grass Valley Wilderness is partly contained in the subregion and the Golden Valley Wilderness borders the subregion to the north. These bajada areas in the central west sector west of Cuddeback Lake, are known for historically high populations of desert tortoise and extremely high historical mining activity.
Ridgecrest	Hiking, equestrian OHV/dual sport	106	328	The Rademacher Hills trails open to the hiking, jogging, horseback riding and mountain biking.

Table D.2. Off-Road Vehicle Designation Subregions

Subregion	Principal Recreation Activities	Route Mileage Designated Open 1985-87	Route Mileage 2001 Route Inventory	Comments
Superior	OHV/dual sport, rock hounding, camping, mining.	396	668	Contains the Rainbow Basin National Natural Landmark ACEC. The Black Mountain Wilderness lies to the west of the subregion and the Calico Mountains lie to the south east of the subregion.

Seven of these subregions were within Desert Tortoise critical habitat: Coyote, El Mirage, Fremont, Kramer, Newberry-Rodman, Red Mountain and Superior. Middle Knob included sensitive plant habitat. Two others, El Paso and Ridgecrest were located close to the City of Ridgecrest, and both were popular areas with increasing OHV use. Finally, the Juniper subregion was included for a new field inventory in response to comments made during the public review of the Draft WEMO EIS.

Nine subregions were not selected for new field inventories. They included: Amboy, Bighorn, East Sierra, Granite, Morongo, North Searles, Pinto, Sleeping Beauty, and South Searles. These nine were not significantly affected by the issues associated with the other subregions. In these nine subregions, the existing 1985 and 1987 route networks were retained. The 2003 WEMO Route Designation Project made only a few minor corrections to the existing network in these subregions. These corrections included the realignment of some routes at boundaries between the ACEC networks and the 1985 and 1987 networks, to ensure that the routes connected seamlessly.

Between September 2001 and March 2002, thirteen field crews inventoried nearly 8,000 miles of OHV access routes within 10 of the 11 subregions that were selected for detailed updating. These 10 subregions encompass about 774,000 acres of public lands, which is 33 percent of the Limited access portions of the overall WEMO Planning area. The Juniper subregion ended up not getting a detailed field inventory due to time constraints and the availability of route data that was considered adequate at the time to meet the needs of a more detailed update. Both four-wheel drive and motorcycle crews participated in the survey. Routes were recorded using global positioning system (GPS) technology. The nature of the route (graded gravel, good dirt, motorcycle trail) was recorded, and nearly two dozen types of pertinent desert features mapped (including campsites, mines, trailheads, and water sources). This information was transferred into the planning team's digital GIS library. In addition, data collected by BLM field survey crews in 1985 and 1987, and during the preparation of BLM management plans for ACECs between 1980 and the late 1990s, was digitized and stored in the GIS database. This data was supplemented by data digitally collected from aerial photography taken in 1995 and 1996, and covering most public lands within the planning area.

The updates to eight of these subregions along with minor revisions to the 1985-87, and ACEC Off-Road Vehicle designations served as the basis for the evaluation in BLM's 2003 Environmental Assessment and Decision Record for the Western Mojave Desert Off-Road

Vehicle Designation Project. The minor revisions occurred in the North Searles and El Mirage subregions, Black Mountain ACEC along with edge matching efforts at 25 locations to align the ACEC, 1985-87, and 2002 designation boundaries. For the El Paso Mountains and Ridgecrest subregions the existing 1985-87 network was adopted until completion of a collaborative planning effort that with local jurisdictions and the general public.

The purpose of the 2003 Western Mojave Desert Off-Road Vehicle Designation Project was to update the existing West Mojave route designations, and to adopt the revised route network as a component of the CDCA Plan, while the 2006 WEMO Plan was under development. The 2003 Designation Project evaluated four route network alternatives developed to meet enhanced ecosystem protection and enhanced recreation objectives. The resulting Record of Decision selected Alternative A, which was based on the existing route designations, modified to incorporate a revised network within desert tortoise critical habitat and other sensitive resource areas. That network, totaling 5,098 mile of routes, served as the basis for the route network alternatives evaluated in the 2006 WEMO Plan.

2006 West Mojave Plan

The route designations adopted in the 2003 WEMO Route Designation Project effort was considered the baseline for the No Action Alternative in the development of the 2006 WEMO Plan. The baseline was subjected to minor modifications and a field survey was conducted in one additional subregion—Juniper Flats. The EIS for the 2006 WEMO Plan evaluated seven alternatives which addressed various use restrictions, using the findings in the 2003 WEMO Route Designation Project as a point of departure. With respect to travel management, the use restrictions on the routes varied among the 2006 WEMO FEIS alternatives, but the overall mileage of the network did not vary. The proposed network evaluated in the 2005 WEMO FEIS consisted of the 2003 network with modifications in specific areas. The Record of Decision (ROD) adopted the FEIS proposed action with minor modifications, resulting in the 5,098 mile network of the 2006 WEMO Plan.

Vehicle Access Decisions in 2006 WEMO ROD

In 2006, the BLM approved a comprehensive amendment covering the WEMO Planning area of the CDCA. Key elements of the CDCA Plan that were updated for the WEMO Planning Area include the Wildlife Element, the Vegetation Element, the Grazing Element, the Recreation Element, and the Motor Vehicle Access Element.

The vehicle route network approved in the 2006 WEMO Plan was based on the 2003 vehicle route network, with the following modifications:

- The mileage of non-motorcycle routes in higher density tortoise population areas was decreased from 439 miles to 384 miles;
- The mileage of vehicle routes within ACECs was reduced from 427 miles to 406 miles; and
- Within the Juniper subregion, a redesigned vehicle access network was adopted that consisted of 73 miles of open routes and 25 miles of routes that would be limited to use by single-track vehicles (motorcycles), which replaced the 152 miles of open routes that had been adopted in 2003.

Overall, the 2006 WEMO Plan included modification of the vehicle management decisions, including OHV route designations, on more than 2.35 million acres of Limited access public land within the CDCA. The ROD for the 2006 WEMO Plan approved the designation of 5,098 miles of motorized vehicle (OHV) routes.

The 2006 WEMO Plan Amendment approved a total of 12 separate decisions, each affecting multiple geographical areas with the planning area. Most of the decisions focused on establishment or adjustment of ACECs for biological resources and changes to multiple use classes to reflect an increased resource protection balance. The specific decision components related to Motorized Vehicle Use and route designations made in the 2006 WEMO ROD, are as follows:

- Decision 5: Recommendations made in the 1994 Rand Mountains-Fremont Valley Management Plan were adopted, including adoption of the proposed motorized vehicle access network to be managed with an educational permit system.
- Decision 6: The motorized vehicle access network in the Afton Canyon Natural Area was adopted.
- Decision 9: The motorized vehicle access network in the remainder of the planning area was adopted, and included minor modifications of the 2003 route network, a redesign of the Juniper subregion, and route closures in the Lane mountain milkvetch ACEC, Barstow woolly sunflower ACEC, the Mojave monkeyflower ACEC, and the Red Mountain subregion. The approved network also included the opening of a 9-mile undesignated route east of Haiwee Reservoir, and establishment of competitive “C” routes northeast of the Spangler Hills Open Area.
- Decision 10: The Stopping, Parking, and Camping Section of the CDCA Plan Motorized Vehicle Access Element was modified to incorporate restrictions within DWMAs, including limiting camping to previously existing disturbed camping areas adjacent to open routes and limiting stopping and parking to within 50 feet of the centerline of open routes.
- Decision 11: The portion of the Barstow to Vegas Race Course within the WEMO Planning area was deleted.
- Decision 12: The use of the Stoddard Valley to Johnson Valley Connector was modified to establish a connector route, and to delete its availability for competitive speed events.

In addition to decisions that were proposed in the 2005 EIS, the 2006 ROD made modifications as a result of resolution of protests. These modifications included specific changes to route designations in the Red Mountain, Ord, Newberry Rodman, Fremont, and Juniper subregions, and in Stoddard Valley. The specific routes designations are listed in the 2006 ROD.

The 2006 WEMO ROD also continued the administrative closure affecting 26 miles of selected dirt roads in a 17,000-acre area of the Rand Mountains, in order to allow time to complete work necessary to implement an educational program and permit system for recreational users.

The following management prescriptions for motorized vehicles (designated as “MVs” in the FEIS) were proposed as take avoidance measures:

- Open Routes (MV-1): Routes designated open would be available for a variety of uses including commercial, recreational, casual access, and non-competitive permitted uses. No motorized vehicles would be allowed to travel off of designated routes, except in emergency situations, or with the explicit permission of the BLM, or as specifically noted below.
- Speed Limits (MV-2): With respect to speed limits on unimproved roads, current law would apply. Basic Speed Law (38305) of the 2001 Vehicle Code, Traffic Laws states: “no person would drive an off-highway motor vehicle at a speed limit greater than is reasonable or prudent and in no event at a speed which endangers the safety of other persons and property.”
- Speed Regulators (MV-3): Within DWMA's, there is no proposal to install speed regulators; however, if monitoring or studies show that certain unimproved roads are causing increased tortoise mortality, the BLM will consider ways, including speed regulators, to reduce or avoid that mortality.
- Washes (MV-4): On public lands, motorized vehicle travel in washes would be allowed only in those washes that are designated as “open routes” and signed as appropriate.

West Mojave Route Network Plan Supplemental EIS

The West Mojave Route Network Plan (WMRNP) Supplemental EIS is being developed as a result of legal action that was brought against the 2006 WEMO Plan. The Record of Decision for the West Mojave Plan /Amendment to the CDCA Plan was signed in March 2006. In August of 2006, eleven environmental organizations sued the Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service (FWS) claiming the BLM's designation of an off-highway vehicle route network throughout the WEMO planning area violated FLPMA. The plaintiffs also claimed that the Environmental Impact Statement and Environmental Impact Report for the West Mojave Plan violated the National Environmental Policy Act of 1969. The court order of September 2009 left in place most of the WEMO Plan and found no Endangered Species Act violations. However, the court ruling did fault the methods used to identify and designate the nearly 5,100 miles of off-road routes throughout the WEMO Plan area. Subsequently, a court Remedy Order of January 2011, remanded the 2006 WEMO Plan to the BLM and directed the BLM to prepare a revised OHV route network that complies with the designation criteria in 43 CFR 8342.1.

In response to the court's ruling BLM started looking at the previous route designation efforts and identified the following issues and concerns:

1. Age of decisions

The route designations of 1985 – 1987 today are nearly 30 years old.

ACEC Plans which included route designations that were written between 1982 and 1995 are approximately 20 to 30 years old.

2. Increase in population and amount of vehicles registered

In the 34 years since the original adoption of the CDCA Plan the population of CA has grown by 57.4 percent (2010 U.S. Census compared to 1980 U.S. Census).

During the same time period the number of OHV registrations grew by 337.3 percent, from 235,003 to 1,027,612.

These changes result in a greater demand for the limited space and resources found on the public lands.

3. Quality of inventories establishing route system

The 1985 – 1987 designations did not result in a detailed inventory of all routes on the public lands. These designations were developed from a combination of sources including 15 & 7.5 minute USGS maps, aerial photography, and limited field visits.

Hundreds of thousands of acres of land has been acquired (and disposed of) throughout the Planning area since the mid-1980's through acquisitions, donations, disposals, and exchanges, including through the West Mojave Land Tenure Project and other major landowner agreements.

Authorizations approved under right-of-way, permit, and easement were documented in individual hard-copy project casefiles, and were not added to the inventory and designated network if not already included in the 1985 – 1987 designations.

The 21 subregions identified in the 2003 WEMO Route Designation Project cover only about 1.3 million acres (55%) of the overall 2.35 million acres of Limited access public lands within the planning area. They were only developed for what was believed to be the more environmentally sensitive areas at the time.

Intensive field inventories were only completed for 10 of the 21 subregions identified in the planning area for the 2003 WEMO Route Designation Project. These efforts encompassed roughly 774,000 acres or 33% of the West Mojave Planning area and recorded about 4400 miles of routes.

In the end only 8 of the 10 inventoried subregions received a route system revision in 2003. Between 2003 and 2006 the Juniper subregion was inventoried, and its designations addressed in the 2006 WEMO Plan.

Therefore, at the end of the 2006 EIS planning effort, 698,000 acres representing just under 30% of the WEMO Planning area had received a detailed inventory and updated route system.

4. Reproducible documentation supporting consideration of 43 CFR 8342.1 in the development of older route designation efforts

Due to the age of the original 1985-1987 route designation process, copies of all designation forms for all routes affected by that decision are not available.

Documentation is lacking or incomplete to show consideration of the Designation Criteria as outline in 43 CFR 8342.1 for the 2003 WEMO Route Designation Project per the court's ruling.

Areas outside of the 8 inventoried subregions of the 2003 WEMO Route Designation Project and the Juniper subregion did not have route-specific designation documentation. It is unknown what level of documentation exists to support the statement made in the 2003 Designation Project that the parts of the then existing network not included in the

2003 designation effort were reviewed to ensure compatibility with the WEMO conservation strategy and were in compliance with federal regulation

5. Compliance with new Travel Management policy and guidance

Route Designation for OHV use of the BLM administered lands has changed to keep pace with the current concept of Travel Management for the Public Lands. All forms of travel are now being considered in the designation process including subdesignations of Motorized, Mechanized as well as Non-motorized; not just OHV Open use as it was in 2006 and before. Additionally, this concept change means that travel for all forms of public land users are now considered in the process including rights of way holders, mining claimants, grazing permittees, as well as casual recreational users.

Because of these concerns and the change in Travel Management policy, BLM decided that 100 percent of the inventory in the planning area would be reviewed, and that the entire area would be considered for new route designations during the 2015 WEMO SEIS process. One of the first steps to be undertaken to reach the final goal of a designated travel network was to develop a base inventory of what at the current time (2013) exist out on the public lands.

The initial inventory was developed from multiple existing sources, and its accuracy and completeness varied depending upon the source. BLM then updated the inventory of linear features by reviewing existing features and tracing additional features from US Department of Agriculture's (USDA) one meter-resolution National Agriculture Imagery Program (NAIP) aerial photography into the Ground Transportation Linear Features (GTLF) geospatial database.

While the GIS staff were digitizing the route system into the GTLF geo-database system it was discovered that the 2001-2002 field survey was not as complete as thought to have been. This issue was confirmed to be true when staff compared NAIP aerial photography from 2005 against 2012 for the same location within the Coolgardie subregion. This comparison showed that routes were well-established on the ground in 2005 and that they were not recorded during the GPS inventory process conducted at that time. Refer to Figures D.1 and D.2 for a sample of what was found within the Coolgardie subregion. Additionally Figures D.3 through Figure D.12 show a sampling of similar missing route situations found within the El Paso, Juniper Flats, Middle Knob, Rand, and Stoddard Valley subregions respectively. Refer to Table D.4 for a comparison of the number of miles inventoried for the 2003 WEMO Route Designation Project compared to what was inventoried for the development of the GTLF geo-database.

Because of the change in policy to now consider and incorporate all transportation features no matter their purpose (authorized, permitted, or casual use) or mode of travel on them (motorized, non-motorized, non-mechanized) into the travel management strategy for an area, the route networks overall mileage will increase from that considered and approved as part of the 2006 WEMO EIS. Routes authorized by permit, right-of-way or easement undergo site-specific review, and, if approved within the last 30 years, would have considered the minimization criteria. Since the ROD for the 2006 WEMO Plan, about 250 miles of authorized and permitted routes have been added so far into the system, the majority of which existed prior to 2005. These routes continue to be added, and a complete review of case files will not be completed until the FEIS.

Finally, because the WEMO SEIS is going to review and update 100% of the planning area versus 30% that was completed in 2006, it is expected that the overall mileage of the route

system will increase. When the BLM conducted its inventory in 2001-2002, there were 4,400 miles of routes in the ten inventoried subregions that encompassed 33% of the 2.35 million acres in the Limited access portion of the planning area. With the development of the new inventory for the planning area approximately 15,000 miles of transportation linear features across the 2.35 million acres of Limited access public lands were identified. These 15,000 miles represent all forms of transportation features on the public lands for both casual use along with permitted uses such as rights-of-ways. Within the 10 subregions inventoried in 2001-2002, the GTLF effort found that the inventory increased by nearly 41 percent from about 4,400 miles in 2001-2002 to 6,200 miles in 2013 within those subregions. The amount of increase in the 10 previously inventoried subregions was surprising. However, some oversights were anticipated, and had been pointed out by the public and staff, particularly in identifying additional permitted routes and during the BLM 2012 route signing and monitoring efforts. It was unclear to what extent these were widespread or isolated issues with the inventory, or the result of non-compliance. BLM conducted sample surveys and based on these surveys, it is believed that most of the additional routes identified in the 2013 inventory existed in 2001-2002, but were not identified in the survey.

2017 Temporary Street-Legal Route Designations

In January 2017, BLM initiated an effort to designate 148 miles of routes located on BLM lands, but maintained by the County of San Bernardino County Public Works Department. This action was taken in response to a January 19, 2017 stipulation from the Court for an additional interim remedy. Use of the routes is limited to street-legal vehicles only, as defined by the California Department of Motor Vehicles. The street-legal designation by BLM is temporary, pending finalization of designations under the WMRNP. In support of this effort, BLM held public open house meetings in Yucca Valley on April 19, 2017, in Barstow on April 20, 2017, and in Barstow on May 3, 2017. The public review period closed on May 12, 2017. An Environmental Assessment (EA) has been released regarding the temporary restriction of street-legal only routes.

D.4 Process for Development of Route Network Alternatives

The WMRNP is being undertaken, in part, to complete the required Transportation and Travel Management (TTM) planning process for the WEMO Planning area.

As discussed in BLM's TTM Handbook (H-1342-1), every acre of BLM-managed public land must be designated as "Open", "Closed", or "Limited" Areas for OHV use. These area designations were made for the entire WEMO Planning Area in the CDCA Plan, and have not changed since 1980. As part of the planning area's TTM planning efforts, each individual transportation linear feature within "Limited" areas must also be designated as either:

- A Road, Primitive Road, or Trail that is part of the designated travel network;
- Transportation Linear Disturbance (not part of the travel network, i.e., closed routes); or
- A Temporary Route (not part of the travel network, e.g., routes available exclusively to one or more right-of-way or easement holders over a specified timeframe).

Within the OHV Limited areas, individual linear features are also further designated as either "OHV Open", "OHV Limited", or "OHV Closed". Both OHV Open and OHV Limited routes

are used by motorized vehicles. OHV Open routes are open to public use without limitations, while OHV Limited routes are subdesignated to indicate their type of limitation. These include subdesignation of routes for Administrative, ATV/UTV, Authorized/Permitted, Competitive event, motorcycle, seasonal, and street legal-only use. OHV Closed routes include “Non-Motorized” and “Non-Mechanized” routes, as well as “Transportation Linear Disturbances”. The travel network alternatives developed for evaluation in the WMRNP consist of different combinations of these designations, as needed to meet different access, use, and resource protection objectives.

The required process in the TTM Handbook includes mandatory planning-level decisions, optional delineation of TMAs, and then implementation-level decisions, which can be made concurrent with the planning-level decisions, but must be completed within five years following the completion of the applicable LUP amendment. The general outline of the process is as follows:

- OHV Area Designations (mandatory planning-level decision);
- Identification of Travel Management Areas (optional planning-level decision);
- Designation of the travel management network consisting of roads, primitive roads, and trails (mandatory implementation-level decisions), temporary routes, and identification of other linear features as transportation linear disturbances.

In 43 CFR 8342.1, the preamble and the four components require designation of public lands and routes as open, limited, or closed based on protection of resources of the public lands, safety of all users, and minimization of conflicts among the various uses of the public lands, and in accordance with the following minimization criteria:

- a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability.
- b) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats.
- c) 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.
- d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect natural, esthetic, scenic, or other values for which areas are established. (Note: “Natural areas” and “primitive areas” are not terms used by BLM and thus these factors do not apply).

The above criteria served as the basis for identifying resources to be considered and establishing thresholds to trigger measures to minimize impacts for each linear feature identified in the current inventory under each alternative. These thresholds are referred to throughout this Draft SEIS as “minimization triggers”. A detailed description of each step of the route designation process, including the current status and future plans, is provided in the subsections below.

OHV Area Designations

The designation of all acreage as Open, Limited, or Closed to OHV use is required as part of the Land Use Planning (LUP) process for each planning area. The CDCA Plan, which includes the WEMO Planning area, includes OHV area designations. No changes to these designations were proposed in the 2006 WEMO Plan or the recently adopted DRECP LUPA, and none are being considered in this current plan amendment effort.

Identification of Travel Management Areas

Identification of TMAs is an optional tool that BLM Field Offices can use to facilitate their overall TTM process. The identification of TMAs is a land use planning-level decision that must be addressed in the applicable LUP or amendment, which in this case would be an amendment to the CDCA Plan, as amended by the 2006 WEMO Plan and 2016 DRECP LUPA.

In the WEMO Planning Area, the feasibility of establishing TMAs and using them to facilitate TTM planning was evaluated as a result of the scoping process. Following the initial scoping meeting in September 2011, BLM held eight travel designation workshops within the identified TMAs, with the intention of conducting additional scoping that focused on the particular uses, resource issues, and areas of controversy that are specific to each TMA.

One purpose of the current planning effort is to establish TMAs as part of the Motorized Vehicle Access Element of the CDCA Plan. The BLM has identified three Alternatives related to establishment of TMAs, including:

- Alternative 1: No Action, which would include no TMAs being established;
- Alternatives 2 and 3: Establishment of eight TMAs, as developed during the scoping process; and
- Alternative 4 (Proposed Action): Establishment of nine TMAs, based on additional analysis following the scoping period.

Identification of Subregions

Similar to the identification of TMAs, the BLM's evaluation of public comments received during the scoping process led to the definition of subregions that were later used to facilitate the analysis of impacts and identification of route network alternatives. As the public comments were analyzed to identify issues, common issues were found to be grouped geographically based on proximity to population centers, topographical and geologic setting, presence of sensitive resources, historical land uses, and other characteristics. These areas were found to be similar to the geographic boundaries used by BLM's rangers to facilitate law enforcement efforts, and comprise 35 subregions throughout the WEMO Planning area. Based on the issues and similarity to BLM's law enforcement boundaries, BLM staff chose to evaluate the existing route network and develop route network alternatives on a subregion basis. The 35 subregions are defined in Table D.3, and shown on Figure 2.1-1. Detailed descriptions of the subregions are provided in subsection D.5.

There are some distinct differences in the establishment of TMAs and subregions. TMAs are planning decisions used to establish common objectives and coordinate management actions throughout an area. The subregions were used as a tool to facilitate resource-specific analysis,

but were not intended to act as administrative units for establishing land use planning objectives and coordinating management actions.

The number, configuration, and names of the subregions in this Draft SEIS have been modified from those evaluated in the previous Draft SEIS. This is due to the designation of two new National Monuments, the Mojave Trails National Monument and the Sand to Snow National Monument, within the WEMO Planning area. Each of these new monuments overlaps the boundaries of multiple subregions that had been used for analysis in the Draft SEIS, so the boundaries have been adjusted to allow each monument to serve as a stand-alone subregion. This has allowed the BLM to specifically consider the objectives expressed in each national monument's Presidential Proclamation in route network analysis and decisions within these subregions.

Table D.3. Summary of WEMO Planning Area Subregions Used to Support the Route Network Analysis and Development of Draft Implementation Strategies

Subregion	Indicator on Maps	General Location
Broadwell	BL	South third of TMA 1, bounded by Interstate 40 on south, Power line road on the east, Newberry Springs to west, Hidden Valley Rd to NW, and Cady Mountains to the NE.
Afton	AC	North third of TMA 1, bounded by Interstate 15 on NW and NE, Hidden Valley Rd on south west, Mojave National Preserve on the east, Union Pacific Railroad to the south east, Cady Mountains on the south central boundary, and Newberry Springs on the west boundary.
Barstow	BA	West third of TMA 1; directly east of Barstow, north boundary Hwy 15, south boundary Hwy 40. Majority land private, mixed development, military base, railroad, agriculture.
Darwin	DA	Northern end of TMA 2, bounded by Hwy 190 on the north, Death Valley NP on the east, China Lake NWS on the south, and Coso Range Wilderness on the west.
Sierra	SI	Western half of TMA 2, bounded by CDCA boundary and Hwy 190 on the north, China Lake and Darwin subregion on the east, Hwy 178 on the south, and the Inyo NF and CDCA boundary on the west.
North Searles	NS	Northeastern end of TMA 2, bounded by the Slate Range Crossing on the north, the ridge top of the Slate Range separating Searles Valley from Panamint Valley on the east, Township line 26S on the South, and China Lake NWS on the west.
South Searles	SS	Southeastern end of TMA 2, bounded along Township line 26S on the north, China Lake NWS on the east, Randsburg Wash Road on the south, and China Lake NWS on the west.
Joshua Tree	JT	In TMA 3, bounded by Highway 62 to the north, Joshua Tree National Park to the south and east, and Sand to Snow National Monument on the west.
Wonder Valley	WV	In TMA 3, bounded by Highway 62 to the south, Twentynine Palms Marine Corps Air Ground Combat Center 29 on the north, Amboy Road on the east, and Highway 247 on the west.

Table D.3. Summary of WEMO Planning Area Subregions Used to Support the Route Network Analysis and Development of Draft Implementation Strategies

Subregion	Indicator on Maps	General Location
Rattlesnake Canyon	RC	In TMA 3, bounded by Highway 247 on the north and east, Sand to Snow National Monument on the south, and U.S. Forest Service land to the west.
Juniper Flats	JF	Southwest corner BFO; borders Hwy18 on east, SBNF to south, Mojave River on west & Hwy 247 to north.
Sand to Snow National Monument	SA	The Monument has two separate areas. There are two sections in Rattlesnake Canyon T1NR5E SBM to include section 4, T2NR5E SBM and to include section 19-21& 28-33. The second area is in Morongo Valley bounded by the National Forest on the west, on the east is Joshua Tree National Park.
Mojave Trails National Monument	MT	Bounded by the WEMO planning boundary on the east, and the Union Pacific Railroad and Interstate 15 on the north, Afton Canyon, Broadwell, Twentynine Palms, and the Cleghorn Lakes Wilderness are on the west, and to the south is Joshua Tree National Park.
Jawbone	JB	Northern end of TMA 4, bounded by Hwy 178 on the north, Hwy 14 on the east, Township line 31S on the south, and the CDCA boundary on the west.
Middle Knob	MK	Central section of TMA 4, bounded by Township line 31S on the north, Hwy 14 on the east, Kern and Los Angeles county lines on the south, and the CDCA boundary on the west.
Lancaster	LA	Southern area of TMA 4, bounded by Highway 58 on the north, San Bernardino county line on the east, Angeles NF on the south, and the CDCA boundary on the west.
Fremont Peak	FP	Northwest corner of BFO; N boundary Ridgecrest OF, W boundary Hwy 395, S boundary Hwy 58 & BNSF, E boundary Harper dry lake.
Black Mountain	BM	Northwest portion, east of and similar to Fremont Peak. N boundary Ridgecrest, China Lake, W boundary Fremont Peak, S boundary Hwy 58 & BNSF, E boundary Coolgardie.
Harper Lake	HL	South central portion of TMA 5. North of Highway 58, including Harper Dry Lake.
Coolgardie	CG	North central portion TMA 5. Softer & rounded landscape, between Ft Irwin to north & City of Barstow to south; Calico to east & Black Mountain to west.
Mitchel Mountains	MM	Center of BFO, south center portion of TMA 5. Small pocket of low rugged mountains border north side of Barstow City.
Calico Mountains	CM	Central portion of TMA 5. Borders I15 on south, Ft. Irwin Rd to west & north, Alvord Mountains to east.
Cronese Lake	CL	North eastern portion of TMA 5. Borders I15 on south, Ft. Irwin to north; west from Coyote Dry Lake east to almost Baker.
El Mirage	EM	Pocket area north of El Mirage, west of Hwy395, east of LA county & south of Edwards.
Kramer Hills	KH	West center portion of BFO and northern portion of TMA 6. West boundary is Hwy 395 & east is Helendale Rd; north boundary is Hwy 59 & south boundary is Silver Lakes.

Table D.3. Summary of WEMO Planning Area Subregions Used to Support the Route Network Analysis and Development of Draft Implementation Strategies

Subregion	Indicator on Maps	General Location
Victorville	VV	Southern portion of TMA 6 west of the Mojave River, and east of the Los Angeles County/San Bernardino County boundary.
Iron Mountain	IM	Area south of Hwy 58, east of Helendale, and north of Route 66.
Ridgecrest	RI	Northeastern portion of TMA 7, including the community of Ridgecrest, bounded by China Lake NWS on the north and east, Golden Valley Wilderness on the south, and Hwy 395 on the west.
El Paso	EP	Northwestern portion of TMA 7, bounded by Hwy 178 on the north, Hwy 395 on the east, Garlock and Redrock-Randsburg Road on the south and Hwy 14 on the west.
Rand	RA	Southwestern portion of TMA 7, bounded by Garlock and Redrock-Randsburg Road on the north, Hwy 395 and the Kern/San Bernardino county line on the east, Hwy 58 on the south, and Hwy 14 on the west.
Red Mountain	RM	Southeastern portion of TMA 7, bounded by Golden Valley Wilderness and Township line 29S on the north, China Lake NWS on the east, Cuddeback Lake Road, Hwy's 395 and 58 on the south, and the Kern/San Bernardino county line on the west.
Stoddard Valley	SV	Area between Victorville & Barstow, south of Hwy 15; east boundary Hwy 247, west boundary Mojave River.
Ord Mountains	OM	Nearly geographical center of field office, center north of TMA. West boundary Hwy 247, east boundary Camp Rock Rd, north boundary I40 & Bartow, south is Lucerne Valley
Newberry Rodman	NR	Located within TMA 8. Bounded by Interstate 40 to the north, Powerline Road and Twentynine Palms Marine Corps Air Ground Combat Center 29 to the east, Camp Rock Road to the west, and the Johnson Valley Off Highway Recreation Area to the southwest.
Johnson Valley	JV	In TMA 8, includes Johnson Valley OHV Area and public lands as far south and west as Hwy 247.

Development of Travel Network Alternatives in the Draft SEIS

Implementation-level decisions include the designation of individual roads, primitive roads, trails, and temporary route as part of the designated travel network. Roads, primitive roads, trails, and temporary routes to be included in the network would include OHV Open and OHV Limited, non-motorized, and non-mechanized routes. Also, non-mechanized routes in wilderness or other OHV Closed Areas may be included in the network, consistent with current wilderness policies, plans, and minimum tool standards. Travel management plan decisions will ultimately identify selection of management prescriptions for individual routes in the network, including signage; speed limits; stopping and parking restrictions; or restrictions based on season, time of day, or weather.

Route designations that were evaluated and adopted in the 2003 Environmental Assessment for the Western Mojave Desert Off Road Vehicle Designation Project were the starting point for the

analysis in 2006 WEMO Plan, and the adopted 2003 network, with some modifications as a result of public comment on the 2003 WEMO Plan DEIS, was proposed and analyzed in the 2005 WEMO Plan FEIS. The 2006 WEMO Plan ROD approved the FEIS route designations, with some minor modifications. The 2006 WEMO ROD was vacated by the Court's Summary Judgment order, which required BLM to reconsider the route designations, consistent with the 43 CFR 8342.1 regulations.

In response, BLM has re-developed the WEMO route designation process in accordance with the TTM Handbook. To develop travel network alternatives that provide for a coherent network and include route designation criteria for consideration in the March, 2015, Draft SEIS, BLM implemented the following steps:

A. Conduct Inventory and Establish the Baseline

- The initial basis of the route network inventory was the 2006 WEMO Plan inventory, as corrected per the errata maps ordered by the Court, and provided by BLM.
- This initial inventory was taken from multiple sources, and its accuracy and completeness varied depending upon the source. BLM then updated the inventory of linear features by reviewing existing features and tracing additional features from USDA's one meter-resolution National Agriculture Imagery Program (NAIP) aerial photography into the Ground Transportation Linear Features (GTLF) geospatial database. The inventory consisted of the 2006 WEMO Plan network (as corrected and adjusted by the BLM pursuant to the Court's order), which serves as the No Action Alternative, and other linear features that currently exist on the ground, to ensure that all existing features were included in the analysis. Note that this inventory reflects the on-the-ground features existing as of 2013, and thus includes features that were developed after 1980. It also reflects substantial improvement in technical accuracy—many of the previously unrecognized features are simply the result of better photography since 1980 and were not detected at that time, and many others are the result of subsequent land acquisitions and permitting activities.
- The route inventory developed from the NAIP aerial photography has been continually ground-truthed during field surveys in 2012 through 2018 that were conducted by the BLM in order to sign and monitor the open route network.
- The 2012-2013 inventory is intended to include all routes that still have some evidence of recent past or current use. Some routes may be included where recent use no longer is evident as a result of active or passive reclamation, and the inventory will be updated as new on-the-ground information confirms use levels. This is a continuing process that is reported in quarterly reports to the Court and copied to the plaintiffs. A sample review of earlier (2005) and later (2013) aerial photographs indicates that the inventory represents a combination of previously known and undocumented routes that have been on-the-ground for at least the last 8 years, and that the inventory is relatively stable.
- The BLM identified and collected existing resource data, in Geographic Information Systems (GIS) format, to be considered based on the requirements of

43 CFR 8342.1, the Court's Summary Judgment and Remedy orders, and scoping comments.

B. Document Analytical Process

- BLM developed an Access database that was used to document the potential route segment baseline, the resources associated with each route segment, the preliminary route network recommendations resulting from application of the minimization trigger analysis using GIS, the public input and other non-GIS information captured for each route segment, and the rationale for the final staff recommendations for each preliminary alternative (e.g., documenting instances where professional judgement or other route-specific or resource-specific information may have overridden the GIS based analysis).
- Once alternative development was complete, the Access database was used to generate an analysis of impacts from the route network under each alternative to 43 CFR 8342.1 criteria.
- The Access database facilitates review of the coincidence between a route segment and one or more potential resource issues to clarify or quantify that coincidence, allows entering additional known route use or resource information that may affect the route network recommendation, and provides for the assignment of specific minimization and mitigation for each route segment within each alternative, and modification of the preliminary GIS-developed recommendation, where appropriate.
- This database was used to document adjustments to specific routes in the network based on identification and analysis of new issues and needs.

C. Identify Mechanisms to Use for Alternative Development

- The BLM identified the No Action Alternative, which, based on the Remedy Order, is the route network currently in use until a revised network is approved.
- The BLM identified specific resource values (e.g. riparian areas) that could adequately identify potential resource impacts based on the 43 CFR 8342.1 minimization criteria associated with the network and with individual routes and linear features.
- The Network-wide minimization measures, described in more detail in item D below, were identified for each alternative. The specific parameters for the following were elements of the potential minimization measures:
 - Stopping, parking and camping parameters were modified, specific to each alternative.
 - The approach to routes that had been designated as “Closed” in the 2006 WEMO Plan decision was determined for each alternative, subject to route-specific review.
 - The approach to routes which were undesignated in the 2006 WEMO Plan decision (i.e., features that were added in 2013 as a result of the GTLF

inventory update and the on-the-ground signing and monitoring process) was determined for each alternative, subject to route-specific review.

- The approach to competitive-event routes outside of OHV Open area.
- The approach to designated parking, staging and camping areas in sensitive locations.
- Staff identified resource minimization triggers that would identify the potential need for minimization and mitigation of resource impacts on the network and on each specific route segment (referred to herein as minimization measures), for criteria in 43 CFR 8342.1. Some of the minimization triggers were based on a distance between the route and the resource (e.g. route within 50 feet of a riparian area), while others were based on co-location of any portion of the route with a resource (e.g., route within a desert wash). In most cases, the comparison of the route to the resource was based on a GIS analysis. In cases where the resource data were not available in GIS, such as tribal areas, the comparison was done based on the resource specialists' working knowledge of the local area, supplemented with additional field visits and tribal consultations, as needed.
- The BLM developed objectives to be considered as part of the framework for the route network alternatives, considering overall goals in the CDCA Plan, 2006 WEMO Plan, and 2016 DRECP LUPA, as well as public scoping comments.
- BLM adjusted the minimization triggers by alternative, reflective of the objectives for each alternative.

D. Issues and Assumptions Used to Develop Alternatives

- All action alternatives utilize the 43 CFR 8342.1 minimization criteria, as well as factoring in the issues of network connectivity, pertinent resource issues not identified in the 43 CFR criteria, and information on the use of the network and of specific routes, including information provided by the public.
- The specific initial minimization measures and mitigation responses in each alternative vary, and the minimization trigger for closure as the initial minimization measure, is lower for Alternative 2 (closure is more readily triggered) than in Alternative 3 (closure is less readily triggered with mitigation more readily triggered). In Alternative 4, the selection of either initial minimization through closure or other mitigation measures, as a response to conflicts was more sensitive to existing uses and needs.
- Minimization and mitigation measures fall into three categories: (1) network-wide; (2) site- or use-specific; and (3) designation changes to a route segment or entire route.
- Network minimization measures minimize impacts of the network on a network-wide basis. Identifying some of these at the outset of the process helped focus other potential minimization and mitigation.

- The site- and use-specific mitigation responses were developed to specifically respond to the sensitivity and location of the conflict. These are outlined in Section 2.3.
- Designation changes to minimize impacts included route closure or further limitation of OHV and other uses of a route by vehicle type (such as closure to OHV use), by authorized user, or by season of use. These terms are defined in the glossary. For the purposes of this analysis, the following assumptions were made with respect to vehicle use:
 - Narrower routes (single-track motorcycle routes), and then quad routes, are considered less impacting than 4-wheel drive routes;
 - Two-wheel drive improved routes are considered less impacting than 4-wheel drive routes, other factors being equal;
 - Non-motorized routes and primitive trails (in Wilderness Study Areas) are considered less impacting than OHV routes;
 - Non-mechanized routes are considered less impacting than non-motorized routes;
 - Hiking routes are considered less impacting than non-motorized routes and primitive trails; and
 - Seasonal-use routes are less impacting than OHV routes, other factors being equal, and may be less impacting than other routes and trails.
- Other minimization measures address impacts through the development of post-designation implementation strategies, as outlined in the TMPs. These can include, but are not limited to, strategies for:
 - Monitoring patrols;
 - Route improvement, upgrade, or reroute;
 - Law enforcement patrols;
 - Fencing, gates, vehicle exclusion barriers, or other vehicle control mechanisms;
 - Water erosion control structures; and
 - Measures to abate fugitive dust.
- Also, the following assumptions were made with respect to users:
 - General public user routes (not available for competitive events) are less impacting than public user routes that are also available to competitive event users;
 - Authorized use and temporary routes are generally less impacting than routes open to the public; and
 - Administrative routes are less impacting than either authorized or public-use routes.

E. Summary of the Alternative Development

The minimization triggers and measures that were developed by alternative are included in the alternative-specific discussions.

1. The most current resources data was overlain on the 2013 inventoried routes to create a computer-generated Geographic Information Systems (GIS) layer and BLM ran a comparative GIS analysis of the inventoried route segments to identify specific locations of potential resource impacts, based on network wide and resource-specific minimization triggers.
2. Three sets of network-wide measures were identified to focus and minimize impacts, depending upon the alternative: a) No Action; b) Alternative 2; and c) Alternatives 3 and 4.
3. BLM staff reviewed the results of the GIS analysis and other resource comparisons to assure that the minimization triggers would adequately identify impacts to sensitive resources. Where impacts were not adequately identified, the minimization triggers were adjusted accordingly, and the analysis re-run.
4. Based on the types of impacts to sensitive resources, route-specific conflicts with the 43 CFR 8342.1 criteria, the objectives of the each alternative, and the overall resource goals of the WEMO Planning area, the BLM refined the minimization triggers to establish the framework for identification of the initial route network alternatives that would incorporate standard minimization measures (e.g., closures and route limitations) and also identify routes that may need additional mitigation measures or other minimization.
5. For Alternatives 2 and 3, a preliminary alternative was then generated through the GIS exercise that included initial assignment of a preliminary designation and sub-designation of each route segment based on resource impacts. Maps of each of the subregion networks in a particular TMA for each of the alternatives were generated. These maps were integrated with additional resource, recreational, and other information to provide context for the route-specific review and development of the alternative.
 - a. Each feature was then reviewed and additional site-specific information applied. In addition, the level of conflicts and issues was assessed.
 - b. Initial connectivity needs were identified where the minimization triggers result in routes with some route segments recommended for closure and other segments recommended to stay open.
 - c. Conflicts in use were identified where the resulting preliminary alternative results in routes where one or more of the alternative objectives would recommend consideration of different approaches to minimization and mitigation.
 - d. Conflicts in analysis were identified where the resulting preliminary alternative results in a route segments that include different approaches to minimization and mitigation.

- e. Connectivity issues and conflicts were addressed based on the relative sensitivity of affected resources, known uses and needs of the route segment, the objectives of the alternative, additional resource and recreation goals for the area, where identified, and other information from staff, other agencies, and the public, to determine if a feature is included within the alternative travel network as OHV Open, OHV Limited or OHV Closed, and any appropriate additional mitigation measures are identified.
 - f. Specific minimization measures were identified by resource, as needed.
6. BLM staff then began the development of the alternative from the preliminary GIS alternative. The maps with the initial designations were reviewed by BLM staff, and adjusted based on the identified conflicts and issues, public or other agency input, site-specific knowledge, and to ensure that the network would be complete and link to adjacent subregions seamlessly to create a travel management area network.
7. For No Action and Alternative 4, Steps 6 and 5 were reversed in order. BLM began with the No Action alternative. The No Action alternative was adjusted only to correct errors and add known rights-of-ways that had been overlooked. Alternative 4 was then developed from the No Action alternative, as corrected. Alternative 4 factored in additional site-specific knowledge, conflicts and issues, public input from scoping and from the subsequent WMRNP Desert Advisory Council (DAC) Subgroup recommendations to the BLM District Manager (the reports are posted on the DAC website at <http://www.blm.gov/ca/st/en/info/rac/dac/wmrnp.html>), and input from other agencies and from staff, to develop the preliminary Alternative 4 network. Then, as with alternatives 2 and 3, a GIS exercise generated maps in each subregion within a TMA that showed remaining areas of conflict. The GIS exercise was used for the No Action alternative as well, to identify remaining conflicts and issues as well, as a basis of comparison with the other alternatives. No changes were made. Alternative 4 maps indicated which of the preliminary routes and route-segments in the initial Alternative 4 would need site-specific review for additional minimization measures (closure or use limitation) and mitigation measures, and other route options to address unmet needs and continuity of the network where conflicts had been identified.
8. The preliminary identification of a route under all alternatives was modified to (1) complete the network, (2) ensure inclusion of authorized rights-of-way that were known, (3) incorporate other staff or public input, and (4) address level of sensitivities. Where conflicts were identified during these changes, additional minimization measures could be identified for the route. Where sensitivities were known not to exist (false positives) or to be less problematic than the GIS indicated, routes may have been opened.
9. Input on specific types of uses other than OHV use was taken into consideration in development of the alternatives, including non-motorized and non-mechanized trails, and motorcycle routes. One or more alternatives may have been adjusted,

based on the overall goals of each alternative, to provide a reasonable range of alternatives for routes that are particularly sensitive, in consideration of network continuity, in consideration of different resource values, or for routes that received a wide range of feedback from the public during scoping.

10. For routes ending at a jurisdictional boundary or private property, the following preliminary designations would generally be made, subject to agency consultation, the need for a reasonable range of alternatives, and potential mitigation measures:
 - a. For the Department of Defense, the route would be identified as a transportation linear disturbance (closed) from the last intersection, unless the route leads to an official gated access.
 - b. For the National Park Service, US Forest Service, California Parks, or California Fish and Wildlife, route access would be matched to the corresponding designation by the other jurisdiction, unless impacts were further minimized based on the minimization criteria, or site-specific input was provided by the agency. For example if the route on US Forest Service land was OHV, BLM would allow for connection by identifying the route as OHV Open, or, if the route was subject to an authorization, it would be designated as OHV Limited. Otherwise, the route would be identified as a transportation linear disturbance (closed) from the last intersection.
 - c. For a route entering private property or land of the California State Lands Commission, the route would be designated as OHV Open to allow for access to the private parcel, to the extent feasible with the current network, and consistent with a review of the minimization criteria. If the property boundary was known to be fenced, or BLM was contacted by owner and asked to not provide access, the route was designated as a transportation linear disturbance (closed) from the last intersection, consistent with network connectivity in at least one alternative, consistent with the minimization criteria.
 - d. For a route that runs adjacent to other jurisdictions or private property, no specific approach was taken. These routes were addressed based on site-specific factors and the objectives of each alternative.
 - e. For a route which intersects a nationally designated trail, if the route provides access to a trailhead, it was identified as OHV Open, unless there is no parking or staging area or the route is located some distance from the designated trail, consistent with the minimization criteria. If the route conflicts with trail use, such as traveling parallel to the trail, then it was generally identified as a transportation linear disturbance (closed). These designations may be adjusted in the Final SEIS, to achieve consistency with the draft DRECP Plan setbacks from designated trails (see <http://www.blm.gov/ca/st/en/prog/energy/DRECP/policy.html>).

11. After the route-specific review, these administrative draft alternative designations went through a preliminary impact analysis process and additional adjustments may have been made based on the results of the initial analysis of impacts and the overall goals of the alternative.
12. The results of the analysis are documented in an Access Table by route or route segment, referred to as a WEMO ID. These WEMO IDs were used to break apart routes in order to allow more detailed, site-specific analysis of the impacts of its various parts. Each WEMO ID is cross-referenced back to the route name, and includes data for the route, who input data, how the route is being used, adverse impacts, recreational assets, public comments, the alternative designation (transportation and travel uses) under the alternative, and whether mitigation measures are identified.

The alternative networks were displayed on maps and reviewed to verify that the resulting route network within each alternative was viable, met the objectives of the alternative, and was consistent with the 43 CFR 8342.1 minimization criteria, the goals and objectives of the CDCA Plan, as modified herein, and the additional goals and objectives of the 2006 WEMO Plan. Adjustments were made in highly sensitive areas based on issues that were not identified through the GIS analysis and preliminary review. Management reviewed staff recommendations, made adjustments to alternatives, and developed the Draft SEIS Proposed Action.

Modification/Development of Travel Network Alternatives in the SEIS

The process described in steps A through E above was used to develop the alternative route networks for Alternatives 1 through 4, which were evaluated in the WMRNP Draft SEIS published in March, 2015. BLM received and evaluated public comments on the route networks associated with Alternatives 1 through 4 in the Draft SEIS during two rounds of public review in 2015, ending in January, 2016. However, by January 2016, BLM was proposing to make other changes in land use designations and associated conservation goals in the DRECP LUPA, and made the decision to delay consideration of route networks in the WMRNP until the changes associated with the DRECP LUPA became final. The DRECP LUPA was adopted in September, 2016, and its land use designations, modified conservation goals, and Conservation and Management Actions (CMAs) now serve as the framework for consideration of the route network alternatives in this Draft SEIS. As a result, the original route networks associated with Alternatives 2, 3, and 4 have been revised, including re-development of Alternative 4 into the Proposed Action, to incorporate BLM's adoption of the DRECP LUPA, as well as other land tenure adjustments and route network corrections identified based on public comments on the 2015 Draft SEIS.

The changes and updates used to modify Alternatives 2 and 3 and to re-develop Alternative 4 as the Proposed Action, included:

- The route inventory was updated following publication of the Draft SEIS, to include authorized routes which were not previously included in the inventory evaluated in the Draft SEIS, to incorporate the results of field observations and monitoring by BLM staff, and to incorporate public comments on the presence or absence of specific routes. Changes made in response to field observations included elimination of washes that were later determined to not be actually used as routes. BLM continued to update the

inventory on an ongoing basis, as staff working in the field identified changes in conditions. The revised inventory was incorporated into modifications of the route networks for Alternatives 1 through 4, and in the development of the Proposed Action.

- BLM conducted detailed review of all alternatives to ensure continuity of the route network. This included identification, review, and, if necessary, correction of designations for small route segments which had been designated as transportation linear disturbances within a longer open route, and vice-versa. It also included review of route designations along single linear features that crossed off and then back onto public lands, to ensure that designations on either side of the adjacent land parcel were consistent.
- The universe of available route designations was expanded to allow designation of some routes as “Competitive”, or “C-routes”, to be used during authorized competitive events. The Alternative 2 through 4 route networks were reviewed and the C-route designation applied, where applicable. The C-route designation was also applied, where applicable, to routes in the Proposed Action.
- Global changes in designation were made in specific geographic areas, or for specific types of routes. These changes vary by alternative, depending on the objectives of that alternative:
 - Routes within lands acquired by the Department of Defense (DoD) for management as a conservation easement as compensation for the expansion of the Fort Irwin National Training Center. These routes are designated globally as transportation linear disturbances under Alternative 2. Under Alternative 3, the backbone network has been designated as open routes. Under Alternative 4, the designation in these areas is the same as under WEMO 2006 (the No Action Alternative), except for specific routes on which public comments were considered.
 - Routes within the China Lake expansion area. Under Alternative 2, all routes in this area were designated as transportation linear disturbances. Under all other alternatives, the routes are designated as they were under WEMO 2006 (the No Action Alternative).
 - Routes within Special Districts (CSA 70 and road districts in San Bernardino County). Under Alternative 2, these routes were designated globally as street-legal use only. Under Alternative 3, the route designations under WEMO 2006 were applied. Under Alternative 4 (the Proposed Action), the street legal designation was applied to San Bernardino County Public Works roads only, and all other roads were designated as they were under WEMO 2006.
 - Routes within the Mojave Trails and Sand to Snow National Monuments. Under Alternatives 2 and 3, all routes remained designated as they were in the Draft SEIS. Under Alternative 4, the routes are designated the same as the Alternative 3 routes in the Draft SEIS, but the network will be refined in future work efforts.
 - Routes within Lands Managed for Wilderness Characteristics. Under Alternative 2, routes remained designated as they were in the Draft SEIS, and the network will be refined in future work efforts. The same designations apply to the

Proposed Action. Under Alternatives 3 and 4, the routes are designated as they were under WEMO 2006.

- Routes with authorized rights-of-way. Under Alternative 2, these routes are globally designated as “authorized only”. Under Alternatives 3 and 4 (the Proposed Action), these routes are designated as “OHV Open”, with no sub-designation. Due to the digitization of many rights-of-way into GIS over the last few years, Alternative 1 was updated to reflect necessary access to these rights-of-ways (i.e., routes were changed from “transportation linear disturbances” to “OHV Limited”), which increased the overall mileage of open routes under this alternative from the previous baseline.
 - Routes within Small Tracts Act parcels. Under Alternative 2, these routes are globally designated as “street-legal only”. Under Alternative 3, these routes are designated as OHV Open, with no subdesignation. Under Alternative 4 (the Proposed Action), these routes are designated as OHV Open, with no subdesignation, unless the route overlaps with a San Bernardino County Public Works road. If the route overlaps with a San Bernardino County Public Works road, then it was designated as OHV Limited “street-legal only”.
- BLM reviewed and made appropriate changes to route designations under all alternatives based on updated resource and route use information. Based on public comments and efforts associated with the DRECP LUPA, BLM staff identified additional geographic-based resource data associated with soil erosion and biological resources, and incorporated these additional GIS layers into the analysis. Route designations were also modified in response to the identification of actual resource impacts, use conflicts, and/or use requirements through field monitoring, and as reported by the public in route-specific public comments. Responses to the generic (non-route specific) public comments are attached as Appendix I.
- In the Draft SEIS, the alternative route networks were developed to meet the management objectives associated with the applicable Multiple Use Class and/or special designations such as ACEC, DWMA, and other designation categories. Following the changes in land management classifications implemented through the DRECP LUPA, the designation of the Mojave Trails and Sand to Snow National Monuments, and other mechanisms, the route networks for Alternatives 2, 3, and 4 have been revised, and the route network for the Proposed Action has been developed, to meet the new management objectives.
- The DRECP LUPA implemented CMAs on a Land Use Plan Area-wide basis, as well as specifically for each of the different land management classifications. Newly authorized activities, such as authorization for new OHV routes, would be required to comply with those CMAs. Under WEMO 2006, a disturbance cap limit of 1 percent was applied in DWMAs. Under the DRECP LUPA CMAs, disturbance cap limits have been developed for all ACECs, not just those established for protection of the desert tortoise. In addition, the disturbance cap limits on the areas which were previously designated as DWMAs have been revised, and now range from 0.1 to 1.0 percent. Areas where existing development, including the route network, exceed the disturbance thresholds require mitigation, consistent with DRECP LUPA, unless the routes are currently authorized for use.

The process used to revise the route networks associated with Alternatives 2 and 3 and to develop the network associated with the Proposed Action, was as follows:

- A preliminary analysis of disturbance from the existing GTLF inventory was conducted to identify areas where disturbance cap limits had already been reached.
- For Alternatives 1 through 3, each alternative network was reviewed against disturbance caps in areas where the DRECP LUPA adopted new or modified existing caps, and the analyses re-performed with updated information compiled after the release of the Draft SEIS. Routes not currently authorized for use by the public were identified in areas with exceedances, to identify and apply area-wide mitigation measures, as needed. Authorized routes not yet included in the Draft SEIS were added to the system, for authorized users only.
- A preliminary Proposed Action was then generated through the GIS exercise, which included initial assignment of a preliminary designation and sub-designation of each route segment based on resource impacts, uses, and the disturbance parameters in a particular area. Maps of each of the subregion networks in a particular TMA for each of the alternatives were generated. These maps were integrated with additional on-the-ground, resource, recreational, and other information to provide context for the route-specific review, consideration of public input, and development of the Proposed Action.
- BLM continued to use the database to document potential resource impacts and user conflicts associated with the various alternative route networks. However, modifications were made to incorporate newly available resource inventory data, changes in land management designation, and changes to the available route sub-designations. These modifications were used to revise the previous analyses of the route networks for Alternatives 1 through 3 with respect to resources and user conflicts, as well as to serve as the basis for the analysis of the route network for Alternative 4.
- An additional assumption was made to support the analysis of impacts. In the analysis of Alternative 4 (the Proposed Action), it was assumed that street-legal use only routes are less impacting than routes also available for OHV users.

The Draft SEIS includes the Alternative 1 through 4 implementation strategies from the previous Draft SEIS, as updated. Route network and implementation strategy changes to Alternatives 1 through 4 are limited to those generated based on new information and analyses completed after the release of the Draft SEIS, unless otherwise indicated. Within Alternative 4, a Proposed Action has been generated in each proposed TMA in response to public input on the Draft SEIS alternatives, new analyses, and additional information. A draft of each of nine proposed TMPs was developed to implement the Proposed Action, including proposed implementation strategies and a map of the proposed routes for each TMA. Each TMP was reviewed to verify that the resulting proposed route network is viable, that the implementation strategy meets the objectives of the Proposed Action, that route designations and minimization measures are consistent with the 43 CFR 8342.1 criteria, with the goals and objectives of the CDCA Plan, as modified herein, and with the additional goals and objectives of the 2006 WEMO Plan and the 2016 DRECP LUPA. TMP adjustments were made based on area- and route-specific issues and public input that were not already identified and addressed through the GIS analysis and preliminary review. Management reviewed staff recommendations, made adjustments, and selected a Proposed TMP

for each area. Proposed TMPs are included with the Draft SEIS, and are being made available for a 45-day public review, prior to adoption of Final TMPs.

Comparison of 2003 WEMO Designation Project to 2015 SEIS GTLF Geo-Database

Table D.4 shows the WEMO 2003/2006 subregions with the mileages as reported in Table 2-7, Page 28 of the 2003 WEMO Designation Project compared to what is found in the 2015 SEIS GTLF geo-database. Because the boundaries of the 2003/2006 subregions do not correspond with current subregion boundaries, these numbers do not translate into the number of miles within the WMRNP subregions analyzed in this EIS.

Table D.4. Comparison of 2001 Inventory to 2015 GTLF Inventory

2003 Subregions	Acres of BLM Lands	2001 Total Miles Inventoried On BLM Lands	2015 Total Miles GTLF Inventory On BLM Lands
AMBOY	31469		
BIGHORN	69750		
COYOTE	103661	411	571
EL MIRAGE	30778	267	287
EL PASO	76961	465	718
FREMONT	126522	582	746
GRANITE	46195		
JUNIPER	22368	164 ¹	
KRAMER	83312	642	733
MIDDLE KNOB	36151	91	309
MORONGO	11042		
NEWBERRY-RODMAN	59717	210	293
NORTH SEARLES	49633		
ORD	122565	549 ²	701
PINTO	105121		
RED MOUNTAIN	119152	733	690
RIDGECREST	20918	328	458
SIERRA	32346		
SLEEPING BEAUTY	29004		
SOUTH SEARLES	23192		
SUPERIOR	116612	668	769

¹ Juniper mileage is for the post-2002 inventory conducted prior to the 2006 WEMO Plan DEIS

² Ord mileage is for the Ord Pilot Project

Appendix D Figures

This attachment to Appendix D displays some comparative NAIP photographs of the routes in the inventory in 2005 and 2012. The photographs were used to compare the on the ground changes since 2005, and also the digitizing accuracy for the 2006 WEMO Plan and the current WMRNP inventory completed in 2013. The aerial photography displays what was actually on the ground at the time of each flight, and the routes captured. New routes added to the inventory are indicated on the 2012 figures with dashed lines.

For example, Figure D.1 and Figure D.2 are photographs of the same area in the Coolgardie subregion flown in 2005 then again in 2012. Note that the dashed white lines on the 2012 figure show all the routes on public lands that were added to the inventory in 2013 for the current planning effort. Some red routes identified as closed in the 2006 WEMO Plan are not included in the 2013 inventory as closed routes because they were not found in either year's aerial photos, or else are substantially misaligned and have been captured as new routes.

The remaining NAIP Imagery Photographs are:

Figure D.3: El Paso Subregion 2005

Figure D.4: El Paso Subregion 2012

Figure D.5: Juniper Flats Subregion 2005

Figure D.6: Juniper Flats Subregion 2012

Figure D.7: Middle Knob Subregion 2005

Figure D.8: Middle Knob Subregion 2012

Figure D.9: Rands Subregion 2005

Figure D.10: Rands Subregion 2012

Figure D.11: Stoddard Valley Subregion 2005

Figure D.12: Stoddard Valley Subregion 2012

D.5 Description of Travel Management Areas and Subregions

One of the first steps in the off-road vehicle designation process in the Draft Supplemental Environmental Impact Statement (SEIS) was the identification of travel management areas (TMA) for travel network. Nine travel management areas provide the geographical framework for implementation of the travel network through specific transportation and travel management (TTM) plans. The factors used in the development of boundaries for TMA are primarily natural transportation boundaries (e.g. highways, jurisdictional, geographic boundaries). Because of the size of the West Mojave (WEMO) planning area, the nine TMAs were further subdivided into 35 subregions. The boundaries of the 35 subregions that compose the TMA consider the natural transportation boundaries, law enforcement patrol areas, designated management areas, and issue-driven factors.

By comparison, the 2006 WEMO Plan had identified 20 different subregions, which included much but not all of the West Mojave Planning Area, from which they examined 11 subregions to build the WEMO network. The 2006 WEMO subregions are based on similarities in certain biological characteristics, but do not readily lend themselves to on-the-ground implementation of

the transportation network. The 2006 WEMO subregion boundaries roughly correlate to the new subregion boundaries as feasible.

The number, configuration, and names of the subregions and TMAs were then modified following the designation of two new National Monuments, the Mojave Trails National Monument and the Sand to Snow National Monument, within the WEMO Planning area. Each of the monuments overlapped the boundaries of multiple subregions. To facilitate both analysis in this Revised Draft SEIS, and ultimate management of the travel networks in the monuments, BLM chose to modify the subregion boundaries so that each monument served as a stand-alone subregion. This required adjustment of the boundaries of the subregions and TMAs, as they had been evaluated in the Draft SEIS. The changes associated with the monuments are as follows:

- The Mojave Trails National Monument incorporated portions of Afton Canyon, Broadwell Lake, Pisgah Crater, and Wonder Valley subregions, and all of the Needles South subregion. The remaining western portion of the Pisgah Crater subregion was then absorbed into Mojave Trails National Monument. The result is that the Pisgah Crater and Needles South subregions have ceased to exist, and the boundaries of Afton Canyon, Broadwell Lake, Wonder Valley, and Newberry Rodman subregions have been modified.
- The Sand to Snow National Monument incorporated all of the Morongo Valley subregion, as well as portions of the Joshua Tree and Rattlesnake Canyon subregions. The result is that the Morongo Valley subregion has ceased to exist, and the boundaries of the Joshua Tree and Rattlesnake Canyon subregions have been modified.

The following discussion provides a general overview of each of the Travel Management Areas and the subregions within it, as they were analyzed in the Revised Draft SEIS.

Travel Management Area (TMA) 1

Afton Canyon Subregion

The Afton Canyon subregion comprises the northeastern-most and the northern middle-third portions of TMA 1, extending south from Interstate 15 to include the Manix and Mojave Fringe-toed Lizard ACECs and the northern two-thirds of the Cady Mountains Wilderness Study Area. It is accessed by the Afton or Basin exits off of Interstate 15 or from Crucero Road on the south. It is bisected by the Mojave River, and bounded on the east by the Rasor OHV Open Area and the Mojave National Preserve and, to the south of the Preserve, the old Tonapah and Tidewater (T&T) Railroad and the adjacent Crucero Road that continue south along the boundary of the Broadwell Lake subregion to Ludlow, CA. The Afton Canyon subregion also extends to the west boundary of the Manix Paleontological ACEC. The southern boundary of the subregion is a major wash which begins at Crucero Road on the east, becomes Hidden Valley Road, and extends to private residences surrounded by agricultural lands on the west, south of the Manix ACEC.

Within the Afton Canyon subregion, the CNDDDB documents the occurrence of five special status species (desert tortoise, golden eagle, pallid bat, fringed myotis, and Nelson's bighorn sheep) and/or suitable habitats. Although present, only a small amount (approximately 2 acres) of desert tortoise Critical Habitat is found within this subregion.

In Afton Canyon, the Mojave River flows aboveground for portions of the year and supports riparian woodlands with an unusual riparian plant community. The Mojave River also flows

along the northernmost portion of the Mojave Trails National Monument subregion. It hosts many rare bird species, provides much needed riparian sustenance for all desert wildlife, and the canyon cliffs are home to nesting raptors. The Mojave River meanders through the canyon along a broad, flat sandy floor a few hundred feet wide, framed by its scenic vertical walls with multiple colors and interesting features. The river flows all year long on the west side of the canyon. A thick ribbon of plants comprised of native and invasive species lines the riparian zone and supports a wide diversity of wildlife including bighorn sheep, mountain lion, badger, coyote, raptors, and numerous small mammals, reptiles, rodents and birds. There is frequent vehicle and train traffic in and through the canyon.

The Mojave River also forms a primary prehistoric, historic, and modern transportation corridor from the eastern Mojave basin and ranges province into the West Mojave desert, and evidence of this use is present on the landscape. Humans in the Afton Canyon area left a record in the form of stone tools and pottery, some of it estimated to be over 8,000 years old. Spanish missionaries were the first documented Europeans through the area in 1776.

Primary activities in Afton Canyon include camping in the developed fee campground and group camp site, river play, hiking, historic Mojave Road touring, equestrian riding, bird watching, bighorn sheep and wildlife viewing, photography, nature study, rock collecting, scenic touring, 4x4 exploration, geo-caching, and hunting. Visitor facilities include public lands for camping and interpretative signs and kiosks.

The Mojave Road route takes visitors through Afton Canyon and a portion of the Mojave National Trails Monument subregion. It is regularly traveled by recreational tourists seeking to understand the experiences of earlier historic travelers and retrace the ancient and historic trail. Remnants can be followed from the Colorado River to the site of the old Camp Cady further upstream along the Mojave River, located in the adjacent Barstow subregion.

The designated river crossings are sometimes impassible because of high water. Use of the route at these times creates sedimentation in the river, which dissipates over time as the flows continue. Because of plantings by the railroad and downstream depositions of seeds, invasive tamarisk plants have been a recurring problem in the river channel. An ongoing restoration program has been underway since 1990 to restore and maintain the river channel riparian vegetation. Much of the channel has been fenced to prevent OHV intrusions where restoration activities have taken place.

The Baxter Mine, a large iron mine, operates at the northern end of the subregion and large trucks regularly access the mine via Basin Road. Other mineral exploration occurs in the area as well. Grazing historically has occurred in this area, but the only obvious evidence remaining is in areas of range improvements. The Afton Canyon subregion is known for its distinctive recreational opportunities, such as the OHV route along the historic Mojave Road, the camping opportunity at the improved campground, hiking, equestrian, and rock hounding opportunities.

The iron mine is accessed from Interstate-15 and Basin Road at the eastern boundary of this subregion. Basin Road is a maintained County Road that is used by both mining trucks and casual users on their way to Afton Canyon or the Razor OHV Open Area. Once the County Road splits from the OHV route, the County Road continues up to the mine entrance. Several OHV routes are located off of this last stretch of County Road on the way up to the mine. These routes are both on public lands as well as the adjacent patented mine land, and are a potential safety issue for OHVs and the large mine trucks that travel up and down the County Road.

Broadwell Lake Subregion

The Broadwell Lake subregion forms the middle southern third of TMA 1. Its southeastern corner is bounded by Power Lane (road) and the Cady Mountains WSA. County Road 20795 establishes the eastern vertical border until the subregion connects with Afton Canyon subregion. The northern border is defined by a wash, which follows the public lands boundary back south to Interstate-40, and forms the southern boundary of the subregion. Troy Lake is north of Interstate 40 in the subregion near its western boundary, and the subregion is bisected by an east-west utility road that forms the southern boundary of the Cady Mountains WSA.

The larger sandy washes draining the southern Cady Mountains support disjunct occurrences of white-margined beardtongue and crucifixion thorn, both sensitive plant species. The subregion includes the occurrence of the following special status wildlife species and/or suitable habitat: Bendire's thrasher, burrowing owl, golden eagle, Mojave fringe-toed lizard, and Nelson's bighorn sheep. In addition, the southern Cady Mountains is also home to the bighorn sheep herd and lambing area that crosses between this subregion and the Mojave National Trails Monument subregion. The Broadwell Lake subregion also includes some of the bighorn corridors, from the lambing areas and points southeastward.

Commercial activities in the subregion include the development and maintenance of major linear utilities, which include the transmission line and pipeline along the southern boundary of the Cady Mountains WSA. A solar facility had been permitted in the southern portion of the subregion, but did not get developed due to a lack of available electrical transmission capacity. Historic mineral prospecting has occurred, particularly in the southeastern portion of the subregion, and portions of the subregion were part of the cattle grazing allotment that extends northward into the Afton Canyon area.

Due to the remoteness of the Broadwell Lake subregion and the relative inaccessibility of the Cady Mountains WSA, this subregion receives light recreational use. Recreation activities include recreational prospecting, rockhounding, wildlife viewing, and vehicle touring.

One major issue is the lack of a legal crossing of the railroad tracks north of Interstate 40 off Hector Road. While the lack of legal railroad crossings is an issue everywhere in the West Mojave, the lack of alternative north-south access for miles makes it more problematic at this location.

There has been some route proliferation in the southwestern portion of the subregion near Troy Lake and the adjacent interface with adjacent private lands. However, overall the subregion has few access conflicts due to the relatively light use it receives.

Barstow Subregion

The Barstow subregion is bounded by Interstate 40 to the North. Public lands along the Mojave River that retain their riparian integrity provide additional habitat and potential intermittent water source for wildlife. One of the other two locations where the Mojave River can flow aboveground is Camp Cady Wildlife Area, located within and adjacent to a portion of the Mojave River approximately 23 miles east of Barstow, California, about 2.5 miles southeast of the Harvard Road exit on Interstate 15. The Wildlife Area is state land, administered by the California Department of Fish and Wildlife, and is managed for sensitive riparian plants and animals, including a fish known as the Mojave tui chub. The Mojave Fringe-toed lizard also

makes its home in the sandbars adjacent to the Mojave River in this subregion and further northeast along the river in the Afton subregion.

Special status plant species occurring in the subregion include the Mojave monkeyflower and Parish's phacelia. Approximately 650 acres of a designated ACEC to protect the Mojave monkeyflower overlaps with the subregion. The subregion includes the occurrence of the following special status wildlife species and/or suitable habitat: burrowing owl, desert tortoise, golden eagle, and Le Conte's thrasher. Approximately 3,337 acres within this subregion has been designated as an ACEC to protect the Mojave fringe-toed lizard.

Camp Cady is also historic military camp dating from the 1860s. Although the Old Spanish Trail and the Mojave Trail continue adjacent to the river, it is difficult to follow the trails due to the intermittent land ownership patterns. Evidence of prehistoric and historic use of these trails and the riverine area has generally been lost over time due to repeated intermittent Mojave River flood flows.

Most public lands in this area have been disposed of, and those that remain in the subregion are primarily located along the Mojave River corridor, with a few other scattered locations that are surrounded by private land. Most of the public lands that remain along the river have been designated as one of the units of the Mojave Fringe-Toed Lizard ACEC.

The majority of lands in this area are private, including some of the best agricultural lands in the West Mojave as well as small towns and rural developments that are concentrated near the two Interstate highways. The MCLB military depot and a small, rural commuter airport can also be found in the subregion. A power-plant is located in the subregion, which is crossed by a major north-south transmission corridor, including both electrical and pipeline transmission facilities. There is little topography in the eastern two-thirds of the subregion. Closer to Barstow, Elephant Mountain dominates the skyline, along with the many communication sites on its back.

Mojave Trails National Monument

The Mojave Trails National Monument subregion is bounded on the north by the Union Pacific Railroad, on the south and southwest by the 29 Palms MCACC and 29 Palms Hwy., on the west by County Road 20795, and Crucero Road, and to the east, a long boundary is formed by the National Trails Highway and Amboy Road. The Mojave Trails subregion has an additional section not touching the larger area of the subregion, which is bounded by Ironage Road and Amboy Road to the east, and bisects the Sheephole Valley Wilderness in its southeastern-most corner. This subregion was created for the West Mojave Route Network Project to better manage the national monument for the resources, objects and values that it was designated for by President Barack Obama in February 2016. The Mojave Road or Mojave Trail is a historic route across the Mojave Desert, linking watering holes between the Colorado River and San Bernardino; the Mojave Road was used by Native Americans and later served Spanish missionaries, explorers, foreign colonizers, and settlers from the 18th to 19th centuries. The Old Spanish Trail was a historic trade route which also follows the Mojave Road through the Afton subregion, and which connected the settlements near Santa Fe, New Mexico with those of Los Angeles and southern California. The segment of the Old Spanish Trail across the Mojave Desert was considered one of the most arduous and difficult for pioneers to navigate, making the Afton Canyon a special oasis on the arduous journey.

This area is characterized by its geologic features, deep canyons carved out of the badlands in the desert landscape, formed when Lake Manix, located at the eastern edge of the subregion, drained 19,000 years ago. The centerpiece of the area is the Afton Canyon Natural Area ACEC, which was designated in the CDCA Plan in recognition of its unique stratigraphy and its unrivaled combination of riparian, geologic, cultural, transportation, and recreational features in the West Mojave. The most predominant feature of the Afton Canyon ACEC is the Mojave River, which forms a 600-foot deep canyon as it flows aboveground here, one of only three places where the Mojave River does so. To the west of the Afton Canyon ACEC, most of the public lands that remain along the river have been designated as units of the Mojave Fringe-Toed Lizard ACEC. The Cady Mountains Wilderness Study Area (WSA) overlaps the southern third of the ACEC and extends further south towards the east boundary Broadwell Lake subregion. The WSA is characterized by a series of detached ridges and deep valleys with the highest peak being Cady Mountain. OHV travel to and from the ACEC campgrounds north of the WSA have resulted in route proliferation in various areas away from the river. The lack of a loop route to the campground has resulted in campers creating loop routes on their own through the Afton Canyon ACEC located in this subregion. The routes south to the Cady Mountains WSA are very scenic. The primitive trails within the WSA are very sandy or very steep and rocky in places, and can be difficult to follow. Some route proliferation has resulted from motorcyclists crossing the river from the Afton Campground area and creating trails up steep canyons to the top of the peaks in the Cady Mountains in the WSA.

The stratigraphy provides gorgeous scenic vistas as the traveler enters the canyons of the Mojave River and as one travels in the more remote canyons in the WSA to the south in the Cady Mountains. The Cady Mountains is home to a bighorn sheep herd and lambing area. Bighorn travel from the remote lambing areas in the WSA to the Mojave River regularly to drink, and sunup or sundown can offer spectacular views of sheep offset by the canyon landscape. Activities in the middle third of this subregion, particularly in the Cady Mountains WSA, are wildlife viewing and rockhounding. The WSA is widely known as a premier rockhounding location in the West Mojave. The Mojave Trails subregion also provides bighorn corridors between the lambing area and points northward and southeastward.

The middle portion of the subregion includes Sleeping Beauty Mountain, a part of the southern Cady Mountains. South of Sleeping Beauty Mountain is a broad, scenic valley named Hidden Valley which extends for six miles. A portion of the middle section of the subregion is a large, sweeping bajada sloping southward to Interstate 40. The lava rock interspersed with sandy soils provides habitat for unusual plants such as crucifixion thorn and suitable habitat for the Mojave fringe-toed lizard. Access to this part of the subregion is generally from Interstate 40, via Lavic off-ramp.

Access conflicts can occur in this area of the Mojave Trails subregion between the mining operation and casual users which occasionally trespass onto private lands. Because of the intermittent nature of the mining operation, this issue is not as problematic here as at some other active mines. Casual spelunkers can also cause damage to the fragile biological resources in the lava tubes.

The southern portion of this subregion was previously Needles South subregion. It consists of a narrow swath of land about 12 miles long and 2-3 miles wide running in a NW-SE arc from Interstate 40 just east of Bagdad on the north, around the northeastern and east side of the 29 Palms MCACC, terminating south of Interstate 62 adjacent to Joshua Tree National Park. The

eastern boundary of the subregion is Amboy Road in the north, and the Sheephole Valley Wilderness Area and Joshua Tree National Park in the south. It includes the northwest and southwest corners of public lands managed by the Needles Field Office in San Bernardino County, California.

This area comprises a relatively lower and drier desert basin area, and a portion of the historic Route 66 transportation corridor (National Trail Highway) providing access from Barstow to Needles and points east. The most prominent feature is Amboy Crater National Landmark. The Sheephole Valley Wilderness Area substantially limits access options in the southern half of the subregion.

The drive down Amboy Road is one of the most scenic in the Mojave Desert during spring due to the spectacular displays of wildflowers along Amboy Road. Amboy Crater National Natural Landmark marks a majestic black lava crater rim that towers over the adjacent bajada landscape, surrounded by a field of black rock. A few locations of the BLM-sensitive White-margined beardtongue are found north of 29 Palms MCACC in this subregion. This subregion also includes approximately 1,197 acres of Critical Habitat for the desert tortoise.

The area includes pipelines, powerlines, and a railroad, and its boundaries are marked by major transportation corridors. One active mine, Amboy Mine, and scattered ruins of large mining operations can be found off of Amboy Road and Route 66. There is little opportunity for OHV Touring in this subregion. Most recreationists are in the Needles subregion either to visit the Amboy Crater National Natural Area, to view wildflowers, or to park at a trailhead of one of the wilderness areas.

There are few access conflicts in this area due to its relatively small size and the relative light use it receives.

Within the Mojave Trails National Monument subregion, the CNDDDB documents the occurrence of ten special status species (desert tortoise, golden eagle, pallid bat, fringed myotis, Mojave monkeyflower, burrowing owl, Gray vireo Mojave fringe-toed lizard, southwestern pond turtle and Nelson's bighorn sheep) and/or suitable habitats. Although present, only a small amount (approximately 2 acres) of desert tortoise Critical Habitat is found within this subregion. The CNDDDB reports approximately 27,000 acres of historic occurrence data within this subregion and the adjacent Afton Canyon subregion for Nelson's bighorn sheep. In addition, approximately 12,000 acres within this subregion have been designated as an ACEC to protect the Mojave fringe-toed lizard.

Historically, the travel route through Afton Canyon has utilized the sandy riverbed through large portions of the canyon. The route has been moved out of the riparian area, and uses either side of the river, but vehicles still must cross the river to traverse the entire canyon area and to avoid a major railroad crossing at the east end of the canyon. The railroad through the canyon runs adjacent to the travel route through much of the canyon; the private railroad crossing at the east end of the canyon between the Natural Area and the Rasor OHV Area is a popular shortcut used instead of the official route across a sandy portion of the river, in order to continue south to the Cady Mountains and Interstate 40. The private crossing area is more dangerous than most crossings because multiple tracks come together at this location so that to get from one side to the other, at least 3 sets of tracks must be crossed.

Primary activities in Mojave National Trails Monument include camping in the developed fee campground and group camp site, river play, hiking, historic Mojave Road touring, equestrian riding, bird watching, bighorn sheep and wildlife viewing, photography, nature study, rock collecting, scenic touring, 4x4 exploration, geo-caching, and hunting.

Visitor facilities include two ACEC campgrounds in the norther portion of the subregion, an equestrian campground, and interpretative signs and kiosks. The Mojave National Trails Monument campgrounds are popular and regularly used by regional residents and travelers on long distance multi day camping trips due to easy access off of Interstate 15. From the campground, an easy loop through the canyon and up Basin Road brings the traveler back to the Interstate. The campground is also used to stage OHV over to the adjacent Rasor OHV Open Area in Afton Canyon subregion. The Mojave Road is one of the primary means of travel for visitors to experience this subregion.

OHV travel from the ACEC campgrounds has resulted in route proliferation in various areas away from the river. The lack of a loop route to the campground has resulted in campers creating loop routes on their own through the ACEC. The routes south to the Cady Mountains WSA are very scenic. The primitive trails within the WSA are very sandy or very steep and rocky in places, and can be difficult to follow. Some route proliferation has resulted from motorcyclists crossing the river from the Afton Campground area and creating trails up steep canyons to the top of the peaks in the Cady Mountains in the WSA.

Travel Management Area 2

Darwin Subregion

The CNDDDB documents the occurrence of four special status species (Le Conte's thrasher, pallid bat, Death Valley sandpaper-plant, and Nelson's bighorn sheep) and/or suitable habitat within the Darwin subregion. There are approximately 277 acres of BLM designated habitat for the Le Conte's thrasher located near the western boundary of this subregion. Additionally, the Darwin subregion contains the only known occurrence data for the Death Valley sandpaper-plant within the WEMO planning area.

Due to the area being bounded on the south by the China Lake Naval Weapons Center accidental vehicle trespass is an occasional issue in the area along with private property trespass within the community of Darwin itself.

The subregion is comprised of open desert expanse that is sporadically interrupted topographically by the upper extent of the Coso Range, the Darwin Hills, and other unnamed hills. The Darwin Falls Wilderness is on the north east flank of the area which provides opportunities for primitive and unconfined non-mechanized forms of recreation. The area is popular for its backcountry vehicle touring and exploration of historic mining sites, primitive camping, packing, hiking, camping, rock collecting, wild horse viewing, and photography. Popular recreational destinations include China Gardens spring, Lower Centennial cabin site, and the historic mining community of Darwin.

North Searles Subregion

The North Searles subregion, is located approximately 28 miles northeast of Ridgecrest, immediately north of Pioneer Point and the community of Trona. It is bounded by Slate Range

Crossing on the north, the crest of the Slate Range on the east, the Inyo-San Bernardino County line on the south, and the China Lake Naval Air Weapons Station (NAWS) boundary on the west.

The Great Falls Basin ACEC, Argus Mountains wilderness, and the Great Falls Basin Wilderness Study Area are surrounded by this subregion on three sides. The general region consists of the upper part of Searles Valley, part of the ancient lakebed above Searles Lake. It is encircled by two prominent mountain ranges on the west, and east and north - the Argus and Slate ranges, respectively. The area is made up almost entirely of gravel, sand, and silt lakebed sediments. Elevations start as low as 1,600 feet on the southern Inyo-San Bernardino County boundary, climbing to more than 5,300 feet above sea level to the west in the Argus Range and to 4,950 feet above sea level in the east along the crest of the Slate Range.

Common plant communities predominate in this area, including Mojave saltbush and creosote bush scrub in the lowlands, with rabbitbrush dominating communities in the washes. However, Joshua trees are found in sparse stands at a few locations at upper elevations in the Argus and Slate ranges. The subregion also contains the Indian Joe Canyon Ecological Reserve, a Department of Fish and Wildlife property protecting significant riparian habitat. Smaller riparian communities exist at isolated seeps and springs throughout the Argus Range. These communities, made up mostly of willow and baccharis, comprise the sole critical habitat for a threatened species, the Inyo California towhee. This is a subspecies of towhee endemic only to the southern Argus Range.

Due to its location along the highway to Death Valley National Park (Highway 178) and close proximity to the community of Trona, visitation is generally high throughout the year, especially in the cooler months. The many small seeps and springs attract upland game hunters, as well as more casual visitors from the surrounding local area.

Casual OHV recreational use involving dune buggies, quads, and motorcycles is popular within the subregion. The majority of these users are local residents from Trona and nearby communities or from Homewood Canyon. Several commercial 4-wheel drive, dual sport motorcycle and equestrian tours, and equestrian competitive endurance rides occur in this area.

Numerous dispersed camping opportunities exist along the route network. While some staging areas off of Highway 178 exist, most off road vehicle enthusiasts stage from their own homes in nearby communities. There are many unmaintained dirt roads that directly connect these communities to the route system in the area. Virtually all trails in this subregion accommodate full-size 4x4 vehicles, as opposed to single-track motorcycle routes. Many of these trails offer challenges requiring strong 4x4 driving skills, particularly in rocky and mountainous stretches of the Slate and Argus Ranges.

Gem and mineral collecting also occurs throughout the Argus and Slate Ranges. Trona is home to an interpretative museum and hosts an annual gem and mineral show. Other uses occurring within the subregion are birdwatching, climbing, equestrian rides, hiking, target shooting, hunting, and rockhounding. Regular bird censuses are taken in Indian Joe Canyon ecological preserve by volunteers, and the Great Falls Basin is particularly popular with backpackers.

Due to its location near several small, rural communities, trash and graffiti, including in sensitive areas, are ongoing issues, requiring regular response. Route proliferation, such as vehicle trespass to Austin Springs at the base of the falls and to various unauthorized hill climbs in the

immediate vicinity are ongoing issues in the Great Falls Basin ACEC. Fences have been built at several springs in the area to protect towhee critical habitat from damage by wild burros, horses, or vehicles.

South Searles Subregion

The South Searles subregion, is located approximately 8 miles northeast of Ridgecrest, immediately north of Randsburg Wash Road and the Spangler Hills Open Area. Randsburg Wash Road defines the subregion on the south, the China Lake Naval Air Weapons Station (NAWS) boundaries on both its east and west sides, and by the Inyo-Kern County line on the north. Numerous landowners own the private lands. The Trona Pinnacles National Natural Landmark and ACEC are surrounded by the subregion on all four sides.

The general region consists of the lower part of Searles Valley surrounding Searles Lake. It is encircled by two prominent mountain ranges, the Argus and Slates, on the west and east, and by the Spangler Hills on the south. The area abuts the upper half of Searles Valley above Searles Lake to the north - an area covered by the North Searles subregion. The area is made up almost entirely of gravel to sandy to silty lakebed sediments. Elevations within this subregion are generally quite low, keeping to within 1,600 to 2,500 feet on the valley floor, to more than 2800 feet at selected high points in the Argus Range. Visitation is generally high, particularly in cooler, winter months, due to the presence of the Trona Pinnacles, and the subregion's general location along a highway to Death Valley National Park (Highway 178) and close proximity to the communities of Trona and Ridgecrest. Mojave saltbush and creosote bush scrub are the predominant plant communities on the valley floor, with rabbitbrush dominating plant communities in upper elevation washes.

The South Searles subregion is located within the Ridgecrest Mohave ground squirrel key population center. Access to this subregion is primarily from Highway 178 and its Trona-Wildrose extension. The subregion can also be accessed from the Randsburg-Wash road, north of the Spangler Hills Open Area.

In general, the area absorbs a lot of casual OHV recreational use involving dune buggies, quads, and motorcycles. Most of these users are local residents. They come from Trona and the associated communities of West End, Argus, and Pioneer Point, or from Homewood Canyon. Some gem and mineral collecting also occurs, primarily in the foothills of the Argus Range on the western edge of the subregion. In October, the Searles Valley Gem and Mineral Society put on a Gem and Mineral Show. The subregion is also used for interpretative museum and commercial 4-wheel drive, dual sport motorcycle and equestrian tours.

Vehicles are permitted to pull off within 300 feet of a route to make camp in the subregion, except in the vicinity of the Pinnacles where visitors are asked to camp only in already impacted sites. Laws and regulations prohibit camping or staying within 200 yards of waters, which includes the natural seeps and springs in the Argus Range. Currently, all access routes on public land in this subregion comply with applicable law.

Most trails in the subregion are full-size 4x4 as opposed to quad or single-track routes, which exist only in the extreme southwestern corner of the subregion. While some staging areas off of Highway 178 exist, most off-road vehicle enthusiasts probably stage from campsites within the Trona Pinnacles or from various campsites within the Spangler Open Area just outside the subregion. Local people most likely enter this area directly from their homes in West End, South

Trona, and Argus. For access to good riding areas, they must cross highway 178, traveling approximately 7 miles south of town to reach the Pinnacles or more than 12 miles to reach the Spangler Open Area.

The area offers very few opportunities for backcountry touring and sightseeing outside of the Trona Pinnacles National Natural Landmark. Climbers have not been observed in great numbers within the subregion. Equestrian use is tied to spring sources or in the case of organized, commercial and/or competitive events to regular vehicle routes for staging the necessary water and periodic veterinarian checks. Most people who hike in the area are locals who are simply exploring their own backyards.

Access to hunting areas is limited within the subregion. Hunting thus requires a good deal of hiking in the subregion. Hunters are known to pursue chukar over steep rocky terrain for long distances. Chukar and California quail are the primary targets although jackrabbits and mourning dove are hunted as well.

Non-motorized trails for mountain bikers do not exist in the area. However, mountain biking is popular along Highway 178 and with campers at the Pinnacles.

Rockhounding occurs throughout the area, in specific localities, mostly in the foothills of the Argus and Slate Ranges. During October's Gem and Mineral Show, the Searles Valley Gem and Mineral Society offers information and several tours to various collecting and other sites of local interest in the valley.

Target shooting occurs throughout the area and is generally permitted wherever the terrain offers a safe backstop. However, the ACEC Plan for The Trona Pinnacles specifically prohibits target shooting anywhere within the vicinity of the National Landmark.

Sierra Subregion

The Sierra subregion, located approximately 10 miles west of Ridgecrest, is defined by Highway 14 on the east, Highway 178 on the south, the Bakersfield BLM Field Office and Sequoia National Forest boundaries on the west, and the Class L and Class M boundary in the Coso Junction and Rose Valley area on the north. The Owens Peak and Sacatar Trail wilderness areas (49,009 and 33,132 acres, respectively) are located within this subregion.

All or parts of three ACECs are found within the Sierra subregion: Fossil Falls, Sand Canyon and Last Chance Canyon. Route designation for Fossil Falls and Sand Canyon was designated by their management plans and is not changed by the West Mojave Plan. For the Last Chance Canyon ACEC, Alternative A would adopt the 1985-87 route designations, except for the east access to Mesa Springs, which was recommended for closure by the 1982 ACEC management plan. This network would be effective on an interim basis, until the completion of a collaborative and community-based program to develop a revised motorized vehicle access network for the El Paso Mountains, including all of the Last Chance Canyon ACEC outside wilderness. Participants in this effort would include the City of Ridgecrest, Kern County, BLM and interested stakeholders. When completed, the revised network for the El Paso Mountains would be incorporated into the CDCA and West Mojave Plans through an amendment.

The region consists primarily of the eastern face of the southern Sierra Nevada. Elevations range from 2,400 feet along Highway 14 to 8,453 feet above sea level on top of Owens Peak. The mountainous terrain has deep, winding, open and expansive canyons, many of which contain

springs with extensive riparian vegetation. This area is a transition zone between the Great Basin, Mojave Desert and Sierra Nevada ecoregions. Vegetation varies considerably with a creosote bush scrub and Joshua tree woodland community on the bajadas, and cottonwood and willow riparian vegetation in the canyons at lower elevations. Above 5,000 feet, the canyons and ridges are dominated by pinyon-juniper woodland with sagebrush and grey pine.

The Sierra subregion includes the occurrence of the following special status species and/or suitable habitat:

- Plants
 - o Charlotte's phacelia
 - o Dedecker's clover
 - o Hall's daisy
 - o Mojave tarplant
 - o Nine Mile Canyon phacelia
 - o Owen's Peak lomatium
 - o Sanicle cymopterus
 - o Spanish needle onion
- Wildlife
 - o Burrowing owl
 - o Golden eagle
 - o Le Conte's thrasher
 - o Least Bell's vireo
 - o Mohave ground squirrel
 - o Northern sagebrush lizard
 - o Swainson's hawk

Approximately 63,934 acres of the Coso Range-Olancho Mohave ground squirrel core area is located within the northern portion of the subregion.

Primary recreation activities and resource uses occurring in the area are: domestic sheep and cattle grazing, mineral exploration, utility and aqueduct corridor maintenance, communication site maintenance, recreational vehicle touring/sightseeing, dispersed hiking and camping, rock climbing, upland gamebird and deer hunting, bird watching, wildflower viewing, rock hounding, mountain biking and equestrian use. Much of this subregion is designated as wilderness.

The proposed route designations provide for vehicle access to the following features: Owens Peak Wilderness, Sacatar Trail Wilderness, Short Canyon, Sand Canyon, Ninemile Canyon, the LADWP Aqueduct, No Name Canyon, and Indian Wells Canyon. They also provide for vehicle access to dispersed camping throughout the Eastern Sierra. The designations provide access to hiking trailhead opportunities along the boundary of the Owens Peak and Sacatar Trail

Wildernesses, Short Canyon, Sand Canyon and No Name Canyon. The designations provide access to staging areas for mountain bike and equestrian recreation throughout the subregion.

The proposed designations provide for vehicle access to and through the subregion's prime chukar, Gambel's quail, and deer hunting areas. Vehicle access to popular rock hounding sites and historic Depression-Era mining sites in Indian Wells Canyon are provided. Also, vehicle access for livestock operations is provided.

The proposed designations provide for vehicle access to every known active mineral exploration area, and provide access along each authorized utility and aqueduct corridor within the area. Vehicle access to all authorized communication sites are also provided for.

Travel Management Area 3

Juniper Flats Subregion

The Juniper Flats subregion is located east of the City of Hesperia, south of the Town of Apple Valley, and south of State Route 18 up to the southern boundary of the WEMO Planning Area in the foothills of the San Bernardino Mountains. The San Bernardino National Forest comprises the southern boundary of the subregion. The Mojave River runs adjacent to the western boundary, and California State Highway 18 forms the northern and eastern boundaries. The entire subregion is located in San Bernardino County, California.

The Juniper Flats subregion is defined by a large block of BLM-managed public lands that abut the San Bernardino National Forest and nearby Deep Creek on the south, and private lands on the east, west, and the north. Juniper Flats is a diverse landscape of mountains, canyons, impressive boulder fields, and washes. Elevations range from 3,000 feet to 6,000 feet. The northern boundary at the highway bisects Fifteen Mile Valley and Rabbit Dry Lake.

In the subregion is located the Juniper Flats ACEC, on a large plateau overlooking Victor Valley that has been a Native American habitation and special use site due to its ample resources and its strategic view of the valley. The ACEC includes one of several watercourses that seasonally flow into the dry lakebeds in the valley floor, with springs and an extensive stretch of riparian habitat in a dense stand of junipers.

Other watercourses running from the mountains to the valley fairly regularly are located in a series of canyons east of the ACEC, including Grapevine Canyon and Arrastre Canyon. A small waterfall is located at the northern end of Arrastre Canyon before it leaves public lands.

The Juniper Flats Cultural ACEC is on the west side of the subregion, and includes a significant Native American habitation and special use site, on a large plateau strategically overlooking Victor Valley. Middens and sub-surface deposits characterize much of the ACEC. These deposits indicate that that Native Americans used large riparian areas as sites for tool manufacture, cooking, food processing, shelter, and hunting. Archaeologists believe that the diversity of multiple abundant game species, such as black-tailed jackrabbits and rabbits, game birds, mule deer, and plant foods from Yucca fruits, pinyon seeds, Eriogonum seeds, and native grass seeds, in combination with available fresh water made Juniper Flat an important pre-historic site. The ACEC includes one of several main watercourses that seasonally flow into the dry lakebeds in the valley floor below, with multiple springs and an extensive stretch of riparian habitat in a dense stand of junipers.

A BLM bird survey was conducted in 2001 in the central portion of the subregion and detected 61 avian species in Grapevine Canyon and 73 species in Arrastre Canyon. In addition to the California quail and other breeding gamebirds, the canyons are used extensively by neotropical migrants. Federally listed, Southwestern Willow Flycatcher's were found on these surveys of Arrastre Canyon. The flycatchers were seen during the breeding season and were exhibiting territorial behavior, but breeding was not confirmed.

The subregion is a productive ecosystem that provides ample riparian and upland habitat for large and small mammals and predators, and many other species, including habitat for the San Diego horned lizard and the gray vireo, two unlisted species proposed for protection in the West Mojave Plan. Soils are extremely erosive in most areas due to the topography in the area. Major historic fires in the area in the 1990's which scoured the landscape of its vegetation, including much of its remaining Juniper Woodlands, has increased the erosive potential of much of the eastern half of the subregion.

The CNDDDB documents the occurrence and/or suitable habitat of four special status plants (cushenbury buckwheat, cushenbury milk-vetch, Mojave tarplant, and Parish's daisy) within the subregion. Additionally, critical habitat is found for three of the four species (cushenbury buckwheat, cushenbury milk-vetch, and Parish's daisy).

The subregion is dissected by a major power line which runs from Hesperia to points east of Juniper Flats. Four large patented or unpatented limestone operation pits are located where BLM-managed public lands and forest service lands meet at the Juniper Flats subregion's south central and southwestern boundaries. Road access to these large active mining pits from nearby processing facilities and the transportation network in the valley beyond occurs on improved roads with a heavy volume of large truck traffic. Small exploratory mining activities occur in the central and eastern portions of the subregion, and a large disturbed, abandoned mine is located on the west end of the subregion that is occasionally used for camping. Seasonal cattle grazing also on the Round Mountain Allotment in the area, and occasional land use permits are approved for transient, seasonal apiary farms. Small to moderately-sized communication sites in the subregion serve the communities in the valleys below.

Recreation activities include hiking, dispersed camping, bird watching and hunting, horseback riding, four-wheel drive vehicle touring, motorcycle touring, mountain biking, and wildlife and wildflower viewing. An equestrian campground is located on nearby forest service land and a network of equestrian trails runs up a ridge above Arrastre Canyon in the Juniper Flats subregion and around Grapevine Canyon and Round Mountain. The area lacks a staging/parking area for horse trailers which limits use to local equestrians. Visitors can camp at Bowen Ranch, a private facility, and also at developed facilities on Forest Service lands. A small, undeveloped camping area is located above Cottonwood Springs in this subregion.

The riparian areas and numerous springs in Juniper Flats, and the hot springs located along Deep Creek on adjacent forest service lands are popular hiking destinations. A parking area is located above the Deep Creek trail, and continuing on the other side of Deep Creek is hiking access to the Pacific Crest Trail.

The 1995 and 1999 fires burned over the entire northeastern third of the subregion, leading to a temporary closure of the area in and around the Juniper Flats ACEC until vegetative recovery had begun. Long-term changes in vegetative cover were triggered or accelerated by these fires, resulting in increased erosion potential and spread of invasive species. These issues can be

exacerbated by OHV use, particularly use off of routes. Some routes may need additional flood control devices to control erosion that may occur during heavy rains.

Safety issues can occur where OHV's and mountain bikes use or cross limited-access trucking routes on the east side of the subregion. Topography is such that visibility of the road ahead is impaired in locations, and trucks traveling downhill have a limited ability to stop quickly in response to unforeseen traffic. Authorized traffic is controlled on these roads, but OHV's and mountain bikes may still occur on undesignated route crossings. Juniper flats is an area of significant unauthorized route use, and is currently a management "hot spot" subject to intensive management focus.

In addition, motorcycles and equestrians or hikers use the same trails in many places, resulting in startling of horses or motorcyclists, and aesthetic conflicts. Some anecdotal evidence exists that either supports or does not support startling of animals by motorcyclists and vice versa. Some horses have become accustomed to approaching motorcycles while others may not be. Hikers have complained that the aesthetic experiences in this subregion do not approach a backcountry experience due to the noise and visual effects of OHV vehicles. Another OHV conflict occurs where motorcycle routes have received 4x4 vehicle use, making them difficult to maintain as motorcycle-only OHV routes.

Trespass issues occur in this subregion because of the relative popularity of the area both as a destination and as an access point to reach forest service lands. These occur near the boundary of public lands and private lands, and near the boundary between forest service and public lands, where multiple access points occur. Most of the trespass issues occur as the result of local users. The east-west powerline road, which crosses non-public lands for most of its length through the area, has been a primary access point for local users.

Rattlesnake Canyon Subregion

The Rattlesnake Canyon subregion is located east of the Juniper Flats subregion, southeast of Lucerne Valley. The Bighorn subregion consists of public and private lands found to the south of State Highway 247 from Lucerne Valley eastward, and State Route 18 roughly between its intersection with Camp Rock Road and the community of Yucca Valley, California. The San Bernardino National Forest comprises the western boundary of both the subregion and the WEMO Planning Area in this location. The southern border of this subregion is bounded by the Sand to Snow National Monument and San Gorgonio Wilderness. Rattlesnake Canyon Road, a wilderness corridor, provides the major access to the San Bernardino Mountains from the north and Pioneertown Road provides the major access from the east.

The Bighorn Mountains Wilderness is located in the center of the subregion, and extends west into the San Bernardino National Forest. The wilderness consists of the steep canyons and sharp peaks of the rugged Bighorn Mountains, which form the eastern foothills of the San Bernardino Mountains. These features limit OHV access to the subregion from the north and northwest, and the adjacent wilderness in the San Bernardino National forest limit access to the subregion from the northeast.

The Carbonate Endemic Plants Research Natural Area ACEC was designated in the WEMO Plan on approximately 4,400 acres of public lands in the Rattlesnake Canyon subregion that abut the San Bernardino National Forest. Four listed and one unlisted sensitive plant species occur in this

area that are associated with the remaining high-grade carbonate (limestone) soils that have not been disturbed by mining in this region.

The Rattlesnake Canyon subregion is a productive ecosystem that provides ample riparian and upland habitat for many species, including habitat for special status species including the San Diego horned lizard, gray vireo, Bendire's thrasher, golden eagle, Le Conte's thrasher, and species that are found in the Carbonate Endemics Plants ACEC. The transition area from the mountains down to the valleys includes a narrow band of very high grade limestone that is used in pharmaceuticals and special clays, and provides habitat for rare plant species. The CNDDDB documents the occurrence and/or suitable habitat of seven special status plants (cushenbury buckwheat, cushenbury milk-vetch, cushenbury oxytheca, Little San Bernardino Mountains Linanthus, Mojave monkeyflower, Parish's daisy, and Robison's monardella) within the subregion. Additionally, critical habitat is found for four of the seven species (cushenbury buckwheat, cushenbury milk-vetch, cushenbury oxytheca and Parish's daisy).

The area is an ecological transition zone between desert and mountain vegetation that in many places is relatively undisturbed because of the steep topography, its limited development and access potential, and few nearby population centers. Numerous ephemeral creeks flow through the wilderness and adjacent canyons down to the valley floors into Johnson Valley. Elevations within the Bighorn subregion range from 3,100 to 6,600 feet. The Bighorn Mountains and surrounding area is known for a wide variety of wildlife species, including large mammals, raptors, and game and non-game birds.

Primary resource uses are large-scale mining and associated rights-of-ways along the southern side of the subregion, powerline and pipeline rights-of-way along the northern edge of the subregion parallel with the highway and on the east side to scattered residences, and cattle grazing in the Rattlesnake allotment that partially overlaps the wilderness.

Recreational activities include OHV touring, technical touring up the Rattlesnake Canyon corridor, hunting, wildlife viewing, hiking, camping, and mountain biking. The area is a popular destination for San Bernardino National Forest-related recreation coming from State Route 18 east of the subregion via the one major east-west access point south of the wilderness.

Trespass issues are a problem in the isolated communities on the east side of the subregion as new roads and development has occurred and the forest service access route has become more popular. Topography and landownership limit the ability of a complete touring loop on public lands, which has also increased trespass problems.

Sand to Snow National Monument

The Sand to Snow National Monument subregion is located at the southernmost tip of the WEMO Planning Area on either side of State Route 62 just north of the town of Morongo Valley at the southeastern base of San Bernardino Mountains. The subregion is bounded on the west and north by the San Gorgonio Wilderness Area, on the east by the Big Morongo Canyon ACEC and Joshua Tree National Park, and on the south at the San Bernardino County line at the planning area boundary. Elevations on public lands in the area range from 1700 feet on the canyon floor to 3800 feet on the ridges heading up towards the peaks of the San Gorgonio Wilderness. These lands overlap the South Coast Resource Management Planning Area, and public lands within the subregion are primarily managed out of the Palm Springs South Coast Field Office. This subregion was created for the West Mojave Route Network Project to better

manage the national monument for the resources, objects and values that is was designated for by President Barack Obama in February 2016.

Public lands in the area are primarily located within wilderness and the wilderness corridors to inholdings. Three public land focal areas are located outside of wilderness, two on the west side and one on the east side of State Route 62. This area includes the transitional zone between the eastern base of the San Bernardino Mountains and dry upland desert ranges of the City of Twentynine Palms and Joshua Tree National Park, and contains a series of parallel canyons, rocky ridges and boulder outcrops. The subregion is also transitional between the high and low deserts of Southern California. The ephemeral drainages flow down from ridge tops on either side of the highway steeply down into Morongo Valley.

The Sand to Snow subregion provides an important wildlife corridor used by deer, bighorn sheep, and mountain lions between the San Bernardino National Forest, the San Gorgonio Wilderness Area and Joshua Tree National Park. The springs in this area and in the nearby Big Morongo Canyon Preserve serve as essential sources of water during drought periods.

Big Morongo Canyon Preserve ACEC, located within the subregion, is a 28,198 acre wildlife refuge and National Watchable Wildlife Site. Preserve programs and displays seek to provide educational opportunities for children, youth, and adults to further their understanding of desert and marsh ecosystems, and the function and importance of a preserve on local, regional, and global levels. Numerous non-motorized trails, including boardwalk trails through the marsh and stream habitats, meander through the Preserve, which is managed by the BLM. Access to the Preserve is via State Route 62.

This area is transected by numerous roads, rights of way, utility corridors, ranches, farms, cabins, and tract homes in the valley below. The public lands further away from the valley floor receive relatively light recreational use due to the many private inholdings and commercial activities. Some OHV activity, hunting, hiking, wildlife viewing, photography, and nature appreciation occurs in this area.

There are few access conflicts in this area due to the relative light use it receives.

Joshua Tree Subregion

The Joshua Tree subregion includes the southeastern portion of the Planning Area adjacent to Joshua Tree National Park and south of State Highway 62. The cities of Twentynine Palms and Joshua Tree are at its northern edge along the highway, and provide the primary access points into the area. The subregion forms a narrow band of public land between the park and the towns below.

Most of the subregion is dominated by steep but generally routed hills, vegetated with the creosote bush scrub community, dry desert lands rise to the south from Highway 62 towards Joshua Tree National Park. The smaller, north-south-trending Twentynine Palms Mountains are located in the western portion of the region and the larger, east-west-trending Pinto Mountains cover its southern half. Elevations range from 1,300 to 4,500 feet.

The central portion of the subregion includes many scenic rock outcroppings that are not far off of the highway. Many washes are located in this area that contains sensitive riparian vegetation communities, including smoke tree, catclaw and desert willow. Stands of Mojave yucca exist

within many of the interior valleys. The Old Dale Mining District covers most of the eastern half of the subregion and is well known for its many historic mining features.

The Pinto Mountains Wilderness was established in 2009 and is located at the southern end of the subregion adjacent to the Joshua Tree National Park. Approximately 102,680 acres of desert tortoise Critical Habitat is located within the subregion, as well as approximately 1,418 acres of a designated Mojave fringe-toed lizard ACEC.

Primary resource uses occurring in the subregion are mining and mining exploration, and powerline and pipeline rights-of-way. Recreation activities in the area include rockclimbing and rock crawling, rockhounding, recreational mining, hunting, shooting and off-highway touring. Most of the area south of the town of Twentynine Palms is managed as backcountry with a few main improved routes that run through it and provide access to roadside attractions. The Old Dale Mining District is a popular destination for historic mine buffs. Features include extensive historic mines and related roads, ruins and camps.

Two specific locations have been identified with boundary issues, where OHVs continue into Joshua Tree National Park on routes that dead-end at the park boundary. Two areas have evidence of substantial route proliferation, the result of historic mining exploration, which may impose safety risks from old mining workings and shafts.

Wonder Valley Subregion

The Wonder Valley subregion comprises the area north of State Highway 62 and south of 29 Palms MCACC, between Amboy Road on the east and State Route 247 just north of Bodick Road on the west. The western and southern expansions of the 29 Palms MCACC are adjacent to this subregion on the north and northwest. Most of the area is generally referred to as Wonder Valley.

This subregion is an extension of the east-west Desert Valley basin, with lands gradually rising to a ridgeline on the 29 Palms MCACC to the north. The northeastern corner of the subregion is comprised of the designated Cleghorn Lakes Wilderness Area, and therefore is closed to vehicles except for trailheads immediately off of Amboy Road or from public lands south of the wilderness area. The foothills of the Bullion Mountains rise as you travel north towards the ridgetops in the Cleghorn Lakes Wilderness, and continue into the 29 Palms MCACC. Sand dunes are located in the north-central portion of the subregion adjacent to springs and nearby Mesquite Dry Lake bed, which continues onto the marine base. The Joshua Tree National Park gateway community of 29 Palms is located on the southern boundary of the subregion, and the City of Joshua Tree is located on its southeastern boundary at the intersection of State Routes 62 and 247. A half-dozen rock outcroppings are located at the northwestern edge of the otherwise flat portion of the subregion, including Giant Rock, a large outcropping adjacent to a dry lake bed.

Some historic dwellings exist in the subregion but this area contains extensive dispersed urban interface from small tract homes, and few undisturbed areas. The sand dunes and springs adjacent to Mesquite Lake bed include sensitive vegetation, most of which is located on private lands. Sensitive plant species occurrence on BLM lands includes the Little San Bernardino Mountains Linanthus and Robinson's monardella. The Wonder Valley subregion includes approximately 6,592 acres of designated desert linkage networks, crucial to the conservation of special status wildlife species. The CNDDDB and BLM field offices document the occurrence of

the four special status wildlife species and/or suitable habitat: Bendire's thrasher, Le Conte's thrasher, Mojave fringe-toed lizard, and Nelson's bighorn sheep. Approximately 1,220 acres within this subregion has been designated as an ACEC to protect the Mojave fringe-toed lizard.

An active salt mine is located on Dale Lake Bed in the southeastern corner of the Wonder Valley subregion. Historic and active mining claims are prevalent in the Copper Mountain and other highlands public land areas, interspersed with broad valleys that are primarily private rural residential lands. The area includes features typical of the southeastern Mojave Desert, with some rock outcroppings that offer opportunities for exploration. Just off the northwestern edge of this subregion is a well known destination known as Giant Rock, and south of that is the Integratron "rejuvenation machine," built in 1959, which has become an international tourist attraction. In the north-central portion of the subregion is Copper Mountain Community College, a small community college that primarily serves residents of the surrounding small towns and rural areas. The college students use the area surrounding the college for recreational pursuits outside of the classroom, and the area immediately north of the college shows significant signs of on- and off-route use of OHVs.

Some of the major issues in this area are trespass, air quality and noise due to the many residences along unmaintained roads that are interspersed with empty lots and public lands. Route designation is more constrained in this area because many private lands were obtained through the Small Tracts Act of 1938, a desert settlement act originally for World War I servicemen that targeted specific areas, including the Wonder Valley area. In many cases no access was set aside in classification orders for individual tracts, and in such cases reserves were made around the entire perimeter of the tracts. These reserves resulted in unnecessary access routes adjacent to many tracts, and restricted the use of the entire tracts by the purchasers. As a result there is a system of routes in this rural area that is more akin to a square road system within an urban suburb containing small tract homes.

Travel Management Area 4

Jawbone Subregion

The Jawbone Canyon subregion includes the Jawbone Canyon and Dove Spring Open Areas, and Bright Star and Kiavah Wilderness Areas.

The Jawbone subregion includes approximately 84,226 acres (approximately 32% of the subregion) of designated desert linkage networks, crucial to the conservation of special status wildlife species. The CNDDDB and BLM field offices document the occurrence of the following special status species and/or suitable habitat, which includes four plant species: Charlotte's phacelia, Kelso Creek monkeyflower, Mojave tarplant, Spanish needle onion; and six animal species: Bendire's thrasher, burrowing owl, golden eagle, Le Conte's thrasher, Mojave ground squirrel, and pallid bat.

Approximately 54,448 acres of the Little Dixie Wash Mohave ground squirrel core area is located within the eastern portion of the subregion. In addition, the Jawbone subregion contains numerous ACECs including, those set-up for the conservation of the Bendire's Thrasher and Kelso Creek monkeyflower. Over half of the northern portion of the subregion includes the Jawbone-Butterbrecht ACEC and a small portion of the Middle Knob ACEC overlaps with the southern boundary of the subregion.

The extensive amount of private property checker boarded with public lands in the southern and western portions of this subregion result in access conflicts. The Pacific Crest National Scenic Trail also traverses through the management area. This trail sometimes sees user conflicts between non-mechanized and OHV user when some vehicles trespass onto this trail.

Middle Knob Subregion

The Middle Knob subregion, located approximately 40 miles southwest of Ridgecrest, is defined by Highway 14 on the east; Highway 58 on the south; the CDCA boundary on the west; and the Jawbone Butterbreth ACEC on the north. Numerous landowners own the private lands.

Primary recreation activities and resource uses occurring in the subregion are recreational vehicle touring/sightseeing (such as in the proposed Middle Knob ACEC), camping and hiking (such as within the proposed Middle Knob ACEC and the Pacific Crest National Scenic Trail), hunting, domestic sheep and cattle grazing, utility corridor maintenance, communication site maintenance, wind energy, and mineral exploration.

This subregion has a variety of special habitats (pavement plains, vernal pool, springs and grey pine woodland) and artificial waters (small game guzzlers). Biological values of special concern include habitat for desert tortoises, Mohave ground squirrels, raptors (nesting and foraging areas), and special status plants. The CNDDDB and BLM field offices document the occurrence of the following special status species and/or suitable habitat, which includes three plant species: Charlotte's phacelia, Kern buckwheat, Bakersfield cactus; and three animal species: burrowing owl, golden eagle, and Le Conte's thrasher.

Further, cultural resources are significant in the subregion.

Lancaster Subregion

The subregion consists of an assortment of scattered tracts of public land; predominantly within Los Angeles County. Open routes primarily connect private roads and provide casual OHV recreation. There are extensive private land developments with roads, power and water systems. Other developments include commercial power plant, military bases, airports, hotels, restaurants and gas stations.

The Fremont-Kramer DT ACEC overlaps with the northeastern corner of the subregion, as well as 1,369 acres of designated desert tortoise Critical Habitat. In addition to desert tortoise populations, approximately 126 acres of the Edwards Air Force Base ground squirrel core area is located within the northeast corner of the subregion.

Due to the scattered nature and small amount of public lands within this area the largest access concern in this area is ensuring that our network connects with those already in place being managed by the local municipalities and other government agencies.

Travel Management Area 5

Fremont Peak Subregion

The Fremont subregion is located approximately 30 miles northwest of Barstow, California. U.S. Highway 395 provides access to the Fremont subregion from the west, Cuddeback Road from the north, Hoffman (Lockhart) Road and smaller roads that skirt around the east side of Harper

Lake from the east, and State Highway 58 from the south. It is bounded by the Harper Lake subregion on the southeast, by the Black Mountain subregion on the northeast, by Cuddeback subregion on the north, by the Rands subregion on the west, and by the Kramer Hills subregion on the south.

The northwest portion of the subregion includes primarily flat terrain, undulating slightly with some prominent rocky buttes. Vegetation is creosote bush scrub, typical of that found throughout the Western Mojave, transitioning towards the south to a combination of creosote bush scrub and salt bush scrub. The lands in the subregion slowly rise from the west and south towards Fremont Peak located in the northeastern corner of the subregion. The creosote bush scrub community in this area is limited to the bajadas and foothills, extending only about one-third of the way to the top of Fremont Peak. The higher elevations of Fremont Peak are rocky hillsides with widely scattered plants of the Mojave mixed woody scrub community. Smaller outcrops are found in the center of the subregion and along Hoffman Road, the major north-south access road.

The entire subregion is within the Fremont Kramer DT ACEC to conserve desert tortoise and enhance its habitat. The designated DT ACEC continues north beyond Cuddeback Road into the Red Mountain subregion in TMA 7, and south to the other side of State Highway 58, into the Kramer Hills subregion, within TMA 6. In addition, the Barstow Woolly Sunflower ACEC is located in this subregion, which has the highest concentration of the species in the planning area.

The Barstow Woolly Sunflower is a rare West Mojave endemic plant which is found on shallow soils throughout the subregion. Approximately 19,000 acres has been designated as an ACEC for the protection of the species within the central portion of this subregion. The Fremont subregion also provides suitable habitat for the desert tortoise. Over half of the subregion is designated desert tortoise Critical Habitat by the USFWS. Desert tortoise fencing runs along the north side of State Highway 58 to prevent desert tortoise fatalities from traffic on the highway. In addition to the desert tortoise and the Barstow Woolly Sunflower populations, other sensitive resource values overlap the western and southeastern portion of the subregion, including two of the Mojave Ground Squirrel population areas.

A north-south utility corridor parallels US Highway 395 on the west side of the subregion and another utility corridor runs east-west from Kramer Junction at that intersection of US Highway 395 and State Route 58. These utility corridors include high-voltage transmission lines and underground pipelines and the access roads associated with their construction and maintenance. Small mining exploration and activity, both historic and recent, occurs primarily in the vicinity of Fremont Peak. Leasable economic mineral resources (oil and gas) occur in the southern part of the subregion. Low-level military overflights occur regularly in this area, and sonic booms are not uncommon.

Most recreation in the Fremont subregion is either associated with destination-oriented camping or touring. Cuddeback Lake Bed, located adjacent to and north of this subregion, is the most popular recreational and camping destination for travelers in the area. Cuddeback Lake Bed is accessed from Cuddeback Road which runs east off of US Highway 395. Cuddeback Road also provides access to points further east and south. Recreationists also use Cuddeback Dry Lake and some nearby disturbed areas off Cuddeback Road to stage their secondary vehicles. Motorcycles are particularly popular in this area. Hoffman Road provides access to Cuddeback Lakebed from the south and intersects Cuddeback Road. Hoffman Road runs past two smaller

lakebeds known as Twin Lakes on the way to Cuddeback Road. Adjacent to Twin Lakes are two well-used staging and camping areas, one of which is particularly popular owing to the unique acoustics created by its location in a natural recess adjacent to a high vertical rock wall. Occasional dual-sport tours occur in and through this area, including, in some years, the multi-day Thanksgiving touring event.

A substantial amount of the non-public land in this subregion is being managed under conservation easement to private landowners. The primary issue in this area is unauthorized use of closed routes and route proliferation near camping and staging areas in sensitive habitat, both on public lands and private lands. Unauthorized use occurs primarily in the northern and western part of the subregion, off of the major east-west and north-south routes, or near highway access.

Black Mountain Subregion

The Black Mountain subregion is located approximately 25 miles northwest of Barstow and east of the Fremont Peak Subregion. It is tucked between the Fort Irwin Army NTC and three other subregions in the TMA. It is bordered on the west by Hoffman (Lockhart) Road, on the east by Hinkley Road and BM6285 which angles northeasterly towards Superior Dry Lakes, the pipeline road on the south boundary of the Black Mountain Wilderness Area, and Fort Irwin and Grass Valley Wilderness Area on the north.

Black Mountain dominates, located in the south central portion of the subregion, along with Opal Mountain to the north of Black Mountain. A parallel ridge line lies northeast of Black Mountain on the other side of a narrow valley. The foothills surrounding Black Mountain provide varying topography and areas of sharp relief, and taper into several valleys to the north and Black Canyon to the east. The westernmost Superior Dry Lake is located in the northwestern corner of the subregion in Superior Valley, and Gravel Hills is located in the northeastern portion of the subregion adjacent to the southern edge of Grass Valley. The Black Mountain Wilderness Area includes Black Mountain and the area immediately around it, and comprises about 20% of the subregion. The Black Mountain Cultural ACEC, designated for its prehistoric and Native American values, overlays about a third of the subregion and includes all of the wilderness area and lands surrounding the wilderness extending further northward and eastward, into the adjacent subregion. The ACEC was modified in the 2006 WEMO Plan to include conservation of desert tortoise and sensitive plant species. The entire subregion is within the Superior-Cronese DT ACEC, designated to conserve desert tortoise and enhance its habitat.

The Black Mountain Petroglyph Sites are an extensive assemblage of prehistoric rock carvings in the basalt rock outcroppings through the south-central portion of the subregion. The most well-known site is Inscription Canyon, which is nationally known and receives substantial visitation in this area. A number of sites in this area are listed within a National Register District. The prehistoric resources represent habitation, extractive activities, and lakeside adaptations. Many of the sensitive resources in this area also represent historic activities, mostly mining and travel.

Approximately 70 percent of the subregion is designated desert tortoise Critical Habitat. Additionally, the entire subregion is within the Superior-Cronese Desert Wildlife Management Area, an Area of Critical Environmental Concern to conserve desert tortoise and enhance its habitat. The DT ACEC continues north into Grass Valley Wilderness Area, south into the Harper Lake subregion, and east into the Coolgardie subregion. A population of desert cymopterus is located in the southeastern portion of the subregion within the Black Mountain

ACEC and Wilderness Area. In addition to the desert tortoise, other sensitive resource values include a portion of the Coolgardie Mesa-Superior Valley Mojave Ground Squirrel Core Population Areas along the eastern boundary of the subregion. Murphy's Well provides essential water for wildlife and is located immediately adjacent to the eastern boundary road, BM6285.

This area is a popular destination and touring subregion. Black Canyon and Inscription Canyon are particularly popular destinations for touring and petroglyph viewing. Opal and Black Mountains are popular rockhounding destinations in the subregion. Superior Dry Lake and its two sister lakes, now located within the Fort Irwin NTC boundary, used to draw many land-sailing enthusiasts and the remaining western lakebed still receives some visitation. Hunting is also popular in this area. Occasional dual-sport tours occur through this area, including, in some years, the multi-day Thanksgiving touring event. The large basaltic mountains and interspersed canyons are also popular for raptor viewing. Low-level military overflights occur regularly in this area, and sonic booms are not uncommon.

Most of the lands in this subregion are federal or State lands. The primary issue in this subregion is vandalism and theft of the sensitive cultural artifacts, particularly in areas which receive higher visitation or are more widely known. Unauthorized use of closed routes occurs in and around the Black Mountain Cultural ACEC and in the northeastern corner of the subregion towards Cuddeback Dry Lake.

Coolgardie Subregion

The Coolgardie subregion, located north of Barstow, is bounded by Fort Irwin NTC on the north, and Hinkley Road which becomes BM6285 and the Black Mountain Wilderness boundary on the west; Fossil Bed Road and a pipeline road, HL7159 mark the boundary with Harper Lake subregion to the southwest, Irwin Road on the boundary with Mitchel Mountains subregion to the south and Calico Mountains subregion to the southeast. The major private landowner is the Catellus Development Corporation. Much of the private land has been acquired by the Department of Defense as mitigation for the expansion of the Fort Irwin Army NTC. Primary access to this area is off of a paved highway, Fort Irwin Road in the southeastern portion of the planning, which connects to another well maintained road, Copper City Road that runs southeast to northwest. Another well used north-south access road off of Fort Irwin Road is the Randsburg-Barstow Road.

The subregion includes the following major geographic features and designations:

- Unique and colorful exposed geologic features
- Lane Mountain provides the high point of the subregion, tapering towards mesas and valleys surrounding it and back up to the volcanic, rocky slopes of the Paradise Range in the north.
- Rainbow Basin/Owl Canyon ACEC: protects paleo geologic, scenic values, sensitive spp.; provides for recreational enjoyment, accessible off Fossil Bed Road, and includes the Mud Hills, Fossil Canyon, Owl Canyon campground, and the colorful Rainbow Basin.
- Approx. 4,000 acres within the Rainbow Basin/Owl Canyon ACEC is a National Natural Landmark and is withdrawn from the mining laws for protection of natural features and

recreational values, and the area in and around the Owl Canyon Campground is closed to shooting

- Coolgardie Mesa ACEC and the Paradise Valley ACEC within the central and north central portions of the subregion are proposed for withdrawal from the mining laws for the protection of two of four remaining known populations of the endangered Lane Mountain Milkvetch plant.
- Superior-Cronese DT ACEC
- A small portion of the Black Mountain Cultural ACEC, designated for its prehistoric and Native American values, extends into the westernmost portion of this subregion, east of Hinkley Road/BM6285. Most of the Black Mountain Cultural ACEC is within the adjacent Black Mountain subregion to the west.

The Coolgardie subregion includes approximately 54,064 acres (approximately 45% of the subregion) of designated desert linkage networks, crucial to the conservation of special status wildlife species. The CNDDDB and BLM field offices document the occurrence of three special status wildlife species (Le Conte's thrasher, Mohave ground squirrel, and desert tortoise) and/or suitable habitat. Approximately 31,712 acres of the Coolgardie Mesa-Superior Valley ground squirrel core area is located within the northern portion of the subregion. In addition, the Coolgardie subregion contains 81,478 acres (approximately 67%) of the designated desert tortoise Superior-Cronese DT ACEC and designated Critical Habitat. Additionally, the occurrence of four special status plant species (alkali mariposa lily, Barstow woolly sunflower, Clokey's cryptantha, and Lane Mountain milk-vetch) have been documented within this subregion. Approximately 9,888 acres of Critical Habitat has been designated within the Coolgardie subregion for the Lane Mountain milk-vetch.

This area is readily accessible to recreational users, RVers, and groups. The central portion of the subregion is very popular for recreational "dry washing" (gold panning) near Copper City Road, including by drywashing clubs. The subregion includes the following activities:

- Recreational touring throughout the planning area.
- Camping both in the Owl Canyon Campground and dispersed throughout the subregion.
- Other recreational activities include touring the OHV Rainbow Basin loop trail, rockhounding, hunting, and motorcycling, including on technical trails in the Mud Hills
- Utility corridor in the southeastern portion of the subregion, major transmission lines, and a pipeline within the corridor.
- Major mining activities in the southeastern portion of the subregion, zeolites and decorative rock used in landscaping,
- Major prospecting, primarily in the Mud Hills in the west central portion of the planning area east off of Coolgardie Road to Copper City Road.

The area has high recreational use levels in sensitive areas. Drywashing has disturbed critical habitat. Historic disturbances have exceeded the 50-foot Stopping and Parking limits.

Harper Lake Subregion

The Harper subregion, located northwest of Barstow, is bounded on the north by a pipeline road (HL7159) which also marks the boundaries with the Coolgardie subregion on the northeast and the Black Mountain Wilderness and subregion boundary on the northwest. A major divided highway, Irwin Road, forms the eastern boundary with the Mitchel Mountains subregion, State Highway 58 is the southern boundary of the subregion and TMA 5, and the Fremont Peak subregion forms the western boundary of the subregion. The small semi-rural community of Hinkley is located in the south-central portion of the subregion, with its town center at the junction of Hinkley Road and old State Highway 58. A major east-west railroad also runs just north and parallel to State Highway 58.

Waterman Hills is in the eastern portion of the subregion, and Harper Lake is in Harper Valley in the western portion. The southern portion of the subregion encompasses Mud-Water Valley, Waterman Hills, and outlying areas of Barstow. Access to the subregion from the south is obtained from Interstate 15, State Route 58, and Irwin Road.

The subregion contains 27,275 acres of designated desert tortoise Critical Habitat. In addition, the Superior-Cronese and Fremont-Kramer DT ACEC overlap with the majority of the subregion. This subregion also includes the occurrence of four special status plant species (Barstow woolly sunflower, desert cymopterus, Mojave monkeyflower, and Parish's phacelia) that have been documented within this subregion.

Excellent opportunities for both hiking and backpacking exist in the Black Mountains, Opal Mountains, and Calico Mountains. Major activities include camping, rockhounding, hunting, and motorcycle free play. Routes vary from long, flat graded utility corridor routes or the flats of Superior Valley; technical jeep routes in the Calico Mountains; technical single-track motorcycle routes in the Mud Hills; lengthy remote touring routes around the Black Mountain wilderness or through the Grass Valley wilderness corridor; short quickly accessible routes into the Mitchell Range or Waterman Hills; and those that provide a loop opportunity to those that are "dead-ends".

Several public roads are located within the subregion including Harper Lake Road, Santa Fe Avenue, and Lockhart Road. The Grass Valley Wilderness and the Red Mountain subregion (within BLM's Ridgecrest Resource Area) bound the subregion to the north, State Highway 58 to the south, the Black Mountain Wilderness and Superior subregion to the east, and U.S. Highway 395 to the west. The Fremont subregion encompasses a total of approximately 222,750 acres, which includes 52% (116,274 acres) Federal land managed by the BLM, and 47% (105,494 acres) private and State land.

The southern portion of the Fremont subregion includes Water Valley, a relatively large, open and flat area with scattered low rolling hills. This area also includes about half of Harper Dry Lake, which is the lowest point of the subregion at 2,018 feet. A portion of Harper Lake is within a BLM Area of Critical Environmental Concern (ACEC), in support of the birds and wildlife in that area. Vegetation in the Water Valley consists mainly of creosote bush scrub and saltbush scrub, and some scattered Joshua trees. A large number of unimproved roads cross the valley along with public infrastructure facilities that include high voltage transmission lines, wood pole power lines, and telephone lines. In addition, the valley includes intermixed grazing and ranching lands with associated fences and structures.

Mitchell Mountains Subregion

This subregion has few roads and trails, scattered historic mines, key communication sites on peaks, and no springs; there is significant vista from top of Mitchell Mountain. Intensive use from urban interface includes recreation shooting, OHVs, 4x4s, mountain biking, running, hiking, dog walking, equestrian use, and geo-caching. People commonly wander and explore into fringes along city edge.

The subregion contains 13,925 acres of designated desert tortoise Critical Habitat and the majority of the subregion is located within the Superior-Cronese DT ACEC. This subregion also includes the occurrence of two special status plant species (Barstow woolly sunflower and Mojave monkeyflower) that have been documented within this subregion.

Calico Mountains Subregion

The Calico Mountains subregion includes the rocky, rugged, colorful Calico Hills and historic mining town; and Coyote dry lake in the north portion (closed). The area is very popular for target shooting, riding OHVs and general exploration. Numerous roads, trails, mines, adits, and diggings are popular for groups, jeep clubs, SRPs, exploration, hiking, equestrian, 4x4 touring and OHV play. The town includes stores, historic cemetery, restaurants, and campground, and is popular with regional, national and international tourists; there is a KOA campground at the freeway. More activities include climbing, photography, painting and commercial photography.

The subregion contains 29,132 acres of designated desert tortoise Critical Habitat and the majority of the subregion is located within the Superior-Cronese DT ACEC. This subregion also includes the occurrence of two special status plant species (Mojave monkeyflower and Parish's phacelia) that have been documented within this subregion.

Cronese Lake Subregion

The Cronese Lake subregion, located approximately 20 miles northeast of Barstow, California, is defined by the Fort Irwin Military Reservation (National Training Center) on the north, Interstate-15 on the south, the Calico Mountains on the southwest, and the Soda Mountains Wilderness Study Area (WSA) on the east. The extensions of this subregion consist primarily of public lands on either side of the Soda Mountains WSA. This area is remote and rugged with numerous jagged mountains and ranges, scattered small playas, and dry upland desert lands. There are few roads, the vast Soda Wilderness Study Area, occasional communication sites, power, pipe and communication lines; mountaintop communication sites and few other developments. Similar to the Afton subregion, this is an ancient, historic and modern day east-west travel corridor and includes portions of Old Spanish National Historic Trail, Mormon Rd, Route 61 and Hwy15. This is the primary path travel and trade corridor between the west coast and all points east. Cronese Lake was the western border of the Anasazi Empire. The area includes a tank trail.

Coyote Dry Lake, Alvord Mountain, and a portion of the Calico Mountains are found within the subregion. Elevations range from 1,700 to 3,600 feet.

The Calico Early Man Site is found at the south end of the subregion. This National Register Property was designated as an ACEC by the 1980 CDCA Plan. A management plan was

prepared in 1984. The plan designated a network of vehicle access routes, a network designed to protect the evidence of ancient human occupation.

This subregion is located within the Superior-Cronese DT ACEC. Additionally, it contains 81,754 acres of designated desert tortoise Critical Habitat.

Primary recreation activities and resource uses occurring in the area are powerline and pipeline rights-of-way, wildlife habitat, cattle grazing, recreational mining, rockhounding, hiking, upland gamebird hunting, and off-highway vehicle use restricted to open routes of travel. The recommended route network provides vehicle access for all of these, as well as for access to each block of non-federal land within the area.

Travel Management Area 6

Kramer Hills Subregion

The Kramer subregion is located south of State Highway 58, between the cities of Hinkley and Kramer Junction. State Highway 58 and Edwards Air Force Base bound the subregion on the north, State Highway 395 on the west, and private lands to the east and south. The Kramer subregion encompasses a total of approximately 133,129 acres, which consists of 84,020 acres (63 percent) of federal land managed by the BLM, and 49,109 acres (37 percent) of private and State land.

The Kramer subregion is largely an area of alluvial soils and low rolling hills incised by braided, seasonal washes draining toward the Mojave River. Elevations range from 2,273 feet to 3,021 feet. The Kramer Hills, Iron Mountain, and Buckthorn Wash are found within the subregion. The Kramer Hills provide the most topographically varied portion of the subregion, and consist of low-lying, rolling hills composed of a complex of sedimentary and volcanic rocks. Iron Mountain, located in the northeastern portion of the subregion, also provides prominent areas of topographic relief. Most of the subregion is covered with creosote bush scrub and saltbush scrub plant communities. Joshua trees are scattered throughout the Kramer Hills and upper washes, in association with creosote and cholla.

Approximately 65,662 acres of the subregion is designated desert tortoise Critical Habitat. Additionally, the majority of the subregion is within the Fremont-Kramer DT ACEC, an Area of Critical Environmental Concern to conserve desert tortoise and enhance its habitat. In addition to the desert tortoise, other sensitive resource values include a portion of the Harper Lake Mojave Ground Squirrel Leitner Population along the northeastern boundary of the subregion.

State Highway 58 on the north and U.S. Highway 395 on the west provide access to the subregion. Several public roads are located within the subregion including Shadow Mountain Road, Harper Lake Road, and Helendale Road.

Current land uses include routes for several power lines and gas pipelines, as well as scattered homesteads. Recreational uses within the subregion include primarily OHV activity, and rockhounding in the Kramer Hills. Primary recreation activities and other resource uses occurring in the subregion are power line and pipeline rights-of-way, wildlife habitat, mining, hunting, and off-highway vehicle use restricted to open routes of travel.

The Kramer subregion includes portions of two grazing allotments. The majority of the subregion falls within the Stoddard Mountain grazing allotment. The southernmost portion of the subregion includes a small portion of the Buckhorn Canyon Allotment.

Mineral resources within the subregion are located primarily within Iron Mountain and the Kramer Hills. Gold has been produced at the Kramer Hills, which also includes occurrences of uranium, magnesite and feldspar. Considerable exploration of uranium occurred in the Kramer Hills during the 1970s. At Iron Mountain, limestone, marl, quartzite, and asbestos have been produced. In addition, there are occurrences of clay, copper, and mica in this area. The U.S. Geological Survey has classified the subregion as prospectively valuable for sodium, potassium, oil, and gas. Mining and homestead sites established in the late 19th and early 20th century exist in the area, some of which may have historical significance.

The suggested route network provides the following: 1) vehicle access to the Kramer Hills, Iron Mountain, and other areas located throughout the Kramer subregion; 2) access to sites appropriate to recreational target shooting; 3) opportunities for general dispersed camping and back country touring; 4) access through each of the primary upland gamebird hunting areas; 5) access to popular rockhounding locations; 6) access to known areas important for recreational mining; 7) OHV access facilitating mountain bike recreation throughout the subregion; and 8) a variety of opportunities for the recreational OHV enthusiasts from which to choose. The suggested route network also maintains vehicle access for a variety of terrain, a variety of trip lengths, access to remote areas for the equestrian community, and a substantial portion of the dual-sport network (for on-street/off-street motorcycles) which runs throughout the subregion.

Iron Mountain Subregion

The major landscape feature in the Iron Mountain subregion is the Mojave River along the TMA southern boundary. Trails and roads in this area are popular for equestrian riding, hiking, scenic touring, 4x4 exploration and OHV play; hunting, photography and bird watching. Features include the Old Spanish National Historic Trail, Mormon Rd., BNSF tracks, historic mines and old stage routes north to Harper and Death Valley.

Approximately 8,500 acres of the subregion is designated desert tortoise Critical Habitat. Additionally, the northwestern portion of the subregion is within the Fremont-Kramer DT ACEC to conserve desert tortoise and enhance its habitat. In addition to the desert tortoise, other sensitive resource values include a portion of the Harper Lake Mojave Ground Squirrel Leitner Population along the northwestern boundary of the subregion.

El Mirage Subregion

The El Mirage subregion, located northwest of the community of Adelanto and due north of BLM's El Mirage Off-Highway Vehicle Area is defined by Edwards Air Force Base to the north and west, State Highway 395 to the east, and the El Mirage Off-Highway Vehicle Area immediately to the south. The western boundary is not well defined, consisting of private and Federal lands. The subregion is located in both Los Angeles and San Bernardino Counties.

The Shadow Mountains, in the southwestern corner, trend northwest-to-southeasterly, and have a maximum elevation of 3,996 feet. The greater area is characterized by bajadas, dry lakebeds, washes, rugged hills, and desert mountains. Vegetation consists of three basic types, creosote

bush scrub, saltbush scrub and alkali sink scrub, all of which are typical of the western Mojave Desert. Creosote bush scrub is by far the dominant vegetative type.

Approximately 26,934 acres of the subregion is designated desert tortoise Critical Habitat. Additionally, the entire subregion is within the Fremont-Kramer DT ACEC to conserve desert tortoise and enhance its habitat.

Primary recreation activities and resource uses occurring in the area are powerline and pipeline rights-of-way, rockhounding, cattle grazing, recreational mining, upland gamebird hunting, hiking and camping, wildlife habitat, and off-highway vehicle use restricted to open routes of travel. Particular designated routes provide access to various blocks of non-federal land within the area.

Victor Valley Subregion

Approximately 500 acres of the subregion is designated desert tortoise Critical Habitat. Additionally, a small portion of the subregion at the northern border overlaps within the Fremont-Kramer DT ACEC to conserve desert tortoise and enhance its habitat.

Travel Management Area 7

Red Mountain Subregion

The Red Mountain subregion, located approximately 20 miles southeast of Ridgecrest, is defined by U.S. Highway 395 and the Kern County line on the west; the Spangler Hills Off-Highway Vehicle Management Area on the north; the China Lake Naval Air Weapons Station B Range on the east; and the Barstow Field Office management boundary on the south. 120,199 acres in size, the area is 82% (98,043 acres) Federal land managed by the BLM and 18% (22,156 acres) private and State land. Numerous landowners own the private lands. The subregion borders the Golden Valley and Grass Valley wilderness areas.

Elevations in the subregion range from 2,568 feet on the Cuddeback Playa to 5,260 feet on Red Mountain. Creosote bush and Mojave saltbush are the predominant plant communities in the lowlands, with cheesebush-dominated plant communities found in the washes, remnant stands of native perennial bunch grasses on the mountaintops and scattered Joshua tree woodland.

Nearly half of the subregion is made up of designated desert linkage networks, crucial to the conservation of special status wildlife species. The subregion contains approximately 111,357 acres of desert tortoise Critical Habitat. In addition to known desert tortoise populations, the subregion is also located within the boundaries of key Mohave ground squirrel population centers described as the Fremont Valley/Teagle and Pilot Knob populations.

The subregion is used for commercial 4-wheel drive and dual sport motorcycle tours and competitive equestrian endurance rides. Further, additional activities in the subregion include commercial filming, mineral exploration, utility corridor maintenance, recreational vehicle touring/sightseeing, dispersed hiking and camping, and upland game bird hunting.

Superior Valley, Monolith Cantil, Lava Mountains, and Pilot Knob are grazing allotments located within the subregion. The first three are ephemeral sheep allotments, and the Pilot Knob Allotment is an ephemeral cattle allotment, which is currently leased to the Desert Tortoise

Preserve Committee. Sheep grazing is not currently allowed in the majority of tortoise critical habitat.

The BLM's mineral resource potential classification shows a moderate potential for the occurrence of placer gold deposits in the Randsburg and Atolia mining districts. A high potential for lode and placer gold occurs immediately outside the south boundary of the subregion. There are no active mining operations in the Red Mountain subregion based on reports from the California Division of Mines and Geology filed under the California Surface Mining and Reclamation Act of 1975 (SMARA). BLM records show, as of March 2001, there are eight lode-mining claims north and west of Randsburg, and two lode claims located on some older workings on a small hill west of the Black Hills.

There are approximately 246 placer mining claims in the subregion. The placer claims are clustered in the center of the subregion, with dense clusters in the Atolia mining district and at the Summit Diggings area south of the Summit Range. Small clusters of placer claims are also located in the center of the subregion near Blackhawk Well. Most of the placer mining claims are association placers, each aggregating about 160 acres. As of March 2001, there were five plans of operation and eleven notice level operations authorized by BLM in the subregion pursuant to 43 CFR 3809. Most were approved for small placer operations in the Summit diggings area or assessment work in the remaining area of the subregion.

A utility corridor crosses the western portion of the subregion, running parallel to Highway 395. The corridor contains existing facilities.

Various opportunities for outdoor recreation are present in the subregion. Some of the best upland game bird hunting in the eastern Kern and San Bernardino Counties is available in the Lava Mountains, Red Mountain and Blackwater Well areas. During years when winter rainfall is suitable, seasonal wildflower displays are exceptional in the Golden Valley and Grass Valley areas. Red Mountain Spring (formerly called Squaw Spring) and Steam Well are two cultural heritage sites in the subregion. Both of these sites contain rock art. A route proposed for the California Statewide Discovery Trail crosses from south to north.

Other recreational opportunities and experiences available in the Red Mountain subregion include dispersed camping; four wheel drive and motorcycle touring; target shooting; rock hounding; hiking in the Golden Valley wilderness and climbing Red Mountain; mountain biking and equestrian recreation; and land sailing on Cuddeback Dry Lake. Several outfitters also use the area for recreational activities operated under recreation use permits including equestrian endurance rides, dual sport events and jeep tours.

Commercial filming in the subregion occurs primarily on Cuddeback Dry Lake where an average of 15 permits a year is issued for advertising and motion picture projects.

Rands Subregion

The bajadas, alluvial fans, and undulating hills that lie between the towns of Randsburg and California City along with scattered sections of land south of California City within eastern Kern make up the Rands subregion. Recreational activities within the region include OHV trail riding and touring, upland game bird hunting, rock hounding, gold prospecting, hiking, nature study, and photography. Popular destination locations include the Desert Tortoise Research Natural Area, Government Peak, and the living ghost town of Randsburg.

The subregion contains approximately 52,676 acres of desert tortoise Critical Habitat. In addition to known desert tortoise populations, the subregion is also located within the boundaries of the key Mohave ground squirrel populations centers described by Leitner as the Fremont Valley/Teagle and Boron Extension populations. Other known Mohave ground squirrel populations within the subregion include the Boron/Kramer Junction and Desert Tortoise Natural Area populations.

Occasionally vehicle trespass into the Desert Tortoise Research Natural Area is of concern. This issue has lessened over time with fencing being completed around the area and volunteer and staff patrolling the perimeter to maintain the fence.

Due to the scattered nature and small amount of public lands within the southern portion of this subregion an access concern for this area is ensuring that our network connects with those already in place that are being managed by the local municipalities and other government agencies.

Travel Management Area 8

Newberry-Rodman Subregion

The Newberry/Rodman subregion, located just south of Newberry Springs, California, is defined by Interstate-40 on the north, the Twentynine Palms Marine Corps Base and the Johnson Valley Off-Highway Vehicle Area on the south, and Camp Rock Road on the west. The subregion is 81,585 acres in size, with 73.6% Federal land (60,012 acres) managed by the BLM and 26.3% private and State land (21,481 acres). Catellus Development Corporation is the primary private landowner.

The general region consists of two small rugged mountain ranges and the surrounding foothills, valleys, sloping alluvial fans, washes, lava flows, and canyons. The entire area shows evidence of volcanic geologic activity, which provides for dramatic views. Elevations range from 1,800 feet to 5,100 feet in the Newberry Mountains. Creosote bush scrub is the predominant plant community in the lower elevations, with a desert willow-dominated plant community found in the dry desert washes, and remnant stands of perennial bunchgrasses in the higher elevations. Joshua tree woodland and small, riparian plant communities may also be found here in select locations. Many raptor nesting sites are found in the region. Kane Wash, which runs in a southwesterly to northeasterly direction, bisects the subregion, separating the Newberry Mountains wilderness and the Rodman Mountains wilderness. Access to this subregion is from Interstate-40, a power line road to the southeast, and Camp Rock Road on the west side.

The Pisgah cinder cone and lava field, south of the Cady Mountains, provides a unique mars-like, scenic black landscape. Lava tubes adjacent to the Pisgah crater cone provide habitat for sensitive bat species. Sensitive species that occur in population nodes in the sandy, lavic soils include white-margined beardtongue, crucifixion thorn, and Mojave fringe-toed lizard. Occurrence of this species has been documented within this portion of the Mojave Trails subregion. The lava fields also have extensive networks of "lava tubes" which may support sensitive endemic cave invertebrates.

The prominent cinder cone feature that dominates the landscape makes the area popular for scenic touring and photography. Casual use spelunkers as well as biologists and other scientists explore the lava tubes surrounding the cinder cone. The cinder cone itself is the location of an

active mining operation for its unusual decorative rock. Away from the cinder cone and adjacent lava field, it is a relatively remote area with few visitors, yet human sounds are near constant because of intensive ambient sounds associated with transportation activities and low flying aircraft.

A wide diversity of cultural site types are found here, some of which are associated with a National Register District. The Serrano tribe lived in the region, resulting in rock art and other cultural sites. Parts of the Rodman Mountains are designated as an ACEC to protect cultural resources. Additionally, approximately 2,000 acres within the subregion are designated as an ACEC to protect the Mojave monkeyflower. Most of this area is within the Rodman Mountains Wilderness. The subregion contains approximately 101,326 acres of designated Critical Habitat for the desert tortoise. In addition to the desert tortoise, the prairie falcon and the golden eagle are found in the subregion, and the area is a potential reintroduction area for bighorn sheep. The Ord Mountain grazing allotment is located in the subregion. Much of the area is highly scenic in character, and both hiking/backpacking and upland gamebird hunting opportunities are plentiful.

Primary recreation activities and other resource uses occurring in the subregion are cattle grazing, mineral exploration/production, utility corridor maintenance (2 major utility corridors), communication site maintenance, recreational vehicle touring/sightseeing, dispersed hiking and camping, equestrian recreation, upland gamebird hunting, and rockhounding.

The Ord grazing allotment is located within this subregion. This allotment consists of 154,848 acres, of which 14,820 are private.

In regards to mineral values in the subregion, construction materials (crushed rock, sand and gravel) are being produced from the northwest area of the Newberry Mountains (Cal West Quarry). There has been production of placer gold at the Camp Rock mine. Cinders have been and are being produced from Pipkin cinder cone (Malpais Crater) in the south-central part of the subregion. Borates (Fort Cady Minerals) and specialty clays (Rheox) are being produced in the eastern part of the subregion. BLM classified the western portion of the subregion as having a moderate to high potential for the occurrence of copper, silver, lead, tungsten and gold based on past exploration and production. The eastern portion of the subregion has a high potential for borate minerals and clay deposits.

A utility corridor runs along the northern boundary of the subregion, while another utility corridor crosses from north to south.

Excellent hiking/backpacking and upland game hunting opportunities exist in the Newberry and Rodman Mountains. There are three highly rated interpretive sites within the subregion, the Newberry Mountain Caves, Pipkin Cinder Cone, and the Rodman Mountain petroglyphs. Other federal plans relating to this subregion include the Johnson Valley Off-Highway Vehicle Area Management Plan.

The suggested route network provides for vehicle access for these resource uses and recreational activities. Further, they provide access to each block of non-federal land within the subregion.

Ord Mountains Subregion

The Ord subregion, located southeast of Barstow, California, is defined by State Highway 247 on the west, the U.S. Marine Corps Firing Range on the north, Camp Rock Road on the east, and greater Lucerne Valley on the south. The Newberry Mountains Wilderness lies immediately to

the northeast, the Johnson Valley and Stoddard Valley Off-Highway Vehicle Areas to the southeast and northwest respectively, and private land of Lucerne Valley to the south.

Apart from the portion north of Power Line Road and a small portion to the south, the subregion consists of the BLM's Ord Mountain Route Designation Pilot Planning Unit. The Planning Unit consists of approximately 126,000 acres, located between the Stoddard Valley and Johnson Valley Off-Highway Vehicle Areas. As such, it is a popular connector between the two. In early 1995, the Ord Mountain Pilot Project was initiated as an opportunity to conduct OHV route planning and vehicle access planning for the West Mojave Plan.

The subregion includes three important desert peaks in close proximity to one another, Ord Mountain, East Ord Mountain, and West Ord Mountain; as well as Daggett Ridge and portions of East Stoddard Valley and North Lucerne Valley. Elevations in the area range from 2,500 feet to 6,309 feet above sea level.

The Ord Mountain area consists of valleys, rolling and jagged hills, sloping bajadas, braided washes, and barren playas. The creosote brush scrub plant community is the dominant vegetative assemblage found within the subregion. Plant species within this community include creosotebush, burrobush, Mormon tea, allscale saltbush, golden cholla, and beavertail cactus. A BLM sensitive species, the Mojave monkeyflower, is found here and approximately 23,000 acres within the subregion are designated as an ACEC to protect this species.

The subregion contains approximately 106,574 acres of designated Critical Habitat for the desert tortoise. Other reptile fauna found in the area include desert banded gecko, desert horned lizard, rosy boa, and Mojave rattlesnake. Notable avian species include golden eagle, prairie falcon, roadrunner, burrowing owl, and loggerhead shrike. Mammalian fauna include desert woodrat, antelope ground squirrel, black-tailed jackrabbit, kit fox, and coyote.

Primary recreation activities and resource uses occurring in the area are cattle grazing, powerline and pipeline rights-of-way, rockhounding, rock climbing, communication sites, camping, hiking, wildlife habitat, mining and recreational mining, hunting, and off-highway vehicle use restricted to open routes of travel.

The Ord Planning Unit consists of a precise vehicle network, restricting access to only essential routes of travel; all other historical routes are either closed or are limited to access by certain individuals for specific reasons, such as maintenance crews and ranch operators.

The recommended route network provides for vehicle access to the following features. Stoddard Valley Off-Highway Vehicle Area, to the west, and Johnson Valley Off-Highway Vehicle Area, to the southeast. In addition to these, the historic Ord Mountain Road and the Daggett Wash Road are accessible by four-wheel-drive vehicles and motorcycles. Mining operators used these two historic roads to haul their ore to the railhead in Daggett, California. Hercules Rock, on the south of the subregion, is a popular destination for rock climbers.

In addition, the network provides for access to the boundary of the Newberry Mountains wilderness, to the east; vehicular travel is not permitted within wilderness, but hiking, camping, and horseback riding are encouraged.

Many visitors to this area take advantage of the many hunting opportunities for small game birds found here. Hunting is enhanced in the region by a variety of water sources to be found here, including springs and guzzlers.

The recommended route network also provides access to various blocks of non-federal land within the area.

Johnson Valley Subregion

The major feature in the Johnson Valley subregion is the Johnson Valley OHV Area designated for 4x4 and OHV use, including exploration, touring, play and competition. The area is popular for large scale OHV events and competitions. It includes the Cougar Buttes area popular with trials bike SRP events and commercial filming. The area includes dry lakebeds, lava flows, rugged mountains, long valleys, springs, Creosote and Yucca Ring plan assemblies, and extensive and large scale mine operations. Sensitive areas are closed and fenced; signs, kiosks and visitor patrols help guide visitors and protect sensitive resources.

The subregion contains approximately 5,000 acres of designated Critical Habitat for the desert tortoise, as well as the occurrence of other sensitive species such as the golden eagle, Le Conte's thrasher, western mastiff bat, and Little San Bernardino Mountains Linanthus.

Stoddard Valley Subregion

The Granite subregion, is defined by State Highway 247 on the east, the Stoddard Valley Off-Highway Vehicle Area on the north, private lands on the west, and private lands on the south. The Granite Mountains, Sidewinder Mountain, North Lucerne Valley, and Stoddard Ridge are all found within this subregion. Elevations range from 3,000 feet to 4,900 feet.

The subregion contains the occurrences of sensitive wildlife species including the Bendire's thrasher, burrowing owl, golden eagle, Le Conte's thrasher, Mojave fringe-toed lizard, western mastiff bat, Barstow woolly sunflower, Mojave monkeyflower, and Parish's phacelia. ACECs within the subregion have been set-up to protect sensitive species including the Bendire's thrasher, Mojave fishhook cactus, and Mojave monkeyflower.

Primary recreation activities and resource uses occurring in the area are cattle and sheep grazing, powerline and pipeline rights-of way, rockhounding, communication sites, hiking, camping, wildlife habitat, mining and recreational mining, hunting, and off-highway vehicle use restricted to open routes of travel.

Some designated routes provide access to many blocks of non-federal land within the area.

Travel Management Area 9

El Paso Subregion

The El Paso subregion, located approximately 10 miles southwest of Ridgecrest, is defined by the El Paso Mountains wilderness area and "old" U. S. 395 to Inyokern on the north, U.S. Highway 395 on the east, the Garlock Road and Red Rock Canyon State Park on the south, and Highway 14 on the west. The subregion is 83,474 acres in size, with 92% federal land (76,998 acres) managed by the BLM and 8% private and state land (6,475 acres). Numerous landowners own the private lands. The El Paso Mountains wilderness is surrounded by this subregion on three sides.

The region consists of prominent volcanic peaks (El Paso Mountains), broad valleys, rolling foothills, badlands, sloping bajadas, braided washes, and narrow canyons. Elevations range from

2,000 feet on the southern boundary to 5,244 feet above sea level on top of Black Mountain. Creosote bush scrub and saltbush scrub are the predominant plant communities in the lowlands, with numerous desert washes, remnant stands of native perennial bunchgrasses on the mountain tops, scattered Joshua tree woodland, and small riparian plant communities at a few of the widely spaced springs.

The El Paso Mountains contain three West Mojave endemic plants: Red Rock poppy, Red Rock tarplant and Charlotte's phacelia. They are well known as a raptor nesting area and support abundant populations of upland game birds.

Approximately half of the subregion is made up of designated desert linkage networks, crucial to the conservation of special status wildlife species. A small portion of the subregion contains desert tortoise Critical Habitat (approximately 68 acres) at the southern border. The subregion is also located within the boundaries of key Mohave ground squirrel populations described as the Little Dixie Wash, Fremont Valley/Teagle, and Ridgecrest populations.

Primary resource uses occurring in this subregion are: domestic sheep grazing, mineral exploration, utility corridor maintenance, communication site maintenance, and various recreational activities. The BLM's CDCA Plan identified four sites within the subregion with excellent potential for interpretation and education: Burro Schmidt's Tunnel; the El Paso Mountains; the Garlock Fault; and the Goler Graben.

In particular, the El Paso Mountains are heavily used for a variety of recreational activities. The area contains excellent opportunities for upland game bird hunting (chukar and Gambel's quail) and rock and mineral collecting. Other activities include recreational vehicle touring/sightseeing, dispersed hiking and camping, mountain biking, and equestrian recreation.

The subregion is also used for commercial 4-wheel drive and dual sport motorcycle tours and competitive equestrian endurance rides.

Ridgecrest Subregion

The Ridgecrest subregion, located south and east of the city of Ridgecrest, is defined by U.S. Highway 395 and the boundary of the Spangler Hills Open Area on the south; the city of Ridgecrest and the China Lake Naval Air Weapons Station on the north and west; and BLM Route RM 138 on the east. 22,465 acres in size, the area is 94% (21,115 acres) Federal land managed by the BLM and 6% (1,350 acres) private land. Numerous landowners own the private lands.

The general region consists of the rolling Rademacher and Spangler Hills. Sloping bajadas, braided washes, and narrow canyons characterize the general topography. Elevations range from 1,900 feet at the northeastern point of the subregion, to over 3,400 feet above sea level in the hills directly south of the City of Ridgecrest in the western portion of the subregion. Creosote bush scrub is the predominant plant community in the subregion, with cheesebush-dominated plant communities found in the washes, remnant stands of native perennial bunch grasses on the mountain tops and scattered Joshua trees. The subregion also located within the boundaries of key Mohave ground squirrel populations described as the Fremont Valley/Teagle population to the south and Ridgecrest population to the north.

The subregion contains two livestock grazing allotments. The Spangler Hills Allotment is located in the eastern-most portion of the subregion. This allotment is identified by the 1980

Desert Plan as an ephemeral allotment requiring a minimum of 200 pounds of dry vegetation per acre before the livestock are turned out to graze. The Cantil Common Allotment, an ephemeral grazing allotment, covers the remainder of the subregion. Sheep grazing occurs in the area in the spring when the annual vegetation meets the minimum requirements. The northern portion of the subregion contains a portion of the Centennial Wild Horse and Burro Herd Management Area.

The BLM's Mineral Resource Potential Classification identifies most of the subregion as having a moderate potential for the occurrence of placer and lode gold deposits, with a high potential for placer, principally hydrothermal lode gold deposits, identified in the western area of the subregion (Rademacher Mining District). In addition, there is a high potential for construction aggregates (sand and gravel) in the western portion of the subregion, with aggregates mined at the Bowman and Inyokern pits outside the western boundary. There are no active mining operations in the subregion filed under the California Surface Mining and Reclamation Act of 1975 (SMARA), based on reports from the California Division of Mines and Geology. Some interest has been expressed in the far western portion of the subregion as evidenced through mining claim locations. BLM records show, as of March 2001, that there are six lode-mining claims and six placer mining claims in this portion of the subregion in the Rademacher Hills. There is one plan of operation and one pending (April 2001) notice level operation in the Rademacher Hills area of the subregion filed pursuant to the regulations at 43 CFR 3809. There are no aggregate resources being developed within the subregion, and the subregion is not valuable, prospectively or otherwise, for Leasing Act minerals.

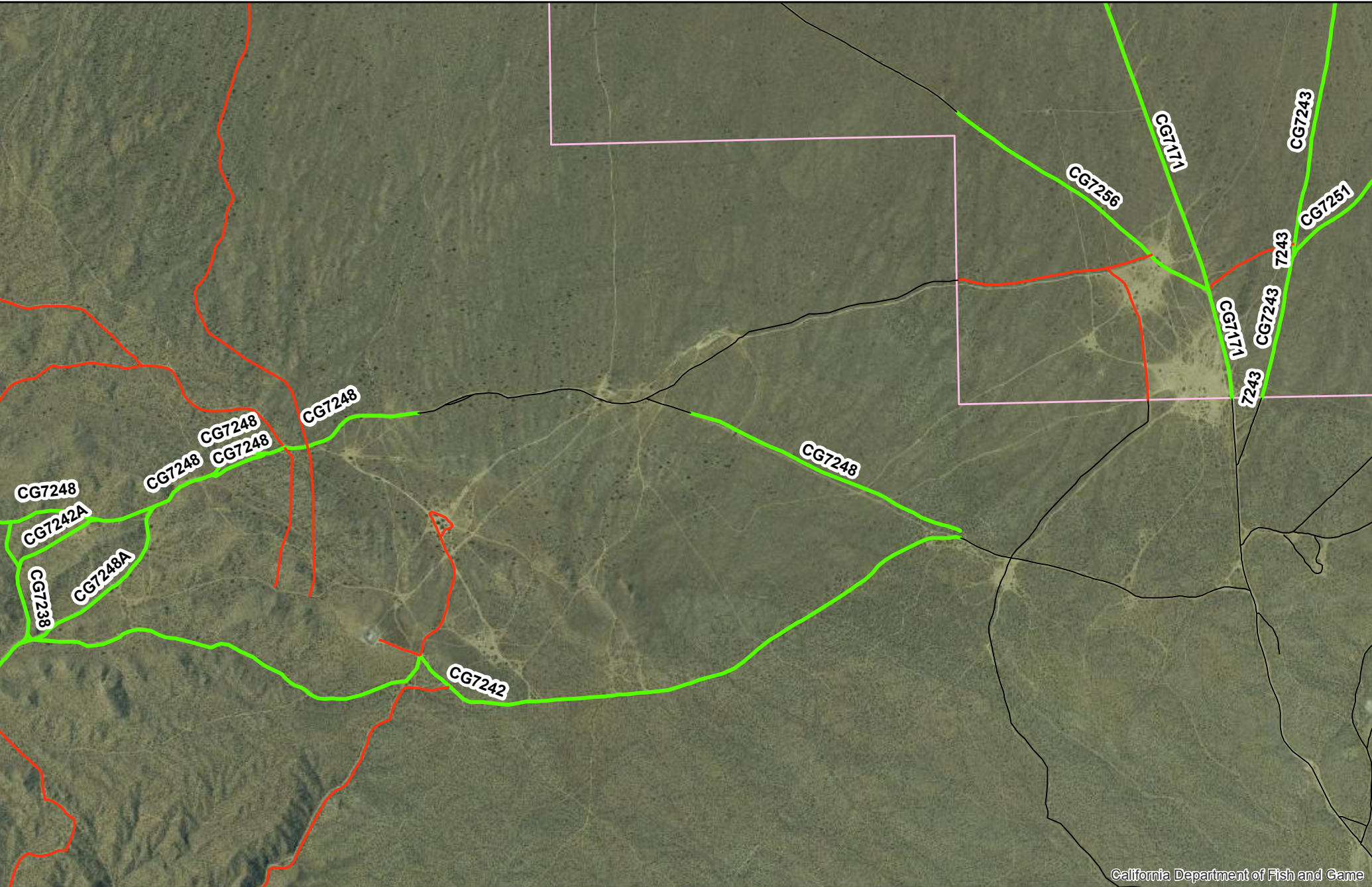
A utility corridor crosses the northern portion of the subregion, in an east/west direction. This corridor contains existing facilities.

The Ridgecrest Subregion supports a wide variety of recreation opportunities and experiences including, but not limited to, four wheel drive and motorcycle touring, hunting and target shooting, paintball, stargazing, photography, exploring mining sites, social gatherings, rockhounding, hiking and running, limited dispersed camping, mountain biking and equestrian recreation.

The most prominent recreation feature in the subregion is the Rademacher Hills, located south of the City of Ridgecrest. The Rademacher Hills offer a 12.5-mile network of trails open to hiking, jogging, horseback riding and mountain biking. This area forms the backdrop for the City of Ridgecrest and provides an urban-public land interface that is fast becoming a popular recreation site for local residents. OHV trails through the Rademacher Hills provide access from the City of Ridgecrest to the 57,000 acre Spangler Hills OHV Area. A link to the Statewide Motorized Discovery Trail is proposed to connect the trail to the City of Ridgecrest through the Rademacher Hills.

The subregion is also used by a variety of recreation permit holders who use the public lands for mountain bike races, ultra-marathon running events, high school cross country running competitions, equestrian trail rides and endurance events, dual sport motorcycle tours, jeep tours, and other activities.

The area is used for commercial 4-wheel drive and dual sport motorcycle tours and competitive equestrian endurance and mountain bike events.



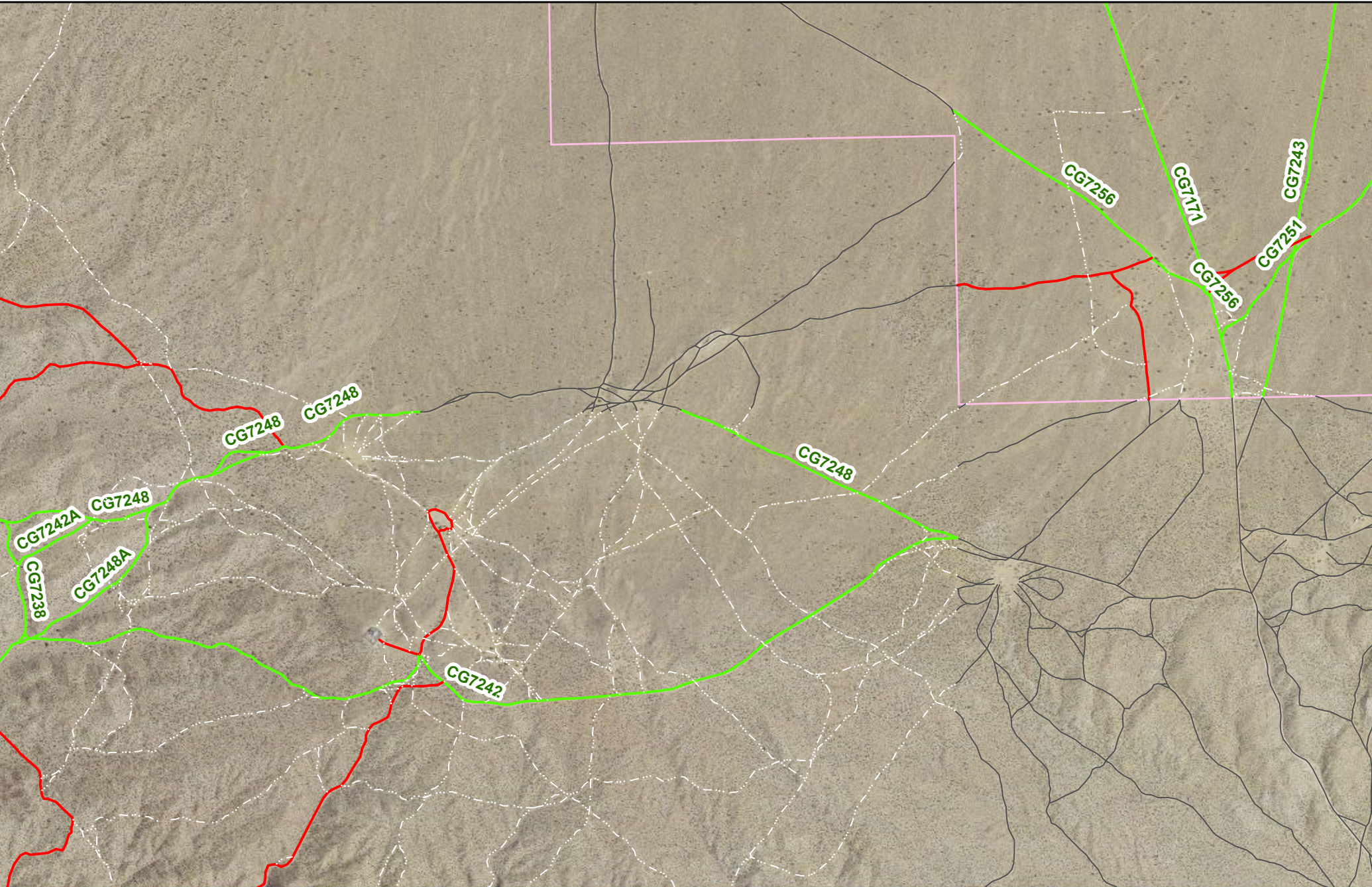
California Department of Fish and Game

- Legend**
- Open to All Vehicles
 - Closed for All Vehicles
 - County, State, or Federally Maintained
 - Access Limited or Seasonally Closed
 - Open for Two Wheeled Vehicles Only
 - Undesignated or Unknown
 - ACEC

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Lane Mtn Milkvetch/Desert Tortoise within the Coolgardie Mesa ACEC
Coolgardie Subregion

Figure D - 1
2006 Wemo Route Designation
2005 NAIP IMAGERY

1:15,000



Legend

- Open
- Closed
- Limited
- NonBLM
- Unk
- ACEC

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Lane Mtn Milkvetch/Desert Tortoise within the Coolgardie Mesa ACEC
Coolgardie Subregion

Figure D - 2
2013 - 2014 GTLF Route Designation
2012 NAIP IMAGERY

1:15,000



- Legend**
- Open to All Vehicles
 - Closed for All Vehicles
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 - Access Limited or Seasonally Closed
 - Open for Two Wheeled Vehicles Only
 - Undesignated or Unknown

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
El Paso Subregion

Figure D - 3
2006 Wemo Route Designation
2005 NAIP IMAGERY

1:15,000

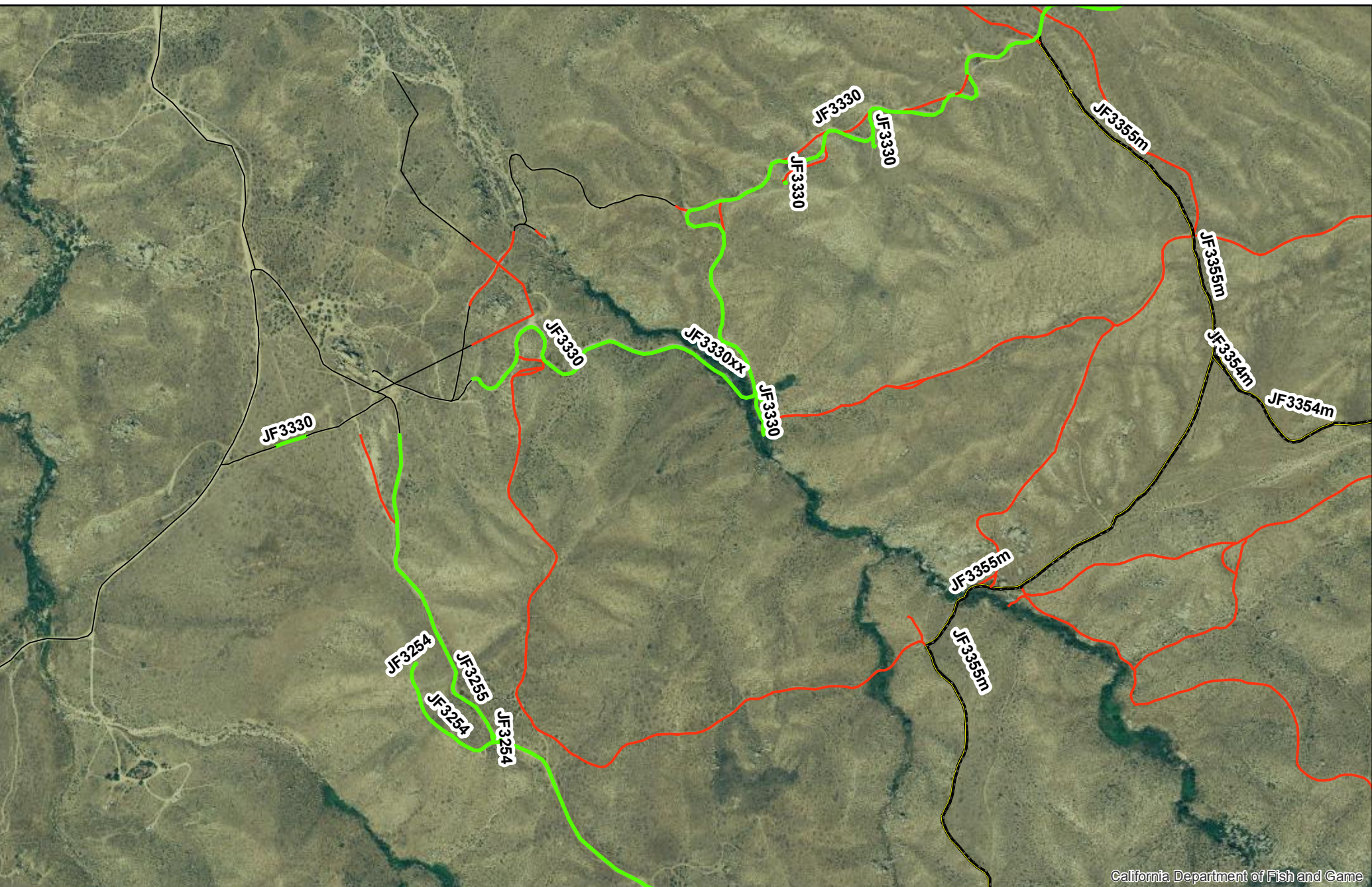


Legend

- Open
- Closed
- Limited
- NonBLM
- Unknown

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
El Paso Subregion

Figure D - 4
2013 - 2014 GTLF Route Designation
2012 NAIP IMAGERY
1:15,000



California Department of Fish and Game

- Legend**
- Open to All Vehicles
 - Closed for All Vehicles
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 - Open for Two Wheeled Vehicles Only
 - Undesignated or Unknown

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY

Juniper Flats Arrastre Canyon & Coxey Road

Juniper Flats Subregion

Figure D - 5

2006 Wemo Route Designation

2005 NAIP IMAGERY

1:10,000



Legend

- Open
- Closed
- Limited
- NonBLM
- Unk

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Juniper Flats Arrastre Canyon & Coxey Road
Juniper Flats Subregion

Figure D - 6
2013 - 2014 GTLF Route Designation
2012 NAIP IMAGERY

1:10,000



- Legend**
- Open to All Vehicles
 - Closed for All Vehicles
 - County, State, or Federally Maintained
 - Access Limited or Seasonally Closed
 - Open for Two Wheeled Vehicles Only
 - Undesignated or Unknown

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Antimony Flat Area
Middle Knob Subregion

Figure D - 7
2006 Wemo Route Designation
2005 NAIP IMAGERY

1:15,000



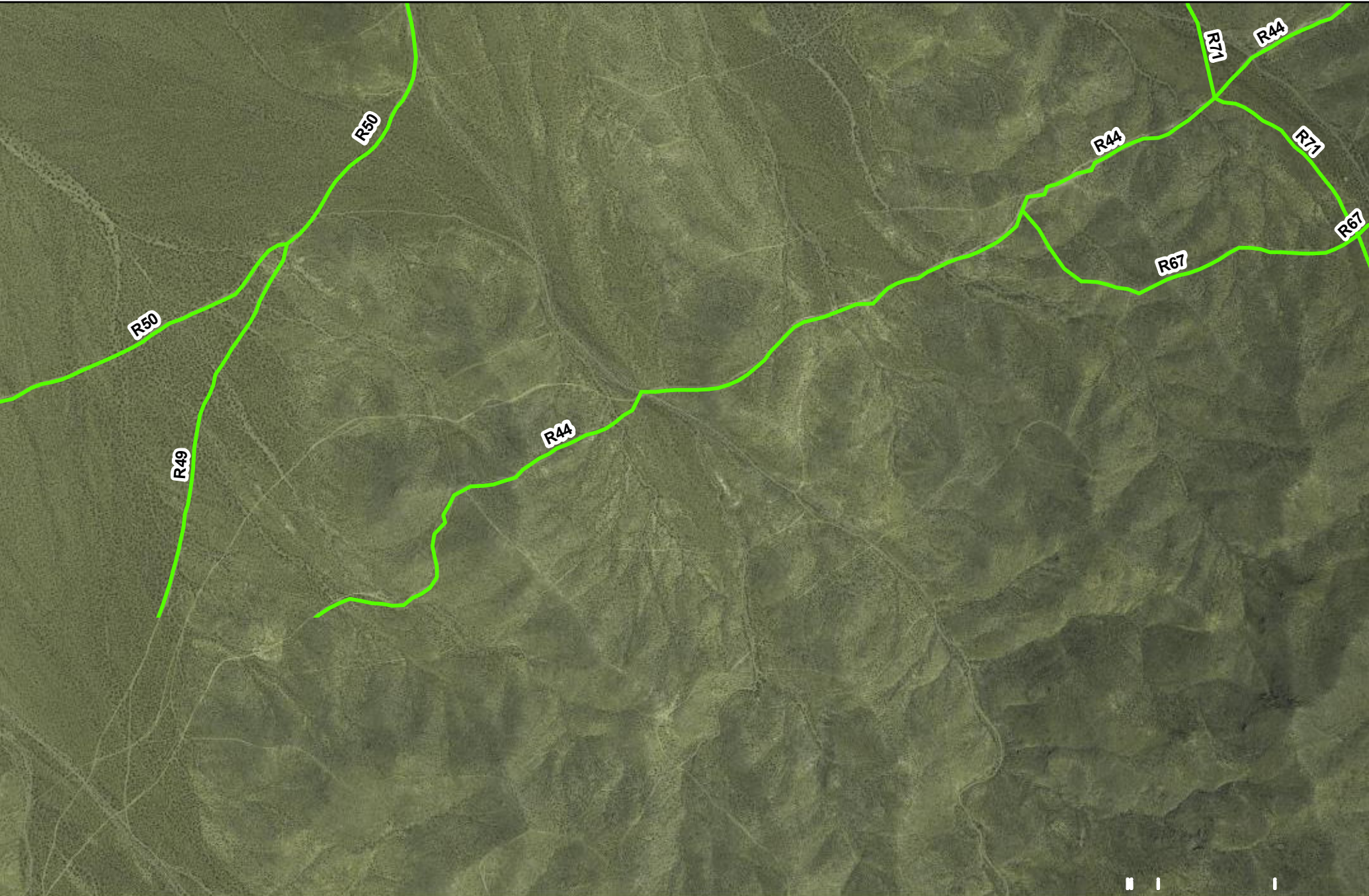
Legend

- Open
- Closed
- Limited
- NonBLM
- Unk

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Antimony Flat Area
Middle Knob Subregion

Figure D - 8
2013 - 2014 GTLF Route Designation
2012 NAIP IMAGERY

1:15,000



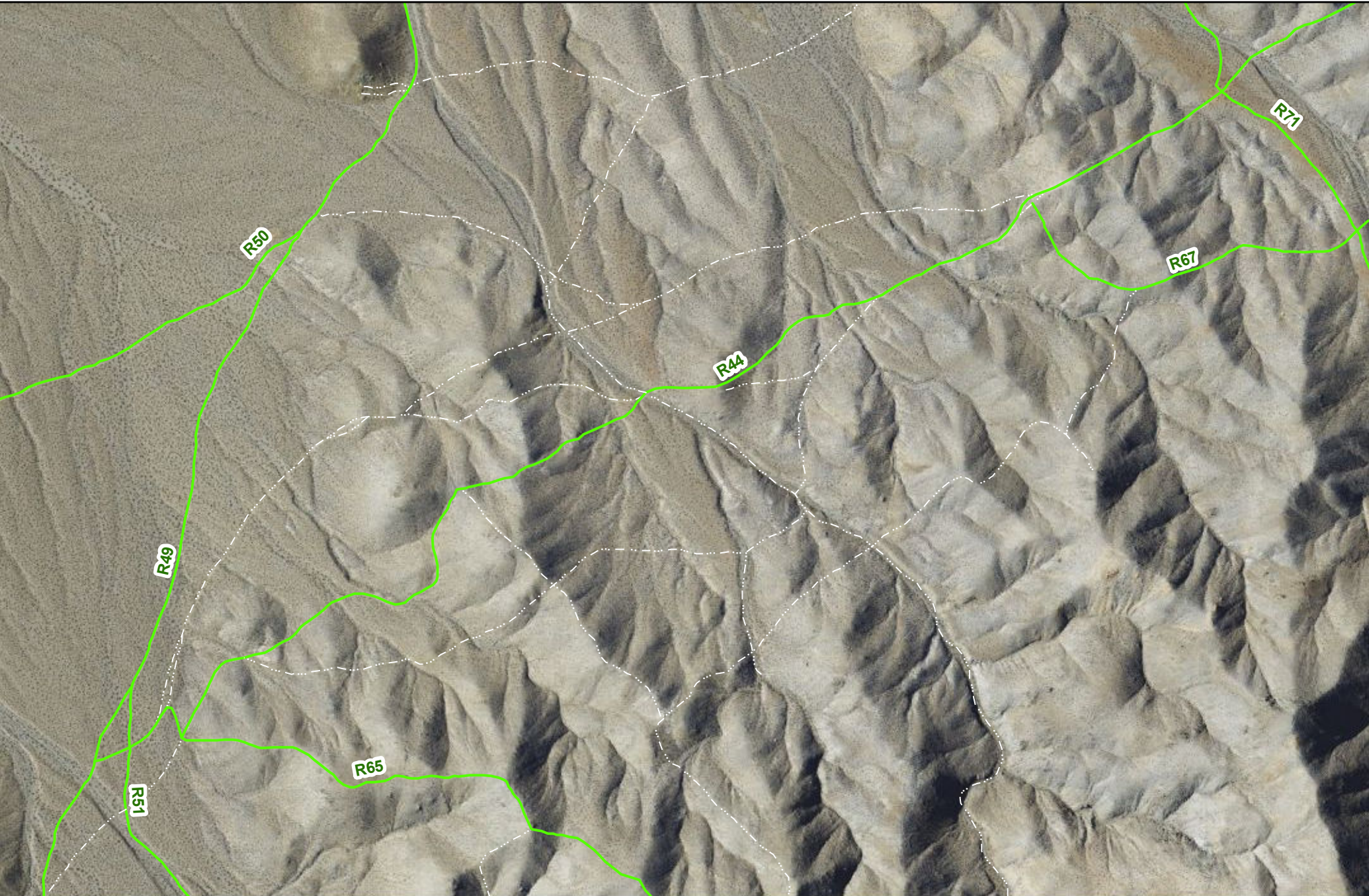
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- Open to All Vehicles
- Closed for All Vehicles
- County, State, or Federally Maintained
- Access Limited or Seasonally Closed
- Open for Two Wheeled Vehicles Only
- Undesignated or Unknown

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Rand Mountains
Rands Subregion

Figure D - 9
2006 Wemo Route Designation
2005 NAIP IMAGERY

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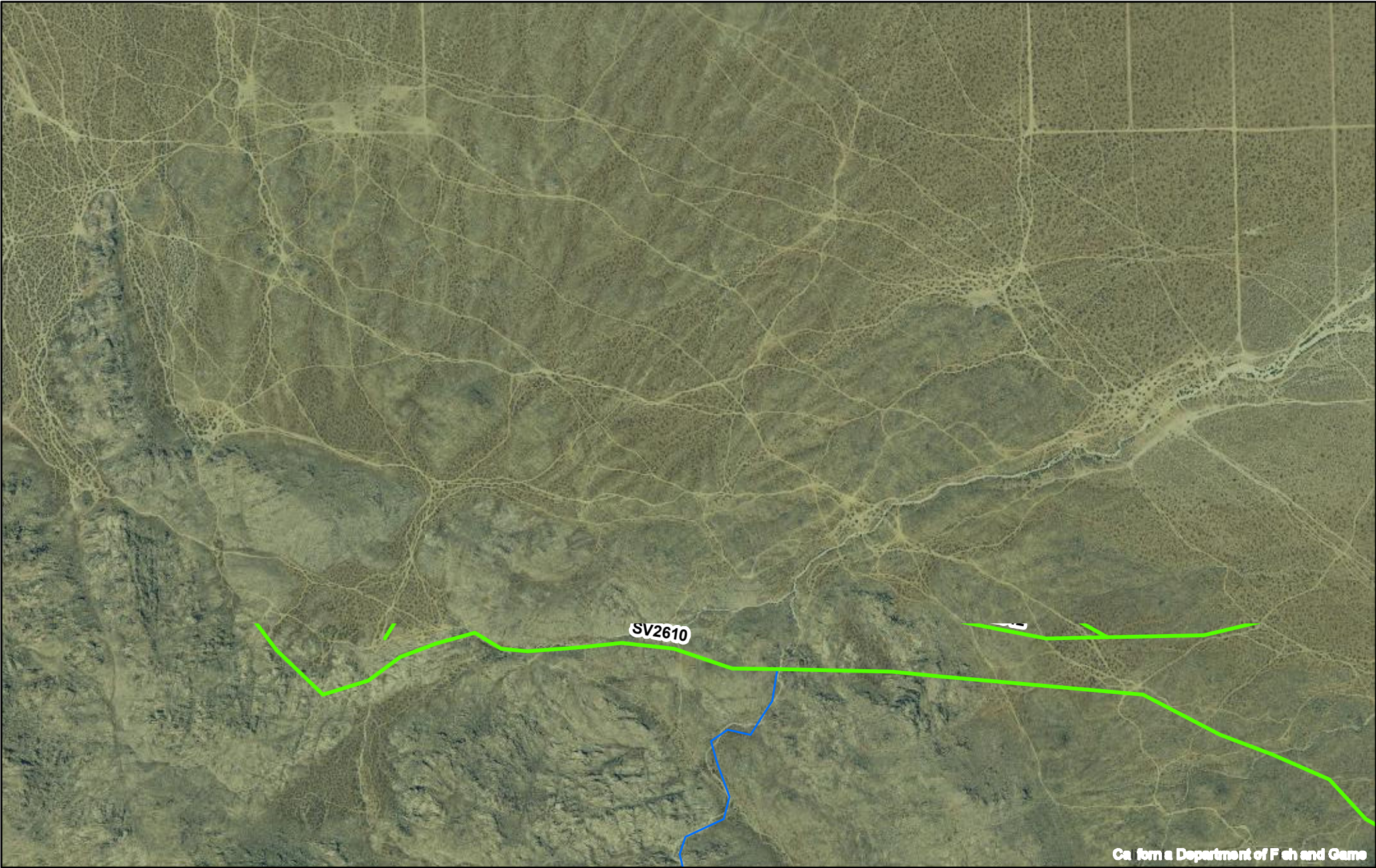
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- Closed
- Limited
- NonBLM
- Unk

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Rand Mountains
Rands Subregion

Figure D - 10
2013 - 2014 GTLF Route Designation
2012 NAIP IMAGERY

1:10,000

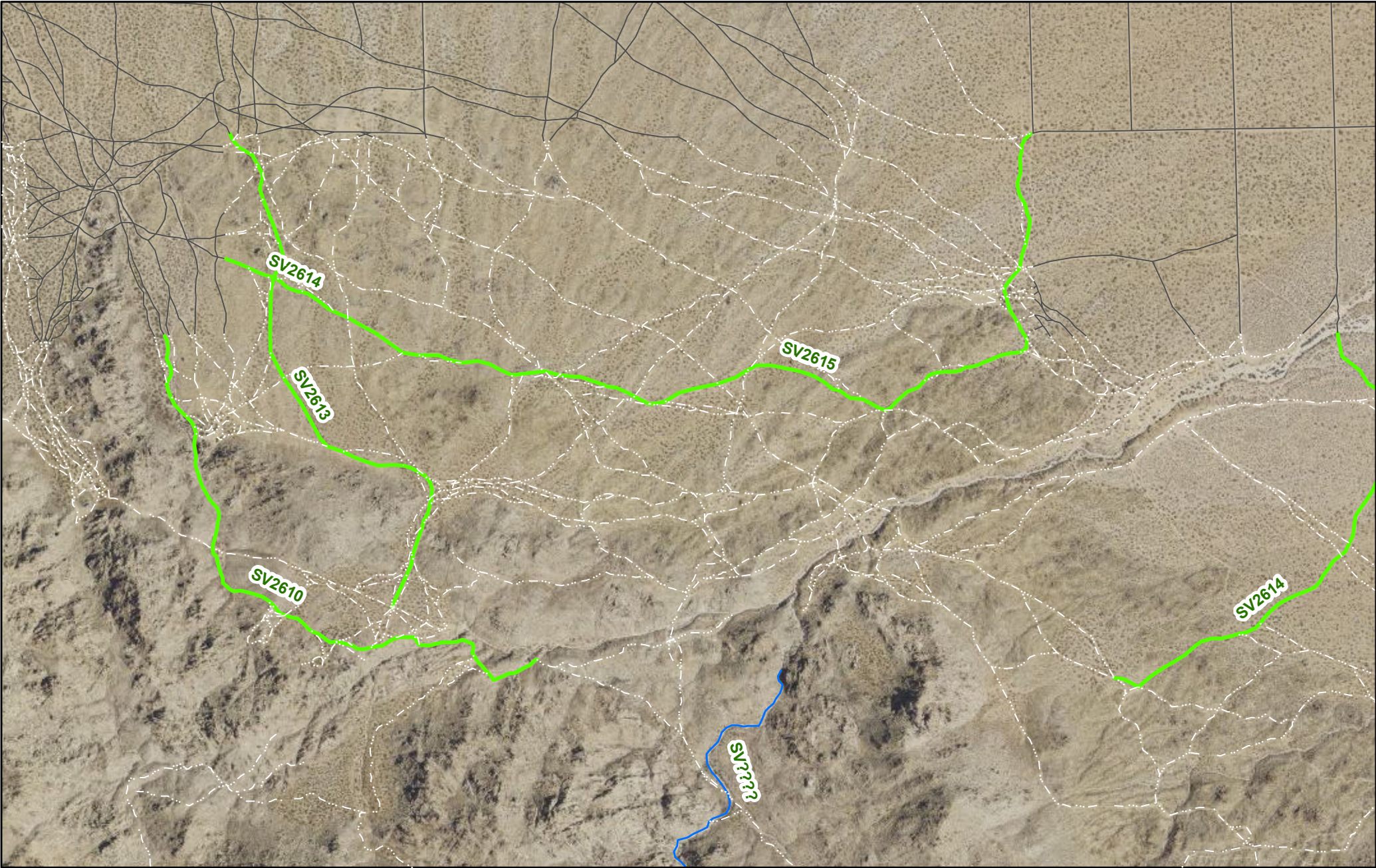


- Legend**
- Open to All Vehicles
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USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Granite Area
Stoddard Valley Subregion

Figure D - 11
2006 Wemo Route Designation
2005 NAIP IMAGERY

1:10,000



Legend

- Open
- Closed
- Limited
- NonBLM
- Unk

USE OF NAIP IMAGERY IN THE WEST MOJAVE ROUTE INVENTORY
Granite Area
Stoddard Valley Subregion

Figure D - 12
2013 - 2014 GTLF Route Designation 1:10,000
2012 NAIP IMAGERY