

## Chapter 2–Alternatives

### Introduction

The chapter describes the alternatives considered which would fulfill the purpose and need for amending land use plans and creating specific management prescriptions for species and habitats on federal lands, providing in particular for the recovery of the desert tortoise. Each of the four alternatives fully considered in this process is discussed under the eight planning issues described in Chapter 1. Other alternatives considered but eliminated from detailed study are also described.

### Vision and Concept

Each local, state, and federal agency and public interest with a stake in this plan has a mandate, or vision, or an influence related to the conservation of desert ecosystems. The three federal land-managing agencies, in particular, have very different mission mandates: multiple-use (BLM), preservation (JTNP), and military training (USMC). Visions and mandates for this planning area are well stated in existing land use plans, laws, and issue positions. An important and unique task in producing this plan was to search for synthesis of mandates and interests--i.e., to determine the nature and extent that agencies and interests shared desert ecosystems in common and, by this nature, also shared in their conservation. The difficult search for land management common ground defined the planning process. While a definitive common vision never was articulated during the planning process, and all stakeholders were not unanimous in their support for the details of proposals which follow, some fundamental points of ecosystem conservation and human use did evolve and suggest that overall land management should:

- conform to the intent of Standards for Public Land Health which would provide for the recovery of the desert tortoise and eliminate the need for more listings of species under state and federal endangered species acts,
- meet as much as possible the arrayed needs for human economic and social pursuits as defined by administrative mandate and articulated interest,
- impose as little additional restriction and expense burden on uses as possible, and
- include large areas of conservation to best allow for both the stresses of nature (on desert ecosystems) and allowable human uses.

Alternatives included in this plan describe an array of existing and new conservation areas or zones and prescriptions that address the conservation points noted above. In reading this plan, the reader should keep in mind the above points and the following hierarchical zones for conservation and use:

**Existing restricted areas** include all Joshua Tree National Park (JTNP) lands, non-target Chocolate Mountain Aerial Gunnery Range (CMAGR) lands, and BLM wilderness lands. Many uses and mechanical equipment are restricted, primarily by law. They are fixed and not negotiable. They provide a high degree of protection and preservation of species and habitats, but alone they do not

address ecosystem management on an overall basis. They provide the foundation for species and habitats conservation.

**Proposed Desert Wildlife Management Areas (DWMAs)** address the recovery of the desert tortoise. These are stand-alone areas which cover much of the designated critical habitat for the desert tortoise. As such they may and do overlap some existing restricted areas. On BLM and CMAGR lands DWMAs are designated areas of critical environmental concern (ACEC). Some additional use restrictions are proposed, but emphasis is placed on minimizing disturbance and maximizing mitigation, compensation, and restoration from authorized allowable uses.

**Proposed Wildlife Habitat Management Areas (WHMAs)** address other special status species and habitat management. Two kinds are proposed: one for bighorn sheep, one for all other special status species and habitats. Bighorn sheep WHMAs overlay the entire range of their occurrence and movement corridors. Multi-species WHMAs are complementary to existing restricted areas and DWMAs, which also cover other special status species and habitats. No restrictions are proposed other than closure of some routes of travel. Management emphasis is placed on active management, specific species and habitats mitigation, and restoration from authorized allowable uses. The special situation of “fixed-point” rare plants is also addressed.

**Other areas** are the remainder of areas not contained in one of the three areas above. These include some target areas in CMAGR and areas of relatively low-value, biological diversity (contained mostly, but not entirely, in BLM multiple use class moderate (MUC M) zones). In these areas federal lands may be disposed of to accomplish management goals for DWMAs and WHMAs, and land uses may occur which are discouraged in more sensitive areas. Except as provided for such situations as tortoise mitigation and some specific species, design and rehabilitation measures based on biological considerations would be less than in other areas.

The existing restricted areas, DWMAs, and WHMAs form the Multi-species Conservation Zone. As much as possible, the array of DWMAs and WHMAs does not incorporate areas high in human use values, although this situation does vary by alternative. Finally, an additional significant feature of managing the BLM portion of these areas is a strategic approach to land acquisitions and disposals. See Appendix H for an expanded explanation of the development of DWMAs and WHMAs and Appendix P for a detailed description of boundaries.

## Alternatives

Four land use management alternatives have been developed for federal lands in the Northern and Eastern Colorado Desert (NECO) planning area. They provide decision makers with a range of realistic and distinct options to fulfill the purpose and need for the project and address the eight scoping issues identified in Chapter 1.

### **1. No Action--Current Management**

This alternative describes existing resource conditions with current management practices and present land use allocations. Included are many decisions previously made but not implemented.

### **2. Proposed Plan**

This alternative provides for managing public lands using strong conservation measures to provide for recovery of the desert tortoise. It emphasizes ecosystem management while balancing for multiple uses.

### **3. Small DWMA--A Alternative**

This alternative provides for managing public lands for recovery of the desert tortoise through recommendations contained in the Tortoise Recovery Plan (USFWS 1994). It emphasizes conserving biodiversity and nonconsumptive uses.

### **4. Small DWMA--B Alternative**

This alternative provides for managing public lands with a reduced emphasis on ecosystem management and increased emphasis on multiple use of public resources, while still providing for recovery of the desert tortoise.

## **Alternatives Considered But Eliminated from Detailed Study**

An Environmental Impact Statement is required to rigorously explore and objectively evaluate all reasonable alternatives. The range of reasonable alternatives is limited by legal requirements and the requirements to fulfill the Purpose and Need described in Chapter One. The BLM considered two alternatives that were eliminated from detailed study. These alternatives were eliminated because they did not meet the Purpose and Need for this plan amendment or the CDCA Plan, did not meet certain legal requirements under the Federal Land Policy and Management Act (FLPMA), or were variations of alternatives already being studied in detail through this CDCA Plan amendment and environmental impact statement process.

### **Desert Tortoise Alternative**

An alternative with a single goal of providing for the desert tortoise was evaluated. This alternative was eliminated from detailed study because it did not meet the Purpose and Need of this plan which includes (1) meeting the needs of a variety of special status species and their habitat needs, (2) meeting the need to implement the "Rangeland Reform 94" initiative to improve ecological conditions while providing for sustainable development and uses on public lands, and (3) meeting the need of incorporating land use designations contained in the 1994 California Desert Protection Act into the CDCA Plan. In addition, this alternative would not meet the need as set forth in the CDCA Plan which includes meeting the multiple use requirements as set forth in Section 601 of the

FLPMA because it would eliminate or severely limit uses other than for the desert tortoise within the planning area.

### **Desert Tortoise Recovery Plan Alternative**

An alternative was examined that would have implemented all recommendations of the 1994 Desert Tortoise Recovery Plan. This alternative was dismissed from detailed study because it (1) was a variation of an alternative already being considered in this plan amendment; (2) would not meet the Purpose and Need of this amendment or the Purpose and Need of the CDCA Plan; and (3) would violate the FLPMA. This alternative is a variation of the Proposed Plan Alternative which incorporates most of the recommendations of the Desert Tortoise Recovery Plan. In addition, this alternative would not meet the Purpose and Need of this plan amendment or that of the CDCA Plan, which includes the need for meeting the multiple use requirements as set forth in Section 601 of the FLPMA. The Purpose and Need would not be met because the adoption of all recommendations contained in the recovery plan, when added to all of the other restrictions currently in place, would significantly limit implementation of other multiple use activities within the planning area.

### **Presentation of Alternatives**

Discussions which present, compare, and contrast the alternatives are organized in eight issues:

1. standards and guidelines
2. recovery of the desert tortoise
3. management of other special status animals and plants and natural communities
4. wild horses and burros
5. motorized-vehicle access/routes of travel designations/recreation
6. land ownership patterns
7. access to resources for economic and social needs
8. maintenance of the CDCA Plan

The issue of access to resources is addressed in the combination of proposals described for the other issue categories.

Each issue is further organized by **goals, objectives, and proposed actions**.

**Goals** and **objectives** form the basis for resolving issues and are constant through the array of alternatives. Achieving goals and objectives would be accomplished through implementation of proposed **actions**. The proposed actions are the substance of the plan for which decisions will be made in the Record of Decision document at the end of the planning process.

Actions which are common to all or most alternatives within each issue section are grouped together at the beginning of each issue section. Those actions which are new proposals under each alternative are labeled **Action**. Those which reflect current management are indicated with a **CM**, and those which are referred to elsewhere in the document for full description are indicated with **Ref**.

**Amendments to BLM’s California Desert Conservation Area Plan 1980**

This chapter identified a range of alternatives to address the purpose and need statements described in Chapter one. Some of the actions require amendment of the California Desert Conservation Area Plan in order to implement them, while others do not. A summary list of Proposed Plan is given in Table 2-1.

**Table 2-1. Summary of Issues and Proposed Plan Amendments to the CDCA Plan**

Issue Category	Section Number	Amendment Description
Public Land Health	2.1	<b>Amendment 1:</b> Proposed standards for Public Land Health and grazing management guidelines
Recovery of the Desert Tortoise	2.2	<b>Amendment 2:</b> Establish Desert Tortoise Wildlife Management Areas (DWMAs) and manage as Areas of Critical Environmental concern (ACECs) <ul style="list-style-type: none"> <li>• Change mixed MUC M (Moderate Use) and L (Limited Use) to all MUC L;</li> <li>• Change desert tortoise CAT II and CAT III to all CAT I inside DWMA, change all CAT I and CAT II outside DWMAs to CAT III</li> <li>• Delete some existing ACECs and HMPs</li> <li>• Adopt a set of DWMA (ACEC) management prescriptions</li> </ul>
		<b>Amendment 3:</b> Changes to cattle grazing management to recover the desert tortoise and incorporate 1994 BO in livestock grazing.
		<b>Amendment 4:</b> Changes to the stopping, parking, and vehicle camping to recover the desert tortoise.
Management of Special Status Animals and Plants and Natural Communities	2.3	<b>Amendment 5:</b> Establish Wildlife Habitat Management Areas (WHMAs) for Sonoran and Southern Mojave Bighorn Sheep Metapopulations <ul style="list-style-type: none"> <li>• Delete some existing HMPs</li> </ul>
		<b>Amendment 6:</b> Change MUC I (Intensive Use) in the Eagle Mountains area to MUC L (Limited Use) and MUC M (Moderate Use)
		<b>Amendment 7:</b> Change domestic sheep grazing management for management of the bighorn sheep and incorporate 1994 Biological opinions in livestock grazing.
		<b>Amendment 8:</b> Designate Multi-species Wildlife Habitat Management Areas (WHMAs) for about 60 wildlife and rare plant species
		<b>Amendment 9:</b> Change OHV designation for Palen Dry Lake, Palen Dunes, Rice Valley Dunes, Ford Dry Lake and Ford Dry Lake Dunes

Issue Category	Section Number	Amendment Description
Management of Wild Horses and Burros	2.4	<b>Amendment 10:</b> Change burro management to recover the desert tortoise and reduce conflicts with other agencies/values.
Motorized Access/Routes of Travel/Recreation	2.5	<b>Amendment 11:</b> Changes to organized competitive vehicle events to protect sensitive resources <ul style="list-style-type: none"> <li>• Delete Parker 400</li> <li>• Modify Johnson Valley to Parker</li> <li>• Delete MUC Guideline criteria in Recreation Element</li> </ul>
		<b>Amendment 12:</b> Changes to Routes of Travel Designation process <ul style="list-style-type: none"> <li>• Make MUC M (Moderate Use) the same as MUC L (Limited Use)</li> <li>• Designate routes of travel open, closed, or limited</li> </ul>
		<b>Amendment 13:</b> Changes the distance measurement for stopping, parking off a road from the roadway edge to the centerline of the road.
Land Ownership Pattern	2.6	None Required
Resource Access	2.7	None Required
Incorporate Changes created by 1994 CDPA	2.8	<b>Amendment 14:</b> Incorporate wilderness areas into CDCA Plan.

## 2.1 Issue: Standards and Guidelines

BLM's grazing regulations in Part 43 CFR 4180 require that State Directors, in consultation with Resource Advisory Councils, develop Standards of Rangeland Health and Guidelines for Grazing Management. The grazing regulations require that standards be in conformance with the "Fundamentals of Rangeland Health" (BLM policy developed in 1993) and that the standards and guidelines address each of the "guiding principles" as defined in the regulations (see Appendix B). Standards and guidelines are to be incorporated into BLM's land use plans to improve ecological conditions. Improving ecological conditions is based upon attainment and maintenance of the fundamentals for healthy ecological systems. Standards and Guidelines are defined as follows:

A **Standard** is an expression of the level of physical and biological condition or degree of function required for healthy, sustainable rangelands.

**Guidelines** for grazing management are the types of grazing management activities and practices determined to be appropriate to ensure that the Standards can be met or significant progress can be made toward meeting standards.

### Plan Alternatives and Scope

By this plan amendment, Public Land Health Standards would be developed and applied to resources and uses on the public (BLM) lands and grazing management guidelines would be developed and applied to grazing leases. The current regulations include a set of National "fallback" Standards and Guidelines, which apply only to livestock grazing in the Current Management/No Action Alternative. For all other alternatives a common set of "Regional" standards and guidelines have been developed. Regional standards apply to all BLM lands and programs, while regional guidelines still apply only to livestock grazing. BLM staff, in consultation with the California Desert District Advisory Council, developed the regional standards and guidelines. These standards and guidelines satisfy the requirements of BLM's strategic plan, comply with the fundamentals of rangeland health, and address each of the guiding principles as required by the grazing regulations (see Appendix B). The guidelines for grazing management address each of the guiding principles as well. At this time, there are no plans to develop guidelines for other activities.

While the definition and adoption of Standards and Guidelines applies specifically and only to BLM lands, the spirit of initiative would be reflected throughout the planning area in developing the strategic approach to managing species and habitats.

### Required Action on Grazing Leases

Standards and grazing management guidelines apply to grazing related portions of activity plans; terms and conditions of permits, leases, and other authorizations; and range improvement activities such as vegetation manipulation, fence construction, and development of water. For lands leased for grazing uses, the grazing regulations require the authorized officer to "take appropriate action" prior to the beginning of the next grazing season when standards or guidelines are not achieved and livestock grazing has been determined to be a significant factor in the failure to achieve the standard or comply with the guideline.

### Adoption of Standards and Guidelines

If the No Action alternative is adopted, the National Fallback Standards and Guidelines would be adopted for the California Desert District. If any one of the other three alternatives is selected, the Regional Standards and Guidelines would be adopted. This decision would amend the California Desert Conservation Area (CDCA) Plan so that only one set of standards and Guidelines would be adopted in the NECO planning area.

### Application of Standards in Land Use Planning

If Regional Standards of Public Land Health are adopted, they would be applied to all resources and uses of the public lands in the following manner:

- **Public Land Health Standards.** A single set of Public Land Health Standards would be applied in the NECO planning area and to all resources and uses. Standards have their foundation in the physical and biological laws of nature. These laws are consistent regardless of the resource or use.
- **Assessment of Public Land Health.** The health of public lands and resources would be assessed using the standards as the measurement of desired function.
- **Assessment Scale.** The health of public lands would be assessed on a landscape/watershed scale. While it may be useful and necessary to examine certain environmental components on a smaller scale, it is intended that the overall assessment of public land health be made at a landscape or watershed scale.
- **Health Determination.** Since Standards are statements of goals for physical and biological function, determinations would be based strictly on the result of resource assessments and be independent of the uses on the public land.
- **Resource Objectives.** Resource management objectives guide decisions made in land use and activity plans. In some cases, particularly where intensive land uses are allowed, resource management objectives could be met while the public land health determination may indicate non-conformance with the standards.
- **Causal factors.** Where Public Land Health assessments indicate that resource management objectives are not being met, a determination would be made as to the causes.
- **Action/Adaptive Management.** Where public land health does not conform to resource management objectives, appropriate action--including changes to land use or activity plans--would be initiated using existing regulatory authorities for each authorized activity. In the case of livestock grazing, the regulations require that the authorized officer "take appropriate action" prior to the beginning of the next grazing season when standards or guidelines are not achieved and livestock grazing has been determined to be a significant factor in the failure to achieve the standard or comply with the guideline.

### **Application of Standards in NEPA Analyses**

Analyses of resources and issues guided by standards would help NEPA review of projects. Consideration of standards should improve identification and analyses of:

- relevant resource conditions and ecosystem functions
- actions in terms of effects on resources and ecosystem functions
- the relationship of biological and physical resources and functions
- the most important resources and functions
- project design and mitigation
- cumulative effects
- short-term and long-term effects
- project compliance

#### **2.1.1 Goals and Objectives**

The goal of standards development is to meet or exceed the national policy for watersheds, ecological processes, water quality, and habitats. The goal of guidelines development is to meet national policy and the grazing regulations.

The objectives are to

- a. implement standards as directed by national policy and grazing regulations
- b. conform grazing activities to achieve standards

In summary, the No Action Alternative would implement National Fallback Standards, while the other alternatives would implement Regional Standards.

In the following sections, the No Action Alternative is discussed first, followed by the Proposed Plan Alternative. The other two action alternatives are identical to the Proposed Plan Amendment Alternative for this issue on standards and guidelines.

#### **2.1.2 No Action Alternative**

The No Action Alternative discusses the current management (CM) to be used in implementing National Fallback Standards under Objective a and current management under objective b to conform grazing activities.

##### **Objective a--Implement Standards**

**CM** Manage grazing activities under the National Fallback Standards:

**Soils**

Upland soils exhibit infiltration and permeability rates that are appropriate to the soil type, climate, and land form.

**Riparian/Wetland**

Riparian-wetland areas are in proper functioning condition.

**Stream Function**

Stream channel morphology (including but not limited to gradient, width/depth ratio, channel roughness and sinuosity) and functions are appropriate for the climate and land form.

**Native Species**

Healthy, productive, and diverse populations of native species exist and are maintained.

**Objective b--Conform Grazing Activities**

**CM** Manage grazing activities under the following National Fallback guidelines:

- Management practices maintain or promote adequate amounts of ground cover to support infiltration, maintain soil moisture, and stabilize soils.
- Management practices maintain or promote soil conditions that support permeability rates that are appropriate to climate and soils.
- Management practices maintain or promote sufficient residual vegetation to maintain, improve, or restore riparian-wetland functions of energy dissipation, sediment capture, groundwater recharge and stream bank stability.
- Management practices maintain or promote stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions that are appropriate to climate and land form.
- Management practices maintain or promote the appropriate kinds and amounts of soil organisms, plants and animals to support the hydrologic cycle, nutrient cycle, and energy flow.
- Management practices maintain or promote the physical and biological conditions necessary to sustain native populations and communities.
- Desired species are being allowed to complete seed dissemination in one out of every three years (Management actions would promote the opportunity for seedling establishment when climatic conditions and space allow.)
- Conservation of federal Threatened or Endangered, Proposed, Category 1 and 2 Candidate, and other Special Status species would be promoted by restoration and maintenance of their habitats.
- Native species are emphasized in the support of ecological function.
- Nonnative plant species are used only in those situations in which native species are not readily available in sufficient quantities or are incapable of maintaining or achieving properly functioning conditions and biological health.

- Periods of rest from disturbance or livestock use during times of critical plant growth or regrowth are provided when needed to achieve healthy, properly functioning conditions (the timing and duration of use periods would be determined by the authorized officer).
- Continuous, season-long, livestock use would be allowed to occur only when it has been demonstrated to be consistent with achieving healthy, properly functioning ecosystems.
- Facilities are located away from riparian-wetland areas wherever they conflict with achieving or maintaining riparian-wetland function.
- The development of springs and seeps or other projects affecting water and associated resources would be designed to protect the ecological functions and processes of those sites.
- Grazing on designated ephemeral (annual and perennial) rangeland would be allowed to occur only if reliable estimates of production have been made, an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and adverse effects on perennial species are avoided.

### 2.1.3 Proposed Plan

#### Objective a--Implement Standards

**Action** Manage all activities under the following regional standards of Public Land Health:

##### Soils

Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, land form, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable watershed, as indicated by:

- Canopy and ground cover are appropriate for the site.
- There is diversity of plant species with a variety of root depths.
- Litter and soil organic matter are present at suitable sites.
- Microbiotic soil crusts are maintained and in place.
- Evidence of wind or water erosion does not exceed natural rates for the site.
- Hydrologic and nutrient functions maintained by permeability of soil and water infiltration are appropriate for precipitation.

##### Native Species

Healthy, productive, and diverse habitats for native species, including special status species (Federal T&E, federally proposed, federal candidates, BLM sensitive, or California State T&E, and CDD UPAs), are maintained in places of natural occurrence, as indicated by:

- Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes.

- Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment.
- Plant communities are producing sufficient litter.
- Age class distribution of plants and animals are sufficient to overcome mortality fluctuations.
- Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events.
- Alien and noxious plants and wildlife do not exceed acceptable levels.
- Appropriate natural disturbances are evident.
- Populations and their habitats are sufficiently distributed and healthy to prevent the need for new listing as special status species.

### **Riparian/Wetland and Stream Function**

Wetland systems associated with subsurface, running, and standing water function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained, as indicated by:

- Vegetative cover would adequately protect banks and dissipate energy during peak water flows.
- Dominant vegetation is an appropriate mixture of vigorous riparian species.
- Recruitment of preferred species is adequate to sustain the plant community.
- Stable soils store and release water slowly.
- Plant species present indicate soil moisture characteristics are being maintained.
- There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species.
- Shading of stream courses and water sources for riparian dependent species is maintained.
- Stream is in balance with water and sediment being supplied by the watershed.
- Stream channel size and meander are appropriate for soils, geology, and landscape.
- Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.

### **Water Quality**

Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California state standards, as indicated by:

- The following do not exceed the applicable requirements: chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment, and dissolved oxygen.
- Standards are achieved for riparian, wetlands, and water bodies.

- Aquatic organisms and plants (e.g., macro-invertebrates, fish, algae, and plants) indicate support for beneficial uses.
- Monitoring results or other data that show water quality is meeting the standard.

For surface waters, the primary objectives are to (1) maintain the existing quality and beneficial uses of water, (2) protect waters where they are threatened (and livestock grazing activities are a contributing factor), and (3) restore waters where they are currently degraded (and livestock grazing activities are a contributing factor). Of particular importance are areas:

- where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act
- where aquatic habitat is present or has been present for federal threatened or endangered, candidate, and other special status species dependent on water resources
- in designated water resource sensitive areas such as riparian and wetland areas.

#### **Objective b--Conform grazing activities**

**Action** Manage grazing activities with the following Regional guidelines:

- Facilities would be located away from riparian-wetland areas wherever they conflict with achieving or maintaining riparian-wetland functions.
- The development of springs and seeps or other projects affecting water and associated resources would be designed to protect the ecological functions and processes of those sites.
- Grazing activities at an existing range improvement that conflict with achieving proper functioning conditions (PFC) and resource objectives for wetland systems (lentic, lotic, springs, addits, and seeps) would be modified so PFC and resource objectives can be met, and incompatible projects would be modified to bring them into compliance. The BLM would consult, cooperate, and coordinate with affected interests and livestock producers prior to authorizing modification of existing projects and initiation of new projects. New range improvement facilities would be located away from wetland systems if they conflict with achieving or maintaining PFC and resource objectives.
- Supplements would be located a sufficient distance away from wetland systems so they do not conflict with maintaining riparian wetland functions.
- Management practices would maintain or promote perennial stream channel morphology (e.g., gradient, width/depth ratio, channel roughness, and sinuosity) and functions that are appropriate to climate and land form.
- Grazing management practices would meet state and federal water quality standards. Impoundments (stock ponds) having a sustained discharge yield of less than 200 gallons per day to surface or groundwater are excepted from meeting California drinking water standards per California State Water Resources Control Board Resolution Number 88-63.

- In the California Desert Conservation Area all wildfires in grazing allotments would be suppressed. However, to restore degraded habitats infested with invasive weeds (e.g., tamarisk), prescribed burning may be used as a tool for restoration. Prescribed burns may be used as a management tool where fire is a natural part of the regime.
- In years when weather results in extraordinary conditions, seed germination, seedling establishment, and native plant species growth would be allowed by modifying grazing use.
- Grazing on designated ephemeral rangeland would be allowed only if reliable estimates of production have been made, an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and adverse effects on perennial species are avoided.
- During prolonged drought, range stocking would be reduced to achieve resource objectives and/or prescribed perennial forage utilization. Livestock utilization of key perennial species on year-long allotments would be checked about March 1 when the Palmer Severity Drought Index/Standardized Precipitation Index indicate dry conditions are expected to continue.
- Through the assessment process or monitoring efforts, the extent of invasive and/or exotic plants and animals would be recorded and evaluated for future control measures. Methods and prescriptions would be implemented, and an evaluation would be completed to ascertain future control measures.
- Habitats would be restored, maintained, or enhanced to assist in the recovery of federally listed threatened and endangered species. Habitats of special status species including federally proposed, federal candidates, BLM sensitive, or California threatened or endangered species, would be restored, maintained or enhanced to promote their conservation.
- Grazing activities would support biological diversity across the landscape, and native species and microbiotic crusts are to be maintained.
- Experimental research efforts would be encouraged to provide answers to grazing management and related resource concerns through cooperative and collaborative efforts with outside agencies, groups, and entities.
- Livestock utilization limits of key perennial species would be as shown in Table 2-2 for the various range types.

**Table 2-2. Proposed Plan Grazing Guidelines for Range Types**

Range Type	Percent Use of Key Perennial Species	
	Poor - Fair Range Condition or Growing Season <sup>a</sup>	Good - Excellent Range Condition or Dormant Season <sup>a</sup>
Mojave/Sonoran Desert Scrub	25	40
Salt Desert Shrubland	25	35
Semidesert Grass and Shrubland	30	40
Sagebrush Grassland	30	40
Mountain Shrub land	30	40
Pinyon-Juniper Woodland	30	40

<sup>a</sup> Rangeland in good condition or grazed during the dormant season can withstand the higher utilization level. Rangelands in poor condition or grazed during the active growth season would receive lower utilization levels.

Monitoring of grazing allotments resource conditions would be routinely assessed to determine if Public Land Health Standards are being met. In those areas not meeting one of more standards, monitoring processes would be established (where none exist) to monitor indicators of health until the standard or resource objective has been attained. Livestock trail networks, grazed plants, livestock facilities, and animal waste are expected impacts in all grazing allotments and would be considered during analysis of the assessment and monitoring process. Activity plans for other uses or resources that overlap an allotment could have prescribed resource objectives that may further constrain grazing activities (e.g., ACEC). In an area where a standard has not been met, the results from monitoring changes to grazing management required to meet standards would be reviewed annually. During the final phase of the assessment process, the Range Determination includes the schedule for the next assessment of resource conditions. To attain standards and resource objectives, the best science would be used to determine appropriate grazing management actions. Cooperative funding and assistance from other agencies, individuals, and groups would be sought to collect prescribed monitoring data for indicators of each standard.

**2.1.4 Small DWMA--A Alternative**

**Objective a--Implement Standards**

**Ref** Same as Proposed Plan.

**Objective b--Conform grazing activities**

**Ref** Same as Proposed Plan.

**2.1.5 Small DWMA--B Alternative**

**Objective a--Implement Standards**

**Ref** Same as Proposed Plan.

**Objective b--Conform grazing activities**

**Ref** Same as Proposed Plan.

## 2.2 Issue: Recovery of the Desert Tortoise

The Desert Tortoise (*Gopherus agassizii*) was listed as a threatened species in 1990 under the Federal Endangered Species Act. In 1994 the U.S. Fish and Wildlife Service (USFWS) designated desert tortoise critical habitat and completed the *Desert Tortoise (Mojave Population) Recovery Plan*, which contains recommendations for protective action. This listing and need to provide for recovery affects several local, state, and federal agencies, each with differing mandates for conservation and protection of the tortoise.

### 2.2.1 Goals and Objectives

The overall goal of the desert tortoise conservation strategy in the planning area is to recover populations of the desert tortoise in the two NECO recovery units identified in the USFWS plan by meeting the criteria for recovery as specified in the plan. The criteria, detailed on page 43 of the *Desert Tortoise (Mojave Population) Recovery Plan*, are summarized as follows:

- There is an upward or stationary trend in population for at least 25 years.
- Sufficient habitat is managed intensively to ensure long-term tortoise population viability (given in the Recovery Plan as at least one area of 1,000-square miles (640,000 acres) in each recovery unit).
- Population lambda (see pages C31-C32) is at least 1.0, (i.e., death rate is equal to recruitment rate):
  - Land management commitment is sufficient to ensure long-term protection of tortoise populations and habitat.
  - Management is sufficient without the use of regulatory mechanisms in the Endangered Species Act.

The objectives are to

- a. Establish desert wildlife management areas (DWMAs) where viable desert tortoise populations can be maintained.
- b. Implement management actions within DWMAs to address conflicts with the goal.
- c. Acquire sufficient habitat within the DWMAs to ensure that management actions are effective in the DWMAs as a unit.
- d. Reduce tortoise direct mortality resulting from interspecific (e.g., raven predation) and intraspecific (e.g., disease) conflicts that likely result from human-induced changes in ecosystem processes.
- e. Mitigate effects on tortoise populations and habitat outside DWMAs to provide connectivity between DWMAs.

### Decisions and Policy Common to all Alternatives

Regardless of the alternative selected, public lands within the planning area would be managed in accordance with all applicable laws and regulations. In addition, current policies complete the overall desert tortoise

recovery strategy. Current policy and management guidance which are common to all alternatives include, but are not limited to, the following:

1. New surface disturbing projects include specific design features (see Appendix D, Desert Tortoise Mitigation Measures) to minimize potential impacts to desert tortoise and their habitat.
2. All mining and mineral activities are subject to mitigation and compensation requirements. Whenever feasible, existing pits would be utilized for sand and gravel operations.
3. In areas of high fire incidence or in years of heavy fuel loading, campfire closures are enforced.
4. Wildfire suppression occurs with the minimum surface disturbance practical in all habitats. Wildfires are suppressed using a mix of only the following methods in order to minimize habitat disturbance:
  - a. aerial attack,
  - b. crews using hand tools to create fire breaks,
  - c. mobile attack engines limited to public roads, designated open routes, and routes authorized for limited-use,
  - d. use of foam and/or fire retardant, and
  - e. earth-moving equipment or tracked vehicles (such as bulldozers) in critical situations to protect life, property, or high-value resource.
5. Post fire-suppression mitigation includes rehabilitation of firebreaks and other ground disturbances and obliteration of vehicle tracks sufficient to discourage future casual use. Hand tools are used for rehabilitation activities whenever feasible.
6. All major, new linear utilities are placed in existing, designated utility corridors consistent with the existing CDCA Plan Energy Production and Utility Element. To the extent feasible, existing routes are utilized to provide access for maintenance of new rights-of-way.
7. Existing wildlife guzzlers would be modified to minimize mortality to desert tortoises and other wildlife, and new guzzlers would incorporate appropriate design features to do the same.
8. Federal and state land managing and regulatory agencies would maintain a presence to enforce wildlife regulations, reduce illegal dumping, littering, arson, off-road vehicle travel, and vandalism, and otherwise identify problems and concerns in proposed DWMA's.
9. The BLM would cooperate with other groups and agencies to identify areas where uncontrolled dogs are causing desert tortoise mortality. In the event such a situation is discovered, BLM would encourage counties to adopt or enforce ordinances prohibiting uncontrolled dogs in those areas.

### **Planning for Area-Wide Decisions and Management Strategy**

Planning for area-wide decisions and management strategy common to the Proposed Plan and to Small DWMA Alternatives A and B includes the following:

1. A restoration performance bond would be required for projects that count against projects that would create a significant disturbance. The project proponent may be required to periodically maintain restoration work including repeat of initial work. Restoration work may include, but would be not limited to seeding, planting, surface preparation, treating weed species, fence repair and watering. For details on implementation of this measure, see Appendix E.
2. Restoration of areas disturbed by projects would vary from site to site by design, costs, and methods. Restoration would be guided by site planning and standard or experimental technologies as defined in publications and generally described in Appendix E.
3. Key segments of closed routes of travel (described in Appendix I) would be restored to meet two goals: (1) protection and enhancement of habitat and species, and (2) implement route closure decisions.
4. BLM will participate with other agencies in development and implementation of a region-wide desert tortoise public education program. The desert Information Resource Task Group Program Coordinator would coordinate the program under direction of the Desert Managers' Group. Until the new program is developed, implement the applicable elements of the public education program (Appendix F) presented in the California Statewide Desert Tortoise Management Policy.
5. Agencies would work with CalTrans to design and install separate, freestanding, interpretive kiosks with desert tortoise protection information at Interstate Highway rest areas (e.g., Sand Hills on I-8, Cactus City and Wiley's Well on I-10, and Fenner Valley on I-40).
6. A Northern and Eastern Colorado Desert Coordinated Management Plan Cooperator's Meeting would be held at least annually. The agenda would include a review of implementation actions in this plan, population trends as indicated by monitoring, progress in research actions, status of public education programs, and cumulative new surface disturbance. Each of the cooperating agencies--BLM, NPS, USMC, USFWS, CDFG--would have an official representative present at the meeting. Among these representatives, a meeting moderator selected would prepare an agenda and minutes and would ensure that an annual report would be assembled at least 10 days prior to the meeting. The general public, interest groups, and other agencies would be invited and would be given time on the agenda to comment on plan implementation. The managers may also establish a technical group to address elements such as monitoring and coordinated budget requests.
7. Public comment on critical issues would be solicited from the California Desert Advisory Council for actions on BLM lands and from the Joshua Tree National Park Commission for actions on Park lands. The NEPA process would be used to provide information to the public

and to solicit comments on proposed projects occurring on federally administered lands in the planning area.

8. The Managers Over-site Group would oversee activities of the Desert Tortoise Coordinator and would have approval for various tortoise technical procedures.
9. The Desert Managers Group would continue to provide strategic fiscal planning and would oversee activities of the Integrated Ecosystem Monitoring Coordinator, the Public Information Coordinator, and the Habitat Restoration Coordinator. The Desert Managers Group would address interagency relations in the planning area.
10. The BLM and USMC would develop an interagency agreement for management of the Chocolate Mountains Aerial Gunnery Range as required by the California Desert Protection Act (Title VIII).
11. The BLM will obtain, through consultation with USFWS under Section 7 of the Endangered Species Act, biological opinions covering the effects on listed species of the CDCA Plan as amended by the Proposed Plan. For the desert tortoise only, the BLM has proposed that for projects meeting the following criteria USFWS would prepare a "tiered biological opinion" under expedited consultation procedures. The criteria are as follows:
  - disturbs less than 100 acres of tortoise habitat
  - does not require an Environmental Impact Statement
  - does not require amendment of the CDCA Plan

The BLM would submit to USFWS a *Report on Proposed Action* (see Appendix D) for any qualifying project. The Report would include a description of the project, the location, and a list of standard mitigation measures to be applied. An environmental assessment, if any, would be attached to the Report. USFWS would respond within 30 days with an expedited biological opinion that would tier off of the CDCA Plan biological opinion. This project-specific, expedited biological opinion would address, at a minimum, (1) the relationship of the specific proposed action to the CDCA Plan, (2) an evaluation of the effects of the action with respect to recovery within the recovery unit, (3) an incidental take statement, and (4) reasonable and prudent measures and terms and conditions for the incidental take. Where unusual circumstances exist, the USFWS may prepare, at their discretion, a standard, non-expedited, non-tiered biological opinion.

NECO covers all federal lands in the planning area; however, the consultation and resulting biological opinion apply only to BLM's management. Subsequent to the completion of NECO, the USMC will develop a land use plan for natural resources for CMAGR that will adopt elements of NECO and obtain a biological opinion for its lands. CMAGR currently has a BO (issued 1996) that covers its operational activities. JTNP has a general management plan that complements NECO proposals; JTNP has obtained a biological opinion.

12. In working with local and state governments on land use authorizations within their jurisdictions, federal land management agencies would advocate the following with respect to reducing raven populations and their negative effects on the tortoise:
- reduce the availability of solid wastes at sanitary landfills,
  - reduce the availability of organic wastes (related to facilities and methods for trash service, dump stations, and composting practices) unrelated to landfills, and
  - reduce the availability of water (related to facilities and methods for sewage treatment, pool/pond design, and irrigation).
13. The Desert Managers Group and the NECO cooperators would hold a management review when the one percent surface disturbance limit has reached the halfway point on an individual tortoise recovery unit basis.

### **2.2.2 No Action Alternative**

#### **Objective a--Establish Desert Wildlife Management Areas**

##### *Northern Colorado Desert Recovery Unit*

- CM** Manage current Category I and II desert tortoise habitat (Map 2-3 Appendix A) according to the California Statewide Desert Tortoise Management Policy and current Multiple-Use Class designations (Map 2-2 Appendix A).

##### *Eastern Colorado Desert Recovery Unit*

- CM** Manage current Category I and II desert tortoise habitat (Map 2-2 Appendix A) according to the California Statewide Desert Tortoise Management Policy. Manage Chuckwalla Bench ACEC and Milpitas Wash HMP (Map 2-4 Appendix A) according to existing plans and MUC classes (Map 2-2 Appendix A).
- CM** Manage critical habitat on CMAGR with the current biological opinions.
- CM** Manage JTNP desert tortoise habitat according to JTNP's General Management Plan and with an emphasis on natural ecosystem management policies that provide adequate protection against potential habitat-altering activities.

#### **Objective b--Implement Management Actions within Category I and II Habitat**

##### *General Actions*

- CM** Proposed activities and projects which cause new surface disturbance are evaluated on a case-by-case basis.

- CM** Compensation for disturbance of public lands within Category I and II is required according to the California Statewide Policy. This formula requires compensation in a range between 4-6 acres compensation lands required for each 1 acre disturbed. Equivalent funds may be directed toward habitat enhancement or rehabilitation. All compensation would be directed to the recovery unit where the disturbance occurs. Compensation would be required for uses authorized to all entities.
  
- CM** Entry points to Areas of Critical Environmental Concern are signed and, in certain cases such as the Desert Lily Preserve, are fenced to protect sensitive habitats from impacts related to vehicular access.

***Grazing Management***

- CM** Management of the Chemehuevi Cattle Allotment (Map 2-5 Appendix A) would continue with current boundaries (which encompass 137,321 acres) and management practices.
  
- CM** Management of the Lazy Daisy Cattle Allotment (Map 2-5 Appendix A) would continue with current boundaries (which encompass 332,886 acres), forage allocation of 3,192 animal unit months (AUM), and management practices.
  
- CM** Cattle grazing would be permitted on ephemeral grazing authorizations as described in Appendix C.
  
- CM** Perennial plant utilization may not exceed 40 percent in any key area within desert tortoise habitat on the Lazy Daisy Allotment.
  
- CM** Table 2-3 indicates proposed range improvements.

**Table 2-3. Proposed Range Improvements for the No Action Alternative**

Allotment Name	Range Improvement	Quantity and Unit	Estimated Cost	Desert Tortoise Category
Chemehuevi	Fence	0.1 mile	\$1,000	III
	Water Site <sup>a</sup>	1 each	750	III
	Water Facility <sup>a</sup>	1 each	3,500	III
Lazy Daisy	Fence	5.5 miles	22,000	I
	Cattle-guard	1 each	3,760	I
	Water Site <sup>a</sup>	3 each	3,000	I
		1 each	1,000	III
	Water Facility <sup>a</sup>	4 miles of pipe	21,200	I
		4 each	4,000	I
		2 each	2,000	III
	Corrals	2 each	4,000	I
		1 each	2,000	III
<b>Total All Allotments</b>			<b>\$68,210</b>	

<sup>a</sup> Water sites include any water accessible to cattle, e.g., troughs, springs, and reservoirs. Water facilities include facilities associated with water sites such as windmills, water storage tanks, and pipeline.

***Vegetation Resources***

**CM** Permits for live vegetation harvest may be issued in non-wilderness areas after environmental review.

***Lands and Land-Use Authorizations***

**CM** Lands acquired through compensation or mitigation are classified Open for disposal or use, under the following authorities:

- Agricultural Land Laws (e.g., Desert Land Entry, Carey Act, Indian Allotment)
- Recreation and Public Purposes Act Lease or conveyance
- FLPMA Lease/Sale (exceptions may be considered for sale of hazardous material sites to potentially responsible parties)
- Airport Lease/Grant
- Non-protective withdrawals

***Transportation/Access***

**CM** Fencing of major highways and railroads is considered as mitigation when new construction projects are proposed.

- CM** Bridges and culverts are considered as mitigation when new construction projects are proposed.
- CM** Stopping, parking, and vehicle camping are allowed within 300 feet of a route except within sensitive areas (such as ACECs) where the limit would be 100 feet. Where a wilderness area is closer to a route than the indicated standard, stopping, parking and vehicle camping are allowed only to the wilderness boundary.
- Ref** See section 2.5, Issue: Designation of Routes of Travel for prescriptions relating to transportation and access.

***Recreation***

- CM** Use of firearms would be permitted and regulated according to state regulations and county ordinances.
- Ref** See section 2.5, Issue: Designation of Routes of Travel for prescriptions relating to recreation.

***Wild Horses and Burros***

- Ref** See section 2.4 Issue: Wild Horses and Burros for prescriptions relating to management of wild horses and burros.

**Objective c--Acquire Sufficient Habitat**

- CM** Federal agencies retain public lands within Category I, and exchanges in Category II habitat would be allowed only if an equivalent or greater amount of Category I or II habitat would be acquired in public ownership as a result of the exchange. Disposals through any methods may occur in Category III.
- Ref** See section 2.6, Issue: Land Ownership Pattern for federal land ownership management.

**Objective d--Reduce Tortoise Direct Mortality Due to Changes in Ecosystem Processes**

- CM** Raven management would be accomplished by evaluating projects on a case project by case basis and appropriate mitigation would be prescribed.

**Objective e--Mitigate Effects on Tortoise Populations Outside Category I and II Habitat**

- CM** Grazing within desert tortoise habitat but outside Category I and II habitat would be conducted under the terms and conditions of the 1994 biological opinions and the National Fallback Standards and Guidelines.

**Ref** Stopping, parking, and vehicle camping are allowed within 300 feet of a route except within sensitive areas (such as ACECs) where the limit would be 100 feet. Where a wilderness area is closer to a route than the indicated standard, stopping, parking and vehicle camping are allowed only to the wilderness boundary.

### 2.2.3 Proposed Plan

#### Objective a--Establish Desert Wildlife Management Areas

##### *Northern Colorado Desert Recovery Unit*

**Action** Designate the Chemehuevi DWMA an ACEC, as shown in Map 2-6 Appendix A to protect desert tortoise and significant natural resources including special status plant and animal species and natural communities; USFWS would modify desert tortoise critical habitat to coincide with the DWMA. This area encompasses about 874,843 acres and contains some exclusions to allow for existing and future development (i.e., freeway exits, towns). Table 2-4 shows the distribution of land ownership in this area for all alternatives considered.

**Table 2-4. Distribution of Land Ownership in the Chemehuevi DWMA**

Landowner	No Action Alternative (Category I, II)		Proposed Plan		Small DWMA Alternatives A and B	
	Acres	%	Acres	%	Acres	%
BLM	866,986	91	815,843	93	695,500	94
State Lands	23,782	3	25,193	3	20,230	3
Private/Other	59,271	6	33,807	4	25,710	3
<b>Total</b>	<b>950,039</b>	<b>100</b>	<b>874,843</b>	<b>100</b>	<b>741,440</b>	<b>100</b>

**Eastern Colorado Desert Recovery Unit**

**Action** Designate the Chuckwalla DWMA, an ACEC, as shown in Map 2-6 Appendix A to protect desert tortoise and significant natural resources including special status plant and animal species and natural communities; USFWS would modify desert tortoise critical habitat to coincide with the DWMA. This area encompasses about 820,077 acres covering lands managed by both BLM and CMAGR and contains some exclusions to allow for existing and future development (i.e., military targets, freeway exits, towns). Table 2-5 shows the distribution of land ownership in this area.

**Table 2-5. Distribution of Land Ownership in the Chuckwalla DWMA.**

Landowner	No Action Alternative (Category I, II and Critical Habitat in CMAGR)		Proposed Plan		Small DWMA Alternatives A and B	
	Acres	%	Acres	%	Acres	%
BLM	365,599	52	465,287	57	355,929	56
USMC	186,423	27	186,423	23	186,423	30
State Lands	14,146	2	19,882	2	13,958	2
Private/Other	129,170	19	147,093	18	74,392	12
<b>Total</b>	<b>695,338</b>	<b>100</b>	<b>818,685</b>	<b>100</b>	<b>630,702</b>	<b>100</b>

**Action** Designate JTNP as shown in Map 2-6 Appendix A as the Joshua Tree DWMA. The remainder of JTNP may be added to this DWMA through the West Mojave Coordinated Management Plan.

### **Objective b--Implement Management Actions within DWMA's**

#### *General Actions*

**Action** Delete Chuckwalla Bench ACEC and Milpitas Wash HMP which are captured inside the proposed Chuckwalla DWMA.

**Action** Re-designate all MUC M (Moderate Use) lands within the proposed DWMA's to MUC L (Limited Use) as shown on Map 2-7 Appendix A.

**Action** Designate proposed DWMA's as Category I Desert Tortoise Habitat.

**Action** Limit cumulative new surface disturbance on lands administered by federal agencies within any DWMA to 1 percent of the federal portion of the DWMA (Appendix G). The amount that may be disturbed would be proportional to the holding of the administering agency.

**Action** Compensation for disturbance of public lands within DWMA's would be required at a 5:1 ratio within desert tortoise habitat. Equivalent funds may be directed toward habitat enhancement or rehabilitation (only option for CMAGR). All compensation would be directed to the Recovery Unit where the disturbance occurs. Compensation would be required for uses authorized to all entities.

**Action** The periphery of DWMA's would be fenced, signed or patrolled to ensure that conflicts with adjacent land uses are controlled. Where there are open or limited routes of travel, fencing would not hinder access.

#### *Grazing Management*

**Action** Prescriptions (Appendix C) adapted from terms and conditions in the 1994 biological opinions would be added to the CDCA Plan Grazing Element as permanent requirements for cattle and sheep grazing in desert tortoise critical habitat and other tortoise habitat.

**Action** Perennial plant utilization may not exceed 40 percent in any key area.

**Action** For a grazing allotment partially within a DWMA, when ephemeral forage production is less than 230 pounds per acre, cattle shall be substantially removed from the DWMA from March 15 to June 15.

- a. In years of good winter precipitation and soil moisture presence, cattle may remain past March 15 in expectation of ephemeral forage production over 230 lbs./ac. If this level

of forage is not attained when weather conditions (e.g., warming of the soil) are appropriate, cattle must leave the DWMA until such time as 230 lbs./ac. ephemeral forage is achieved or June 15, whichever is earlier. This determination will be made based on the evaluation and judgement of the BLM authorized officer. If cattle must be removed, the operator will be given two weeks to remove them from the DWMA.

- b. In years of poor winter precipitation or absence of soil moisture, cattle must be removed from the DWMA by March 15 and remain out until such time as 230 lbs./ac. ephemeral forage is achieved or June 15, whichever is earlier.
- c. The term “substantially removed” recognizes that some cattle may wander into the area of seasonal closure despite the operator’s best efforts and regardless of management facilities (e.g., fences, water sources) that are in place.
- d. The grazing strategy will be developed within a year and implemented within two years of the Record of Decision. The strategy would be a written plan detailing the area of removal, natural cattle movements, existing and potential improvements, and other constraints of cattle management.

**Action** Ephemeral authorization would no longer be available for cattle use in the Lazy Daisy and Chemehuevi allotments. As a result, the Lazy Daisy “perennial/ephemeral” designation would be changed to “perennial only,” and the forage in Chemehuevi Allotment would be allocated to desert tortoise. In addition, temporary non-renewable use on Lazy Daisy Allotment within the DWMA would no longer be authorized.

**Action** Forage on 21,606 acres in that portion of the Lazy Daisy Cattle Allotment falling within the highest density of desert tortoise habitat would be allocated to desert tortoise. That area of the allotment would no longer be available for livestock use. (See Map 2-8 Appendix A).

**Action** The Lazy Daisy Allotment lessee may voluntarily relinquish all grazing use authorizations, thereby initiating a grazing decision to allocate all forage to desert tortoise and making the allotment no longer available for livestock use. All ownership of range improvements would be conveyed to BLM. The intent of this alternative would be to manage the DWMA for tortoise conservation, but grazing use would continue until the lessee desires to relinquish the lease.

**Action** All existing cattle guards would be modified to prevent entrapment of desert tortoises. New cattle guards would be designed to prevent entrapment of desert tortoise.

**Action** Table 2-6 indicates proposed range improvements to improve cattle distribution.

**Table 2-6. Proposed Range Improvements for the Proposed Plan**

Allotment Name	Proposed Range Improvement	Quantity and Unit	Estimated Cost, \$	Desert Tortoise Category/DWMA
Lazy Daisy	Fence	18 miles	72,000	DWMA
	Cattle guard	3 each	11,280	DWMA
	Water Site <sup>a</sup>	3 each	3,000	DWMA
		1 each	1,000	III
	Water Facility <sup>a</sup>	4 miles of pipe	21,200	DWMA
		4 each	4,000	DWMA
		2 each	2,000	III
	Corrals	2 each	4,000	DWMA
		1 each	2,000	III
<b>Total</b>			<b>\$120,480</b>	

<sup>a</sup> Water sites include any water accessible to cattle, e.g., troughs, springs, and reservoirs.  
Water facilities include facilities associated with water sites such as windmills, water storage tanks, and pipeline.

***Vegetation Resources***

**Action** Permits for live vegetation harvest may be issued after environmental review only within salvage areas where surface disturbance has been authorized.

***Lands and Land-Use Authorizations***

**Action** Lands acquired through compensation or mitigation would be classified as Closed to disposal and use, through the following authorities:

- Agricultural Land Laws (e.g., Desert Land Entry, Carey Act, Indian Allotment),
- Recreation and Public Purposes Act Lease or conveyance,
- FLPMA Lease/Sale (exceptions may be considered for sale of hazardous material sites to potentially responsible parties),
- Airport Lease/Grant, or
- Non-protective withdrawals .

***Transportation/Access***

**Action** Interstate Highways 40 and 10 would be fenced by CalTrans along their common boundaries with DWMA's to preclude tortoise mortality and limit other wildlife mortality. In addition State Highway 95 would be fenced by CalTrans in that section of the Chemehuevi DWMA in which the tortoise population density is >50 tortoises per square mile. On Highway 95, the fence would be installed only when highway upgrade occurs (washes are spanned with

bridges and culverts to complement the fencing). Everywhere that fencing would be installed, it would be placed on both sides of highways. Fencing would meet standard design and installation specifications. Placement of fencing would not affect driving on connecting or nearby routes designated "open" or "limited." Fencing would be installed in sections of varying lengths according to routine highway maintenance cycles. Map 2-9 Appendix A show the locations of fencing, and Table 2-7 presents the locations, amounts, and costs of fencing.

**Action** Bridges and culverts for animal passage would be required for new linear projects, such as roads and railroads.

**Action** Portions of DWMA's are designated as "washes closed zones" wherein vehicle use would be restricted to specific routes, including navigable washes, that are individually designated "open" or "limited" (Map 2-10 Appendix A).

**Action** Stopping, parking, and vehicle camping are allowed no more than 100 feet from the *centerline* of an approved route of travel within DWMA's. Where wilderness areas would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management transportation and access, which includes definitions of terms related to routes and washes.

#### ***Recreation***

**Action** Use of firearms would be permitted and regulated according to state and county ordinances.

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management prescriptions relating to recreation.

#### ***Wild Horses and Burros***

**Ref** See section 2.4, Issue: Wild Horses and Burros for management prescriptions related wild horses and burros.

### **Objective c--Acquire Sufficient Habitat**

**Action** Federal agencies would retain public lands within DWMA's and Category I Habitat.

**Ref** See section 2.6, Issue: Land Ownership Pattern for acquisition management.

**Objective d--Reduce Tortoise Direct Mortality Due to Changes in Ecosystem Processes**

**Action** Remove ravens that are known to prey on tortoises through selective shooting, poisoning, or trapping where there is evidence of raven predation in or within 1 mile of tortoise habitat.

**Action** Proposed projects on federal lands anywhere in the planning area which have a potential for increasing raven populations would be reviewed for design and operations features and would require mitigation measures to reduce or eliminate the opportunity for proliferation of ravens.

**Ref** Highway road kills as a raven food source would be reduced by fencing Interstate and state highways to limit animal access.

**Objective e--Mitigate effects on Tortoise Populations outside DWMA**s

**Action** All existing Desert Tortoise Category I, II or III outside of DWMA boundaries would be converted to and managed as Category III habitat.

**Action** Grazing within desert tortoise habitat would be conducted under the livestock grazing prescriptions presented in Appendix C and the regional standards and guidelines.

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designations/Recreation. The "300-foot rule" for stopping, parking, and vehicle camping applied and is modified to reflect that the standard would be measured from the *centerline* of a route outside DWMA's. Where a wilderness area is closer to a route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the wilderness boundary.

**Table 2-7. Length and Estimated Costs of Proposed Fencing**

Highway or Railroad	Fencing for Both Sides of the Highway, Roads, or Railroads, in miles		
	Proposed Plan	Small DWMA-- A Alternative	Small DWMA-- B Alternative
<b>Chemehuevi DWMA</b>			
Interstate 40	68	40	18
Highway 95	28	46	28
Historic Routes 66	0	75	
Havasu Road	0	12	
Ward Valley	0	80	
ATSF Railroad	0	40	
<b>Subtotal</b>	<b>96</b>	<b>293</b>	<b>46</b>
<b>Chuckwalla DWMA</b>			
Interstate 10	112	102	12
Box Canyon Road	0	8	
Wiley Well / Milpitas Road	0	70	
Bradshaw Road	0	104	
<b>Subtotal</b>	<b>112</b>	<b>302</b>	<b>12</b>
<b>Joshua Tree DWMA</b>			
Cottonwood Road	0	60	0
<b>Total all DWMA's</b>	<b>208</b>	<b>637</b>	<b>58</b>
Estimated cost @ \$10/ft	\$10.9 million	\$33.6 million	\$3.0 million

#### 2.2.4 Small DWMA--A Alternative

##### Objective a--Establish Desert Wildlife Management Areas

###### *Northern Colorado Desert Recovery Unit*

**Action** Designate the Chemehuevi DWMA an ACEC, as shown in Map 2-11 Appendix A, to protect desert tortoise and significant natural resources including special status plant and animal species and natural communities; USFWS would modify desert tortoise critical habitat to coincide with the DWMA. This area encompasses about 741,440 acres and contains some exclusions to allow for existing and future development. This alternative DWMA was designed to minimize conflicts between tortoise habitat protection and grazing.

###### *Eastern Colorado Desert Recovery Unit*

**Action** Designate the Chuckwalla DWMA an ACEC, as shown in Map 2-11 Appendix A, to protect desert tortoise and significant natural resources including special status plant and animal species and natural communities; USFWS would modify desert tortoise critical habitat to coincide with the DWMA. This area encompasses about 632,094 acres covering land managed by both BLM and CMAGR and contains some exclusions to allow for existing and future development (e.g., military targets, freeway exits, towns). This alternative DWMA was designed to minimize conflicts between tortoise habitat protection and recreation, hunting, and high proportion of private land with many owners.

**Action** Designate JTNP as shown in Map 2-11 Appendix A as the Joshua Tree DWMA. The remainder of JTNP may be added to this DWMA through the West Mojave Coordinated Management Plan.

##### Objective b--Implement Management Actions within DWMA

###### *General Actions*

**Action** Delete the Chuckwalla Bench ACEC which is incorporated in the Chuckwalla DWMA.

**Action** Designate all Multiple-Use Class M (Moderate Use) lands in the proposed DWMA as Multiple-Use Class L (Limited Use) as shown on Map 2-12 Appendix A.

**Action** Designate DWMA as Category I Desert Tortoise Habitat.

**Action** There would be no threshold on new surface disturbance.

**Action** Compensation for disturbance of public lands within DWMA would be required according to the California Statewide Policy (for Category I). This formula would require compensation in range between 4-6 acres compensation lands required for each 1 acre

disturbed. Equivalent funds may be directed toward habitat enhancement or rehabilitation. All compensation would be directed to the Recovery Unit where the disturbance occurs. Compensation would be required for uses authorized to all entities.

**Action** The periphery of DWMA's would be fenced where there are conflicts with adjacent land uses and access cannot be otherwise controlled. Where there are open or limited routes of travel, fencing would not hinder access.

### *Grazing Management*

**Action** Ephemeral authorization would no longer be available for cattle use in the Chemehuevi Allotment. Forage would be allocated to the desert tortoise.

**Action** Forage on 140,357 acres in that portion of the Lazy Daisy Allotment within the boundaries of the proposed Chemehuevi DWMA would be allocated to the desert tortoise. That area of the allotment would no longer be available for cattle use. This would allow grazing use on 192,529 acres, and forage quantity would be set at 2,554 AUMs (Map 2-13 Appendix A).

**Action** Prescriptions adapted from terms and conditions in the 1994 biological opinions (Appendix C) would be added to the CDCA Plan Grazing Element as permanent requirements for cattle and sheep grazing in desert tortoise critical habitat and other tortoise habitat.

**Action** All existing cattle guards would be modified to prevent entrapment of desert tortoises. New cattle guards would be designed to prevent entrapment of desert tortoises.

**Action** Table 2-8 indicates proposed range improvements necessary to improve cattle distribution and to substantially remove cattle from the DWMA.

**Table 2-8. Proposed Range Improvements for the Small DWMA--A Alternative**

Allotment Name	Proposed Range Improvement	Quantity and Unit	Estimated Cost, \$	Desert Tortoise Category
Lazy Daisy	Fence	61.5 miles	246,000	I
	Cattle-guard	7 each	26,320	I
	Water Site <sup>a</sup>	3 each	3,000	I
		1 each	1,000	Non-category
	Water Facility <sup>a</sup>	4 miles of pipe	21,200	I
		4 each	4,000	I
		2 each	2,000	Non-category
	Corrals	2 each	4,000	I
		1 each	2,000	Non-category
<b>Total All Allotments</b>			<b>\$309,520</b>	

<sup>a</sup> Water sites include any water accessible to cattle i.e., troughs, springs, and reservoirs.  
Water facilities include facilities associated with water sites such as windmills, water storage tanks, and pipeline.

***Vegetation Resources***

**Ref** Same as the Proposed Plan.

***Lands and Land-Use Authorizations***

**Ref** Same as the Proposed Plan.

***Transportation/Access***

**Action** Portions of several interstate highways, state highways, maintained roads, and railroads in and adjacent to DWMA's would be fenced as recommended in the *Desert Tortoise Recovery Plan* to preclude tortoise mortality and limit other wildlife mortality. The work would be accomplished by various agencies and utility companies which have the operation and maintenance responsibilities for the indicated road/railroad. For highways scheduled to be elevated over washes, fences would be installed when highway upgrades occur. Installation along highways and roads which would never be elevated over washes may require design solutions which result in "leaky" fences and may incompletely reduce highway/road mortality. Where fencing would be installed, it would be placed on both sides of highways/roads. Fencing would meet standard design and installation specifications. Placement of fencing would not affect driving on connecting or nearby routes designated "open" or "limited." Fencing would be installed in sections of varying lengths according to routine highway maintenance cycles. Map 2-14 Appendix A and Table 2-7 show the locations, amounts, and costs of fencing.

**Action** Bridges and culverts for animal passage would be required for new linear projects, such as roads and railroads. Existing linear projects would be retrofitted with bridges and culverts.

**Action** All DWMA's are designated as "washed closed zones" wherein vehicle use would be restricted to specific routes, including navigable washes designated "open" or "limited."

**Action** Stopping and parking are allowed no more than 30 feet from the *centerline* of an approved route of travel within DWMA's. Vehicle camping would be allowed only in designated area. Where a wilderness area would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management of transportation and access.

#### ***Recreation***

**Action** Discharge of firearms would not be allowed in DWMA's except for hunting of game between September 1 and March 1.

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management prescriptions related to recreation.

#### ***Wild Horses and Burros***

**Ref** See section 2.4, Issue: Wild Horses and Burros for management prescriptions related to wild horses and burros.

### **Objective c--Acquire Sufficient Habitat**

**Action** Federal agencies would retain public lands within DWMA's.

**Ref** See section 2.6, Issue: Land Ownership Pattern for acquisition management.

### **Objective d--Reduce Tortoise Direct Mortality Due to Changes in Ecosystem Processes**

**Ref** Same as Proposed Plan with the following exception:

**Action** Ravens that are known to prey on tortoises may be removed through non-lethal means, only.

### **Objective e--Mitigate effects on Tortoise Populations outside DWMA's**

**Ref** Same as the Proposed Plan.

### 2.2.5 Small DWMA--B Alternative

#### Objective a--Establish Desert Wildlife Management Areas

##### *Northern Colorado Desert Recovery Unit*

**Ref** Same as Small DWMA A Alternative.

##### *Eastern Colorado Desert Recovery Unit*

**Ref** Same as Small DWMA A Alternative.

#### Objective b--Implement Management Actions within DWMA's

##### *General Actions*

**Action** Delete the Chuckwalla Bench ACEC, which is incorporated in the Chuckwalla DWMA (Map 2-4 Appendix A).

**Action** Designate all Multiple-Use Class M (Moderate Use) in the proposed DWMA's as Multiple-Use Class L (Limited Use) as shown on Map 2-12 Appendix A.

**Action** Designate proposed DWMA's as Category I Desert Tortoise Habitat.

**Action** Limit cumulative new surface disturbance on lands administered by federal agencies within any DWMA to 3 percent of the federal portion of the DWMA (Appendix G). The amount that may be disturbed would be proportional to the holding of the administering agency. For projects over 40 acres, a restoration performance bond may be required for projects that count against the 3% DWMA disturbance limit. This may require the project proponent to periodically maintain restoration work including repeat of initial work. Work may include, but is not limited to: seeding/planting, surface preparation, mowing weed species, fence repair, watering, and road closure. For details on implementation of this measure, see Appendix D.

**Action** Compensation for disturbance of public lands within DWMA's would be required according to the California Statewide Policy (for Category I). This formula would require compensation in range between 4-6 acres compensation lands required for each 1 acre disturbed. Equivalent funds may be directed toward habitat enhancement or rehabilitation. All compensation would be directed to the Recovery Unit where the disturbance occurs. Compensation would be required for uses authorized to all entities.

**Action** Boundaries of DWMA's would not be fenced when there are conflicts with uses.

*Grazing Management*

**Action** Forage on 140,357 acres in that portion of the Lazy Daisy Allotment within the boundaries of the proposed Chemehuevi DWMA would be allocated to the desert tortoise. That area of the allotment would no longer be available for cattle use. This would allow grazing use on 192,529 acres. Forage quantity will be set at 2,554 AUMs (Map 2-15 Appendix A).

**Action** Forage on 36,480 acres in that portion of the Chemehuevi Allotment falling within the highest density of desert tortoise-habitat would be allocated to the desert tortoise. That area of the allotment would no longer be available for cattle use. This would allow grazing use on 100,841 acres (Map 2-15 Appendix A).

**Action** The Chemehuevi Allotment Lessee may voluntarily relinquish all grazing use authorizations, thereby initiating a grazing decision to allocate all forage to desert tortoise and making the allotment no longer available for livestock use. All ownership of range improvements would be conveyed to BLM. The intent of this alternative would be to manage the DWMA for tortoise conservation, but grazing use would continue until the lessee desires to relinquish the lease

**Action** Prescriptions adapted from terms and conditions in the 1994 biological opinions (Appendix C) would be added to the CDCA Plan Grazing Element as permanent requirements for cattle and sheep grazing in desert tortoise critical habitat and other tortoise habitat.

**Action** All existing cattle-guards would be modified to prevent entrapment of desert tortoises. New cattle-guards would be designed to prevent entrapment of desert tortoises.

**Action** Table 2-9 indicates anticipated range improvements proposed to improve cattle distribution.

**Table 2-9. Proposed Range Improvements for the Small DWMA--B Alternative**

Allotment Name	Proposed Range Improvement	Quantity and Unit	Estimated Cost, \$	Desert Tortoise Category/DWMA
Chemehuevi	Fence	15 miles	60,000	DWMA
	Cattle-guard	3 each	11,280	III
	Water Site <sup>a</sup>	1 each	750	III
	Water Facility <sup>a</sup>	1 each	3,500	
Lazy Daisy	Fence	5.5 miles	22,000	I
	Cattle-guard	1 each	3,760	I
	Water Site <sup>a</sup>	3 each	3,000	I
		1 each	1,000	Non-category
	Water Facility <sup>a</sup>	4 miles of pipe	21,200	I
		4 each	4,000	I
		2 each	2,000	Non-category
	Corrals	2 each	4,000	I
		1 each	2,000	Non-category
<b>Total All Allotments</b>			<b>\$138,490</b>	

<sup>a</sup> Water sites include any water accessible to cattle i.e., troughs, springs, and reservoirs.  
Water facilities include facilities associated with water sites such as windmills, water storage tanks, and pipeline.

***Vegetation Resources***

**Action** Permits for live vegetation harvest may be issued either after environmental review for creosote bush stems or for any plant within salvage areas where surface disturbance has been authorized.

***Lands and Land-Use Authorizations***

**Ref** Same as Small DWMA--A Alternative.

***Transportation/Access***

**Action** Portions of Interstate Highways 40 and 10 and State Highway 95 would be fenced by CalTrans along their common boundaries with DWMA's to preclude tortoise mortality and limit other wildlife mortality. Because of the high cost involved, fencing would be installed only where two criteria are met: (1) highways have more than 1,000 vehicles per day, and (2) the adjacent tortoise population is >50 per square mile. State Highway 95 fencing would be installed only when highway upgrades occur (washes are spanned with bridges and culverts to complement the fencing). Where fencing would be installed, it would be placed on both sides of highways. Fencing would meet standard design and installation

specifications. Placement of fencing would not affect driving on connecting or nearby routes designated "open" or "limited". Fencing would be installed in sections of varying lengths according to routine highway maintenance cycles. Map 2-16 Appendix A and Table 2-7 show the locations, amounts, and costs of fencing.

**Action** Bridges and culverts for animal passage would be required for new linear projects, such as roads and railroads.

**Action** All DWMA's are designated as "washed closed zones" wherein vehicle use would be restricted to specific routes, including navigable washes that are individually designated "open" or "limited" (same as Small DWMA--A Alternative).

**Action** Stopping, parking, and vehicle camping are allowed no more than 300 feet from the *centerline* of an approved route of travel within DWMA's. Where a wilderness area is closer to a route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the wilderness boundary.

**Ref** See section 2.5 Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management of transportation and access.

#### ***Recreation***

**Action** Discharge of firearms will not be allowed in DWMA's except for hunting of game between September 1 and March 1 (Same as Small DWMA--A Alternative).

**Ref** See section 2.5, Issue: Motorized-Vehicle Access/Routes of Travel Designation/Recreation for management of recreation.

#### ***Wild Horses and Burros***

**Ref** See section 2.4, Issue: Wild Horses and Burros for management prescriptions related to wild horses and burros.

#### **Objective c--Acquire Sufficient Habitat**

**Action** BLM may dispose of public lands within a DWMA (outside of wilderness areas) if it augments the overall management strategy.

**Ref** See section 2.6 Issue: Land Ownership Pattern for land acquisition management.

#### **Objective d--Reduce Tortoise Direct Mortality Due to Changes in Ecosystem Processes**

**Ref** Same as Small DWMA A Alternative with the following exception:

**Action** Ravens known to prey on desert tortoises may be removed through non-lethal measures only.

**Objective e--Management Actions Outside DWMA**

**Ref** Same as Small DWMA A Alternative.

### 2.3 Issue: Management of Special Status Animals and Plants and Natural Communities

This section is organized into three parts.

1. **Bighorn Sheep** are addressed separately because wildlife habitat management areas (WHMAs) are proposed which are particular to the bighorn sheep's complex geographic occurrence or metapopulation and needs.
2. **Desert Mule Deer** are addressed separately because their management is related to the aesthetic, education, and recreational uses rather than conservation as a special status species.
3. **Other Special Status Animals and Plants and Natural Communities** are grouped together into a proposed common set of WHMAs that are different than those proposed for bighorn sheep.

#### 2.3.1 Desert Bighorn Sheep Conservation--Goals and Objectives

The overall goal of the desert bighorn sheep conservation strategy in the planning area is to ensure the long-term viability of the Sonoran Desert Bighorn Sheep Metapopulation and the Southern Mojave Desert Bighorn Sheep Metapopulation. To achieve this goal, the following sub-goals have been identified:

- maintain genetic variation in each metapopulation by conserving and enhancing individual bighorn sheep demes (subpopulations)
- maintain genetic variation in and viability of individual demes by improving or increasing usable habitat and by augmenting populations
- maintain habitat connectivity within and between demes

The objectives are to:

- a. identify and protect essential habitat for bighorn sheep (i.e., that habitat providing forage, water, cover, and space, including movement corridors, necessary for maintenance of a viable metapopulation),
- b. maintain, improve, and restore habitat quality within essential habitat, and
- c. reestablish lost demes or augment demes with less than 50 individuals by transplanting bighorn sheep as required.

#### Desert Bighorn Sheep Strategy

The bighorn sheep populations within the Northern and Eastern Colorado Desert planning area would be managed as two metapopulations--the "Sonoran Desert Bighorn Sheep Metapopulation" and the "Southern Mojave Desert Bighorn Sheep Metapopulation"--through decisions made in this plan and more specific plans for these two meta-populations that the California Department of Fish and Game (CDFG) is developing (Map 2-17 Appendix A). The CDFG plans would contain considerably more detail and site-specific proposals. All objectives and actions that follow apply to both metapopulations unless specified otherwise. Most of the actions were taken from a draft management plan prepared by CDFG for the Sonoran Desert Bighorn Sheep

Metapopulation. Work on the Southern Mojave plan has not yet begun. At least one alternative in each action set implements BLM's Fish and Wildlife 2000 Plan entitled *Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska*.

### **Decisions and Policy Common to all Alternatives**

1. Federal agencies would not dispose of National Park lands, military lands, and wilderness lands within the planning area.
2. When sufficient numbers of bighorn sheep are available, demes that contain less than 50 adults and have sufficient habitat to support more than 50 adults would be augmented. At current population levels, these demes (Map 2-17 Appendix A) include the following:

#### **Sonoran Bighorn Sheep Metapopulation WHMA**

Chuckwalla Mountains  
Little Mule Mountains

#### **Southern Mojave Bighorn Metapopulation WHMA**

Coxcomb Mountains  
Granite Mountains  
Iron Mountains  
Palen Mountains

CDFG would complete applicable meta-population plans and prepare capture and relocation plans for each augmentation and would coordinate and direct operations. Approval of the BLM State Director and/ or NPS Superintendent would be required before augmentation.

3. CDFG would provide regulations, permitting systems, law enforcement, and other agency action to support a sport hunting program where sustainable and where consistent with metapopulation management goals. Hunting would be permitted on BLM-administered lands, but would not be permitted in JTNP or CMAGR.
4. CDFG would continue to construct, improve, and maintain new and existing natural and artificial water sources, including exclosures where required. CDFG would coordinate such work through other agencies and volunteer groups according to CDFG standards and MOUs with BLM and CMAGR on land managed by BLM and CMAGR. BLM and USMC, for their respective lands, would consult with USFWS for proposed projects in desert tortoise habitat.
5. Public comment on critical issues would be solicited from established advisory councils.
6. The Desert Managers Group would address interagency relations in the planning area.

7. The BLM and CDFG would coordinate all wildlife management activities in BLM wilderness areas under the MOU on "Wildlife Management Activities in Wilderness" signed in 1997.
8. Barriers to bighorn sheep movement within demes and between demes would be limited to the extent possible. Installation of new roads, fences, and other linear projects would be mitigated to consider passage of bighorn sheep.
9. BLM Park rangers and CDFG wardens would continue to inform public land visitors where appropriate about bighorn sheep conservation issues.

### **Planning Area-wide Decisions and Management Strategy Common to All Alternatives**

1. CDFG, BLM, and NPS would jointly develop a public education plan. Educational materials might include brochures, posters, interpretive displays, and signs. The BLM's Santa Rosa Mountains Visitor Center and the JTNP Visitor Center would be primary contact points for public education for the planning area. Interpretive programs at the Big Morongo Reserve, Thousand Palms Preserve, Dos Palmas Reserve, BLM Information/Field Office Centers and National Parks would include information on desert bighorn sheep.
2. Plan implementation and other activities would be coordinated through the annual Northern and Eastern Colorado Desert Coordinated Management Plan Cooperator's Meeting.
3. The BLM and USMC would develop an interagency agreement for management of the Chocolate Mountains Aerial Gunnery Range as required by the California Desert Protection Act.
4. Artificial waters proposed for construction in any given year would (1) be submitted by June 1 and considered as a group, by metapopulation, for both bighorn sheep and deer; and (2) be supported by two levels of monitoring--population trends, and impact trends to tortoise or other special status species. The latter should include both direct monitoring (water hazards) and indirect monitoring (population dynamics/ecosystem changes).

**Note:** Any waters built on private land in the area of overlap between the NECO and Coachella Valley Plans is outside the scope of NECO and would have to meet conditions articulated in the Coachella Valley MSCP. NECO only addresses needs south of I-10, and artificial waters would generally be approved conditional to indicated NEPA and monitoring support. The array of waters proposed is subject to change depending upon the gathering of additional information and conduct of the monitoring program. Regardless of the number of waters installed, at such time as monitoring indicates the total number of waters is adequate for bighorn sheep/deer goals, or NEPA review indicates it is creating local or landscape scale impact, the cooperating agencies would consider ending the installation program.

5. Enclosures would protect waters from burros to varying degrees in alternatives; however, no specific numbers are proposed in this plan. At such time as they are proposed, full NEPA review

would be conducted. All or the bulk of such consideration would occur in the course of developing herd management area plans (see section 2.4).

### 2.3.1.1 No Action Alternative

#### Objective a--Identify and Protect Essential Habitat

- CM** Continue implementation of current desert bighorn HMPs (Marble Mountains, Whipple Mountains, Sheep Hole Mountains, Chuckwalla Mountains, and Orocopia Mountains) as shown on Map 2-4 Appendix A.
- CM** Continue management of the Ford Dry Lake and Rice Valley domestic sheep allotments with current boundaries (49,682 and 85,565 acres, respectively) and grazing prescriptions (Map 2-5 Appendix A).
- Ref** See section 2.6, Issue: Land Ownership Pattern for acquisition management.

#### Objective b--Maintain, Improve, and Restore Habitat Quality

- CM** Proposals for new water developments would be considered on a case-by-case basis. Design, construction, and maintenance information is provided in Appendix M.
- Ref** See section 2.4, Issue: Management of Wild Horses and Burros for management of burros inside bighorn sheep range.

#### Objective c--Reestablish Demes

- CM** Proposals to reestablish lost demes on BLM lands are addressed on as case-by-case basis and require an HMP and State Director approval.

### 2.3.1.2 Proposed Plan

#### Objective a--Identify and Protect Essential Habitat

- Action** Designate Wildlife Habitat Management Area (WHMA) for both the Sonoran Desert Bighorn Sheep Metapopulation and the Southern Mojave Desert Bighorn Sheep Metapopulation as shown on Map 2-18 Appendix A.
- Action** Delete Herd Management Areas Plans for Marble Mountains, Whipple Mountains, Sheep Hole Mountains, Chuckwalla Mountains, and Orocopia Mountains (Map 2-4 Appendix A), all of which are captured inside the WHMAs.
- Action** Change the Multiple Use Class designation in the Eagle Mountains area on 20,600 acres of current MUC I (Intensive Use) to MUC L (Limited Use) (18,000 acres) and MUC

Unclassified (2,600 acres). The rationale for this change includes: (1) MUC L more appropriately supports the management goals and objectives for bighorn sheep while still allowing for the extraction of minerals; (2) MUC I supported open pit mining of iron which terminated over a decade ago, including the dismantling of the associated milling facility; (3) mineral market conditions are such that remaining mineral potential (mostly iron and gold) is currently uneconomical; and (4) gold deposits are in the form of veins, the extraction of which would most likely not involve the open pit methods. This applies to public lands only. See Map 2-7 Appendix A.

**Action** Fence potential hazards to bighorn sheep (e.g., canals, pitfalls) with substantial fencing materials (e.g., chainlink).

**Action** Ford Dry Lake sheep allotment (49,682 acres) would no longer be available for domestic sheep use because it is less than 9 miles from occupied bighorn range in the Palen Mountains.<sup>1</sup>

**Action** About 9,254 acres in the southern portion of the Rice Valley sheep allotment would no longer be available for domestic sheep use because it is less than 9 miles from occupied bighorn range in the Granite and Palen Mountains<sup>1</sup> (Map 2-15, Appendix A).

**Action** In areas managed for any combination of burros, deer, and bighorn sheep, natural waters would be allocated to each species on an equal shares basis. Such allocations would improve the opportunity of achieving viable populations of each species, prevent over-utilization of both forage and water by burros, reduce conflicts from contact, and improve the efficiency of gathering burros. This allocation addresses only the indicated species and does not mean fundamental exclusion of other elements of the ecosystem. Allocations would be achieved through installation of exclosures that allow access to waters for deer and bighorn sheep and prevent access to burros. However, a specific fencing proposal is not addressed in this plan but is deferred until the number of burros reaches appropriate management level and a monitoring base has been established to include such information as animal numbers and water and forage usage. Design, construction, and maintenance information for typical exclosures is provided in Appendix M.

**Ref** See section 2.5, Issue: Designation of Routes of Travel for description of route closures.

**Ref** See section 2.6, Issue: Land Ownership Pattern for description of land acquisition management.

**Ref** See section 2.2, Issue: Recovery of the Desert Tortoise for prescriptions relating to reduction of surface disturbance which cover parts of bighorn sheep range.

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<sup>1</sup> BLM guidelines given in Appendix C of the BLM's *Mountain Sheep Ecosystem Management Strategy in the 11 Western States and Alaska* (see Appendix J) require a 9-mile buffer zone between bighorn sheep and domestic sheep unless there is a significant barrier to physical contact.

**Ref** See section 2.2, Issue: Recovery of the Desert Tortoise for terms and conditions for domestic sheep grazing.

### **Objective b--Maintain, Improve, and Restore Habitat Quality**

**Action** New water developments would be constructed to expand usable habitat for bighorn sheep. Some existing artificial water sources would be removed over time as they age and otherwise become non-functional or inefficient. These would include all nine windmills (which are no longer functional) and some pipe-tank facilities which are old, high maintenance, have too little storage capacity, and are redundant to proposed new facilities. An unspecified number of those to be removed are located in wilderness areas. Map 2-19 Appendix A shows 87 prospective new water development areas in the Sonoran Bighorn Sheep WHMA as identified by CDFG with the assistance of bighorn conservation groups. Of these 87 prospective sites, 75 would be authorized through this action with application of appropriate siting NEPA review. There are 51 sites common to both deer and bighorn sheep. Design, construction, and maintenance information is provided in Appendix M. Proposed sites have been generally mapped. Twenty-two of the proposed sites are in wilderness areas. Ten of those twenty-two sites would be authorized at this time as noted above and as shown in Table M-1 of Appendix M. The remaining 12 waters in wilderness areas that would not be authorized at this time may be authorized at a later time without further amendment but must be supported with additional biological justification (e.g., the completion of the Sonoran Meta-Population Plan being developed by CDFG) and site-specific NEPA analysis.

**Ref** See section 2.4, Issue: Management of Wild Horses and Burros for management of burros inside bighorn sheep range.

### **Objective c--Reestablish Demes**

**Action** After burro and domestic sheep conflicts are resolved and when sufficient numbers of bighorn sheep are available, reestablish the following lost demes (Maps 2-17 and 2-18 Appendix A) in the Sonoran Bighorn Sheep Metapopulation WHMA:

Cargo Muchacho Mountains  
Mule Mountains  
Palo Verde Mountains

CDFG would prepare a capture and relocation plan for each reestablishment and would coordinate and direct operations. Approval of the BLM State Director would be required prior to reestablishment.

### 2.3.1.3 Small DWMA--A Alternative

#### Objective a--Identify and Protect Essential Habitat

**Action** Designate Wildlife Habitat Management Areas (WHMA) of essential habitat for the Sonoran Desert Bighorn Sheep Metapopulation and the Southern Mojave Desert Bighorn Sheep Metapopulation as shown on Map 2-18 Appendix A.

**Action** Delete HMPs for Marble Mountains, Whipple Mountains, Sheep Hole Mountains, Chuckwalla Mountains, and Orocopia Mountains (Map 2-4 Appendix A), which are all captured inside WHMAs.

**Action** Change the Multiple Use Class designation in the Eagle Mountains area on 20,600 acres of current MUC I (Intensive Use) to MUC L (Limited Use) (18,000 acres) and MUC Unclassified (2,600 acres). The rationale for this change is (1) MUC L more appropriately supports the management goals and objectives for bighorn sheep while still allowing for the extraction of minerals; (2) MUC I supported open pit mining of iron which terminated over a decade ago, including the dismantling of the associated milling facility; (3) mineral market conditions are such that remaining mineral potential (mostly iron and gold) is currently uneconomical; and (4) gold deposits are in the form of veins, the extraction of which would most likely not involve the open pit methods. This applies to public lands only. See Map 2-12 Appendix A.

**Action** Where they occur and if necessary, wild burros may be fenced out of some or all natural and artificial waters within currently occupied range of the Sonoran Bighorn Sheep Metapopulation WHMA or the Southern Mojave Bighorn Metapopulation WHMA. Design, construction and maintenance information is provided in Appendix M.

**Action** Ford Dry Lake sheep allotment (49,682 acres) would no longer be available for domestic sheep use because it is less than 9 miles from occupied bighorn range in the Palen Mountains.

**Action** Rice Valley sheep grazing allotment (85,565 acres) would no longer be available for domestic sheep use in order to re-establish the Little Maria Mountain deme (Map 2-13 Appendix A). The allotment is within 9 miles of proposed deme.

**Ref** See section 2.5, Issue: Designation of Routes of Travel for description of route closures.

**Ref** See section 2.6, Issue: Land Ownership Pattern for description of land acquisition management.

**Ref** See section 2.2, Issue: Recovery of the Desert Tortoise for prescriptions relating to reduction of surface disturbance which cover parts of bighorn sheep range.

**Ref** See section 2.2, Issue: Recovery of the Desert Tortoise for terms and conditions for domestic sheep grazing.

**Objective b--Maintain, Improve, and Restore Habitat Quality**

**Ref** Same as the Proposed Plan.

**Objective c--Reestablish Demes**

**Ref** Same as the Proposed Plan.

**2.3.1.4 Small DWMA--B Alternative**

**Objective a--Identify and Protect Essential Habitat**

**Ref** Same as the Proposed Plan.

**Objective b--Maintain, Improve, and Restore Habitat Quality**

**Action** Construct new water developments outside of designated wilderness areas as generally described below (not shown on a map) to expand usable habitat in the Sonoran Bighorn Sheep Metapopulation WHMA:

<b>Location</b>	<b>Quantity</b>
Little Chuckwalla Mountains	1
Between Hwy 78 and I-8	3
Chocolate Mountains (west side)	3
Little Mule Mountains	1
Orocopia Mountains	1
Little Picacho Mountains	1
Chuckwalla Mountains (north side)	2
Mule Mountains (to reestablish deme)	3
Palo Verde Mountains (to reestablish deme)	3
Cargo Muchacho Mountains (to reestablish deme)	3

Some existing artificial water sources would also be removed over time. These include all nine windmills (which are no longer functional) and some pipe-tanks facilities which are old, high maintenance, have too little storage capacity, and are redundant to proposed new facilities. An unspecified number of those to be removed are located in wilderness areas. Fewer of these existing facilities would be removed than proposed in the Proposed Plan, however, because so few new waters are proposed. Some of these new water developments would benefit deer. Design, construction, and maintenance information is provided in Appendix M. Agencies would attempt to site new water developments at least 1/4 mile from open routes or washes.

- Ref** See section 2.4 Issue: Management of Wild Horses and Burros for management of burros inside bighorn sheep range.

### **Objective c--Reestablish Demes**

- Ref** Same as the Proposed Plan.

### **2.3.2 Desert Mule Deer Management--Goals and Objectives**

Desert mule deer is a native species, but not a special status species. Deer are included in this section primarily because they are managed as a game species and because artificial waters are proposed to support their population. Deer would potentially benefit from prescriptions related to protecting and enhancing habitat for both bighorn sheep and other special status animal and plant species. Nevertheless, management of mule deer is not dependent on designation of DWMA's or WHMA's.

The objective of this effort is to

- a. provide for the aesthetic, educational, and recreational uses of desert mule deer, to be accomplished by maintaining genetic variation in, and viability of, individual demes and by improving or increasing usable habitat and by augmenting populations

### **Desert Mule Deer Strategy**

The desert mule deer populations within the Northern and Eastern Colorado Desert planning area would be managed as two populations identified by their current CDFG hunting zone designation: D-12 and D-17. Desert mule deer would continue to be conserved as a native species and would continue to be managed as a game species. CDFG is currently rewriting the deer conservation and management plan for both of these herds in a document known as the Deer Management Plan for Deer Assessment Unit 11. When completed the CDFG plan would contain considerably more detail and site-specific proposals. While deer is a native species found in JTNP and CMAGR, hunting is not allowed on those lands. In addition, in JTNP there would be no game management consideration for deer, including artificial waters, but there is in CMAGR in support of hunting that occurs outside CMAGR. Therefore, the bulk of this strategy would be limited to BLM and CMAGR lands.

### **Decisions and Policy Common to all Alternatives**

1. Manage deer in deer habitat throughout its range as currently delineated in the state's D-12 Deer Action Unit and manage harvesting through hunting. CDFG would provide regulations, permitting systems, law enforcement, and other action to support a hunting program where sustainable and consistent with metapopulation management goals.
2. CDFG would continue to construct, improve, and maintain existing natural and artificial water sources and exclosures around them where required and coordinate such work through other

agencies and volunteer groups according to CDFG standards and MOUs with BLM and CMAGR.

3. Artificial waters proposed for construction would be considered as a grouped proposal as noted for waters proposed for bighorn sheep (see section 2.3) and addressed in a NEPA review on a yearly basis for administrative efficiency. A monitoring summary (population trends, and effects of waters) would be included to help support the annual proposal and the full strategic number and patter for the metapopulation as outlined in the Plan. Since about half of the proposed artificial waters for bighorn sheep and desert mule deer are mutually beneficial, they would also be considered simultaneously. In this plan new artificial waters are proposed only for the Sonoran Desert Bighorn Sheep Metapopulation. Proposals for the Southern Mojave Desert Bighorn Sheep Metapopulation, including JTNP, would be considered at a later date.

#### **2.3.2.1 No Action Alternative**

##### **Objective a--Provide for the aesthetic, educational, and recreational uses of desert mule deer**

- CM** Proposals for new water developments for burro deer are considered on a case-by-case basis. Design, construction, and maintenance information is provided in Appendix M.

#### **2.3.2.2 Proposed Plan**

##### **Objective a--Provide for the aesthetic, educational, and recreational uses of desert mule deer**

**Action** New water developments would be constructed to expand usable habitat for desert mule deer. Map 2-19 Appendix A shows 101 prospective areas for the new water developments in the Sonoran WHMA as identified by CDFG with the assistance of bighorn conservation groups. Of the 101sites, 53 are common to both deer and bighorn sheep. Design, construction, and maintenance information is provided in Appendix M. Proposed sites have been generally mapped. Nine sites are shown on Map 2-19 to be in wilderness areas, but only two of those nine are authorized at this time and are arrayed by wilderness area as shown in Table M-1 Appendix M. Many more are located near the boundaries of wilderness areas. This location pattern was developed to best meet the objective with the minimum necessary inclusion in wilderness areas. The remaining seven waters in wilderness areas not authorized at this time may be authorized at a later time without further amendment but must be supported with additional biological justification and site-specific NEPA analysis.

#### **2.3.2.3 Small DWMA--A Alternative**

##### **Objective a--Provide for the aesthetic, educational, and recreational uses of desert mule deer.**

**Action** Same as the Proposed Plan.

#### 2.3.2.4 Small DWMA--B Alternative

##### Objective a--Provide for the aesthetic, educational, and recreational uses of desert mule deer

**Action** Construct 21 artificial waters for deer over the next several years (Figures M-1 and M-2 Appendix M). Use would be common to both deer and bighorn sheep at all sites.

#### 2.3.3 Other Special Status Animal and Plant Species, Natural Communities, and Ecological Processes--Goals and Objectives

Goals for special status animal and plant species, natural communities, and ecological processes are as follows:

- **Plants and Animals.** Maintain the naturally occurring distribution of 28 special status animal species and 30 special status plant species in the planning area. For bats, the term "naturally occurring" includes those populations that might occupy man-made mine shafts and adits.
- **Natural Communities.** Maintain proper functioning condition in all natural communities with special emphasis on communities that a) are present in small quantity, b) have a high species richness, and c) support many special status species.
- **Ecological Processes.** Maintain naturally occurring interrelationships among various biotic and abiotic elements of the environment.

The objectives are to

- a. protect and enhance habitat
- b. protect connectivity between protected communities

#### Decisions and Policy Common to all Alternatives

- 1, Activities or projects authorized at or within 1 mile of a significant bat roost site would have applicable mitigation measures. Mitigation might include seasonal restrictions, light abatement, bat exclusion, and gating of alternate sites. If bats are to be excluded from an old mine prior to renewed mining, the exclusion must be performed at a non-critical time for the species present by a qualified bat biologist. Mitigation plans for large mines would consider retaining some shafts and adits or creating new ones as compensation.
2. Within suitable habitat within the distribution of flat-tailed horned lizard, all applicable actions in the Flat-tailed Horned Lizard (FTHL) Conservation Strategy (available in BLM Riverside and El Centro offices) would be applied. These include the following:

- a. Where occupied flat-tailed horned lizard habitat is identified, apply mitigation measures specified in the FTHL Strategy.
  - b. Require compensation for disturbance of habitat at 1 acre acquired for each acre disturbed, which is the rate outside of FTHL Management Areas.
  - c. Document all habitat disturbance according to an interagency protocol.
3. Public comment on critical issues would be solicited from the California Desert Advisory Council for actions on BLM lands and from the Advisory Commission for lands in JTNP. The NEPA process would be used to provide information to the public and to solicit comments on proposed projects occurring on federally administered lands in the planning area.
  4. The Desert Managers Group would continue to provide strategic fiscal planning and would oversee activities of the Integrated Ecosystem Coordinator, the Public Information Coordinator, and the Habitat Restoration Coordinator. The Desert Managers Group would address interagency relations in the planning area.
  5. The BLM and CDFG would coordinate all wildlife management activities in wilderness under the MOU (available in all BLM offices) on "Wildlife Management Activities in Wilderness" signed in 1997.

#### **Planning Area-wide Decisions and Management Strategy Common to All Alternatives**

Various actions to benefit desert tortoises would add protection to special status species and natural communities within DWMA's depending upon the alternative selected. Additionally, there are many other important issues which would add additional commitment to the conservation of special status species and natural communities. These include but are not limited to the following:

1. CDFG, BLM, and NPS would jointly develop a public education plan. Educational materials might include brochures, posters, interpretive displays and signs. The BLM's Santa Rosa Mountains Visitor Center and the JTNP Visitor Center would be primary contact points for public education for the planning area. Interpretive programs at Big Morongo Reserve, Thousand Palms Reserve, Dos Palmas Reserve, and National Parks would include topics such as needs of special status species, vegetation restoration, fire ecology, and off-highway vehicle use. BLM rangers, Park rangers, and CDFG wardens would continue to inform public land visitors on these issues.
2. A Northern and Eastern Colorado Desert Coordinated Management Plan Cooperator's Meeting would be held at least annually. The agenda would include a review of implementation actions in this plan, population trends as indicated by monitoring, progress in research actions, status of public education programs, and cumulative new surface disturbance. Each of the cooperating agencies--BLM, NPS, USMC, USFWS, CDFG--would have an official representative present at the meetings. The general public, interest groups, and other agencies would be invited and would be given time on the agenda to comment on plan implementation. The managers may also

establish a technical group to address some elements such as monitoring and coordinated budget requests.

3. The BLM and USMC would develop an interagency agreement for management of the Chocolate Mountains Aerial Gunnery Range as required by the California Desert Protection Act.
4. Within one year after completing the plan, BLM and NPS would jointly develop and submit a monitoring plan to USFWS to ensure that casual uses or other human activity are not affecting known occurrences of Coachella Valley Milkvetch.
5. During project construction, special effort would be made to avoid disturbance of populations of any special status plant. Avoidance would be strongly encouraged, but where plants cannot be avoided, the effects of the project on the species as a whole would be assessed. If the project is not likely to jeopardize the species or lead to the need to list a candidate or sensitive species, the project may be approved. Disturbance of a listed plant species would not be allowed. Consideration would be given to transplanting; seed collection and propagation; seed-bed removal and replacement; and long-term, rigorous post-project monitoring of plant population recovery. Where a project approaches a population of a special status plant, permanent or temporary fencing would be strongly considered.
6. NEPA documentation undertaken for project proposals considered under actions described in the following alternatives would address values and effects to specific special status species and general habitats and adhere to both state and federal guidance.

### **2.3.3.1 No Action Alternative**

#### **Objective a--Protect and enhance habitat**

- CM** Habitat of each special status species and each natural community would be protected using existing land use policies, designations such as existing MUC and ACECs (Bigelow cholla, Desert Lily Preserve, Chuckwalla Bench, Corn Springs, Chuckwalla Valley Dune Thicket and Dos Palmas), National Fallback Guidelines and by developing activity plans for proposed Habitat Management Plans from the CDCA plan that have not yet been prepared. These HMPs (Map 2-4 Appendix A) include: Chemehuevi Wash, Vidal Wash, Whipple Mountains, Eagle Mountains bighorn habitat, Coxcomb Mountains bighorn habitat, Granite/Palen Mountains bighorn habitat, Rice Valley Dunes, McCoy Wash, Ford Dry Lake, Palo Verde Mountains, and Indian Wash.
- CM** Impacts of proposed projects in suitable habitat, within the range of a special status species and within natural community types, would be mitigated using commonly applied mitigation measures.
- CM** Standard mitigation practices for protection of raptors throughout the planning area would be applied to construction of all new electric utility lines. Among these measures are the

following: conductor spacing greater than 5 feet and/or perch guards or artificial perches on metal or unsafe cross-arms. Mitigation techniques may be found in *Suggested Practices for Raptor Protection on Power Lines* (Olendorff 1981). In areas of heavy raptor use, electrical distribution lines would be retrofitted appropriately.

**CM** Mitigation measures protecting raptors (and other birds) throughout the planning area would be applied to cyanide-leaching mines. Measures would include, but are not limited to, the following: (1) piping of cyanide solutions, (2) placement of balls or nets over pregnant ponds, and (3) use of drip-irrigation with no standing water on leach pads.

**CM** The following dunes and playas (see Maps 2-20 and 3-3 Appendix A) in the planning area would be designated as "open" or "closed" to vehicle use regardless of the underlying multiple-use class. These are listed in Table 9 in the Motorized-Vehicle Access Element of the CDCA Plan and are listed here for information only.

Ford Dry Lake (portion of)	MUC M	Open
Cadiz Dunes	MUC L	Closed
Rice Valley Dunes (portion of)	MUC M	Open

#### **Objective b--Protect connectivity between protected communities**

**CM** The route designation process would consider fragment size. A fragment is defined as an area un-bisected by route or linear disturbance.

#### **2.3.3.2 Proposed Plan**

##### **Objective a--Protect and enhance habitat**

**Action** Designate seventeen multi-species WHMAs (totaling 555,523 acres) such that approximately 80 percent of the distribution of all special status species and all natural community types would be included in the Multi-species Conservation Zone (Map 2-21 Appendix A). See Appendix H for a description of the process used to define the WHMA and the concept of conservation zones.

**Action** Delete the following unwritten HMPs: Fenner/Chemehuevi Valleys, Chemehuevi Wash, Vidal Wash, Eagle Mountains, Granite-Palen Mountains, Rice Valley Dunes, McCoy Wash, Chuckwalla Bench, Ford Dry Lake, Palo Verde Mountains, Indian Wash, Milpitas Wash, Algodones Dunes (that portion within planning area) and Coxcomb Mountains.

**Action** Require mitigation of impacts of proposed projects in suitable habitat within the range of a special status species and within natural community types using commonly applied mitigation measures and conduct surveys in the proposed project area for special status species as follows (also see range maps 3-6a-f and 3-7a-f Appendix A):

- **Most Animals:** Only within Multi-species Conservation Zone.
- **Plants with mapped ranges:** Within ranges for species with range maps. (Ranges may be both in and outside Multi-species Conservation Zone).
- **Other:** At all species locations in the planning area (see CM for special status species and special measures below for selected species or species groups).

Special mitigation measures would be applied as given below for each species or species group.

**Action** Bat gates would be constructed on caves or mine roosts only where there would be significant potential for negative effects from human intrusion. Gates would be constructed according to the most recent techniques considering human and bat passage, susceptibility to vandalism, and cost. Gates would be inspected and maintained regularly. On BLM-managed lands, placement of gates would include right-of-way protection unless sites are already afforded such protection.

**Action** All riparian habitat or permanently flowing streams within 5 miles of a maternity roost for Townsend's big-eared bat would have a riparian proper functioning condition analysis and receive annual inspection and monitoring report. Those riparian/stream sites degraded by use or exotic plants or otherwise not functioning properly would receive treatment and/or protection to restore them to proper functioning condition.

**Action** Closure of any route within 1/4 mile of any significant bat roost would be strongly considered.

**Action** Throughout the Planning Area, closure of any route within 1/4 mile of a prairie falcon or golden eagle eyrie (cliff nests) would be strongly considered.

**Action** OHV races, construction activities, blasting, and similar activities would not be authorized within 1 mile of a prairie falcon or golden eagle eyrie between February 15 through June 15.

**Action** Habitat for elf owls at Corn Springs would be improved by removing tamarisk to elevate water table, controlling starlings, planting cottonwoods, adding nest boxes or wood poles until cottonwoods mature, and minimizing groundwater pumping. (Other special status species benefitting might include vermilion flycatcher and Gila woodpecker).

**Action** Limit construction activity period to September 1 - February 1 if burrowing owls are present in a project area.

**Action** Harvest of live vegetation, especially cactus and yucca, would be prohibited in the Multi-species Conservation Zone to protect perching and nesting sites for thrashers.

**Action** Limit construction activity period to July 1 - December 1, if Crissal thrashers are present in a project area.

**Action** The following dunes and playas (see Map 2-20 Appendix A) would be closed under CFR 8342 to vehicle use (except for routes designated open or limited) to protect essential blowsand habitat or sand source for populations of Mojave fringe-toed lizard. The following changes would be made to Table 9 in Motorized-Vehicle Access Element of the CDCA Plan:

Palen Dunes	MUC M	Closed
Rice Valley Dunes	MUC M	Closed
Ford Dunes	MUC M	Closed
Palen Dry Lake	MUC L & M	Closed
Ford Dry Lake (portion of)	MUC M	Closed

See Section 2.5 Objective a for additional information.

**Action** Special mitigation measures avoiding disturbance of Couch's spadefoot toad habitat would be strongly considered in all projects. Ephemeral impoundment areas would not be disturbed by vehicles or other activities in order to maintain soil percolation rates and preserve microfauna. Surface flow to such impoundments would not be blocked by projects.

**Action** Closure of any route within 1/4 mile of a site of known occurrence of Couch's spadefoot toad would be strongly considered.

**Action** Install permanent fencing where unauthorized vehicle use is observed in temporary impoundment areas for Couch's spadefoot toad. These areas have not yet been identified.

**Action** Closure of any route within 1/4 mile of a natural or artificial water source (e.g., springs, seeps, streams, guzzlers) would be strongly considered.

**Action** Closure of redundant routes would be strongly considered.

**Action** In the Multi-species WHMA, compensation for disturbance of Desert Dry Wash Woodland and Desert Chenopod Scrub communities as shown on Map 3-3 Appendix A would be required at 3 acres for each acre disturbed. Equivalent funds may be directed toward community enhancement or rehabilitation. For compensation for habitat disturbance within DWMA's, see Section 2.2 Issue: Recovery of the Desert Tortoise, Small DWMA--A Alternative.

**Action** In sand dune and playa communities (Map 3-3 Appendix A) that are closed to vehicle use, compensation for surface disturbance would be required at 3 acres for each acre disturbed. Compensation would not be required for existing salt mining operations on playas managed under MUC I. Equivalent funds may be directed toward community enhancement or rehabilitation. For compensation for habitat disturbance within DWMA's, see section 2.2 Issue: Recovery of the Desert Tortoise Recovery, Small DWMA A.

**Action** On those playas which are designated MUC I for salt mining (Bristol, Cadiz, and the western half of Danby), areas of playa habitat with little to no mining infrastructure would be managed through design and rehabilitation of mining operations and other uses to mitigate alteration of natural ecological processes--primarily episodes of water flooding and ponding. This prescription would serve until either (1) the level of mining operations is significantly increased from the relatively low, constant level of activity of the past five decades; or (2) the level of knowledge is increased about the natural history of the specific playa environments and effects of salt mining operations--positive or negative.

**Action** Spring and Seep communities in need of rehabilitation, or protection, would be improved through a number of means: removing tamarisk, controlling starlings, planting native species, adding nest boxes or wood poles until cottonwoods mature, adding fencing to exclude livestock and burros, discontinuing water diversions. These needs and measures would vary by the known or predicted occurrence of various species of concern. Where necessary, habitat improvements would be protected by right-of-way. Map 2-22 Appendix A indicates 45 sites are in need of tamarisk removal and 93 sites that may need enclosures for cattle and burros (those within leases or herd areas), although these numbers may vary somewhat after performing on-site evaluations.

**Action** Construction projects would not disturb springs and seeps during duration of project.

**Action** BLM would be interested in acquiring private and State Lands Commission (SLC) lands outside NPS with known occurrences of Coachella Valley Milkvetch where (1) there is a willing seller, (2) such lands would be manageable, and (3) such lands are not encumbered by highway, other right-of-way conflicts, or other conflicts. Acquisition would occur only where the action is consistent with obtaining and retaining lands in federal ownership and is consistent with current or future urban/agricultural lands uses in the Desert Center area

**Ref** See section 2.5 Issue: Designation of Routes of Travel for description of route closures.

**Ref** See section 2.6 Issue: Land Ownership Pattern for description of land acquisition management.

#### **Objectives b--Protect connectivity between protected communities**

**Action** The route designation process would consider fragment size. A fragment is defined as an area un-bisected by route or linear disturbance.

**Action** The fragmenting affects of projects should be considered in the placement, design, and permitting of new projects.

**Ref** See section 2.5 Issue: Designation of Routes of Travel for description of route closures.

### 2.3.3.3 Small DWMA--A Alternative

#### Objective a--Protect and enhance habitat

**Action** Same as Proposed Plan with following exceptions:

**Action** Designate eighteen Multi-species WHMAs (totaling 812,323 acres) such that approximately 80 percent of the distribution of all special status species and all natural community types are included in the Multi-species Conservation Zone (Map 2-23 Appendix A). See Appendix H for a description of the process used to define the WHMA and the concept of conservation zones.

**Action** Bat gates would be constructed on all caves or mine roosts where entry would pose a hazard to humans or bats outside of CMAGR. Gates would be constructed according to the most recent techniques considering human and bat passage, susceptibility to vandalism, and cost. Gates would be inspected and maintained regularly. On BLM-managed lands, placement of gates would include right-of-way protection unless sites are already afforded such protection.

**Action** All significant roost sites would be withdrawn, at generally 2.5 acres per site, from mineral entry, subject to valid existing rights.

**Action** In Sand Dune and Playa communities as shown on Map 3-3 Appendix A that are closed to vehicle use, compensation for surface disturbance would be required at 3 acres for each acre disturbed. Compensation would not be required for existing salt mining operations on playas managed under MUC I. Equivalent funds may be directed toward community enhancement or rehabilitation.

#### Objective b--Protect connectivity between protected communities

**Action** Same as Proposed Plan.

### 2.3.3.4 Small DWMA--B Alternative

#### Objective a--Protect and enhance habitat

**Action** Same as Proposed Plan with following exceptions:

**Action** Designate twelve Multi-species WHMAs (totaling 512,455 acres) such that approximately 50 percent of the distribution of special status species and natural community types are included in the following combined areas: (1) Joshua Tree National Park, (2) Chocolate Mountains Aerial Gunnery Range, (3) designated wilderness (4) proposed DWMAs (see section 2.2 Issue: Recovery of the Desert Tortoise Small DWMA B), and (5) the newly defined Multi-species WHMA (Map 2-24 Appendix A). These combined areas are hereafter

referred to as the Multi-species Conservation Zone. Actions applied to the Multi-species WHMA would generally be pro-active and use-guiding rather than use-prohibiting. See Appendix H for a more precise definition of the WHMA.

**Action** Construction would not be limited to the period between July 1 and December 1 in Conservation Zone when Crissal Thrashers are present.

**Action** Fencing would not be considered where unauthorized vehicle use is observed in temporary impoundment areas for Couch's spadefoot toad.

**Action** In the Multi-species WHMA, compensation for disturbance of Desert Dry Wash Woodland and Desert Chenopod Scrub communities as shown on Map 3-3 Appendix A would be required at 1 acre for each acre disturbed. Equivalent funds may be directed toward community enhancement or rehabilitation. For compensation for habitat disturbance within DWMA's, see section 2.2 Issue: Recovery of the Desert Tortoise Recovery, Small DWMA A.

**Action** In Sand Dune and Playa communities as shown on Map 3-3 Appendix A that are closed to vehicle use, compensation for surface disturbance would be required at 1 acre for each acre disturbed. Compensation would not be required for existing salt mining operations on playas managed under MUC I. Equivalent funds may be directed toward community enhancement or rehabilitation.

**Action** On Bristol Dry Lake (designated MUC I for salt mining), areas of playa habitat with little to no mining infrastructure would be managed through design and rehabilitation of mining operations and other uses to mitigate alteration of natural ecological processes--primarily episodes of water flooding and ponding. This prescription would serve until either (1) the level of mining operations is significantly increased from the relatively low, constant level of activity of the past five decades; or (2) the level of knowledge is increased about the natural history of the specific playa environments and effects of salt mining operations--positive or negative.

**Objective b--Protect connectivity between protected communities**

**Action** Same as Proposed Plan.

## 2.4 Issue: Wild Horses and Burros

Managing wild burros along the Colorado River is a joint responsibility for BLM offices in California and Arizona. Management is further complicated by a complex land ownership pattern which includes three national wildlife refuges, one state recreation area, private lands (which include farmlands), Metropolitan Water District lands, and the Chemehuevi and Colorado River Indian tribal lands. As these jurisdictions are mostly adjacent to the Colorado River, they tend to have concentrations of wild burros during the summer months when water availability is limited in upland areas. Burros that range both on and off BLM public lands are subject to the Wild, Free-Roaming Horse and Burro Act of 1971.

Two pairs of herd management areas (HMAs) lie on the west side of the Colorado River and either side of the CDCA boundary, just west of, and parallel to, the Colorado River. BLM offices in California and Arizona administer HMAs on their respective sides of the CDCA boundary (Map 2-25, Appendix A).

BLM's land use plans for the above-indicated California and Arizona BLM offices are proposed to be amended for their Wild Horses and Burros components because of the recommendations of *Desert Tortoise Recovery Plan*, the Pierson Report (see goal c), and conflicts with other uses.

The *Desert Tortoise Recovery Plan* recommends no burro grazing in DWMAs. The burros also share habitat with bighorn sheep and deer. There are increasing concerns over forage competition between burros and deer, and even greater concern over competition between burros and bighorn sheep for available water in the uplands. The reader is also referred to Issues 2.1 (Standards and Guidelines), 2.3 (Bighorn Sheep and Deer), and 2.2 (Recovery of the Desert Tortoise) for related issues and solutions.

No specific permanent management facilities for wild burros (burro drinkers, spring developments, exclosures) are proposed at this time. At such time as burro populations reach management levels prescribed for the herd management areas (HMAs), the need for these facilities would be evaluated. Currently, the BLM and California Department of Fish and Game are coordinating efforts to gather information on the seasonal distribution and extent of movements with radio collared burros in the Chocolate/Mule Mountains, Picacho and Cibola/Trigo Herd Management Areas. This data, along with water assessments, vegetative monitoring, and population census data (burro, bighorn sheep, and deer) would be used in the updated herd management area plans (HMAPs) to decide where development of these facilities would best achieve the management objectives and hold burros within the HMA boundaries. Exclosures would be used primarily around critical waters for bighorn sheep. In lieu of exclosures, fenced, wildlife guzzlers could be built. Exclosures around natural waters and mitigation for burros would be addressed in updated HMAPs. Methods, locations, and facilities related to the gathering and holding of captured burros, both temporary and permanent, would be utilized and specifically addressed in forthcoming updated herd management area plans (HMAPs) and gathering plans. Development of these documents also includes public review.

### 2.4.1 Goals and Objectives

The goals of wild burro management are to:

- Manage wild burro herds for healthy viable populations in a thriving natural ecological balance.
- Address the inconsistencies and complexities of management plans and program administration between California and Arizona BLM leading to better implementation the BLM's management responsibilities under Public Law 92-195 and accomplishing the missions and mandates which govern other administrated lands.
- Follow the recommendations from the Wild Horse and Burro Emergency Evaluation Team, commonly known as the Pierson Report. The team recommended combining multiple HMAs to recognize an entire herd and designate one field office responsible for herd census, burro removal, and monitoring actions. Each field office would still be responsible for the management of all other resources within their respective jurisdictions, including vegetation and waters management upon which herds are dependent.

The objective for wild burro management is to:

- a. Retain and combine common herds and management units for herd management units that are common to California and Arizona administrations, adjusting the boundaries and Appropriate Management Levels (AMLs) and designating a single BLM field office to manage the units, resolve management issues, and improve program administration.

### Change in Terminology and CDCA Plan

The following is a list of terms used to define wild horse and burro management. Some of this terminology represents a change in terminology used in the CDCA Plan as described in Chapter 3 (See section 3.7 for definitions and the relationships to the out-of-date terms). The correct terms used in planning documents developed by BLM in Arizona for that portion of the California Desert within its jurisdiction are: Herd Area (HA), Herd Management Area (HMA), Appropriate Management Level (AML), and Herd Management Area Plan (HMAP).

### Additional Points of Management

The following additional notes of management are provided to help clarify details of management not addressed in the NECO Plan but are related to land use plan implementation.

#### HMAs and Unitized Program Administration

Upon completion of the NECO Plan, new HMAPs would be written which would replace the current separate California and Arizona HMAPs. The plans will contain the details of managing herds of wild horses and burros which are not contained in land use plans. Along with the writing of HMAPs,

agreements would be developed between the BLM offices in California and Arizona for the combined program administration.

### Gathering Operations and Plans

Gathering plans would be written and approved prior to conducting gathering operations. These plans address the time of year of operations; the use of facilities and wranglers on horses; access into HMAs and other areas--including wilderness areas, refuges, lands managed by other agencies, and private lands-- and the use of water/air/wheeled craft to help herd and haul animals.

### Decisions Common to All Alternatives

**CM** Add historic burro range in the Chocolate Mountains-Cargo Muchacho Mountains area to the Chocolate Mountains HA. (This corrects a previous technical error in describing the HA.) (Map 2-25 Appendix A).

### 2.4.2 No Action Alternative

#### Objective a--Combine Common Herds and Management Units

**CM** Manage all HMAs with current boundaries and AMLs as separately set in current California and Arizona land use and program management plans. ( Table 2-10) (Map 2-25 Appendix A). Manage Piute Mountain HA for zero burros.

Table 2-10. Appropriate Herd Size

Herd Management Area (HMA)	Appropriate Management Level (AML)
Chemehuevi HMA (CA)	150 (a single herd and AML are common to both HMAs)
Havasu HMA (AZ)	
Chocolate/Mule Mountains HMA (CA)	22 (California), 190 (Arizona) (a single herd is common to both HMAs, each of which has separate AMLs)
Cibola/Trigo HMA (AZ)	
Picacho HMA (CA)	42 horses

### 2.4.3 Proposed Plan

#### Objective a--Combine and Adjust Common Herds and Management Units

**Action** Combine Chemehuevi and Havasu HMAs into a single burro HMA to be named Chemehuevi HMA and modify the new HMA boundary to reduce conflicts in the northern

portion of the Chemehuevi Indian Reservation, the Havasu National Wildlife Refuge (NWR), and with issues defined in sections 2.2 and 2.3. The new HMA would be reduced from a current combined 485,846 acres to 147,630 acres (Map 2-26 Appendix A). Reduce the current AML of 150 to a current management level of 108, which would remain in effect until a new AML is established through monitoring of habitat and population. AML reductions center primarily on the NWR and tribal land.

**Action** Eliminate the Picacho HMA for horses.

**Action** Combine the historical burro range (see Chapter 3) and the Chocolate/Mule Mountains and Cibola-Trigo HMAs into a single burro HMA to be named Chocolate/Mule Mountains HMA. Modify the boundary to more accurately reflect burro use and reduce conflicts in the Cibola and Imperial National Wildlife Refuges (NWRs), Fish and Wildlife Service lands, CMAGR, Picacho State Recreation Area (SRA), and with issues defined in sections 2.2 and 2.3. The HMA would be reduced from a current combined 422,598 acres to 223,542 acres (Map 2-26 Appendix A). Reduce the current combined AML of 212 to a single current management level of 121, which would remain in effect until an AML is established through monitoring of habitat and population. AML reductions are primarily in the NWRs and SRA.

#### 2.4.4 Small DWMA--A Alternative

##### Objective a--Combine and Adjust Common Herds and Management Units

**Action** Eliminate the Chemehuevi, Havasu, Chocolate/Mule Mountains, Cibola-Trigo and Picacho HMAs. This would eliminate conflicts stemming from a land pattern issue in which there are many entities that do not share burro management mandates (NWRs, SRA, CMAGR, private farmlands). (Map 2-27 Appendix A.)

#### 2.4.5 Small DWMA--B Alternative

##### Objective a--Combine and Adjust Common Herds and Management Units

**Action** Combine Chemehuevi and Havasu HMAs into a single burro HMA to be named Chemehuevi HMA. Modify the new HMA boundary to more accurately reflect burro use and reduce conflicts in the northern portion of the Chemehuevi Indian Reservation, the Havasu National Wildlife Refuge (NWR), and with issues defined in sections 2.2 and 2.3. The HMA would be reduced from a current combined 485,846 acres to 263,021 acres (Map 2-28 Appendix A). The current AML of 150 would remain in effect until a new AML is established through monitoring of habitat and population. The relatively small reduction in acres allows continuation of current management level.

**Action** Eliminate the Picacho HMA for horses.

**Action** Combine the historical burro range (see Chapter 3) and Chocolate/Mule Mountains and the Cibola-Trigo HMAs into a single burro HMA to be named Chocolate/Mule Mountains HMA. Modify its boundary to more accurately reflect burro use and reduce conflicts in the Cibola and Imperial National Wildlife Refuges (NWRs) and CMAGR, and with issues defined in sections 2.2 and 2.3. The HMA would be reduced from a current combined 422,598 acres to 274,811 acres (Map 2-28 Appendix A). Reduce the current combined AML of 212 to a single current management level of 138, which would remain in effect until an AML is established through monitoring of habitat and population.

**Action** Establish the *Piute Mountain HMA* (39,780 acres) at a current population level of 37 burros until an AML is established through monitoring of habitat and population (Map 2-28 Appendix A).

## 2.5 Issue: Motorized-Vehicle Access, Routes of Travel Designations, and Recreation

In the California Desert, motorized-vehicle access and recreation are closely related, particularly when motorized travel is the focus of recreational activities (e.g., driving for pleasure, participating in dual-sport motorcycle events, or racing in organized events). Motorized vehicle access is often required to get to recreation sites such as campgrounds and trail heads. Routes of travel designations directly influence opportunities for recreation and affect access for non-recreational pursuits. Accordingly, motorized-vehicle access, routes of travel designations, and recreation are addressed as a single issue.

### Casual Versus Authorized Use

Casual use of public lands in the context of motorized-vehicle access is defined as the use of routes not requiring a specific authorization. Authorized use is the use of routes approved through a permitting process for specific activities (e.g., rights-of-way issued for development of communication sites). The designation of routes as “open,” “limited,” and “closed” is generally applicable to both casual and authorized users of public lands. Where there is a requirement for occasional access associated with an authorized use and it is determined that unlimited casual use may cause undesirable resource impacts, routes would be designated “closed” and available for use only by the authorized party. In such circumstances, the authorized use of a “closed” route usually limits this use in some manner or requires mitigation in some form. Only a few routes would be in this group of “for use only by authorized parties.” Access for the use and enjoyment of private lands would be addressed on a case-by-case basis where private landowners are adversely affected by route designation decisions.

Map 2-29 Appendix A shows the current access network for all lands in the NECO planning area. Plan decisions would not address access on USMC or NPS lands. Accordingly, the following actions apply to BLM-managed lands only.

#### 2.5.1 Goals and Objectives<sup>2</sup>

The goals stated in the CDCA Plan’s Motorized-Vehicle Access Element (1985 Plan Amendment Six, approved January 15, 1987) are herein reiterated as goals of the NECO Plan for motorized-vehicle access and routes of travel designations:

- Provide for constrained motorized vehicle access in a manner that balances the needs of all desert users, private landowners, and other public agencies.

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<sup>2</sup> New, small off-highway vehicle recreation areas were suggested for various locations during the NECO planning process. Their consideration is deferred to another planning process, through adaptive management, and until additional, specific information is gathered on recreation needs as well as natural and cultural values which could be affected. Designation of additional motorized “open areas” requires a plan amendment (and would include an evaluation according to regulations at 43 CFR 8342.1), but was not part of the scope of issues identified at the beginning of the NECO planning process. Therefore, any inclusion of such proposals in NECO could not be adequately supported with data and science and is premature.

- 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.

The goals in the CDCA Plan's Recreation Element (1985 Plan Amendment Six, approved January 15, 1987; and 1987 Plan Amendment Nine, approved August 23, 1988) are herein reiterated as goals of the NECO Plan for recreation:

- Provide for a wide range of quality recreation opportunities and experiences, emphasizing dispersed undeveloped use.
- Provide a minimum of recreation facilities. Those facilities should emphasize resource protection and visitor safety.
- Manage recreation use to minimize user conflicts, provide a safe recreation environment, and protect desert resources.
- Emphasize the use of public information and education techniques to increase public awareness, enjoyment, and sensitivity to desert resources.
- Adjust management approach to accommodate changing visitor use patterns and preferences.
- Encourage the use and enjoyment of desert recreation opportunities by special populations, and provide facilities to meet the needs of those groups.

The objectives for motorized-vehicle access / routes of travel designations / recreation are to

- a. designate routes of travel consistent with the criteria at 43 CFR 8342.1
- b. provide for competitive off-highway vehicle events in a manner that protects desert resources
- c. establish stopping, parking, and vehicle camping limitations consistently

### **2.5.2 Decisions and Policy Common to all Alternatives**

Regardless of the alternative selected, public lands within the planning area would be managed in accordance with all applicable laws and regulations.

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 requires route approval to be based on the following criteria:

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

The biological parameters proposed in sections 2.2 and 2.3 are applicable to all alternatives in order to meet regulatory requirements at 43 CFR 8342.1(b). These parameters are summarized in Table 2-11.

**Table 2-11. Biological Parameters to Minimize Harassment of Wildlife and Disruption of Habitats**

Section	Parameters <sup>a</sup>
2.2	Portions of Desert Tortoise Recovery Units (No Action Alternative), portions of DWMA (Proposed Plan), or DWMA in their entirety (Small DWMA A and B Alternatives) would be designated as “washes closed zones” wherein vehicle use would be restricted to specific routes, including navigable washes, that are designated “open” or “limited.” <sup>b</sup>
2.3	The route designation process would consider fragment size.
2.3	Closure of any route within 1/4 mile of any significant bat roost would be strongly considered. <sup>c</sup>
2.3	Closure of any route within 1/4 mile of prairie falcon and golden eagle eyries (cliff nests) would be strongly considered. <sup>c</sup>
2.3	Closure of any route within 1/4 mile of a site of known occurrence of Couch’s spadefoot toad would be strongly considered. <sup>c</sup>
2.3	Closure of any route within 1/4 mile of a natural or artificial water source (e.g., springs, seeps, streams, guzzlers) would be strongly considered. <sup>c</sup>
2.3	Closure of “redundant” routes would be strongly considered. <sup>d</sup>

<sup>a</sup> Recognizing the value of a motorized recreational touring network, the following categories of routes on public lands are designated “open” as exceptions to the biological parameters described in this table: paved roads, maintained dirt roads, and recreational touring routes. In accordance with the CDCA Plan, as amended, a maintained road is defined as “regularly or frequently maintained by

continuous use (e.g., passage of vehicles) or machine maintenance.” For the NECO Plan, a maintained dirt road is generally one that is maintained periodically with the use of machines (e.g., motorized graders). A “recreational touring route” is one that, in combination with other such routes, provides important recreational access primarily to meet the needs of individuals who “drive for pleasure.”

<sup>b</sup> On public lands within “washes closed zones,” washes not specifically designated “open” or “limited,” despite their navigability, would not be available for vehicle use. Such washes are designated “closed” as a class. Outside “washes closed zones,” navigable washes within “washes open zones” are available for motorized-vehicle use as a class (unless it is determined that use in specific washes or wash zones must be further limited). In MUC L areas, navigable washes on public lands in “washes open zones” are designated “open” as a class. In MUC M areas and MUC I areas not designated “open” to motorized-vehicle access, navigable washes are considered “existing” routes (No Action Alternative only). No “washes limited zones” are proposed in the NECO Plan.

<sup>c</sup> Applying such “location-specific” biological parameters occasionally caused the designation of an entire route on public lands as “closed” rather than limiting the closure to a portion of the route. Such broadening of the parameters in this manner is generally based on judgments regarding potential for manageability. Conversely, in light of judgments regarding maintenance of a viable route network and potential for manageability, routes on public lands that occur within the prescribed distance as specified by the biological parameters are occasionally designated “open” or “limited.”

<sup>d</sup> Redundant routes are those deemed excess, or more than are needed. In identifying redundant routes, the following definition was used: A redundant route is one whose purpose is apparently the same, or very similar to, that of another route, inclusive of providing the same or very similar recreation opportunities or experiences. In some instances, elimination of redundant routes also reduces fragmentation of wildlife habitats. Identifying redundant routes requires that judgements be made relative to the uses and purposes of certain routes.

The criteria at 43 CFR 8342.1(a) require that damage to soil, watershed, vegetation, air, or other resources of the public lands be minimized where routes are available for use by motorized vehicles. Such “other resources” include cultural resources. The following approach to cultural resources in the context of route designation is developed in furtherance of these criteria:

**Cultural Resources.** For all alternatives, the BLM would propose an amendment to the California Desert Conservation Area Programmatic Agreement between BLM and the California State Historical Preservation Office (SHPO) to formalize the implementation of a phased cultural resource strategy for routes of travel. This proposed amendment will:

1. Define the nature of the undertaking and level of effort necessary to address effects on historic and cultural resources,
2. Allow the designation of routes to proceed,
3. Provide for phased identification and evaluation of historical and cultural sites over a specified period of time in consultation with SHPO, interested persons, and tribal entities, and
4. Provide remedies (route closure, mitigation) when eligible historical and cultural resources would be affected.

**Route Designation Definitions.** Route designation definitions of open, closed, and limited routes were established in the amended CDCA plan. The definition of a non-route was developed in the NECO planning effort. The definitions are shown here to aid the reader.

**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 routes by motor vehicles is limited to use in one or more of the following ways and limited with respect to:

- number of vehicles allowed
- time or season of vehicle use
- permitted or licensed vehicle use only
- establishment of speed limits

The same exceptions to motorized-vehicle use of closed routes also apply to limited routes.

**Non-Routes.** Non-routes are previously-existing routes that have been substantially reclaimed by the forces of nature. Some of these non-routes are delineated as existing routes on the most-recent versions of 1:24,000 USGS maps. Nevertheless, an on-the-ground survey revealed that such routes (1) cannot be located due to complete or near-complete reclamation, (2) are intermittently visible, thereby encouraging intermittent cross-country travel where evidence of the route disappears, and/or (3) have been re-vegetated to the extent that, although visible, travel upon them would require the crushing of substantial vegetation, i.e., destruction of natural features.

In some instances where only a portion of a route was declared to be a non-route at the time of the inventory, the entire route would be closed to preclude impacts to the non-route portion and allow natural reclamation to continue. Such routes are identified as “partial non-routes.” Where a portion of the route connects other open routes and is not declared to be a non-route, only the non-route portion would be closed.

All “non-routes” and “partial non-routes” identified for closure on public lands would be designated “closed.”

In reviewing the four alternatives, the following must be kept in mind:

- Route designations approved through the NECO Plan constitute CDCA Plan decisions; future changes to these decisions would require amending the CDCA Plan.
- Route designations apply only to routes and portions thereof on public lands; the designation of routes as “open,” “limited,” and “closed” is not applicable on non-public lands.

- Routes within Joshua Tree National Park are not subject to route designation through the NECO Plan; motorized-vehicle access is addressed through the Park’s General Management Plan and amendments thereto.
- The Chocolate Mountain Aerial Gunnery Range is closed to casual use; routes therein accordingly are not subject to the NECO Plan route designation process.
- Appendix L describes the route inventory process for the NECO Plan.

**Summary of Routes**

A comparison of routes open and closed for each alternative is presented in Table 2-12. It presents the miles of paved roads (672 miles), miles of Open and Closed unpaved routes, and the total mileage of routes. About 645 miles of routes were previously closed as a result of 1994 wilderness designations by Congress.

**Table 2-12. Comparison of Routes Open and Closed by Alternatives**

Alternative	Routes (miles)			
	Paved	Unpaved		Total
		Open	Closed	
No Action	672	4,743	239	<b>5,654</b>
Proposed Plan	672	4,743	239	<b>5,654</b>
Small DWMA A	672	4,134	848	<b>5,654</b>
Small DWMA B	672	4,222	760	<b>5,654</b>
Routes previously closed as a result of the 1994 wilderness designations				645

The areas of washes closed zones are compared for each alternative in Table 2-13. Washes closed zones are large areas that include mountains and many other features. Within these areas, washes are closed unless specifically designated open. For the three action alternatives, the acres and percent of the Chemehuevi and Chuckwalla DWMA’s designated “washes closed zones” are presented. For the No Action Alternative, similar information is presented for Category I and II desert tortoise habitat in the Chemehuevi and Chuckwalla areas. Washes closed zones presented in this table add to the area of washes previously closed as a result of past designations for NPS, CMAGR, and BLM wilderness areas. These wilderness areas cover 45 percent of the NECO planning area.

Table 2-13. Size of Washes Closed Zones by Alternative

Alternative	New "Washes Closed Zones"					
	Chemehuevi		Chuckwalla		Total	
	Acres	% of Area	Acres	% of Area	Acres	% Planning Area
No Action	326,024	35	121,189	12	447,213	8
Proposed Plan	359,093	41	121,374	15	480,467	9
Small DWMA A	491,645	66	293,589	47	785,234	14
Small DWMA B	491,645	66	293,589	47	785,234	14

### 2.5.3 No Action Alternative

#### Objective a--Designate Routes of Travel

**CM** Motorized-vehicle access would be managed in accordance with Multiple-Use Class (MUC) guidelines established in the CDCA Plan, as amended (see section 3.9.4). Routes of travel are approved for motorized-vehicle use in accordance with Executive Orders 11644 and 11989 (issued on February 9, 1972, and May 24, 1977, respectively), and the criteria at 43 CFR 8342.1.

**Action** All "existing" routes (Map 2-29 Appendix A) on public lands that have been inventoried and mapped in MUC L (Limited Use) areas, including navigable washes that have been individually identified, would be designated "open" for motorized-vehicle use except where: (1) such use has already been limited or prohibited through publication of a final notice in the *Federal Register*, (2) specific biological parameters (Table 2-11) are applied to minimize harassment of wildlife and habitats relative to motorized-vehicle use, or (3) restrictions on use are required to protect other resource values of the public lands, to promote the safety of all users of the public lands, or to minimize conflicts among various uses of the public lands. All navigable washes not individually inventoried and mapped on public lands in MUC L areas would be designated "open" as a class, except where such washes occur within a "washes closed zone" (Maps 2-10 and 2-31 Appendix A).

All "existing" routes on public lands in MUC M and MUC I areas, whether non-wash routes or navigable washes, would be available for motorized-vehicle use except where such use has already been limited or prohibited, or where specific biological parameters identified in sections 2.2 and 2.3 are applied to minimize harassment of wildlife and significant disruption of wildlife habitats relative to motorized-vehicle use (Map 2-31 Appendix A).

Any route requiring construction through use of road construction equipment or establishment by repeated vehicular travel would require a specific authorization consequent to preparation of a project-specific environmental assessment.

### **Route-Specific Designations (No Action Alternative)**

Map 2-31 Appendix A depicts the following:

- open routes in MUC L areas
- “existing” routes available for use in MUC M and I areas
- limited routes
- closed routes
- routes proposed for addition to the route network to enhance recreational opportunities
- routes declared to be “non-routes” at the time of the inventory (April 1996 and thereafter) and, therefore, not available for use

### **Results of Route-Specific Designations**

A summary of the miles of routes open and closed for the No Action Alternative is presented in Table 2-14. Similar tables are presented for each alternative. For the No Action Alternative, a total of 4,743 miles would be available for use by motorized vehicles (not including 672 miles of open paved routes). A total of 239 miles of routes would be closed due to (1) proximity of bat roosts, prairie falcon or golden eagle eyries, or waters; (2) redundant route closures; and (3) other resources values, safety, and minimizing conflicts with various users. Additional routes proposed to enhance recreation total 3 miles. In designated wilderness areas, 645 miles were previously closed to casual access by the California Desert Protection Act of 1994.

**Table 2-14. Summary of Routes of Travel Designations for No Action Alternative<sup>a</sup>**

	Planning Area Subdivisions			Total
	Desert Tortoise Critical Habitat Units		Outside Desert Tortoise Critical Habitat Units	
	Chemehuevi	Chuckwalla		
<b>Open Routes<sup>b</sup>, in Miles</b>				
Open vehicle routes	431	591	1,020	2,042
“Existing” vehicle routes	329	526	1,846	2,701
Proposed New routes for recreation	3	0	0	3
<b>Closure of routes within 1/4 mile of:</b>	<b>Closed Routes, in Miles</b>			
Significant bat roosts	1	0	14	15
Prairie falcon or golden eagle eyries	0	2	0	2
Couch’s spadefoot toad	0	0	0	0
Water sources	3	9	18	30
<b>Closure of redundant routes</b>	29	42	62	133
Closed to protect other resources, promote safety and minimize conflicts <sup>c</sup>	2	2	55	59
<b>Total of Closed Routes</b>	35	55	149	<b>239</b>
<b>Area of Washes Closed Zone, Acres</b>	326,024	121,189	0	447,213
<b>Mileages indicated below are not included in the total miles of routes closed to motorized-vehicle use</b>				
Non-routes	105	22	205	332
Partial Non-routes	21	1	38	60
Vehicle Routes in Designated Wilderness Closed to Casual Motorized-Vehicle Use	estimated 645 miles <sup>d</sup>			

<sup>a</sup> Route designations apply only to routes and portions thereof on public lands. Nevertheless, in order to portray the actual extent of the access network on routes, mileages of routes cited in this table pertain to lengths of **unpaved routes** in their entirety regardless of land ownership. **Paved roads** total 672 miles and are not included in this table.

<sup>b</sup> These figures do not reflect the miles of wash routes on public lands designated “open” as a class in “washes open zones.” Limited routes (seasonal limitations on use) total about 4 miles, but are included in this table as “open” routes.

<sup>c</sup> Mileages reflect application of the route designation criteria at 43 CFR 8342.1 other than those at 43 CFR 8342.1(b). This mileage also reflects routes behind locked gates that were previously closed to public access.

<sup>d</sup> The actual mileage of routes in wilderness that were closed to casual motorized-vehicle use consequent to the California Desert Protection Act of 1994 is undetermined as a complete inventory of routes does not exist for these areas.

### **Implementation of Route Designation Decisions**

- Routes comprising a basic recreational access network within the NECO planning area would be individually signed in such a way as to signify their availability for use. This basic network is based on specific recreational touring routes identified for the NECO Plan.
- Information kiosks depicting the basic recreational access network would be installed at key locations throughout the NECO planning area. These kiosks would furnish information relating to access opportunities and limitations, resource protection, and visitor safety.
- Printed media (e.g., maps, brochures, etc.) depicting the basic recreational access network would be developed and distributed to the public. Information provided would be similar to that on the kiosks, but would likely be more comprehensive as space allows. Interpretive information may also be provided to enhance recreational experiences.
- Routes designated “closed” would be appropriately signed, barricaded, or rehabilitated as necessary to exclude access and allow the forces of nature to obliterate them, except where limited use is important to achieve resource management objectives (e.g., maintenance of small game guzzlers to support wildlife populations). In such cases, access would be controlled to exclude casual use by the general public yet allow continued administrative use.
- Routes that are not included in the basic recreational access network but are available for motorized-vehicle use (i.e., they have not been designated “closed”) would *not* be signed or depicted on information kiosks.

The intent of this strategy would be (1) to provide off-highway vehicle enthusiasts, especially novices, with well-defined, signed routes on which to explore the desert, and (2) to direct use to a limited number of primary routes, thereby decreasing use throughout the network of secondary routes. In general, it is anticipated that the identified primary routes would better accommodate higher levels of use with lower potential for adverse impacts to resource values than the secondary routes.

### **Implementation Priorities**

Implementation would occur first within MUC L areas and ACECs, then on the remaining public lands.

### **Route-Specific Documentation**

Route-specific decisions are displayed on the large format maps in the back-cover pouch for each alternative (Maps 2-31 through 2-35). The route of travel inventory is available on detailed maps (1:24,000 scale) for review at BLM offices in Needles, Palm Springs, El Centro, and Riverside. Documentation on a route-specific basis wherein all routes are listed by their assigned numbers along with their respective designations was not included in the DEIS. Route-specific documentation relative to the Proposed Plan is presented in Appendix R.

### **Route Designation Revisions**

Routes of travel designations would be revised in accordance with the CDCA Plan, as amended (see section 3.9.7).

### **Objective b--Provide for Competitive Off-Highway Vehicle Events**

**CM** Competitive off-highway vehicle events are allowed on competitive recreation routes established through the CDCA Plan, as amended.<sup>3</sup> Within the NECO Planning Area, these are the Johnson Valley to Parker and the Parker 400 routes (Map 2-30 Appendix A). These routes are established and approved exclusively for permitted competitive recreation use, and are not for access or casual recreation unless specifically approved for such use.

Before a competitive off-highway vehicle event within a designated competitive recreation route would be authorized, an event-specific environmental assessment (EA) would be completed. It can be assumed the BLM would issue permits *absent a change in the circumstances which led to the establishment of these corridors*. The purpose of the EA would be to determine if changes have occurred. The BLM may deny a permit for a race in a designated corridor if there is reason to believe that changes have, in fact, occurred and a competitive off-highway vehicle event would result in substantial impacts to resource values that cannot be avoided or mitigated.

Permits issued for the use of these corridors would include stipulations consistent with the Multiple-Use Class guidelines for the areas through which they pass. All competitive events would require appropriate resource, safety, and management stipulations. Stipulations for the Johnson Valley to Parker Motorcycle Race would include those developed specifically for the event through the 1980 Environmental Impact Statement (see Appendix K).

Competitive off-highway vehicle events outside the established competitive recreation routes are allowed in accordance with the Multiple-Use Class guidelines for the areas through

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<sup>3</sup> The CDCA Plan identifies competitive recreation courses as "routes." Actions proposed in the NECO Plan require distinguishing between an existing route on which casual motorized vehicle travel occurs and which establishes the basic alignment of the competitive recreation route, and a "corridor" that would be comprised of the existing route and adjacent lands available for racing.

which they pass (see section 3.8.1 for guidelines). Before a competitive off-highway vehicle event outside a designated competitive recreation route would be authorized, an event-specific environmental assessment or environmental impact statement would be completed.

### **Objective c--Establish Stopping, Parking, and Vehicle Camping Limitations Consistently**

**CM** In accordance with the CDCA Plan, as amended, stopping, parking, and vehicle camping is allowed within 300 feet of a route, except within sensitive areas (such as ACECs) where the limit would be 100 feet.<sup>4</sup>

## **2.5.4 Proposed Plan**

### **Objective a--Designate Routes of Travel**

**Action** Amend the CDCA Plan to require that motorized-vehicle access would be managed in accordance with current MUC L guidelines irrespective of Multiple-Use Class, except in MUC C (wilderness) and areas designated “open” for vehicle use.

**Action** All “existing” routes on public lands that have been inventoried and mapped for the NECO Plan (Map 2-29 Appendix A), including navigable washes that have been individually identified, would be designated “open” for motorized-vehicle use with the following exceptions: (1) where such use has already been limited or prohibited through publication of a final notice in the *Federal Register*, (2) where specific biological parameters proposed through the NECO Plan are applied to minimize harassment of wildlife and significant disruption of wildlife habitats relative to motorized-vehicle use, or (3) where restrictions on use are required to protect other resource values of the public lands, to promote the safety of all users of the public lands, or to minimize conflicts among various uses of the public lands. All navigable washes not individually inventoried and mapped on public lands would be designated “open” as a class except where such washes occur within a “washes closed zone”<sup>5</sup> created to meet management goals in section 2.2 (Maps 2-10 and 2-32 Appendix A).

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<sup>4</sup> The 1982 CDCA Plan Amendments Three and Forty-Nine, approved May 17, 1983, lend themselves to confusion regarding limitations on stopping, parking, and vehicle camping. Amendment Three, which revised the Motorized-Vehicle Access Element, specifies that stopping, parking, and vehicle camping are allowed within 300 feet of routes, and that specific parking or stopping areas may be signed “open” or “closed” to protect fragile or sensitive resources adjacent to the route. Accordingly, these activities would not be further limited until such time that it is determined to be necessary. On the other hand, Amendment Forty-Nine establishes the 300-foot limit “except within sensitive areas (such as ACECs).” Determinations of where these activities need to be further limited were not deferred to a later date in the case of ACECs and other recognized sensitive areas (although prohibiting parking and stopping in specific areas to protect fragile or sensitive resources, regardless of location, remains discretionary with the BLM). As the CDCA Plan in 1980 established a 100-foot limitation and Amendment Forty-Nine changes it to 300 feet *except* in sensitive areas, the 100-foot limitation still applies in ACECs.

<sup>5</sup> The configuration of the “washes closed zone” under this alternative is the same as for the No Action Alternative.

### **Route-Specific Designations (Proposed Plan)**

Appendix R and Map 2-32 Appendix A identify the following:

- open routes
- limited routes
- closed routes
- routes proposed for addition to the route network to enhance recreational opportunities
- routes declared to be “non-routes” at the time of the inventory (April 1996 and thereafter) and, therefore, not available for use

The 7.5-minute quadrangle sheet (topographic map) index for the NECO planning area is also shown on Map 2-32. This grid and callout of names of quadrangle sheet names are not repeated for the other alternatives (Maps 2-31, 2-33, and 2-24). When evaluating other alternatives, please refer to Map 2-32 for this information.

### **Results of Route Specific Designations**

A summary of the miles of routes open and closed for the Proposed Plan is presented in Table 2-15. Similar tables are presented for each alternative. For the Proposed Plan, a total of 4,743 miles of unpaved routes would be available for use by motorized vehicles. A total of 239 miles of routes would be closed due to (1) proximity of bat roosts, prairie falcon or golden eagle eyries, or waters; (2) redundant route closures; and (3) other resources values, safety, and minimizing conflicts with various users. Additional routes proposed to enhance recreation opportunities total 3 miles. In designated wilderness areas, 645 miles were previously closed to casual access by the California Desert Protection Act of 1994.

**Table 2-15. Summary of Routes of Travel Designations for Proposed Plan<sup>a</sup>**

	Planning Area Subdivisions				Total
	DWMAs		WHMAs	Outside DWMAs and WHMAs	
	Chemehuevi	Chuckwalla			
<b>Open Routes<sup>b</sup>, in Miles</b>					
Open vehicle routes	734	960	696	2,353	4,743
Proposed New routes for recreation	3	0	0	0	3
<b>Closure of routes within 1/4 mile of:</b>	<b>Closed Routes, in Miles</b>				
Significant bat roosts	0	0	3	12	15
Prairie falcon or golden eagle eyries	0	2	0	0	2
Couch's spadefoot toad	0	0	0	0	0
Water sources	3	9	12	6	30
<b>Closure of redundant routes</b>	25	40	39	29	133
Closed to protect other resources, promote safety and minimize conflicts <sup>c</sup>	3	2	2	52	59
<b>Total of Closed Routes</b>	31	53	56	99	<b>239</b>
<b>Area of Washes Closed Zone, Acres</b>	359,093	121,374	0	0	480,467
<b>Mileages indicated below are not included in the total miles of routes closed to motorized-vehicle use</b>					
Non-routes	95	26	62	149	332
Partial Non-routes	0	2	15	43	60
Vehicle Routes in Designated Wilderness Closed to Casual Motorized-Vehicle Use	Same as the No Action Alternative (estimated 645 miles) <sup>d</sup>				

<sup>a</sup> Route designations apply only to routes and portions thereof on public lands. Nevertheless, in order to portray the actual extent of the access network on routes, mileages of routes cited in this table pertain to lengths of **unpaved routes** in their entirety regardless of land ownership. **Paved roads** total 672 miles and are not included in this table.

<sup>b</sup> These figures do not reflect the miles of wash routes on public lands designated "open" as a class in "washes open zones." Limited routes (seasonal limitations on use) total about 4 miles, but are included in this table as "open" routes.

<sup>c</sup> Mileages reflect application of the route designation criteria at 43 CFR 8342.1 other than those at 43 CFR 8342.1(b). This mileage also reflects routes behind locked gates that were previously closed to public access.

<sup>d</sup>The actual mileage of routes in wilderness that were closed to casual motorized-vehicle use consequent to the California Desert Protection Act of 1994 is undetermined as a complete inventory of routes does not exist for these areas.

### **Implementation of Route Designation Decisions**

Same as the No Action Alternative except for implementation priorities.

### **Implementation Priorities**

Implementation would occur first within DWMA's, followed by WHMA's, then on the remaining public lands.

### **Route-Specific Documentation**

See discussion under the No Action Alternative.

### **Route Designation Revisions**

Same as the No Action Alternative.

## **Objective b--Provide for Competitive Off-Highway Vehicle Events**

**Action** The section entitled "Organized Competitive Vehicle Events" in the Recreation Element of the CDCA Plan would be amended as follows:

- The Parker 400 competitive recreation route (corridor) would be eliminated.
- Competitive events in the Johnson Valley to Parker route would be permitted in accordance with requirements set forth in the CDCA Plan (see Section 3.8.4) and stipulations from the 1980 Environmental Impact Statement (see Appendix K) except for the following changes and additional requirements (some elements listed below provide clarification of existing requirements):
  - The Johnson Valley to Parker route would be available for casual recreation use except on days when competitive events are conducted.
  - The Johnson Valley to Parker route would be designated "open" except where cross-country travel within the Johnson Valley to Parker corridor is permitted.<sup>6</sup>

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<sup>6</sup> Cross-country portions of the Johnson Valley to Parker route--sections where no established route exists--will not be available to the casual user. Only race participants and race officials may use cross-country portions of the race route when a competitive event is approved; race officials may also use these portions of the route for purposes related to administration of the event. The Johnson Valley to Parker route designated "open" refers to the established route available for casual use; lands adjacent to the established route and within the race corridor are not available for casual use except for the purposes of stopping, parking, and vehicle camping unless such uses are otherwise restricted.

- The maximum number of participants in any one event would be 500.
  - Participation would be limited to motorcycles and all-terrain vehicles (ATVs).
  - The start area must be located sufficiently within and distant from the boundary of the Johnson Valley Off-Highway Vehicle Recreation Area to allow the field of participants to narrow (given the differing speeds of the various contestants) such that the event could continue within the confines of the established race corridor outside the “open area.”<sup>7</sup>
  - The maximum width of the race corridor outside the Johnson Valley Off-Highway Vehicle Recreation Area would be 200 feet.<sup>8</sup>
  - Where the Johnson Valley to Parker route establishes the boundary of a DWMA or WHMA, or the boundary of a wilderness area is less than 100 feet from the *centerline* of the designated route, the race corridor would not extend beyond the route’s edge on that side, nor would it extend farther than 100 feet from the *centerline* of the route opposite these special areas. Identification of other sensitive areas (e.g., those containing significant cultural resources) may locally restrict corridor width to protect resource values.
  - Pits would be limited to locations identified in the NECO Plan. All pit activities, including parking of service vehicles, would be restricted to the designated pit areas. Only race participants, support crews, and race officials would be allowed in pit areas; spectators would be prohibited in the pits.
  - Participants may officially finish at any pit area.
  - Access by race officials for delineating the route, monitoring events, and conducting post-event actions would be limited to the established corridor and other routes of travel normally available to the casual user.
- 
- Before a competitive off-highway vehicle event in the Johnson Valley to Parker corridor would be authorized, an event-specific environmental assessment would be completed. It can be assumed the BLM would issue a permit *absent a change in the circumstances which led to establishment of the corridor*. The purpose of the EA is to determine if changes have occurred. The BLM may deny a permit for a race in the corridor if there is reason to believe that changes have, in fact, occurred and a competitive off-highway vehicle event would result in substantial impacts to resource values that cannot be avoided or mitigated.
  - Competitive motorized-vehicle events in which speed is the primary competitive factor would be prohibited except on approved competitive recreation routes (e.g., Johnson Valley to Parker route) and within Off-Highway Vehicle Recreation Areas.

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<sup>7</sup> Depending on the number of participants, two or more starting waves may be necessary to meet this requirement.

<sup>8</sup> Where an existing route establishes the alignment of the race corridor, the boundaries of the corridor would be no more than 100 feet from the *centerline* of the route.

### Objective c--Establish Stopping, Parking, and Vehicle Camping Limitations Consistently

**Action** The section entitled “Stopping and Parking” in the Motorized-Vehicle Access element of the CDCA Plan, as amended, would be modified such that stopping, parking, and vehicle camping are allowed within 300 feet from the *centerline* of an approved route except within sensitive areas (such as ACECs) where the limit would be 100 feet.<sup>9</sup> This slight modification of current management would provide consistency as regards the width of the stopping, parking, and vehicle camping corridor along approved routes of travel.

**Ref** See section 2.2 Issue: Recovery of the Desert Tortoise. In accordance with the Proposed Plan, stopping, parking, and vehicle camping would be allowed no more than 100 feet from the *centerline* of a route within DWMA.

### 2.5.5 Small DWMA--A Alternative

#### Objective a--Designate Routes of Travel

**Action** Same as the Proposed Plan except that open vehicle routes within DWMA would be limited to (1) paved routes, (2) maintained dirt routes, and (3) recreational touring routes identified for the NECO Plan (Map 2-33 Appendix A).

#### Route-Specific Designations (Small DWMA--A Alternative)

Map 2-33 Appendix A depicts the following:

- open routes
- limited routes
- closed routes
- routes proposed for addition to the route network to enhance recreational opportunities
- routes declared to be “non-routes” at the time of the inventory (April 1996 and thereafter) and, therefore, not available for use.

#### Results of Route Specific Designations

A summary of the miles of routes open and closed for the Small DWMA--A Alternative is presented in Table 2-16. Similar tables are presented for each alternative. For the Small DWMA--A Alternative, a total of 4,134 miles would be available for use by motorized vehicles. A total of 848 miles of routes would be closed due to (1) proximity of bat roosts, prairie falcon or golden eagle eyries, or waters; (2) redundant route closures; and (3) other resources values, safety, and minimizing conflicts with various users. Additional routes proposed to enhance recreation opportunities total 3 miles. In designated wilderness areas, 645 miles were previously closed to casual access by the California Desert Protection Act of 1994.

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<sup>9</sup> Under this alternative, the “300-foot rule” would be applicable outside DWMA only.

**Table 2-16. Summary of Routes of Travel Designations for Small DWMA--A Alternative<sup>a</sup>**

	Planning Area Subdivisions				Total
	DWMAs		WHMAs	Outside DWMAs and WHMAs	
	Chemehuevi	Chuckwalla			
<b>Open Routes<sup>b</sup>, in Miles</b>					
Open vehicle routes	342	239	1,123	2,430	4,134
Proposed new routes for recreation	3	0	0	0	3
<b>Closure of routes within 1/4 mile of:</b>	<b>Closed Routes, in Miles</b>				
Significant bat roosts	0	0	3	12	15
Prairie falcon or golden eagle eyries	0	2	0	0	2
Couch's spadefoot toad	0	0	0	0	0
Water sources	0	7	14	9	30
<b>Closure of redundant routes</b>	18	27	56	32	133
Closed to protect other resources, promote safety and minimize conflicts <sup>c</sup>	3	1	2	53	59
Closed according to management prescriptions under this alternative	250	359	-	-	609
<b>Total of Closed Routes</b>	271	396	75	106	<b>848</b>
<b>Area of Washes Closed Zone, Acres</b>	491,645	293,589	0	0	785,234
<b>Mileages indicated below are not included in the total miles of routes closed to motorized-vehicle use</b>					
Non-routes	85	26	72	149	332
Partial Non-routes	12	2	4	42	60
Vehicle Routes in Designated Wilderness Closed to Casual Motorized-Vehicle Use	Same as the No Action Alternative (estimated 645 miles) <sup>d</sup>				

<sup>a</sup> Route designations apply only to routes and portions thereof on public lands. Nevertheless, in order to portray the actual extent of the access network on routes, mileages of routes cited in this table pertain to lengths of **unpaved routes** in their entirety regardless of land ownership. **Paved roads** total 672 miles and are not included in this table.

<sup>b</sup> These figures do not reflect the miles of wash routes on public lands designated "open" as a class in "washes open zones." Limited routes (seasonal limitations on use) total about 4 miles, but are included in this table as "open" routes.

<sup>c</sup> Mileages reflect application of the route designation criteria at 43 CFR 8342.1 other than those at 43 CFR 8342.1(b). This mileage also reflects routes behind locked gates that were previously closed to public access.

<sup>d</sup> The actual mileage of routes in wilderness that were closed to casual motorized-vehicle use consequent to the California Desert Protection Act of 1994 is undetermined as a complete inventory of routes does not exist for these areas.

### **Implementation of Route Designation Decisions**

Same as the Proposed Plan.

### **Route-Specific Documentation**

See discussion under the No Action Alternative.

### **Route Designation Revisions**

Same as the No Action Alternative.

## **Objective b--Provide for Competitive Off-Highway Vehicle Events**

**Action** The section entitled "Organized Competitive Vehicle Events" in the Recreation Element of the CDCA Plan would be amended as follows:

- The Johnson Valley to Parker and Parker 400 competitive recreation routes (corridors) would be eliminated.
- Competitive off-highway vehicle events in which speed is the primary competitive factor would be restricted to Off-Highway Vehicle Recreation Areas. Events in these "open areas" would be permitted in accordance with MUC I guidelines and event-specific requirements as formulated by the authorized officer.

## **Objective c--Establish Stopping, Parking, and Vehicle Camping Limitations Consistently**

**Action** Same as the Proposed Plan.

**Ref** See section 2.2 Issue: Recovery of the Desert Tortoise. In accordance with the Small DWMA--A Alternative, it is proposed that stopping and parking be limited to an area no more than 30 feet from *centerline* of an approved route within DWMA's. Vehicle camping would be allowed only in designated areas within DWMA's.

### 2.5.6 Small DWMA--B Alternative

#### Objective a--Designate Routes of Travel

**Action** Same as the Small DWMA--A Alternative except that redundant routes on public lands outside DWMA's would be designated "open" (Map 2-34 Appendix A).

#### Route-Specific Designations (Small DWMA--B Alternative)

Map 2-34 Appendix A depicts the following:

- open routes
- limited routes
- closed routes
- routes proposed for addition to the route network to enhance recreational opportunities
- routes declared to be "non-routes" at the time of the inventory (April 1996 and thereafter) and, therefore, not available for use

#### Results of Route-Specific Designations

A summary of the miles of routes open and closed for the Small DWMA--B Alternative is presented in Table 2-17. Similar tables are presented for each alternative. For the Small DWMA--B Alternative, a total of 4,222 miles would be available for use by motorized vehicles. A total of 760 miles of routes would be closed due to (1) proximity of bat roosts, prairie falcon or golden eagle eyries, or waters; (2) redundant route closures; and (3) other resources values, safety, and minimizing conflicts with various users. Additional routes proposed to enhance recreation opportunities total 3 miles. In designated wilderness areas, 645 miles were previously closed to casual access by the California Desert Protection Act of 1994.

**Table 2-17. Summary of Routes of Travel Designations for Small DWMA--B Alternative<sup>a</sup>**

	Planning Area Subdivisions				Total
	DWMAs		WHMAs	Outside DWMAs and WHMAs	
	Chemehuevi	Chuckwalla			
<b>Open Routes<sup>b</sup>, in Miles</b>					
Open vehicle routes	342	239	763	2,798	4,134
Additional routes for recreation	3	0	0	0	3
Additional routes per management prescriptions under this alternative	-	-	35	53	88
<b>Closure of routes within 1/4 mile of:</b>					
<b>Closed Routes, in Miles</b>					
Significant bat roosts	0	0	0	15	15
Prairie falcon or golden eagle eyries	0	2	0	0	2
Couch's spadefoot toad	0	0	0	0	0
Water sources	0	7	13	10	30
<b>Closure of redundant routes</b>	18	27	0	0	45
Closed to protect other resources, promote safety and minimize conflicts <sup>c</sup>	3	1	1	54	59
Closed according to management prescriptions under this alternative	250	359	-	-	609
<b>Total of Closed Routes</b>	271	396	14	79	<b>760</b>
<b>Area of Washes Closed Zone, Acres</b>	491,645	293,589	0	0	785,234
<b>Mileages indicated below are not included in the total miles of routes closed to motorized-vehicle use</b>					
Non-routes	85	26	28	193	332
Partial Non-routes	12	2	4	42	60
Vehicle Routes in Designated Wilderness Closed to Casual Motorized-Vehicle Use	Same as the No Action Alternative (estimated 645 miles) <sup>d</sup>				

<sup>a</sup> Route designations apply only to routes and portions thereof on public lands. Nevertheless, in order to portray the actual extent of the access network on routes, mileages of routes cited in this table pertain to lengths of **unpaved routes** in their entirety regardless of land ownership. **Paved roads** total 672 miles and are not included in this table.

<sup>b</sup> These figures do not reflect the miles of wash routes on public lands designated “open” *as a class* in “washes open zones.” Limited routes (seasonal limitations on use) total about 4 miles, but are included in this table as “open” routes.

<sup>c</sup> Mileages reflect application of the route designation criteria at 43 CFR 8342.1 other than those at 43 CFR 8342.1(b). This mileage also reflects routes behind locked gates that were previously closed to public access.

<sup>d</sup> The actual mileage of routes in wilderness that were closed to casual motorized-vehicle use consequent to the California Desert Protection Act of 1994 is undetermined as a complete inventory of routes does not exist for these areas.

### **Implementation of Route Designation Decisions**

Same as the Proposed Plan.

### **Route-Specific Documentation**

See discussion under the No Action Alternative.

### **Route Designation Revisions**

Same as the No Action Alternative.

## **Objective b--Provide for Competitive Off-Highway Vehicle Events**

**Action** The section entitled “Organized Competitive Vehicle Events” in the Recreation Element of the CDCA Plan would be amended as follows:

- The Parker 400 competitive recreation route (corridor) would be eliminated.
- Competitive motorized-vehicle events in the Johnson Valley to Parker corridor would be managed consistent with the requirements described for the Proposed Plan except the maximum number of participants in any one event would be 800.
- The following *additional* criteria for competitive motorized-vehicle events in which speed is the primary competitive factor would be included except for such events occurring entirely within Off-Highway Vehicle Recreation Areas:
  - Competitive motorized-vehicle events may occur only on routes designated “open” for casual use; routes designated “limited” or “closed” may not be used for such events.
  - Participation would be limited to motorcycles and ATVs.
  - Start areas would be located within Off-Highway Vehicle Recreation Areas. The start area must be located sufficiently within and distant from the boundary of the Off-Highway Vehicle Recreation Area to allow the field of participants to narrow

(given the differing speeds of the various contestants) such that the event could continue within the confines of the established race corridor outside the “open area.”

- The maximum width of the race corridor would be 200 feet.<sup>10</sup>
- Competitive motorized-vehicle events would not be allowed in ACECs, critical habitat designated by the USFWS, identified cultural resource sites or districts, riparian areas, and other sensitive areas. Course design would not include trails and roads that (a) are on or eligible for the National Register of Historic Places, (b) are designated as National Historic Trails or eligible for such designation, or (c) have been otherwise specially designated.
- Where the “open” route utilized for a competitive event establishes the boundary of a DWMA or WHMA, or the boundary of a wilderness area is less than 100 feet from the *centerline* of the route, the race corridor would not extend beyond the route’s edge on that side, nor would it extend farther than 100 feet from the *centerline* of the route opposite these special areas.
- Pits would be limited to suitable sites in MUC M and I areas. All pit activities, including parking of service vehicles, would be restricted to the designated pit areas. Only race participants, support crews, and race officials would be allowed in pit areas; spectators would be prohibited in the pits.
- Finish and spectator areas would be limited to suitable sites in MUC M or I areas.
- Access by race officials for delineating the route, monitoring events, and conducting post-event actions would be limited to the established corridor and other routes of travel normally available to the casual user.
- Written permission from landowners to cross private property would be provided to the BLM.
- Permits issued for competitive motorized-vehicle events would include appropriate resource, safety, and management stipulations.
- Before a competitive off-highway vehicle outside an approved competitive recreation route or Off-Highway Vehicle Recreation Area would be authorized, an event-specific environmental assessment would be completed.

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<sup>10</sup> Where an “open” route establishes the alignment of the race corridor, the boundaries of the corridor would be no more than 100 feet from the *centerline* of the route.

**Objective c--Establish Stopping, Parking, and Vehicle Camping Limitations Consistently**

**Action** Same as the Proposed Plan.

**Ref** See section 2.2 Issue: Recovery of the Desert Tortoise. In accordance with the Small DWMA--B Alternative, stopping, parking, and vehicle camping would be allowed within 300 feet from *centerline* of an approved route within DWMA's.

## 2.6 Issue: Land Ownership Pattern

Eighty-one percent of the land within the planning area is in federal (public) ownership (Map 1- 3 Appendix A). The remainder is divided primarily among state land grants, railroad lands, private holdings, and other properties. There are zones of mixed or “checkerboard” ownership outside of JTNP and CMAGR where federal management and private agendas are difficult to pursue due to this pattern. Without an adjustment to the land ownership pattern, BLM would continue to be at a disadvantage concerning the management of sensitive resources which are not constrained by property lines. Currently there is little development pressure on private lands within the planning area.

### 2.6.1 Goals and Objectives

The goal is to adjust the land ownership pattern through acquisition and disposal of selected lands (1) to improve opportunities for both the management of areas and conservation of natural resources within DWMA's, WHMA's and existing wilderness; and (2) to facilitate the use of public and private lands in areas of low natural resource values for private, commercial or social purposes, including the opportunity for community expansion. Acquisition of Catellus and State Lands Commission (SLC) lands (as well as other private lands) in wilderness areas is a continuing independent process requiring no specific action through the NECO planning process. All acquired lands would automatically be managed under the same criteria as the surrounding public lands.

The objectives of adjusting the land ownership pattern are to

- a. acquire habitat within DWMA's and WHMA's (limited application in bighorn sheep corridors), to ensure long-term manageability of these areas for conservation of biological ecosystems
- b. dispose of public lands to private ownership for community expansion where environmentally suitable
- c. acquire lands for protection of threatened and endangered species, where prudent

### Planning Area-wide Decisions and Management Strategy Common to All Alternatives

Public ownership within DWMA's and WHMA's would be retained according to the guidelines of multiple use classes, ACECs, wilderness areas and other federal requirements unless there is a compelling reason for disposal as determined through NEPA and land use plan amendments. Where decisions may be made to dispose of federal lands, the following considerations would contribute to developing a pattern of use and conservation to protect special status species and the habitats and ecological processes they depend upon:

- location of springs and artificial waters
- known/predicted occurrence of special status plants and wildlife species
- corridors for movement of bighorn sheep and other species
- flow of water and movement of sand and soil and other ecological processes

Federal lands available for private acquisition (disposal) come from the remainder of lands outside CMAGR, JTNP, BLM wilderness, DWMAAs and WHMAAs. The design of DWMAAs and WHMAAs included consideration (i.e., exclusions) for freeway exits and lands in and adjacent to urban and agricultural centers. "Fixed-site" special status species and habitats (e.g., rare plants, bats, springs) which lie outside DWMAAs and WHMAAs would also be retained in public ownership to the extent practical.

Acquisition of private lands would be accomplished as much as possible and practical through exchange to reduce the impact of loss of tax base to counties and only from willing sellers.

Acquisition within DWMAAs, WHMAAs, and wilderness areas would be generally prioritized as follows:

**DWMAAs**

- high risk of development in areas of greatest habitat value (i.e., high tortoise density, populations connectivity points)
- large acreage parcels
- high tortoise density
- high species richness
- all others

**WHMAAs**

- special habitat value
- high development risk
- large acreage parcels
- high species richness
- all others

**Wilderness Areas**

- high development risk
- special habitat value (e.g., springs, bat sites, bighorn sheep lambing areas)
- all others

In all areas, lands with Coachella Valley milkvetch would be areas of acquisition interest. Acquisition methods would generally be applied as follows, but subject to variation in application as follows:

- 1-owner sections (640 acres)--exchange/Land and Water Conservation Fund (LWCF)
- 2-5 owners/section--LWCF/exchange/compensation
- 6-19 owners/section--compensation/LWCF
- 20+ owners/section--compensation, conservancy support, donation, assembled exchange

## 2.6.2 No Action Alternative

### Objective a--Acquire Habitat within DWMA's and WHMA's

**Action** BLM and JTNP would seek to acquire state or private lands within some ACECs, tortoise Category I and II, and wilderness areas through purchase, donation, or exchange according to scheduled priorities. Low priority lands would be acquired only on a passive basis, i.e., federal funding would not be sought; acquisitions would occur through means which do not require expenditure of federal funds (i.e., compensation, donation). Examples of low priority lands are (1) lands with little opportunity or support for private development; or (2) lands with a high density of owners where probability of acquisition of a manageable unit would be low, and the cost of implementing such acquisitions high. Additional guidance is in the California Statewide Desert Tortoise Management Policy.

### Objective b--Dispose of Public Lands into Private Ownership

**Action** Identify public lands suitable for disposal (low biological sensitivity and other management value) into private ownership where consolidation and location of private land both promotes private development and increases tax base for local governments. Federal lands potentially suitable for disposal under this action could include lands along freeways and freeway exists; lands adjacent to urban, agricultural, and industrial centers; lands in checkerboard ownership outside other sensitive areas; lands in unclassified areas; and other lands deemed to be unmanageable under federal ownership. Although exchange would be the BLM's preferred method of disposal, the sale of lands could be considered.

## 2.6.3 Proposed Plan

### Objective a--Acquire Habitat within DWMA's and WHMA's

**Action** BLM and JTNP would actively seek to acquire lands or interests in lands within DWMA's, and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to scheduled priorities. In DWMA's this includes both private and State Lands Commission (SLC) lands. In WHMA's this includes only private lands. This action adds to existing policy to acquire both private and State Lands Commission (SLC) lands in wilderness areas. Table 2-18 presents acreage of private lands involved. Table O-4 in Appendix O presents the acres of land to be acquired from State Lands Commission. The location of state and private lands is shown on Map 2-35 of Appendix A.

### Objective b--Dispose of Public Lands into Private Ownership

**Action** BLM would dispose of lands in areas outside wilderness, DWMA's, and WHMA's which do not containing known occurrences of rare plants, springs, bat or other special status species, and where such action supports consolidation and location of private land to promote private development and increase tax base for local governments. Federal lands potentially suitable

for disposal under this action could include lands along freeways and freeway exits, lands adjacent to urban, agricultural, and industrial centers, lands in checkerboard ownership outside other sensitive areas, lands in unclassified areas, and other lands deemed to be unmanageable under federal ownership. Although exchange would be the BLM's preferred method of disposal, the sale of lands could be considered.

**Table 2-18. Private Lands in Management Areas for Proposed Plan, in Acres**

Management Area	Acres by Density Class (Owners or Parcels per Section)				
	1	2-5	6-19	20+	Total
Chemehuevi DWMA	13,236	4,353	5,387	9,866	<b>32,840</b>
Chuckwalla DWMA	56,563	12,931	25,030	39,159	<b>133,684</b>
Joshua Tree DWMA	18,881	300	8	42	<b>19,231</b>
BLM wilderness outside DWMA's	33,361	5,267	11,020	4,666	<b>54,314</b>
Bighorn Sheep and Multi-species WHMA's outside all above <sup>a</sup>	89,457	11,669	7,052	5,216	<b>113,394</b>
<b>Total</b>	<b>211,497</b>	<b>34,521</b>	<b>48,497</b>	<b>58,948</b>	<b>353,463</b>
<b>Total by County</b>					
Imperial	61,011	9,690	10,315	22,468	<b>103,484</b>
Riverside	84,545	15,456	21,905	24,294	<b>146,200</b>
San Bernardino	65,941	9,375	16,277	12,186	<b>103,779</b>

<sup>a</sup> excluding Bighorn Sheep corridors

**Objective c--Acquire lands for Protection of Coachella Valley Milkvetch**

**Action** BLM would be interested in acquiring private and State Lands Commission (SLC) lands outside NPS with known occurrences of Coachella Valley Milkvetch where (1) there is a willing seller, (2) such lands would be manageable, and (3) such lands are not encumbered by highway, other right-of-way conflicts, or other conflicts. Acquisition would occur only where the action would be consistent with obtaining and retaining lands in federal ownership and would be consistent with current or future urban/agricultural lands uses in the Desert Center area.

**2.6.4 Small DWMA--A Alternative**

**Objective a--Acquire Habitat with DWMA's and WHMA's**

**Action** BLM and JTNP would actively seek to acquire lands or interests in lands within DWMA's and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to scheduled priorities. In DWMA's this includes both private and State Lands Commission (SLC) lands. In WHMA's this includes only private lands. This action also adds to existing policy to acquire both private and SLC lands in wilderness areas. Table 2-19 presents acreage of private lands involved. Table O-4 in Appendix O presents the acres of land to be acquired from State Lands Commission. The location of state and private lands is shown on Map 2-36 of Appendix A.

**Table 2-19. Private Lands in Proposed Management Areas Under Small DWMA--A Alternative**

Management Area	Acres by Density Class (Owners or Parcels per Section )				
	1	2-5	6-19	20+	Total
Chemehuevi DWMA	10,435	3,074	4,308	6,895	<b>24,712</b>
Chuckwalla DWMA	23,594	5,659	14,469	17,327	<b>61,050</b>
Joshua Tree DWMA	18,881	300	8	42	<b>19,231</b>
BLM wilderness outside DWMA's	34,980	5,574	11,398	7,177	<b>59,128</b>
Bighorn Sheep and Multi-species WHMA's outside all above <sup>a</sup>	123,571	19,864	18,242	27,411	<b>189,093</b>
<b>Total</b>	<b>211,461</b>	<b>34,470</b>	<b>48,431</b>	<b>58,852</b>	<b>353,214</b>
<b>Total by County</b>					
Imperial	65,939	9,648	10,254	22,379	<b>108,220</b>
Riverside	84,543	15,447	21,900	24,288	<b>146,178</b>
San Bernardino	60,979	9,375	16,277	12,185	<b>98,816</b>

<sup>a</sup> excluding Bighorn Sheep corridors

**Objective b--Dispose of Public Lands into Private Ownership**

**Action** Same as Proposed Plan.

**Objective c--Acquire Lands for Protection of Coachella Valley Milkvetch**

**Action** Same as Proposed Plan.

**2.6.5 Small DWMA--B Alternative**

**Objective a--Acquire Habitat within DWMA's and WHMA's**

**Action** BLM and JTNP would actively seek to acquire lands or interests in lands within DWMA's and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to scheduled priorities. In DWMA's this includes both private and State Lands Commission (SLC) lands. In WHMA's this includes only private lands. This action also adds to existing policy to acquire both private and SLC lands in wilderness areas. Table 2-20 presents acreage of private lands involved. Table O-4 in Appendix O presents the acres of land to be acquired from State Lands Commission. The location of state and private lands is shown on Map 2-37 of Appendix A.

**Table 2-20. Private Lands in Proposed Management Areas Under Small DWMA--B Alternative**

Management Area	Acres by Density Class (Owners or Parcels per Section )				
	1	2-5	6-19	20+	Total
Chemehuevi DWMA	10,435	3,074	4,308	6,895	<b>24,712</b>
Chuckwalla DWMA	23,572	5,624	14,468	17,304	<b>60,968</b>
Joshua Tree DWMA	18,881	300	8	42	<b>19,231</b>
BLM wilderness outside DWMA's	34,980	5,574	11,398	7,177	<b>59,128</b>
Bighorn Sheep and Multi-species WHMA's outside all above <sup>a</sup>	92,438	14,576	17,257	27,270	<b>151,541</b>
<b>Total</b>	<b>180,305</b>	<b>29,148</b>	<b>47,439</b>	<b>58,688</b>	<b>315,580</b>
<b>Total by County</b>					
Imperial	59,522	9,066	15,285	12,038	<b>95,911</b>
Riverside	72,658	10,986	21,900	24,288	<b>129,832</b>
San Bernardino	48,125	9,096	10,254	22,362	<b>89,837</b>

<sup>a</sup> excluding Bighorn Sheep corridors

**Objective b--Dispose of Public Lands into Private Ownership**

**Action** Same as No Action Alternative.

**Objective c--Acquire lands for protection of Coachella Valley Milkvetch**

**Action** Same as Proposed Plan.

## **2.7 Access to Resources for Economic and Social Needs**

No plan actions are described, but there are some important points to note. While no specific action is included here, this public scoping issue has provided fundamental guidance in developing decisions that address other issue items. The intent in developing this plan was to address all the major issues on an equal basis to meet the goal of Public Land Health with the least expense to access and use of resources. A summation of the decisions proposed for these other issue items in Chapter 2 and the cumulative effects described in Chapter 4 would suggest to what extent this intent has been achieved.

Since the public scoping meetings were held and issue conclusions developed for the Plan, the CDPA passed (October, 1994). The CDPA had a considerable effect on this subject. It created new data, analyses, and obvious areas for protection of species and habitats. It also reduced access and heightened the sensitivity on this issue.

The emphasis that this issue provides is translated into the following guidance:

- Utilize existing Congressional and protective land use designations as much as possible to develop areas of conservation emphasis for the desert tortoise and other species and habitats and minimize the need for additional area for this purpose.
- Develop management areas with management emphases that are commensurate with the issues contained--i.e., the degree of restriction and cost of use should be in line with what is appropriate the array of species issues.
- Manage species and habitats by increasing the cost of doing business as opposed to imposing additional restrictions.
- Decisions based on science and science-based judgement, on regional and long-term perspectives, and on cooperative approaches have the best chance of standing the test of time, minimize further need for restrictive management, and maximize possible future relaxation of current restrictions and expenses.

## 2.8 Incorporation of Changes to the California Desert Conservation Area (CDCA) Plan Created by the California Desert Protection Act (CDPA)

The Congressionally created CDPA created 23 new BLM wilderness areas in the planning area, added lands to and changed Joshua Tree National Monument to a Park, and created new wilderness areas in JTNP. The new wilderness designations must also be incorporated into JTNP and BLM land use plans. This has already occurred for JTNP, but would occur through NECO for BLM lands. For BLM lands an additional land use change associated with their creation is required as is described below under the heading “MUC Remnants,” below. The changes are required and allow for no choice (except as noted below), so what is described below is the same for all alternatives.

### 2.8.1 No Action Alternative

Not addressed.

### 2.8.2 Proposed Plan

**Action** Incorporate 23 CDPA-designated wilderness areas into the CDCA Plan.<sup>11</sup> Wilderness areas would be managed according to law, regulations, policies and manuals for wilderness management. Additionally, wilderness areas would be designated MUC C (Controlled Use). These areas are listed below (from north to south) and depicted on Map 2-38 Appendix A:

- Bigelow Cholla Garden
- Clipper Mountains
- Stepladder Mountains
- Whipple Mountains
- Old Woman Mountains
- Sheephole Valley
- Rice Valley
- Palen/McCoy
- Orocopia Mountains
- Little Chuckwalla Mountains
- Indian Pass
- Little Picacho Peak
- Piute Mountains
- Trilobite
- Chemehuevi Mountains
- Turtle Mountains
- Cadiz Dunes
- Riverside Mountains
- Big Maria Mountains
- Mecca Hills
- Chuckwalla Mountains
- Palo Verde Mountains
- Picacho Peak

### MUC Remnants

The new set of BLM wilderness areas overlaid all or portions of previously designated MUC C, L, and M areas. Wilderness designation supercedes any previous MUC designation. However, the “edge fit” of the

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<sup>11</sup> All BLM wilderness study areas that were identified under the wilderness review requirements of section 603 of FLPMA have been released and no longer exist.

wilderness areas over the previous designations--even areas proposed for wilderness--was not an exact fit in many cases. The result would be that many small portions of previously large MUCs extend beyond wilderness boundaries. These small areas are referred to as "remnants." All the wilderness areas in the NECO planning area have gone through the boundary refinement process and approval. Most remnants are small, extremely long and narrow, and are unmanageable as independent MUCs. They lie between the various wilderness areas and some different adjacent MUC areas. In the case of remnant MUC C areas, the CDCA Plan directs that they automatically and temporarily be reassigned as MUC L until such time as they are permanently assigned a MUC through the plan amendment process. Because the boundaries of wilderness areas cannot be changed, the compelling solution for reassigning most remnants is to assign them to the adjacent non-wilderness MUC as described in the action below. Reassignments vary among alternatives depending upon the nature of DWMA and other proposals. The scope of this action **does not** include (1) large MUC L and M remnants which can stand alone, or (2) access road "cherry stems" into wilderness areas.

As a reminder and as noted in the Desert Plan, MUCs C, L, M, and I designations apply only to federal lands, so this subject and the action below has no effect on private lands.

**Action** Reassign all "remnant" MUCs identified on Map 2-2 of Appendix A to new MUCs, as indicated on Map 2-7 of Appendix A.<sup>12</sup>

### **2.8.3 Small DWMA--A Alternative**

**Action** Reassign all "remnant" MUCs identified on Map 2-2 to new MUCs, as indicated on Map 2-12 of Appendix A.<sup>13</sup>

### **2.8.4 Small DWMA--B Alternative**

**Action** Reassign all "remnant" MUCs identified on Map 2-2 to new MUCs, as indicated on Map 2-12 of Appendix A.<sup>13</sup>

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<sup>12</sup>The smallest sized remnants are too small to be observable on this map. More information and details are available at the Riverside Office of the Bureau of Land Management.

## **2.9 Comparison of Alternatives**

Actions for each of the four alternatives are compared in Table 2-21. Chapter 4 analyzes the impacts of the alternatives and Table 4-27 summarizes the impacts of the four alternatives.

**Table 2-21. Comparison of Alternatives**

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Standards of Public Land Health and Guidelines for Grazing Management</b>			
Manage ecosystem health with the National Fallback Standards.	Manage ecosystem health with the Regional Standards.	Same as the Proposed Plan.	Same as the Proposed Plan.
Manage grazing activities with national fallback guidelines.	Manage grazing activities with specific regional guidelines.	Same as the Proposed Plan.	Same as the Proposed Plan.
<b>Recovery of the Desert Tortoise</b>			
Manage current Category I and II desert tortoise habitat in the Chemehuevi area.	Designate 874,843 acres as the Chemehuevi DWMA.	Designate 741,440 acres as the Chemehuevi DWMA.	Same as the Small DWMA--A Alternative.
Manage current Category I and II desert tortoise habitat and the Chuckwalla Bench ACEC in the Chuckwalla area.	Designate 720,077 acres as the Chuckwalla DWMA.	Designate 632,094 acres as the Chuckwalla DWMA.	Same as the Small DWMA--A Alternative.
JTNP is managed according to the General Management Plan and with an emphasis on natural ecosystem management policies.	Designate JTNP as the JTNP DWMA.	Same as the Proposed Plan	Same as the Proposed Plan.
Manage Chuckwalla Bench ACEC and Milpitas Wash HMP according to existing plans.	Delete Chuckwalla Bench ACEC and Milpitas Wash HMP which are incorporated into proposed DWMA.	Delete Chuckwalla Bench ACEC which is incorporated into the proposed DWMA.	Same as the Small DWMA--A Alternative.
Retain existing Multiple-Use Class designations.	Designate all MUC M (Moderate Use) lands in proposed DWMA as MUC L ( Limited Use).	Same as the Proposed Plan.	Same as the Proposed Plan.
Retain existing Category I, II, and III Desert Tortoise Habitat area.	Designate proposed DWMA as Category I Desert Tortoise Habitat.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Recovery of the Desert Tortoise, continued</b>			
Evaluate surface-disturbing projects on a case-by-case basis.	Limit cumulative new surface disturbance to 1 percent within DWMA's.	Same as the No Action Alternative.	Limit cumulative new surface disturbance to 3 percent within DWMA's.
Compensation required according to California Statewide Policy.	Compensation for disturbance of public lands within DWMA's would be required at a 5:1 ratio.	Same as the No Action Alternative.	Same as the No Action Alternative.
ACECs entry points are signed and, in certain cases, fenced.	Fence, sign, or patrol the periphery of DWMA's to control conflicts with adjacent land uses.	Fence periphery of DWMA's only where there are conflicts with adjacent land uses to control conflicts.	The periphery of the DWMA's would not be fenced.
Boundary of Lazy Daisy Allotment would remain unchanged.	Allocate forage on 21,606 acres of Lazy Daisy Allotment to desert tortoise.	Allocate forage on 140,357 acres of Lazy Daisy Allotment to desert tortoise.	Same as the Small DWMA A Alternative.
Boundary of Chemehuevi Allotment would remain unchanged.	Ephemeral authorization on Chemehuevi lease is allocated to the desert tortoise and unavailable for Livestock	Same as the Proposed Plan.	Portion of Chemehuevi Cattle Allotment falling within the highest-density tortoise habitat would be would be allocated for desert tortoise
Not addressed.	Prescriptions adapted from terms and conditions of the 1994 BO would be added to the CDCA Plan Grazing Element.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Cattle allotment lessee may voluntarily relinquish all grazing authorizations.	Not addressed.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Recovery of the Desert Tortoise, continued</b>			
Perennial plant utilization may not exceed 40 percent in any key area.	When ephemeral forage production is less than 230 pounds per acre, cattle would be substantially removed for the DWMA.	Not addressed.	Same as the No Action Alternative.
Permits for live vegetation harvest may be issued in non-wilderness areas after environmental review.	Permits for live vegetation harvest may be issued after environmental review only within salvage areas inside where surface disturbance has been authorized.	Same as the No Action Alternative.	Permits for live vegetation harvest may be issued after environmental review for creosote bush stems or any plant within salvage areas where surface disturbance has been authorized.
Lands acquired through compensation or mitigation are classified OPEN for disposal or use.	Land acquired through compensation or mitigation would be classified CLOSED for disposal or use.	Same as the Proposed Plan.	Same as the Proposed Plan.
Fencing of major highways and railroads would be considered as mitigation for new construction projects.	Total of 208 miles of fencing along highways, and railroads.	Total of 63 miles of fencing along highways, and railroads.	Total of 58 miles of fencing along highways, and railroads.
Bridges and culverts would be considered mitigation when new construction projects are proposed.	Bridges and culverts for animal passage would be required for new linear projects.	Bridges and culverts for animal passage would be required for new linear projects, and existing linear projects would be retrofitted.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Recovery of the Desert Tortoise, continued</b>			
Stopping, parking, and camping within proposed DWMA's would be allowed only within 100 feet of a route.	Stopping, parking, and vehicle camping within DWMA's would be allowed only within 100 feet of the centerline of a route.	Stopping and parking, within DWMA's would be allowed only within 30 feet of the centerline of a route. Vehicle camping within DWMA only in designated areas.	Stopping, parking, and vehicle camping within DWMA's would be allowed only within 300 feet of the centerline of a route.
Not addressed.	Portions of DWMA's would be designated as "washes closed zones" wherein vehicle use would be restricted to identified open routes.	DWMA's in their entirety would be designated as "washes closed zones" wherein vehicle use would be restricted to identified open routes.	Same as the Small DWMA A Alternative
Federal agencies would not dispose of public lands within Category I habitat.	Federal agencies would not dispose of public lands within proposed DWMA.	Same as the Proposed Plan.	BLM may dispose of public lands within proposed DWMA if it augments the overall management strategy.
Raven management is accomplished by evaluating projects on a case by case basis, and appropriate mitigation is prescribed.	Proposed projects that potentially increase raven populations within five miles of DWMA's would require mitigation measures to reduce or eliminate proliferation of ravens.	Same as the Proposed Plan.	Same as the Proposed Plan.
Raven management is accomplished by evaluating projects on a case-by-case basis, and appropriate mitigation is prescribed.	Remove ravens that are known to prey on tortoise through selective shooting, poisoning, or trapping and euthanization where there is evidence of raven predation in or within 1 mile of tortoise habitat.	Ravens that are known to prey on tortoise would be removed through non-lethal means only.	Same as the Small DWMA A-Alternative.
Not addressed.	Raven management is accomplished by evaluating projects on a case-by-case project basis and appropriate mitigation is prescribed.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Recovery of the Desert Tortoise, continued</b>			
Manage Categories with current boundaries.	All Desert Tortoise Category I, II, and III habitat outside of DWMA boundaries would be converted to, and managed as, Category III habitat.	Same as the Proposed Plan.	Same as the Proposed Plan.
<b>Special Status Animals and Plants and Natural Communities--Desert Bighorn Sheep</b>			
Continue implementation of current HMPs.	Designate essential habitat for the Sonoran Desert Bighorn Sheep and the Southern Mojave Desert Bighorn Sheep as WHMAs (Map 2-18).	Same as the Proposed Plan.	Same as the Proposed Plan.
Continue implementation of current HMPs.	Delete all current bighorn sheep HMPs that are captured inside WHMAs.	Same as the Proposed Plan.	Same as the Proposed Plan.
Retain current Multiple Use Class designation in the Eagle Mountains area.	Change MUC designation in the Eagle Mountains area from MUC I to MUC L (Intensive to Limited Use).	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Fence potential hazards to bighorn sheep with substantial fencing materials.	Areas with potential hazards to bighorn sheep would not be fenced.	Same as the Proposed Plan.
Manage the Ford Dry Lake Allotment with current boundaries and management practices.	Ford Dry Lake Sheep allotment would be no longer available for domestic sheep because it is less than 9 miles from occupied bighorn sheep range.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Special Status Animals and Plants and Natural Communities--Desert Bighorn Sheep, continued</b>			
Manage the Rice Valley Allotment with current boundaries and management practices.	9,264 acres of the Rice Valley sheep allotment would be no longer available for domestic sheep because it is within 9 miles of current occupied bighorn sheep range.	The Rice Valley sheep allotment would be no longer available for domestic sheep because it would be less than 9 miles from the Little Maria Mountain deme which would be reestablished.	Same as the Proposed Plan.
Not addressed.	In areas managed for burros, deer, and bighorn sheep, natural water sites would be designated to each on an equal shares basis.	Wild burros would be fenced out of all natural and artificial waters within currently occupied bighorn sheep range in the WHMA.	Same as the Proposed Plan.
Proposals for new water developments would be considered on a case-by-case basis.	Construct 75 new waters to expand usable habitat including 10 in wilderness areas. Add up to 12 more in wilderness area based on future biological justification.	Same as the Proposed Plan.	Construct 21 new water developments to expand usable habitat outside of wilderness areas.
Proposals to reestablish lost demes on BLM lands are addressed on a case-by-case basis and require an HMP and State director approval.	Reestablish the following lost demes: <ul style="list-style-type: none"> <li>• Cargo Muchacho Mountains</li> <li>• Mule Mountains</li> <li>• Palo Verde Mountains</li> </ul>	Same as the Proposed Plan.	Same as the Proposed Plan.
<b>Special Status Animals and Plants and Natural Communities--Desert Mule Deer</b>			
Proposals for new water developments are considered on a case-by-case basis.	Construct 101 new waters, 53 of which would also provide water to bighorn sheep, to expand usable habitat.	Same as the Proposed Plan.	Construct 21 new water developments to expand usable habitat outside of wilderness.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Other Special Status Animals and Plants and Natural Communities</b>			
Habitat of each special status species and each natural community would be protected using existing land use policies, designations and fallback guidelines.	Designate 555,523 acres as multi-species WHMA (Map 2-21) such that ~80% of special status species are within DWMA's and WHMA's.	Designate 812,323 acres as Multi-species WHMA (Map 2-23) such that ~80% of special status species are within DWMA's and WHMA's.	Designate 512,455 acres as Multi-species WHMA (Map 2-24) such that ~50% of special status species are within DWMA's and WHMA's.
Mitigate impacts of proposed projects using commonly applied mitigation.	Require mitigate impacts of proposed projects using commonly applied mitigation measures and surveys.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Bat gates would be constructed on caves or mine roost only where there is significant potential for negative effects.	Bat gates would be constructed on all caves or mines roost where entry would pose a hazard to humans or bats outside CMAGR.	Same as the Proposed Plan.
Not addressed.	Not addressed.	All significant bat roost sites would be withdrawn from mineral entry, subject to valid existing rights.	Not addressed.
Not addressed.	All riparian habitat or permanently flowing streams within 5 miles of a maternity roost for Townsend's big-eared bat would have a riparian proper functioning condition analysis.	All significant roost sites would be withdrawn, at generally 2.5 acres per site, from mineral entry, subject to valid existing rights.	Same as the Proposed Plan.
Not addressed.	Closure of any route within 1/4 mile of any significant bat roost would be strongly considered.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Other Special Status Animals and Plants and Natural Communities, continued</b>			
Not addressed.	OHV races, construction activities, blasting and similar activities would not be authorized within 1 mile or a prairie falcon or golden eagle eyrie between February 15 through June 15.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Closure of any route within 1/4 mile of a prairie falcon or golden eagle eyrie would be strongly considered.	Same as the Proposed Plan.	Same as the Proposed Plan.
Remove and control tamarisk and add four nest boxes.	Habitat for elf owl at Corn Springs would be improved by removing tamarisk to elevate water table, controlling starlings, planting cottonwoods, adding nest boxes and minimizing ground water pumping.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Limit construction activity period to September 1-February 1 if burrowing owls are present.	Same as the Proposed Plan.	Same as the Proposed Plan.
Permits for live vegetation harvest may be issues in non-wilderness areas after environmental review.	Harvest of live vegetation would be prohibited in the Multi-species Conservation Zone to protect perching and nesting sites for thrashers.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Limit construction activity period to July 1 - December 1 if Crissal thrashers are present in a project area.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Other Special Status Animals and Plants and Natural Communities, continued</b>			
<p>The following dunes and playas are designated as “open” or “closed” to vehicle use:</p> <ul style="list-style-type: none"> <li>• Ford Dry Lake (portion of) (Open)</li> <li>• Cadiz Dunes (Closed)</li> <li>• Rice Valley Dunes (portion of) (Open)</li> </ul>	<p>The following dunes and playas would be closed to vehicle use:</p> <ul style="list-style-type: none"> <li>• Palen Dunes</li> <li>• Rice Valley Dunes</li> <li>• Ford Dunes</li> <li>• Palen Dry Lake</li> <li>• Ford Dry Lake (portion of)</li> </ul>	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Special mitigation measure avoiding disturbance of habitat of Couch’s spadefoot toad would be strongly considered on all projects.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Closure of any route within 1/4 mile Couch’s spadefoot toad site would be strongly considered.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Install permanent fencing where unauthorized vehicle use is observed in temporary impoundment areas for Couch’s spadefoot toad.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Closure of any route within 1/4 mile of a natural or artificial water source would be strongly considered.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Closure of redundant routes would be strongly considered.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Other Special Status Animals and Plants and Natural Communities, continued</b>			
Acquisition is primarily focused within some ACECs, tortoise Category I and II habitat, and wilderness areas.	Acquire private and SLC lands outside NPS with known occurrences of Coachella Valley Milkvetch.	Same as the Proposed Plan.	Same as the Proposed Plan.
Compensation for disturbance in Desert Dry Wash Woodland and Desert Chenopod Scrub communities is not required.	In the Multi-species WHMA, compensation for disturbance of Desert Dry Wash Woodland and Desert Chenopod Scrub communities would be required at 3 acres for each acre disturbed.	Same as the Proposed Plan.	Same as the Proposed Plan.
Compensation for disturbance in Sand Dune and Playa communities that are closed to vehicle use, is not required.	In Sand Dune and Playa communities that are closed to vehicle use, compensation for surface disturbance would be required at 3 acres for each acre disturbed.	In Sand Dune and Playa communities that are closed to vehicle use, compensation for surface disturbance would be required at 1 acre for each acre disturbed.	Same as the Small DWMA A-Alternative.
Not addressed.	Selected Spring and Seep communities would be improved to enhance habitat for special status bird species.	Same as the Proposed Plan.	Same as the Proposed Plan.
Not addressed.	Construction projects would not disturb Spring and Seep communities during the duration of the project.	Same as the Proposed Plan.	Same as the Proposed Plan.

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Wild Horses and Burros</b>			
<p>Manage the Chemehuevi and Havasu HMAs with current boundaries and AML of 150 burros as set in the CDCA Plan and the Arizona BLM HMAPs.</p>	<p>Combine Chemehuevi and Havasu Herd Management Areas into one named Chemehuevi HMA consisting of 147,630 acres and AML is reduced from 150 to a current management level of 108 burros until an AML is established through monitoring of habitat.</p>	<p>Eliminate the Chemehuevi, Havasu (California side), Chocolate/Mule Mountain, Cibola-Trigo (California side) and Picacho HMAs.</p>	<p>Combine Chemehuevi and Havasu Herd Management Areas into one named Chemehuevi HMA consisting of 263,021 acres and AML is reduced from 150 to a current management level of 108 burros until an AML is established through monitoring of habitat.</p>
<p>Manage the Picacho and Chocolate/Mule Mountains HMAs with current boundaries and AML as set in the CDCA Plan of 42 horses and 22 burros, respectively. The Arizona BLM Cibola/Trigo HMA would be managed with current boundaries and AML as set in their HMAP of 190 burros.</p>	<p>Eliminate the Picacho HMA for horses. Combine historical burro range, Chocolate/Mule Mountains, and Cibola-Trigo Herd Areas into one named Chocolate/Mule Mountains HMA. Reduce AML of 212 burros to a current level of 121 burros which would remain in effect until an AML is established through monitoring.</p>	<p>Eliminate the Chemehuevi, Havasu (California side), Chocolate/Mule Mountain, Cibola-Trigo (California side) and Picacho HMAs.</p>	<p>Eliminate the Picacho HMA for horses. Combine historical burro range, Chocolate/Mule Mountains HA and the Cibola-Trigo HA and HMA for burros to be named Chocolate/Mule Mountains HA and HMA. Manage for a current level of 138 burros until an AML is established through monitoring.</p>
<p>Manage the Piute Mountain HA for zero burros, removing current population.</p>	<p>Same as the No Action Alternative.</p>	<p>Same as the No Action Alternative.</p>	<p>Establish the Piute Mountain HMA (39,780 acres) at current population level of 37 burros until an AML is established through monitoring.</p>

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Motorized-vehicle Access/Routes of Travel Designation</b>			
<p>Routes would be closed in accordance with the biological parameters established in the NECO Plan regardless of Multiple-use Class.</p>	<p>Motorized-vehicle access would be managed in accordance with current MUC L guidelines irrespective of Multiple-Use Class, except in MUC C and areas designated "open" for vehicle use. Routes would be closed in accordance with the biological parameters established in the NECO Plan regardless of Multiple-use Class.</p>	<p>Same as the Proposed Plan Alternative except that routes designated "open" within DWMA's would be limited to paved roads, maintained dirt roads, and recreational touring routes.</p>	<p>Same as the Small DWMA A Alternative except that redundant routes outside DWMA's would be designated open.</p>
<p>All "existing" routes in MUC L areas that have been inventoried and mapped including navigable washes would be designated "open" for motorized-vehicle use except as noted.</p>	<p>All "existing" routes that have been inventoried and mapped including navigable washes would be designated "open" for motorized-vehicle use except as noted.</p>	<p>Same as the Proposed Plan Alternative.</p>	<p>Same as the Proposed Plan Alternative.</p>
<p>Competitive off-highway vehicle events are allowed on competitive recreation routes established through the CDCA Plan, as amended and in accordance with MUC guidelines outside these routes.</p>	<p>Eliminate the Parker 400. Events on the Johnson Valley to Parker route would be permitted in accordance with specified parameters.</p>	<p>Eliminate the Parker 400 and the Johnson Valley to Parker routes.</p>	<p>Eliminate the Parker 400. Events on the Johnson Valley to Parker route would be permitted in accordance with specified parameters.</p>

No Action	Proposed Plan	Small DWMA--A	Small DWMA--B
<b>Land Ownership Pattern</b>			
<p>Federal agencies would seek to acquire state or private lands within some ACECs, tortoise Category I and II, and wilderness acres through purchase, donation, or exchange according to ranked priorities.</p>	<p>Federal agencies would actively seek to acquire lands or interests in lands within DWMA's and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to ranked priorities.</p>	<p>Federal agencies would actively seek to acquire lands or interests in lands within DWMA's and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to ranked priorities.</p>	<p>Federal agencies would actively seek to acquire lands or interests in lands within DWMA's and WHMA's (except within Bighorn Sheep corridors) through purchase, donation, or exchange according to ranked priorities.</p>
<p>Identify public lands suitable for disposal of low biological sensitivity into private ownership where consolidation and location of private land both promotes private development and increases tax base for local governments.</p>	<p>BLM would dispose of lands in areas outside wilderness, DWMA's, and WHMA's and not containing known occurrences of rare plants, springs, bat or other special status species and where such action supports consolidation and location of private land to promotes private development and increases tax base for local governments.</p>	<p>Same as the No Action Alternative.</p>	<p>Same as the No Action Alternative.</p>

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## **Appendix D**

### **Desert Tortoise Mitigation Measures**

#### **Introduction**

These measures are intended to minimize the impacts of authorized actions or projects on desert tortoise and its habitat. In various wordings, they have been included in biological opinions issued by USFWS and in land-use decisions of BLM and others on Federal lands. Livestock grazing mitigation measures have not been reiterated due to their length and because they have been previously applied to the four allotments.

#### **General Mitigation Measures**

##### **1. Designated Persons**

In the following measures, a "Qualified Biologist" is defined as a person with appropriate education, training, and experience to conduct tortoise surveys, monitor project activities, provide worker education programs, and supervise or perform other implementing actions. The person must demonstrate an acceptable knowledge of tortoise biology, mitigation techniques, habitat requirements, sign identification techniques, and survey procedures. Evidence of such knowledge may include work as a compliance monitor on a project in desert tortoise habitat, work on desert tortoise trend plot or transect surveys, or other research or field work on desert tortoise. Attendance at a training course endorsed by the agencies (e.g., Desert Tortoise Council tortoise training workshop) is a supporting qualification.

An "Authorized Biologist" is defined as a wildlife biologist who has been authorized to handle desert tortoises by USFWS and CDFG for this project. Name(s) of proposed Authorized Biologist(s) must be submitted to USFWS and CDFG for approval at least 15 days prior to anticipated need. The tortoise handling protocol is described in Attachment 2.

A "Field Contact Representative" (FCR) is defined as a person designated by the project proponent who is responsible for overseeing compliance with desert tortoise protective measures and for coordination with the agency compliance officer. The FCR must be on-site during all project activities. The FCR shall have the authority to halt all project activities that are in violation of these measures. The FCR shall have a copy of all tortoise protective measures when work is being conducted on the site. The FCR may be an agent for the company, the site manager, any other project employee, a biological monitor, or other contracted biologist."

##### **2. Worker Training**

All workers, including all participating agency employees, construction and maintenance personnel, and others who implement authorized actions shall be given special instruction. This instruction will include training on distribution, general behavior and ecology, protection afforded by State and Federal endangered species acts (including prohibitions and penalties), and procedures for reporting encounters, and the importance of following the protection measures. The education program may consist of a class or video presented by a Qualified Biologist. It is recommended that workers carry wallet cards with important information while in the field.

### **3. Compliance**

The FCR shall oversee compliance and coordination with the authorizing agency. Compliance shall include conducting species surveys, proper removal of species from areas being impacted, assurance that a sufficient number of Qualified Biologists are present during surface disturbance, and that all conditions of the authorization are being met by proponent, contractors, and workers. The FCR shall have the authority to halt activities that are in not in compliance with the authorization.

Any incident occurring during project activities which is considered by the biological monitor to be in non-compliance with the mitigation plan shall be documented immediately by the biological monitor. The FCR shall ensure that appropriate corrective action is taken. Corrective actions shall be documented by the monitor. The following incidents shall require immediate cessation of the construction activities causing the incident, including (1) imminent threat of injury or death to a desert tortoise; (2) unauthorized handling of a desert tortoise, regardless of intent; (3) operation of construction equipment or vehicles outside a project area cleared of desert tortoise, except on designated roads, and (4) conducting any construction activity without a biological monitor where one is required (see Term and Condition 2.1). If the monitor and FCR do not agree, the Federal agency's compliance officer shall be contacted for resolution. All parties may refer the resolution to the Federal agency's authorized officer."

After completion of the project, the participating agency which authorized the project shall conduct a review to determine if the project proponent complied with the conditions of authorization. Corrective actions shall be required of the proponent where conditions have not been met.

### **4. Compensation**

A mitigation fee based on the amount of acreage disturbed shall be required of proponents of new development. Within DWMA's (Category I) the lands delivered or equivalent fee shall be an amount that achieves a ratio of 5 acres of compensation land for every 1 acre disturbed. Outside DWMA's (Category III) the lands delivered or equivalent fee shall be an amount that achieves a ratio of one 1 acre of compensation land for every 1 acre disturbed. Funds may be expended as approved by the Management Oversight Group in 1991. Lands will be acquired or enhanced within the same recovery unit as the disturbance. CDFG may require additional fees for management of lands and for rehabilitation of lands.

### **5. Tortoise Seasonal Restrictions**

To the extent possible, activities shall be scheduled when tortoises are inactive (November 1-March 15). Dual-sport (non-speed, trail-ride) events and non-emergency maintenance of roads are restricted to this season.

### **6. Pre-Construction Clearance Surveys**

Pre-construction surveys shall be conducted to locate and remove desert tortoises prior to grading or actions which might result in harm to a desert tortoise or which remove tortoise habitat. The survey shall be conducted by an Authorized Biologist within 24 hours of the onset of the surface disturbance unless a tortoise-proof fence has been installed that would prevent re-entry of the animals.

## **7. Site Fencing and Hazard Removal**

During the tortoise active season, March 15 - November 1, no overnight hazards to desert tortoises (e.g., auger holes, trenches, pits, or other steep-sided depressions) shall be left unfenced or uncovered; such hazards shall be eliminated each day prior to the work crew leaving the site.

Large or long-term project areas shall be enclosed with tortoise-proof fencing to keep desert tortoises out of the work area. The fencing shall be wire mesh with a maximum mesh size of ½" square fastened securely to posts. The wire mesh shall extend at least 18 inches above the ground and preferably about 12 inches underground. Where burial is not possible, the lower 12 inches shall be folded outward and fastened to the ground. Any gates or gaps in the fence shall be constructed to prevent entry of tortoises. The fencing shall be removed when restoration of the site is completed.

Temporary fencing shall be required around test sites where trenching or drill holes could trap animals or around other small, short-term projects where tortoises could move into the work area. Occasionally, seasonal restrictions and/or monitoring may be substituted to alleviate the need for fencing.

Fenced areas are to be cleared of tortoises by an Authorized Biologist prior to project activities.

## **8. Surface Disturbance**

All surface disturbing activity shall be limited to the land area essential for the project. In determining these limits, consideration shall be given to topography, public health and safety, placement of facilities, and other limiting factors. Work area boundaries and special habitat features shall be appropriately marked to minimize disturbance. All workers shall strictly limit their activities and vehicles to the areas marked. All workers shall be trained to recognize work area markers and to understand equipment movement restrictions. Where possible, previously disturbed areas shall be used as worksites and for storage of equipment, supplies, and excavated material.

Blading of work areas shall be minimized to the extent possible. Pre-construction activity, such as removal of vegetation, shall occur in the presence of a Qualified Biologist. Disturbance of shrubs shall be avoided to the extent possible. Where shrubs must be disturbed, they shall be crushed rather than bladed or excavated.

Project maintenance and construction, stockpiles of excavated materials, equipment storage, and vehicle parking shall be limited to existing disturbed areas wherever possible. Should use of existing disturbed areas prove infeasible, any new disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows or vegetation, public health and safety, and other limiting factors. Special habitat features, particularly tortoise burrows, shall be flagged by the Qualified Biologist so that they may be avoided by installation equipment and during placement of poles and anchors.

## **9. Biological Monitor**

For activities conducted between March 15 and November 1 in desert tortoise habitat, construction and operation activities shall be monitored by a Qualified Biologist approved by BLM. The Qualified Biologist shall be present during all activities in which encounters with tortoises may occur. The Qualified Biologist

shall watch for tortoises wandering into the construction areas, check under vehicles, examine excavations and other potential pitfalls for entrapped animals, examine exclusion fencing, and conduct other activities necessary to ensure that death or injuries of tortoises is minimized.

### 10. Refuse Disposal

All trash and food items generated by construction and maintenance activities shall be promptly contained and regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert predators. Portable toilets shall be provided on site if appropriate.

### 11. Dogs

Dogs shall be restrained either by enclosure in a kennel or by chaining to a point within the tortoise-proof enclosure if one has been constructed for the activity.

### 12. Ravens

Structures which may function as common raven nesting or perching sites are not authorized except as specifically stated in the appropriate BLM document. The proponent shall provide a graphic description of all structures to be erected on the site. Some actions are required to mitigate actual nesting on authorized structures, such as requiring the proponent to secure necessary permits to remove nests and to remove such nests in a timely fashion. USFWS does not (or rarely) authorize nest removal if birds are present in the nest, but does authorize nest removal after birds have left.

### 13. Motorized Access

Where possible, motor vehicle access shall be limited to maintained roads and designated routes. Where temporary access off a maintained road or designated route is permitted, a Qualified Biologist shall travel with each work crew to ensure that all desert tortoises and their burrows are avoided and that impact to the habitat is minimized. All vehicle tracks that might encourage public use shall be obliterated after temporary use.

Where access from a maintained road or designated route to a project's site is part of the approved development plan, length and location of the route shall be designed to minimize impact to the habitat. The amount of disturbed area shall be subject to the mitigation fee, and the route shall be designated "Limited Use" and not open to the public. The following requirements apply to vehicle use.

- a. **Speed Limits.** Vehicle speed within a project area, along right-of-way maintenance roads and on routes designated for limited use shall not exceed 20 miles per hour. Speed limits shall be clearly marked by the proponent, and workers shall be made aware of these limits.
- b. **Tortoises Under Vehicles.** Vehicles parked in desert tortoise habitat shall be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, the Authorized Biologist shall be contacted to move the animal from harm's way, or the vehicle shall not be moved until the desert tortoise leaves of its own accord. The Authorized Biologist shall

be responsible for taking appropriate measures to ensure that any desert tortoise moved in this manner is not exposed to temperature extremes which could be harmful to the animal.

#### 14. Route Maintenance and Surface Restoration

The following mitigation measures shall be implemented during all route maintenance and surface restoration projects:

- a. **Heavy Equipment.** Operators of heavy equipment (such as road graders) shall be accompanied by a biological monitor who is a Qualified Biologist when working in desert tortoise habitat during the desert tortoise's active period (March 15 to October 31). The biological monitor shall walk **in front** of the equipment during its operation and shall function as the FCR and have the responsibility and authority to halt all project activity should danger to a desert tortoise arise. Work shall proceed only after hazards to the desert tortoise are removed, the desert tortoise is no longer at risk, or the desert tortoise has been moved from harm's way by an Authorized Biologist. This measure does not currently apply to County or Caltrans road work on BLM land.

During the desert tortoise's inactive period (November 1 to March 15), an on-site monitor is not required. The operator shall watch for desert tortoises while using the equipment and shall have the responsibility for preventing harm to desert tortoises by proceeding only after hazards to the desert tortoise are removed or the desert tortoise is no longer at risk. Operators of light equipment used for trail maintenance and project leaders for surface reclamation actions shall watch for desert tortoises during all project activities. They shall have the responsibility for preventing harm to desert tortoises by proceeding only after hazards to the desert tortoise are removed or the desert tortoise is no longer at risk.

- b. **Injury.** Should any desert tortoise be injured or killed, all activities shall be halted, and the Authorized Biologist immediately contacted. The biologist shall have the responsibility for determining whether the animal should be transported to a veterinarian for care, which is paid for by the project proponent, if involved. If the animal recovers, USFWS is to be contacted to determine the final disposition of the animal; few injured desert tortoises are returned to the wild.
- c. **Report.** The equipment operator or Authorized Biologist shall keep a tally of all desert tortoises seen, moved, injured or killed during the project. Other required elements are (1) rating the effectiveness of required mitigation, (2) a breakdown of actual habitat disturbance, and (3) suggestions for improving mitigation.
- d. **Water Ditches.** The equipment operator or Qualified Biologist shall inspect water ditches for desert tortoise burrows before moving or shoveling any soil. If a desert tortoise burrow is present, the water ditch shall be left undisturbed, if possible. The equipment operator shall inspect water ditches for desert tortoise burrows.

- e. **Burrows.** If a burrow is occupied by a desert tortoise and avoidance of the burrow is not possible during road maintenance or reclamation activities, the Authorized Biologist shall make the final determination. Only an Authorized Biologist may excavate the desert tortoise, following established protocols.
- f. **Grading.** To avoid building up tall berms that may inhibit desert tortoise movement, the operator should minimize lowering of the road bed while grading. Berms higher than 12 inches or a slope greater than 30 degrees shall be pulled back into the road bed. Where it is not feasible to meet these requirements, berms will be mitigated through such means as artificial breaching at washes, intersections, or ditch-outs for drainage with adequate spacing.
- g. **Speed Limits.** The equipment operator shall watch for desert tortoises on the road whenever driving, transporting, or operating equipment. Driving speeds shall not exceed 20 miles per hour, and operating speeds should not exceed 5 miles per hour to allow for adequate visibility.

## Special Mitigation for Specific Uses

### 15. Mineral Exploration and Development

In addition to mitigation measures described above for general mitigation, the following special mitigation measures shall apply to small mining operations and minor exploration and test drill holes in which the surface disturbance or area from which desert tortoises are to be removed is less than ten acres:

- a. **Compliance.** A Qualified Biologist shall be on-site during the initial mining activity.
- b. **Explosives.** If explosives are authorized, the BLM's field office biologist shall verbally consult with the appropriate USFWS office to determine what measures shall be required to reduce the potential to take desert tortoises. This measure may include:
  - (1) Seasonal restrictions upon the use of explosives;
  - (2) Temporary removal of desert tortoises from areas potentially at risk during detonation either directly from the explosion or by thrown materials. All handling and storage of desert tortoises for this purpose shall be conducted as described in Measure 3 by an Authorized Biologist.
  - (3) Covering of desert tortoise burrows to reduce impacts of flying materials.

### 16. Non-Competitive Recreational Events

The following measures shall apply to all vehicle-oriented, dual-sport, and other non-competitive trail events:

- a. **Timing.** Events shall be held during the hibernation season for desert tortoises, generally considered to be between November 1 and March 1. Routes selected shall avoid impacting other special status plants and animal species. Any course flagging or markers shall be placed on the course not more than two weeks prior to the event and shall be removed within one week after conclusion of the event.
- b. **Limits.** The event shall be restricted to designated routes and limited to 500 rider participants per event. Participants shall not exceed 30 miles per hour through Category I and II tortoise habitat. They shall be notified of this requirement at the beginning of the event and before the start of the event on any subsequent days. Racing shall be prohibited.
- c. **Maps.** A map identifying the course shall be furnished to each entrant. The map shall clearly delineate maximum speed limits, authorized camp sites, and Conservation areas, and shall include a statement cautioning that travel beyond the edge of the roads into undisturbed habitat is strictly prohibited.
- d. **Parking.** Vehicles shall be parked at the side of the road or areas devoid of any perennial vegetation. Any entrants who abandon the event must exit the course on designated routes or public roads.
- e. **Camping.** Overnight camping shall be limited to existing campgrounds or designated camp sites capable of accommodating the group. Selected camping areas shall be surveyed by a Qualified Biologist prior to the event to determine if desert tortoise burrows or other special status plant or animal species are present.
- f. **Trash.** Trash and food items shall be carried out by the participants. The event proponent shall be responsible for ensuring that trash and garbage are not left behind.
- g. **Injury.** Injured tortoises found on the course shall be transported to an approved veterinarian (list provided to event organizers) at the earliest possible time. The proponent shall be responsible for the cost resulting from treatment of desert tortoises whose injuries resulted from the event.
- h. **Clearance.** The entire course shall be swept by an Authorized Biologist within an hour before the event. In addition, an Authorized Biologist shall travel at the front of the event to ensure that the route is cleared of all desert tortoises. Desert tortoises found shall be moved approximately 100 feet off the course.

## 17. Competitive Events

These measures apply to organized off-highway vehicle events in designated vehicle open areas.

- a. Organized event promoters and sponsors shall designate an FCR responsible for overseeing compliance with the special desert tortoise stipulations.

- b. Prior to commencing the event, organized event promoters and sponsors shall provide event participants and spectators with the BLM's printed materials describing: the occurrence of the desert tortoise in the area, the status of the desert tortoise, prohibitions against take and the penalties associated with take, and methods being employed as a part of the event to protect the desert tortoise and its habitat.
- c. Organized event promoters and sponsors that fail to comply with any of the special recreation permit stipulations shall be prosecuted to the fullest extent possible.
- d. Trash containers used for race event shall be raven-proof. Trash and food items shall be promptly contained and removed from the area within 24 hours of completion of the event.
- e. Participants who violate any special desert tortoise stipulation shall be disqualified from the event. Support team members that fail to comply with the stipulations shall result in disqualification of the associated rider(s). Anyone who accumulates three violations shall be barred from participating in any organized off-highway vehicle event for one year from the date of the third violation.

## 18. Utility Pipelines and Underground Cables

For construction and maintenance of all pipelines, fiber-optic lines, and other utilities requiring trenching, the following measures shall apply:

- a. **Width.** Construction rights-of-way shall be restricted to the narrowest possible width.
- b. **Exceptions.** All project construction and maintenance shall be restricted to the authorized right-of-way. If unforeseen circumstances require expansion beyond the right-of-way, the potential expanded work areas shall be surveyed for desert tortoises.
- c. **Access.** Vehicular travel shall be limited to the right-of-way. Access to the right-of-way shall be limited to public roads and designated routes.
- d. **Trenches.** Open trenches shall be regularly inspected by the Authorized Biologist at a minimum of once per day, and any desert tortoises that are encountered shall be safely removed. For small projects, escape ramps are sometimes required. The length of the trench left open at any given time shall not exceed that distance which will remain open for one week or less in duration. A final inspection of the open trench segment shall be made by the Authorized Biologist immediately prior to backfilling. Arrangements shall be made prior to the onset of maintenance or construction to ensure that desert tortoises can be removed from the trench without violating any requirement of the Occupational Safety and Health Administration.
- e. **Maintenance.** Observations of desert tortoises or their sign during maintenance shall be conveyed to the field supervisor and a biological monitor. Employees shall be notified that they are not authorized to handle or otherwise move tortoises encountered on the project site.

- f. **Compliance.** Sufficient Authorized and Qualified Biologists shall be present during maintenance or construction activities to assist in the implementation of on-site mitigation measures for the desert tortoise and to monitor compliance. The appropriate number of biologists will depend upon the nature and extent of the work being conducted and shall be stated in the right-of-way grant for each particular action, after consultation with the specific resource area office authorizing the action.
- g. **Final Assessment.** The authorizing agency shall ensure that maintenance or construction activities are confined to the authorized work areas by means of a post-project assessment. The assessment may be conducted by the Authorized Biologist. If maintenance or construction activities have extended beyond the flagged work areas, the BLM shall ensure that the project proponent restores these disturbed areas in an appropriate manner.
- h. **Restoration.** The proponent shall be required to restore disturbed areas in a manner that would assist re-establishment of biological values within the disturbed rights-of-way. Methods of restoration shall include, but not be limited to; road closure, the reduction of erosion, respreading of the top two to six inches of soil, planting with appropriate native shrubs, and scattering any bladed vegetation and rocks, where appropriate, across the right-of-way.

## 19. Power Transmission

The following mitigation measures shall be implemented during all construction and maintenance of transmission lines:

- a. **Surveys.** When access along the utility corridor already exists, pre-construction surveys for transmission lines shall provide 100 percent coverage for any areas to be disturbed and within a 100-foot buffer around the areas of disturbance. When access along the utility corridor does not already exist, pre-construction surveys for transmission lines shall follow standard protocol for linear projects.
- b. **Access.** To the maximum extent possible, access for transmission line construction and maintenance shall occur from public roads and designated routes.
- c. **Disturbed Areas.** To the maximum extent possible, transmission pylons and poles, equipment storage areas, and wire-pulling sites shall be sited in a manner that avoids desert tortoise burrows.
- d. **Restoration.** Whenever possible, spur and access roads and other disturbed sites created during construction shall be recontoured and restored.
- e. **Ravens.** All transmission lines shall be designed in a manner that would reduce the likelihood of nesting by common ravens. Each transmission line company shall remove any common raven nests that are found on its structures. Transmission line companies must

obtain a permit from the USFWS's Division of Law Enforcement to take common ravens or their nests.

## **20. Fire Management**

- a. Federal land management agencies will assign an environmental specialist on all wildfires exceeding initial attack.
- b. Before the beginning of each fire season, firefighters and support personnel will be provided with a briefing on tortoises and their habitat. This education program will focus on minimizing take of any listed species, particularly take due to vehicle use.
- c. On-road travel speeds will be kept low to reduce take of desert tortoise.
- d. Off-road vehicle travel will be restricted to the minimum necessary to suppress wildfires.
- e. Individuals trained to recognize tortoises and their shelter sites will precede any vehicle traveling off-road.
- f. Camps, staging areas, and helispots will be pre-surveyed for tortoises and burrows by the assigned environmental specialist. Camps will be established within previously disturbed areas whenever possible.
- g. Some effects of suppression may require rehabilitation action (e.g., surface disturbance from dozers).
- h. Some burned areas may require monitoring and follow-up treatment to promote return of native species and discourage exotic species.

## **Project Reporting**

For each project on which the consultation is to be applied, the BLM will transmit a reporting form (Attachment 1) to the appropriate USFWS field office at least 30 days prior to authorizing the activity. If there is no response after 30 days, the project may be approved.

Each Field Office will report to the California Desert District Office the actual acres disturbed, the number of tortoises moved, and the number of tortoises killed within 30 days of the completion of each project covered under this consultation. The California Desert District Office will report annually on these projects to the Ventura and Carlsbad field Offices of USFWS.

The BLM's California Desert District maintains a tabular and GIS record of all compensation acquisitions.

**Attachment 1**  
**Reporting Form**  
(on following pages)

**REPORT ON PROPOSED ACTION TO BE COVERED BY  
THE PROGRAMMATIC CONSULTATION ON ACTIVITIES RESULTING IN  
SMALL DISTURBANCES OF DESERT TORTOISE HABITAT  
IN THE CALIFORNIA DESERT**

**Authorization may not be issued until USFWS has 30 days for review and comment. For actions in Inyo, Kern, Los Angeles, and transmontane San Bernardino Counties, send to USFWS, Field Office Supervisor, 2493 Portola Road, Suite B, Ventura, CA 93003. For actions in Riverside, Imperial, and cismontane San Bernardino Counties, send to USFWS, Carlsbad Field Office Supervisor, 2730 Loker Avenue West, Carlsbad, CA 92008. \*\* Send a copy to BLM California Desert District T&E Coordinator.**

Name of Project: \_\_\_\_\_ BLM Case File No.: \_\_\_\_\_

Type of Activity: \_\_\_\_\_

BLM Contact: \_\_\_\_\_ Date of Preparation: \_\_\_\_\_

Location of Activity: Base Meridian \_\_\_ Township \_\_\_ Range \_\_\_ Section \_\_\_

General locality: \_\_\_\_\_  
\_\_\_\_\_

BLM Field Office: \_\_\_\_\_  
or other jurisdiction: \_\_\_\_\_

Tortoise Critical Habitat Unit: \_\_\_\_\_  
Tortoise Recovery Unit: \_\_\_\_\_  
BLM Tortoise Habitat Category (I, II, III): \_\_\_\_\_

Brief description of project (include site photographs, topographic map of location, and proposed construction dates):

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Stipulations to be applied (list specific stipulation numbers from biological opinion):

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**Attachment 2**

**Handling of Desert Tortoises**

Only an "Authorized Biologist" (see Measure 1) shall handle a desert tortoise. No handling activities shall begin until an Authorized Biologist is approved. Authorization for handling shall be granted under the auspices of the Section 7 consultation. BLM Field Office Biologists are authorized to handle tortoises in accordance with these measures.

If a tortoise or clutch of eggs is found in the project area, to extent practical, activities shall be modified to avoid harm or injury to it. If activities cannot be modified, the tortoise or clutch shall be moved from harm's way the minimum distance possible within appropriate habitat to ensure its safety from death, injury, or collection. The Authorized Biologist is allowed some discretion to ensure that survival of each relocated tortoise or clutch is likely.

In handling desert tortoises, the Authorized Biologist shall follow the techniques for handling in "Guidelines for Handling Desert Tortoise During Construction Projects" (LaRue 1994). Desert tortoises moved shall be marked for future identification in the event that a dead tortoise is found later in the project area.. An identification number using the acrylic paint/epoxy covering technique shall be placed on the fourth left costal scute as described the Handling Protocol. A 35-mm slide of the carapace, plastron, and the fourth costal scute shall be taken.

No notching of scutes or replacement of fluids with a syringe is authorized.

The Authorized Biologist shall maintain a record of desert tortoises handled. This information shall include:

1. The location (narrative and map) and dates of observations
2. General condition and health of the tortoise, including injuries and state of healing and whether the animal voided its bladder
3. location moved from and to
4. Diagnostic markings (e.g., scute markings)
5. Slide photograph of each tortoise handled

Encounters with listed species shall be reported to the FCR. The FCR shall maintain a record of all listed species encountered during project activities. Information recorded shall be the same as that for animals that were handled.

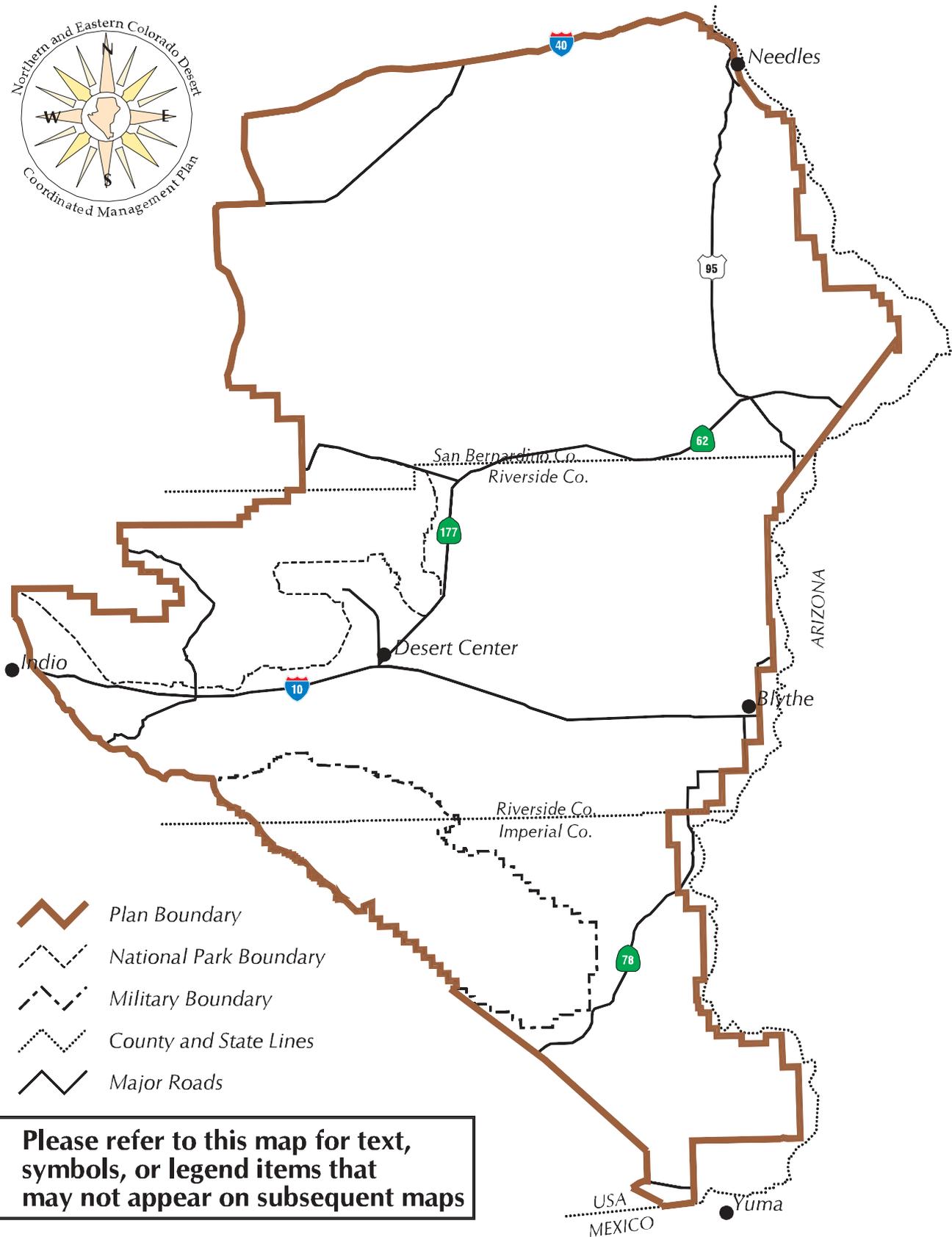
Upon locating dead, injured, or sick individuals of a listed species, the Federal land management agency must be notified immediately. The agency must make or verify initial notification to the Service's Division of Law Enforcement at (310) 297-0062 in Torrance, California, within three working days of its finding. The Service's Field Office within whose area of responsibility the specimen is recovered shall also be notified (Carlsbad: 619-431-9440; Ventura: 805-650-9845). The agency must make written notification within five calendar days and include the date, time, and location of the carcass, a photograph, cause of death, if known, and any other pertinent information. Care must be taken in handling sick or injured animals to ensure treatment and care, and in handling dead specimens to preserve biological material in the best possible state.

The Federal land management agency in that area shall endeavor to place the remains of intact listed species with educational or research institutions holding the appropriate State and Federal permits per their instructions. If such institutions are not available or the animal's remains are in poor condition, the information noted above shall be obtained and the carcass left in place. If the animal is a desert tortoise, the carcass shall be marked in a manner that would not be toxic to other wildlife to ensure that it would not be re-recorded in the future. Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Animals injured by project activities should be transported to a qualified veterinarian. Should any treated animals survive, the appropriate Service field office should be contacted regarding the final disposition of the animals.

<b>Map #</b>	<b>Map Title</b>
	Base Map
1-1	Vicinity Map
1-2	NECO Boundary and Tortoise Recovery Units
1-3	Land Ownership
1-4	Concurrent Desert Plans
2-1	Utility Corridors
2-2	Current Multiple Use Classes
2-3	Current BLM Desert Tortoise Categories
2-4	Current ACECs and HMPs
2-5	Current Grazing Management
2-6	Proposed Plan--DWMA
2-7	Proposed Plan--Multiple Use Classes
2-8	Proposed Plan--Grazing Management
2-9	Proposed Plan--Tortoise Fencing
2-10	Proposed Plan--Open/Closed Washes in DWMA's
2-11	Small DWMA A & B Alternatives--DWMA's
2-12	Small DWMA A & B Alternatives--Multiple Use Classes
2-13	Small DWMA A Alternative--Grazing Management
2-14	Small DWMA A Alternative--Tortoise Fencing
2-15	Small DWMA B Alternative--Grazing Management
2-16	Small DWMA B Alternative--Tortoise Fencing
2-17	Bighorn Sheep Demes
2-18	Proposed Plan and Small DWMA A & B Alternatives--Bighorn Sheep WHMA's
2-19	Proposed Plan and Small DWMA A Alternative--New Waters for Bighorn Sheep and Deer
2-20	Proposed Plan and Small DWMA A & B Alternatives--Dunes and Playas Closures
2-21	Proposed Plan--Multiple-Species WHMA's
2-22	Proposed Plan and Small DWMA A & B Alternatives--Springs and Seeps Improvements
2-23	Small DWMA A Alternative--Multiple-Species WHMA's
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2-25	Current Wild Horse and Burro Management
2-26	Proposed Plan--Wild Horses and Burros Management
2-27	Small DWMA A Alternative--Wild Horses and Burros Management
2-28	Small DWMA B Alternative--Wild Horses and Burros Management
2-29	Current Routes of Travel Network

<b>Map #</b>	<b>Map Title</b>
2-30	Current Competitive Recreation Routes
2-31	No Action Alternative--Route Designations (inside back cover)
2-32	Proposed Plan--Route Designation (inside back cover)
2-33	Small DWMA A Alternative--Route Designations (inside back cover)
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2-35	Proposed Plan--Acquire Habitat
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2-38	BLM Wilderness Area
3-1	Existing Water Sources
3-2	Drainages
3-3	Plant Communities
3-4	Landforms
3-5	Desert Tortoise Critical Habitat
3-6a-f	Special Status Species--Animals
3-7a-d	Special Status Species--Plants
3-8	Mineral Potential--Metallic
3-9	Mineral Potential--Construction
3-10	Mineral Potential--Industrial
4-1	Current CDCA Burro Management Areas
4-2	Popular Rock Hounding Areas
4-3	High Mineral Development Potential
H-1	Ecological Hot Spots
H-2	Plant Species Richness
H-3	Animal Species Richness
H-4	Current Management--Largest Unfragmented Areas

# Base Map



**Please refer to this map for text, symbols, or legend items that may not appear on subsequent maps**

# Vicinity Map



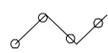
**NECO Planning Area**

# NECO Boundary and Tortoise Recovery Units



Northern  
Recovery Unit

Southern  
Recovery Unit

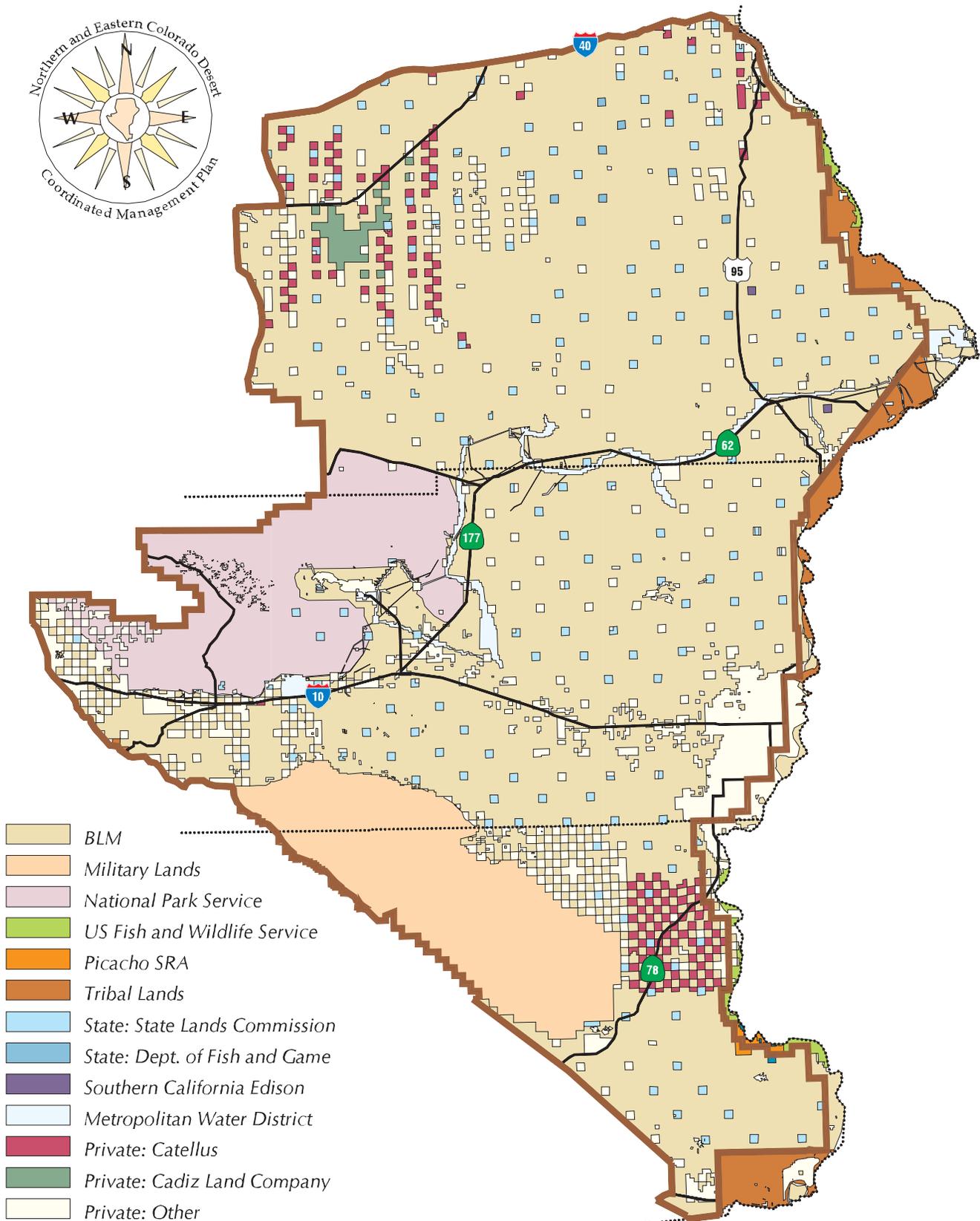
-  Interstate 40
-  CDCA Boundary
-  Ft. Yuma Boundary
-  Connecting Lines
-  Canal
-  Paved Road
-  Railroad
-  CMAGR Boundary
-  JTNP Boundary
-  Recovery Unit Boundary

June 5, 2002

Map 1-2

Scale 1:1,120,000

# Land Ownership



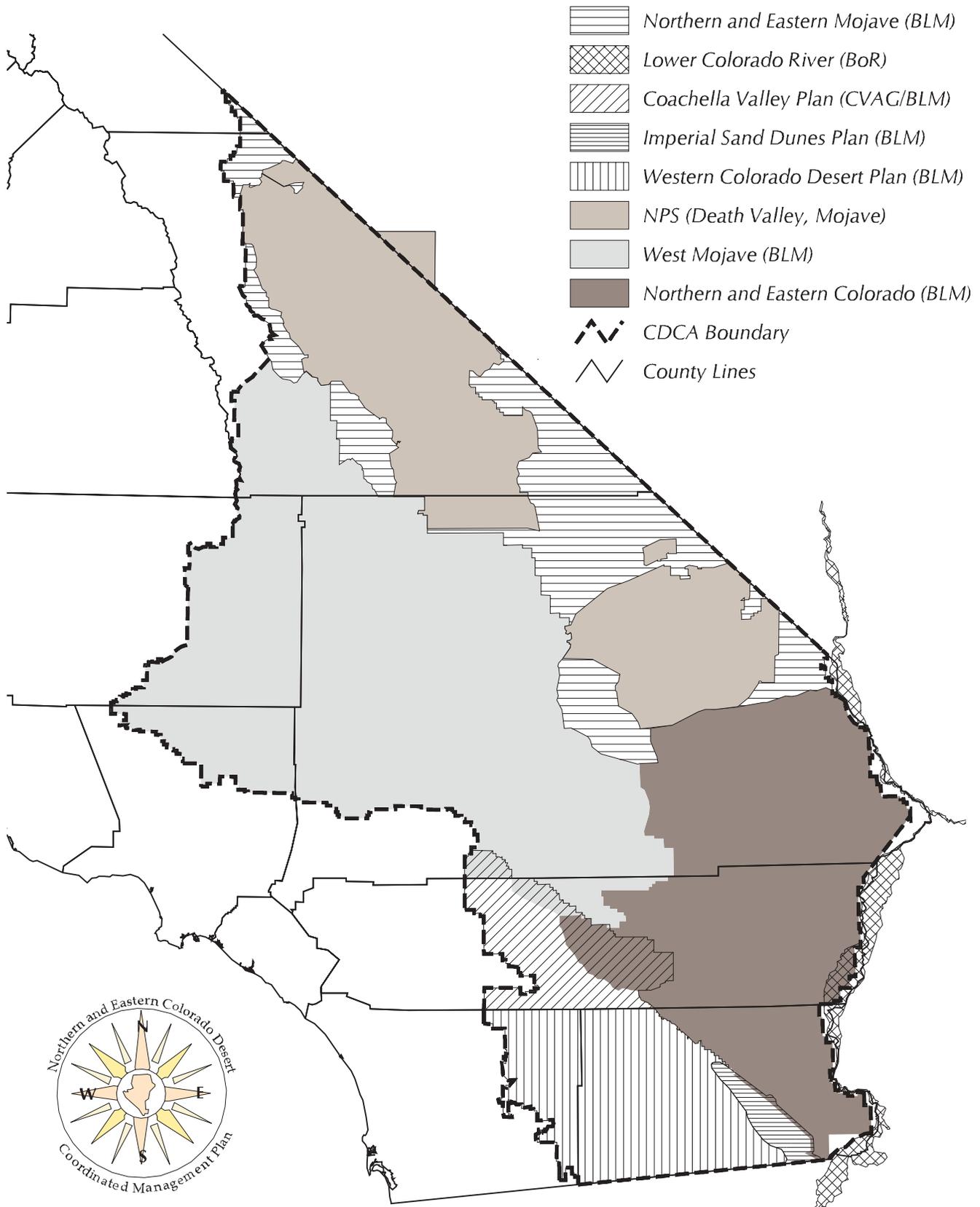
Please refer to Base Map for features not described here

June 5, 2002

**Map 1-3**

Scale 1 : 1,120,000

# Concurrent Desert Plans

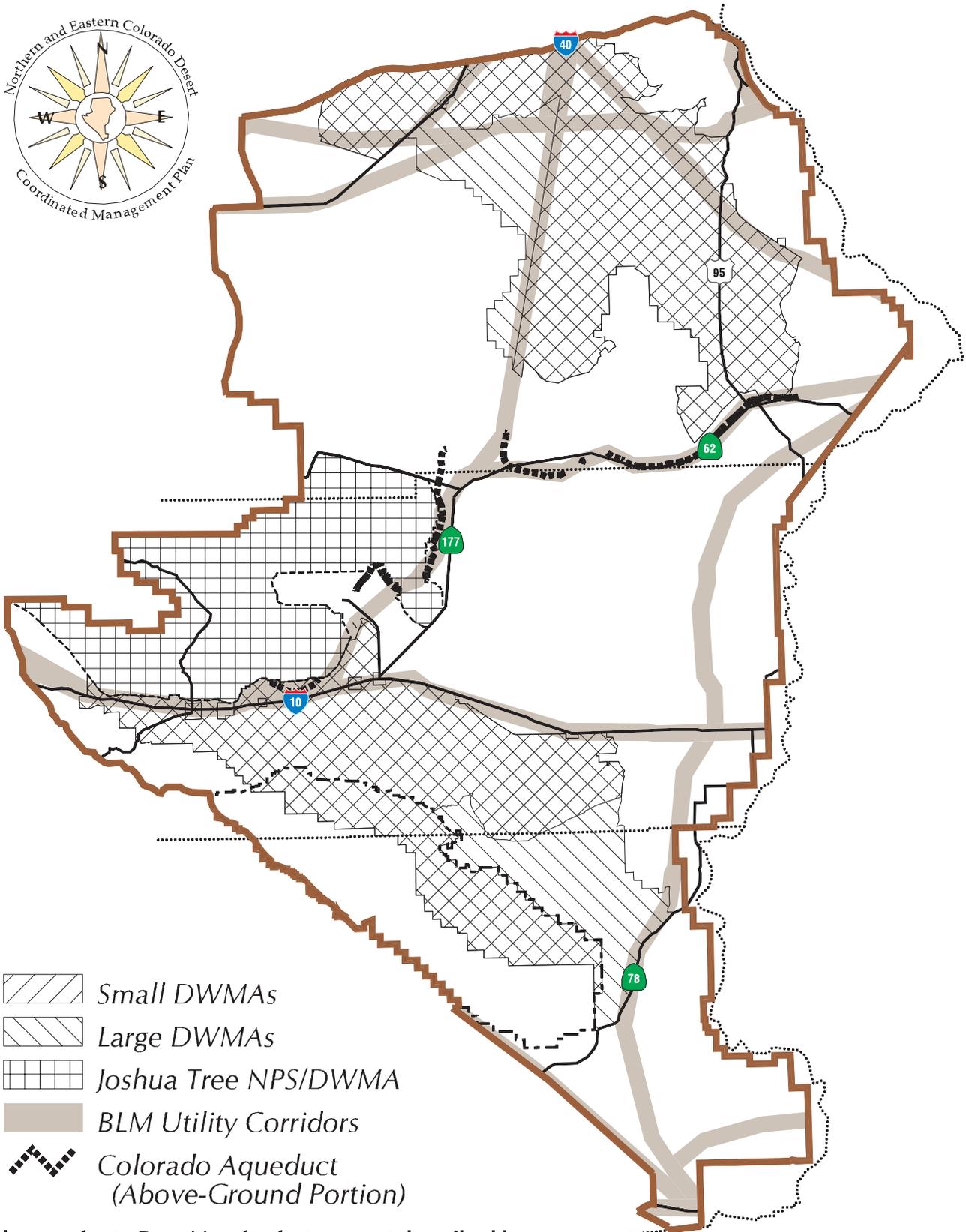


June 5, 2002

Map 1-4

Scale 1 : 2,800,000

# Utility Corridors



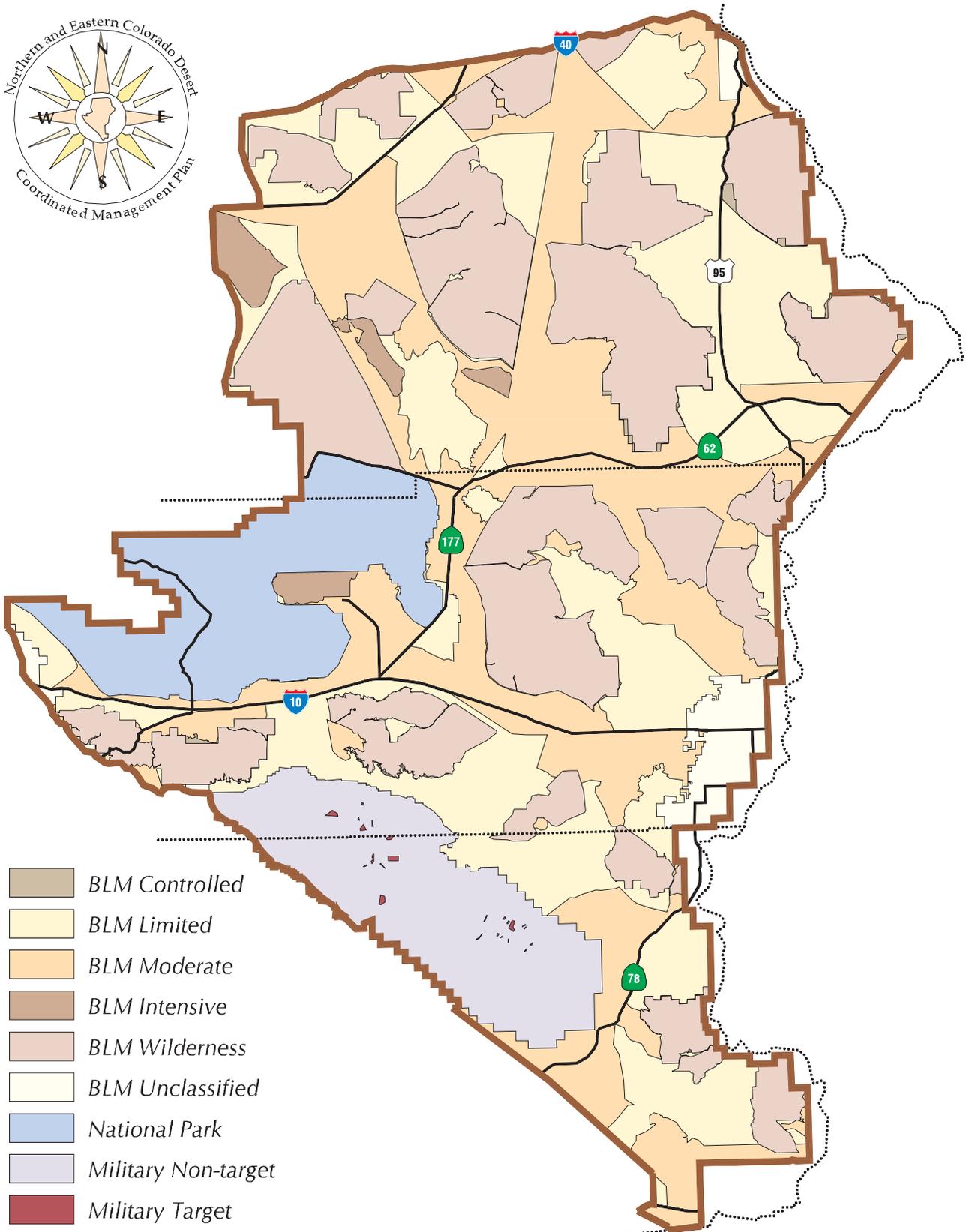
Please refer to Base Map for features not described here

May 30, 2002

Map 2-1

Scale 1 : 1,120,000

# Current BLM Multiple Use Classes



-  BLM Controlled
-  BLM Limited
-  BLM Moderate
-  BLM Intensive
-  BLM Wilderness
-  BLM Unclassified
-  National Park
-  Military Non-target
-  Military Target

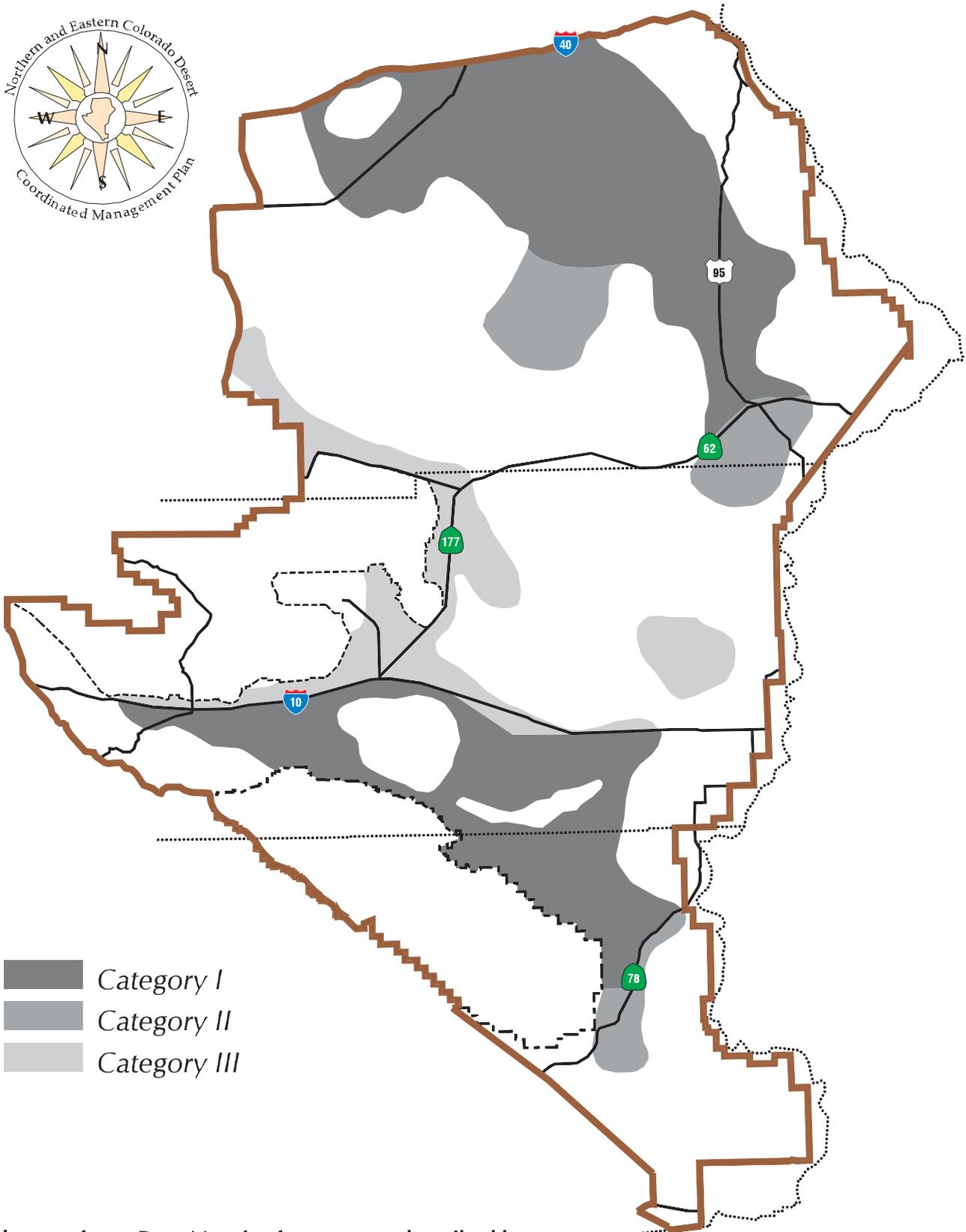
Please refer to Base Map for features not described here

May 30, 2002

Map 2-2

Scale 1 : 1,120,000

# Current BLM Desert Tortoise Categories



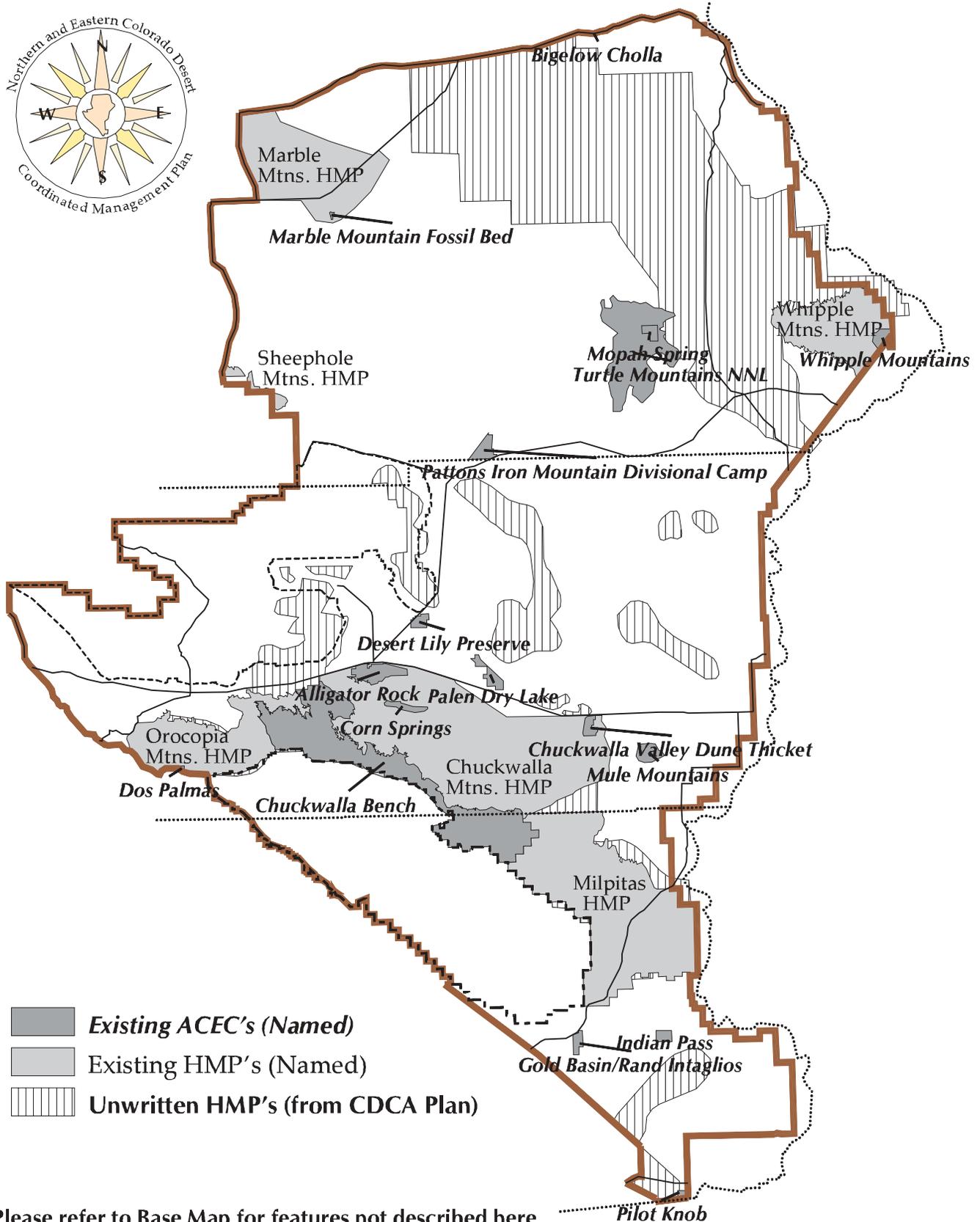
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May 30, 2002

Map 2-3

Scale 1 : 1,120,000

# Current HMPs and ACECs



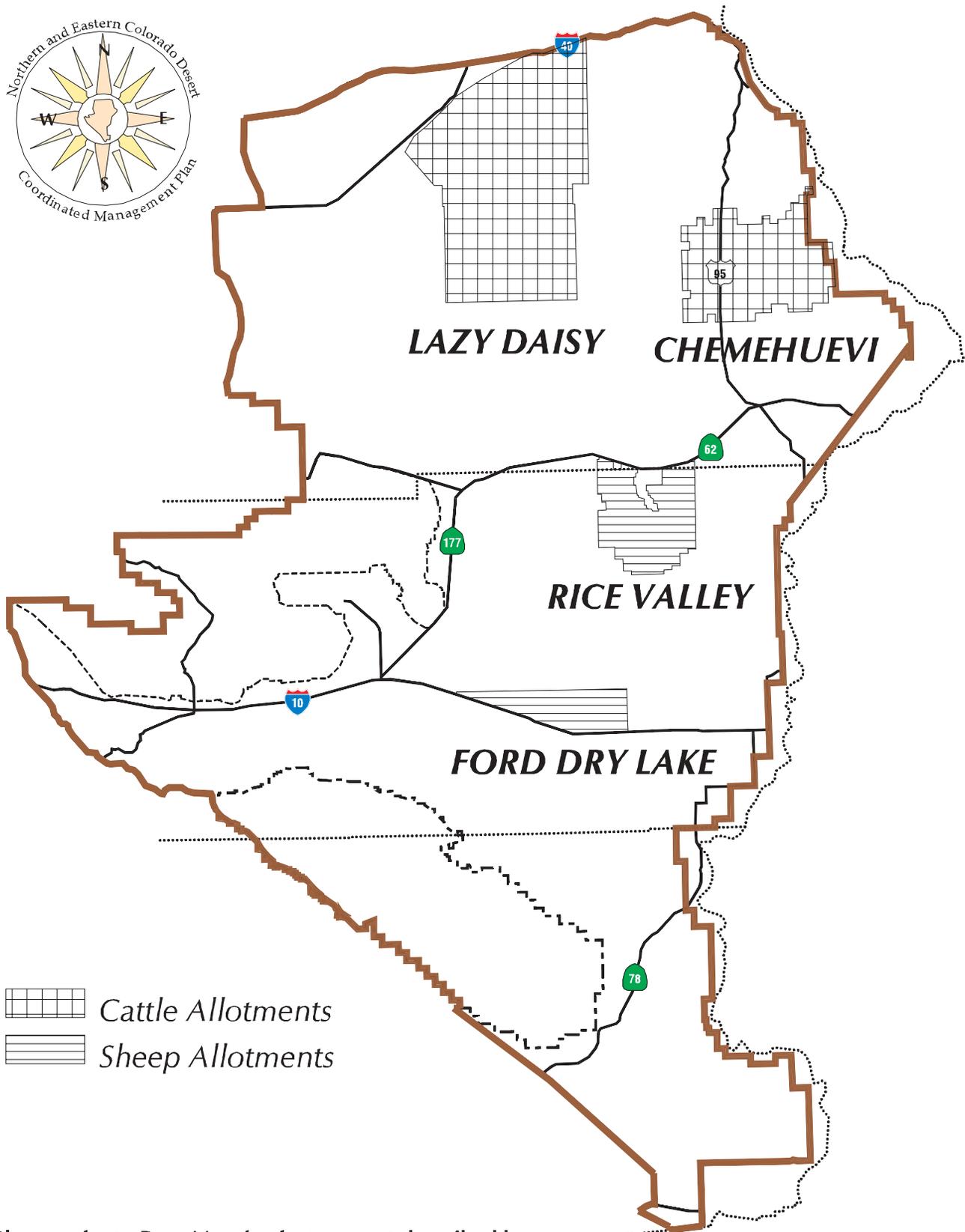
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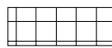
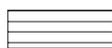
June 5, 2002

Map 2-4

Scale 1 : 1,120,000

# Current Grazing Management



-  Cattle Allotments
-  Sheep Allotments

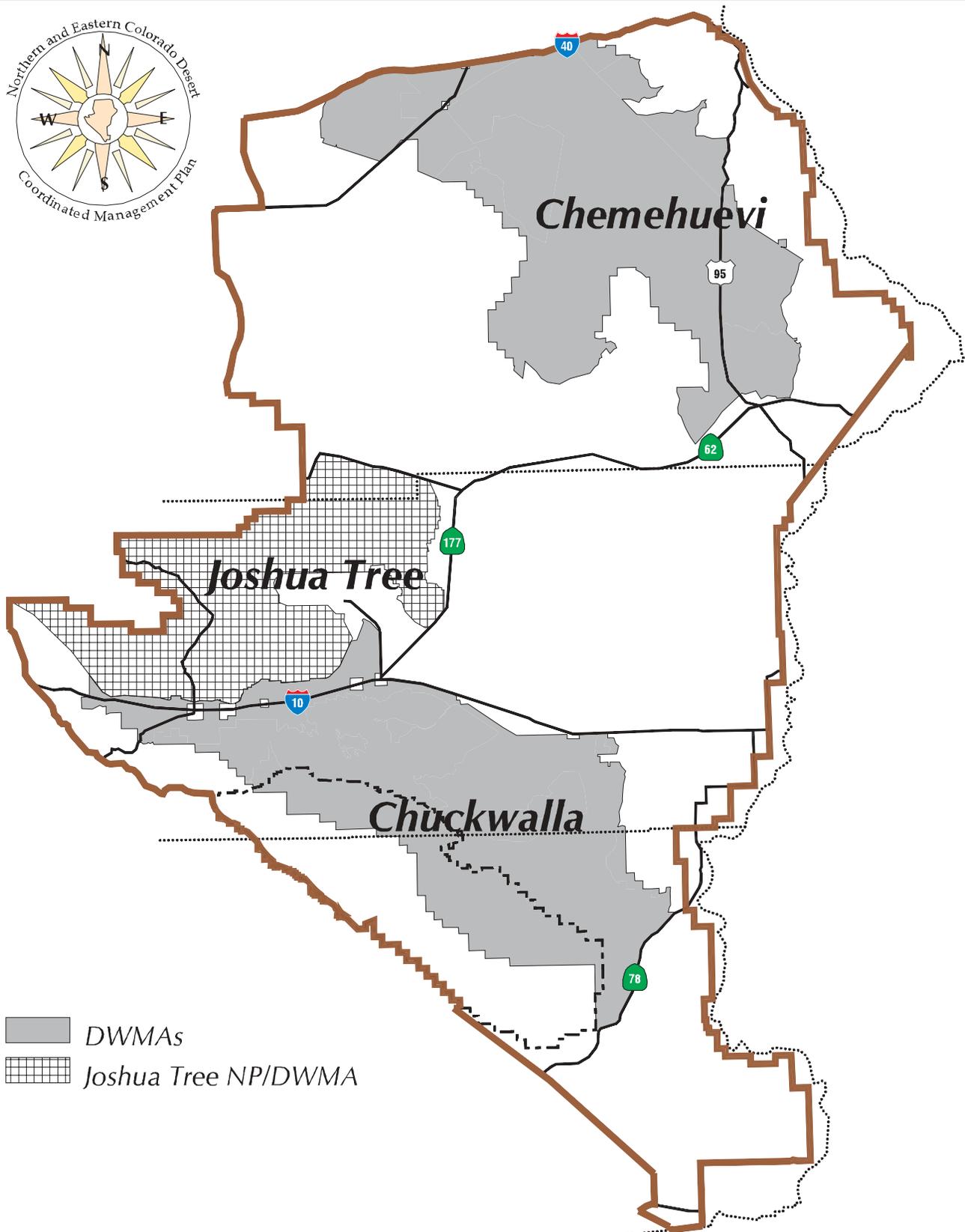
Please refer to Base Map for features not described here

May 30, 2002

Map 2-5

Scale 1 : 1,120,000

# Proposed Plan DWMAs



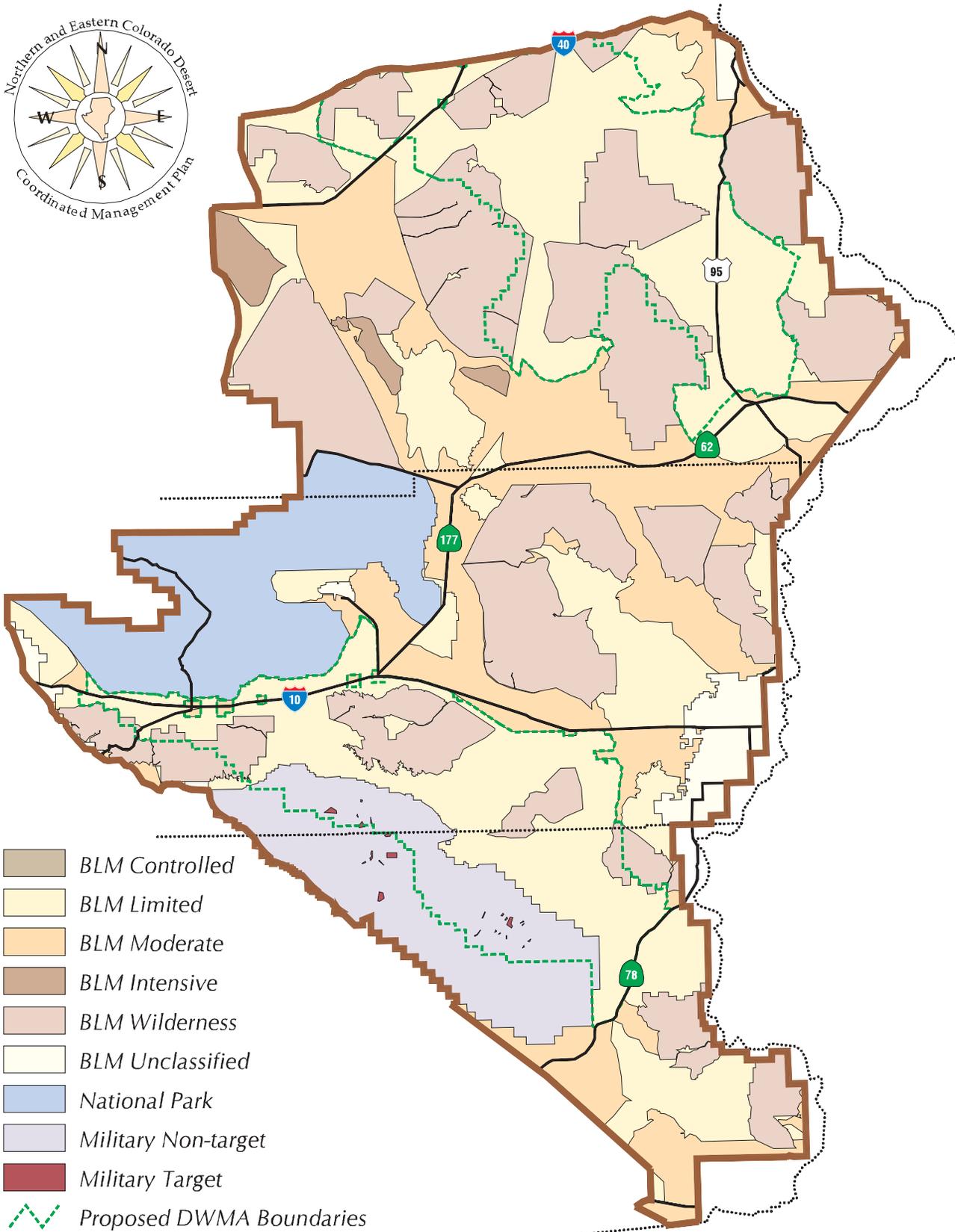
Please refer to Base Map for features not described here

June 5, 2002

**Map 2-6**

Scale 1 : 1,120,000

# Proposed Plan BLM Multiple Use Classes



-  BLM Controlled
-  BLM Limited
-  BLM Moderate
-  BLM Intensive
-  BLM Wilderness
-  BLM Unclassified
-  National Park
-  Military Non-target
-  Military Target
-  Proposed DWMA Boundaries

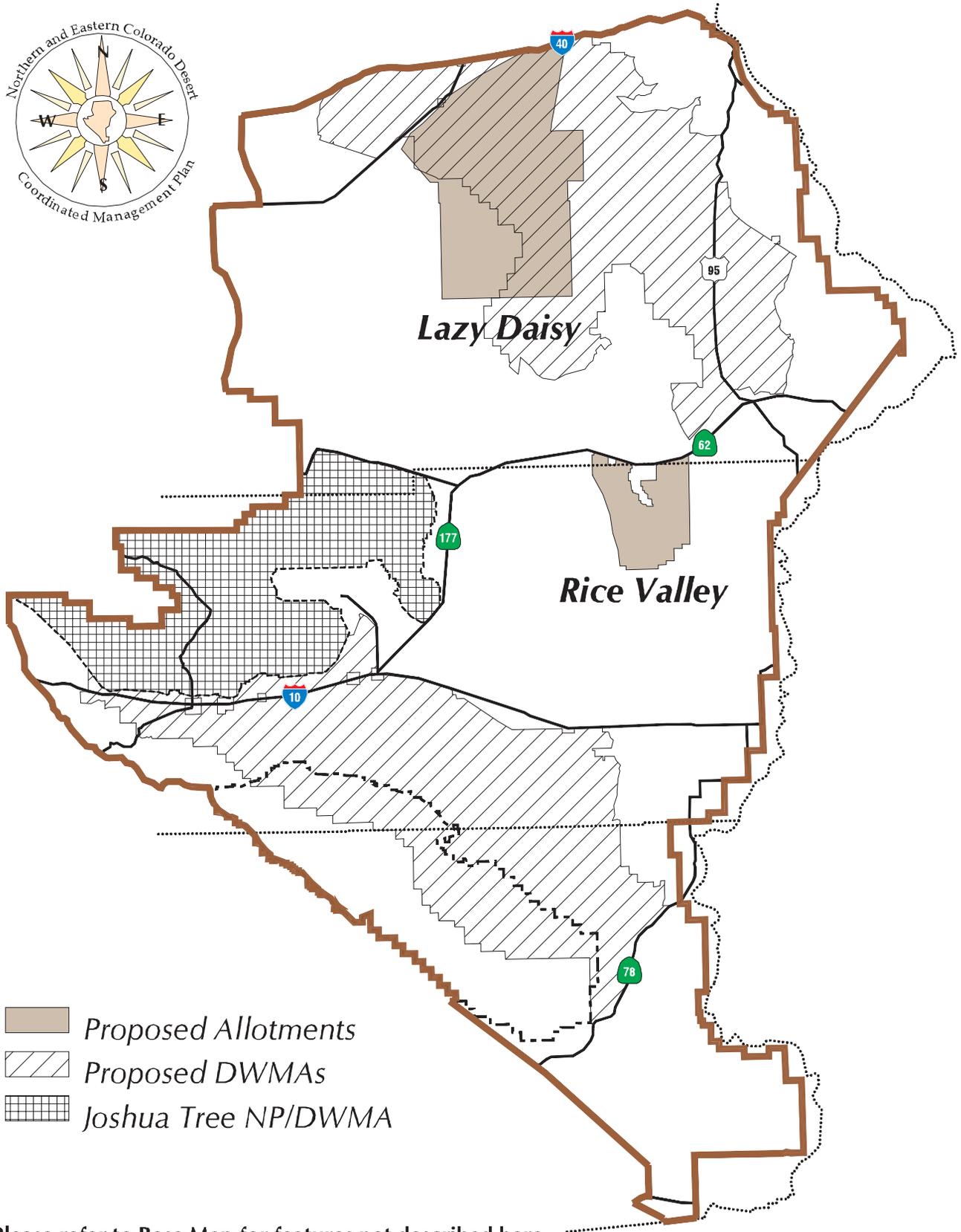
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-7**

Scale 1 : 1,120,000

# Proposed Plan Grazing Management



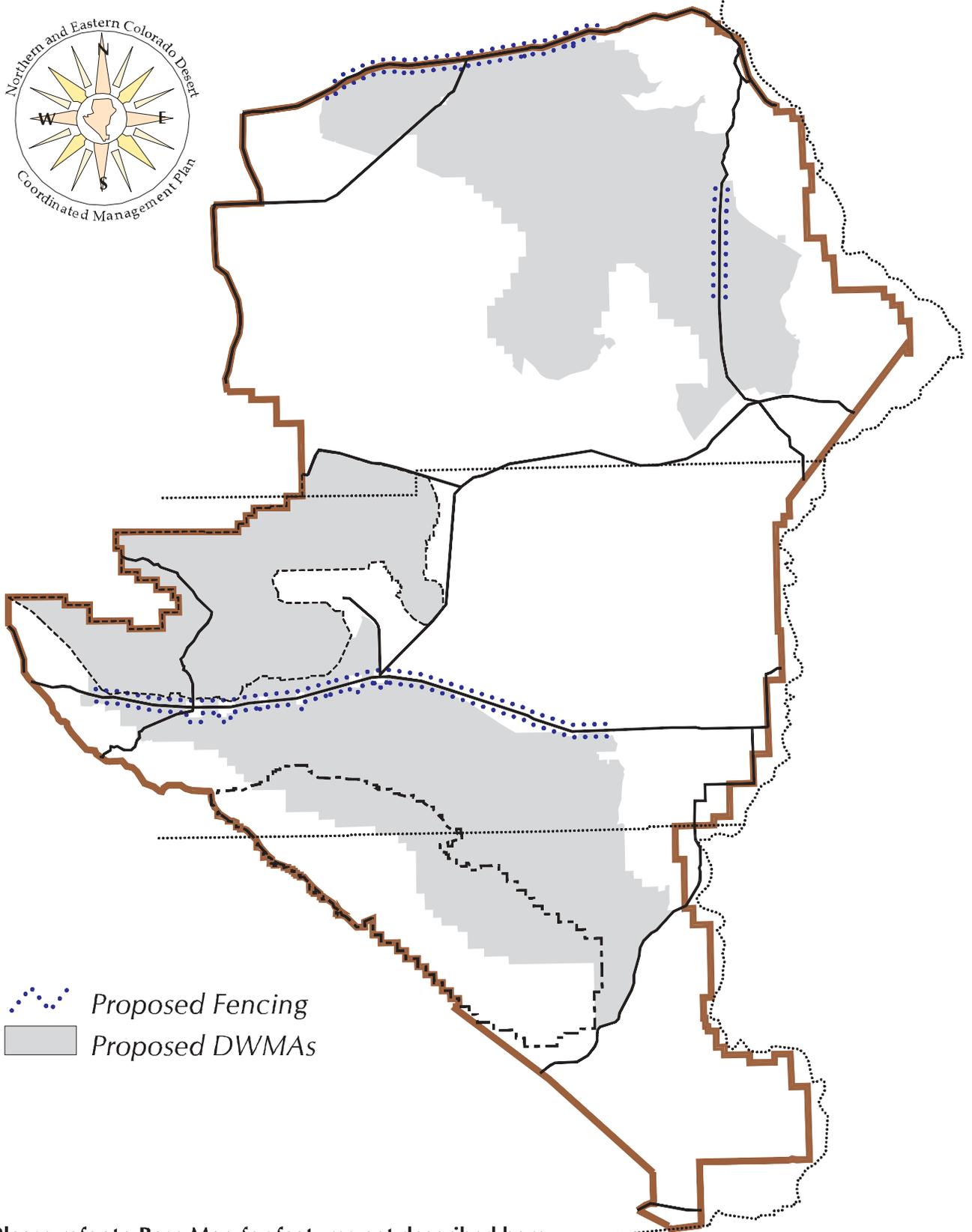
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-8**

Scale 1 : 1,120,000

# Proposed Plan Tortoise Fencing



Please refer to Base Map for features not described here

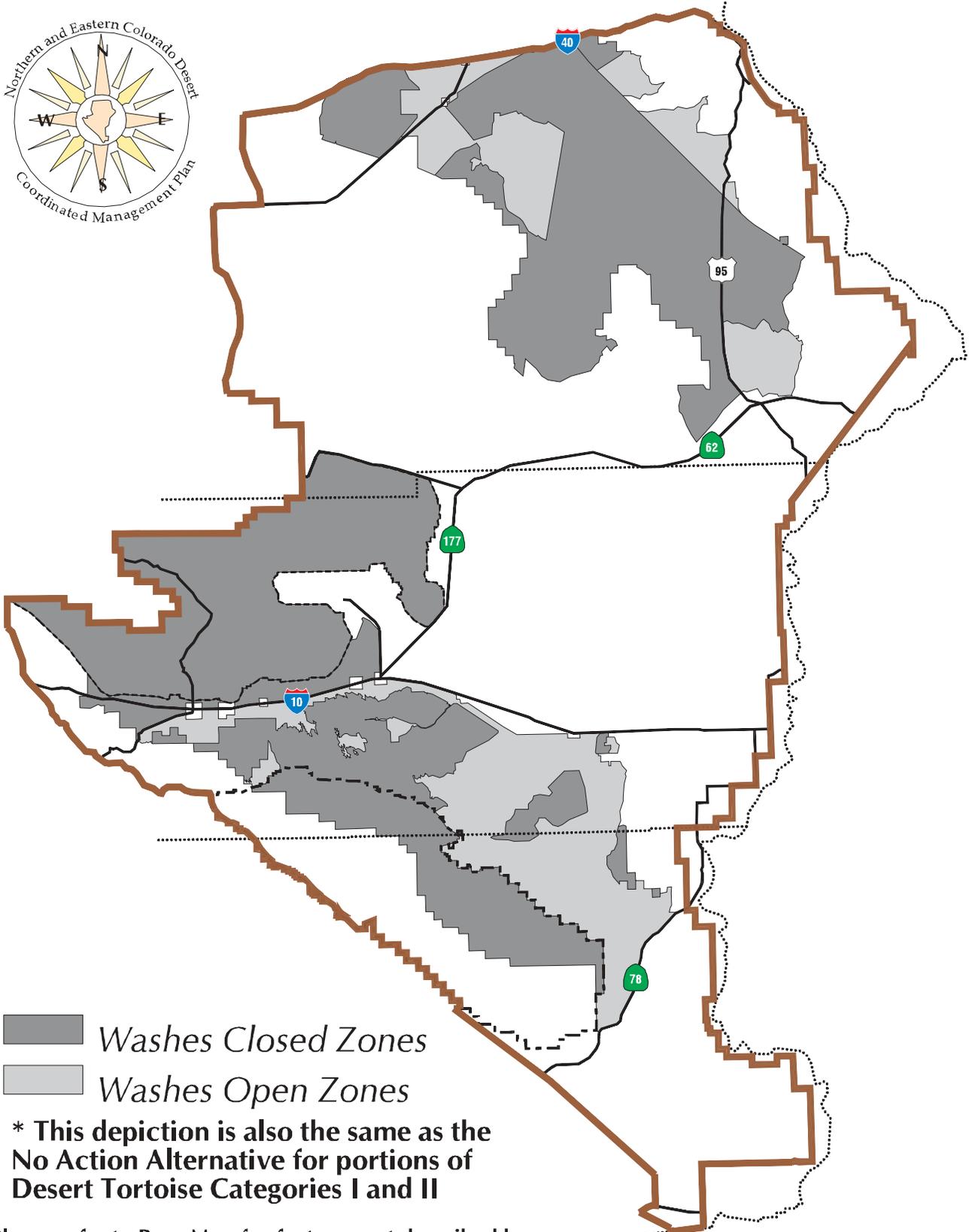
May 30, 2002

**Map 2-9**

Scale 1 : 1,120,000

# Proposed Plan\*

## Routes of Travel Designations-Washes Closed Zones in DWMA's

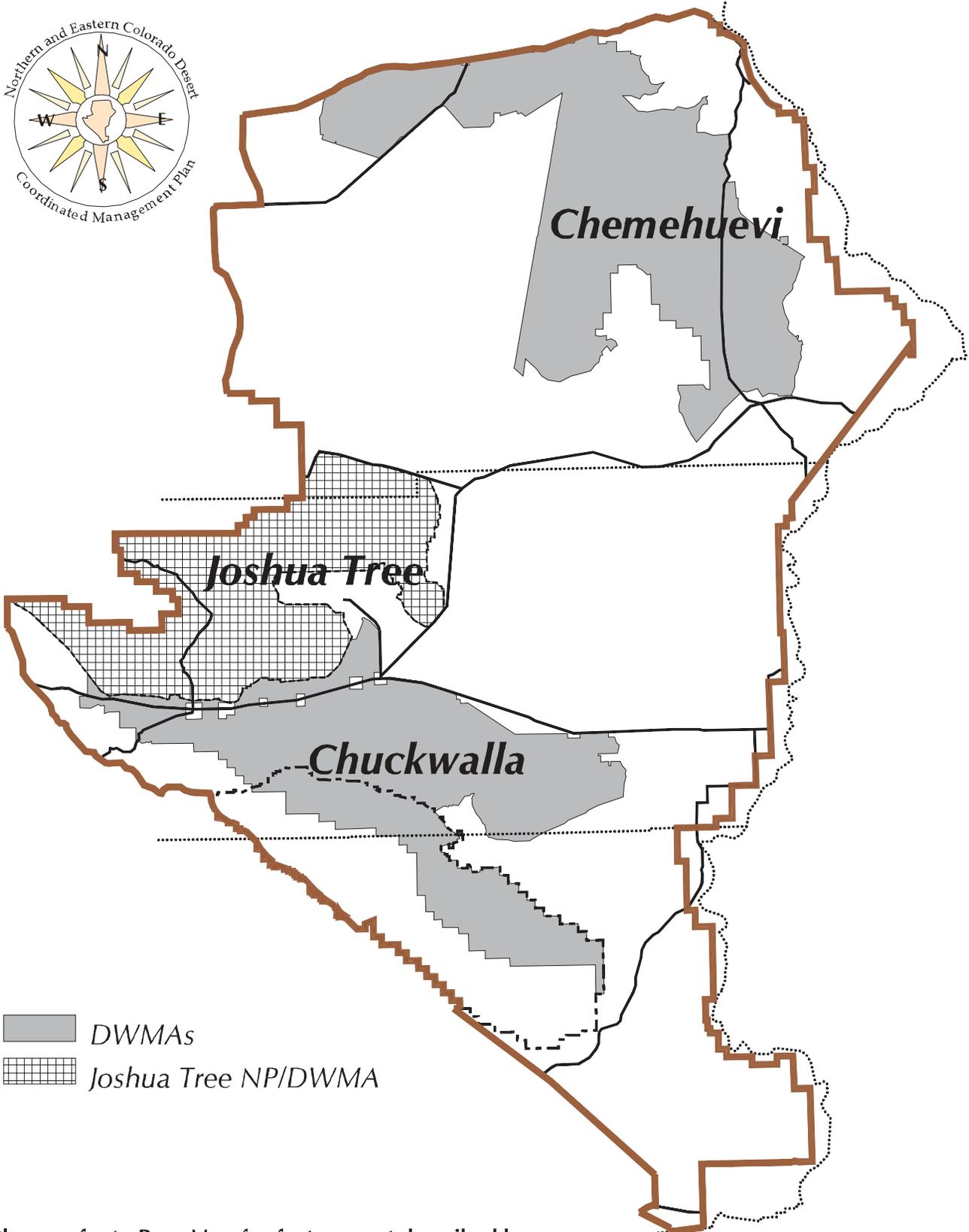


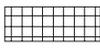
- Washes Closed Zones
- Washes Open Zones

\* This depiction is also the same as the No Action Alternative for portions of Desert Tortoise Categories I and II

Please refer to Base Map for features not described here

# Small DWMA A & B Alternatives DWMA's



-  DWMA's
-  Joshua Tree NP/DWMA

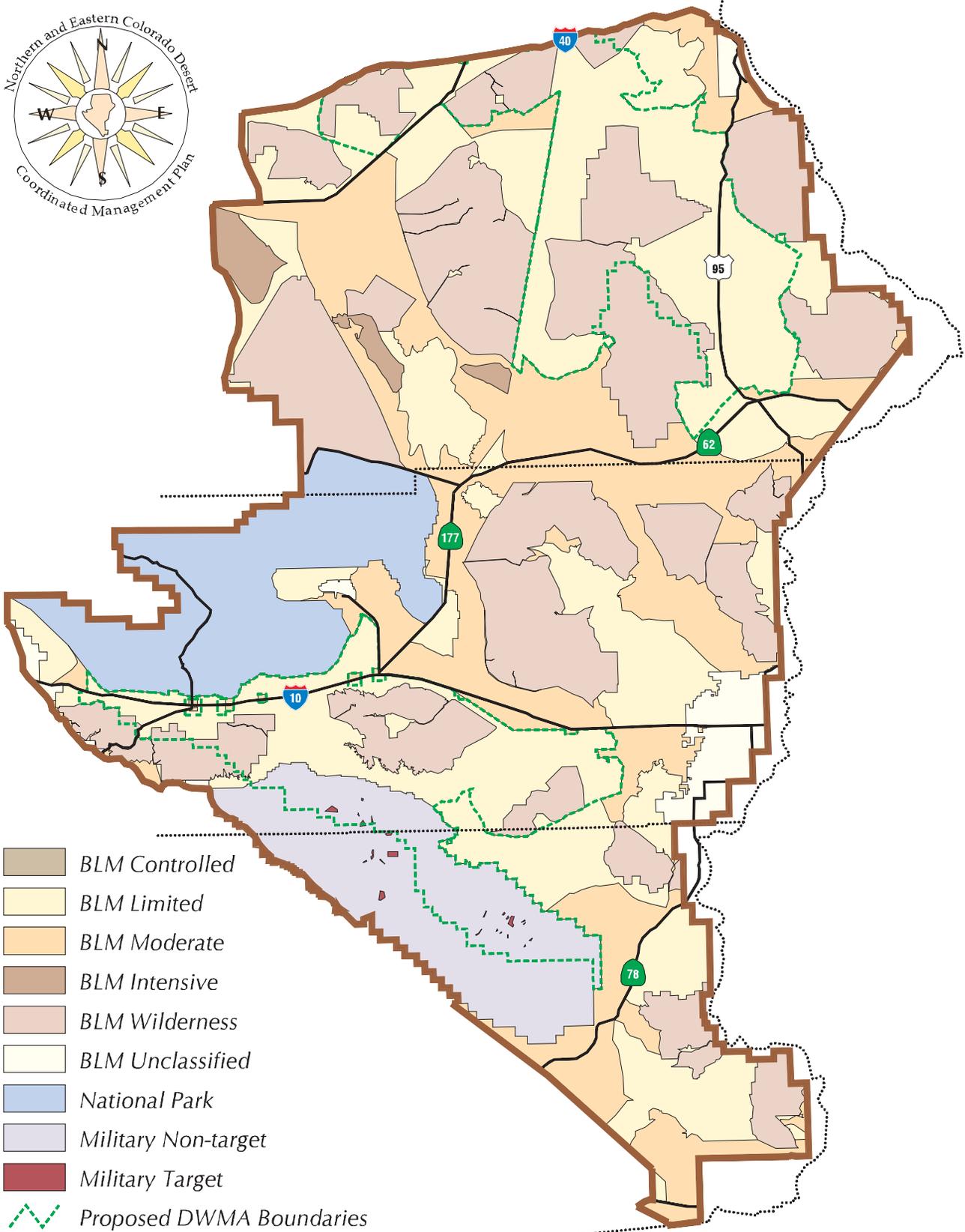
Please refer to Base Map for features not described here

June 5, 2002

**Map 2-11**

Scale 1 : 1,120,000

# Small DWMA A & B Alternatives BLM Multiple Use Classes



- BLM Controlled
- BLM Limited
- BLM Moderate
- BLM Intensive
- BLM Wilderness
- BLM Unclassified
- National Park
- Military Non-target
- Military Target
- Proposed DWMA Boundaries

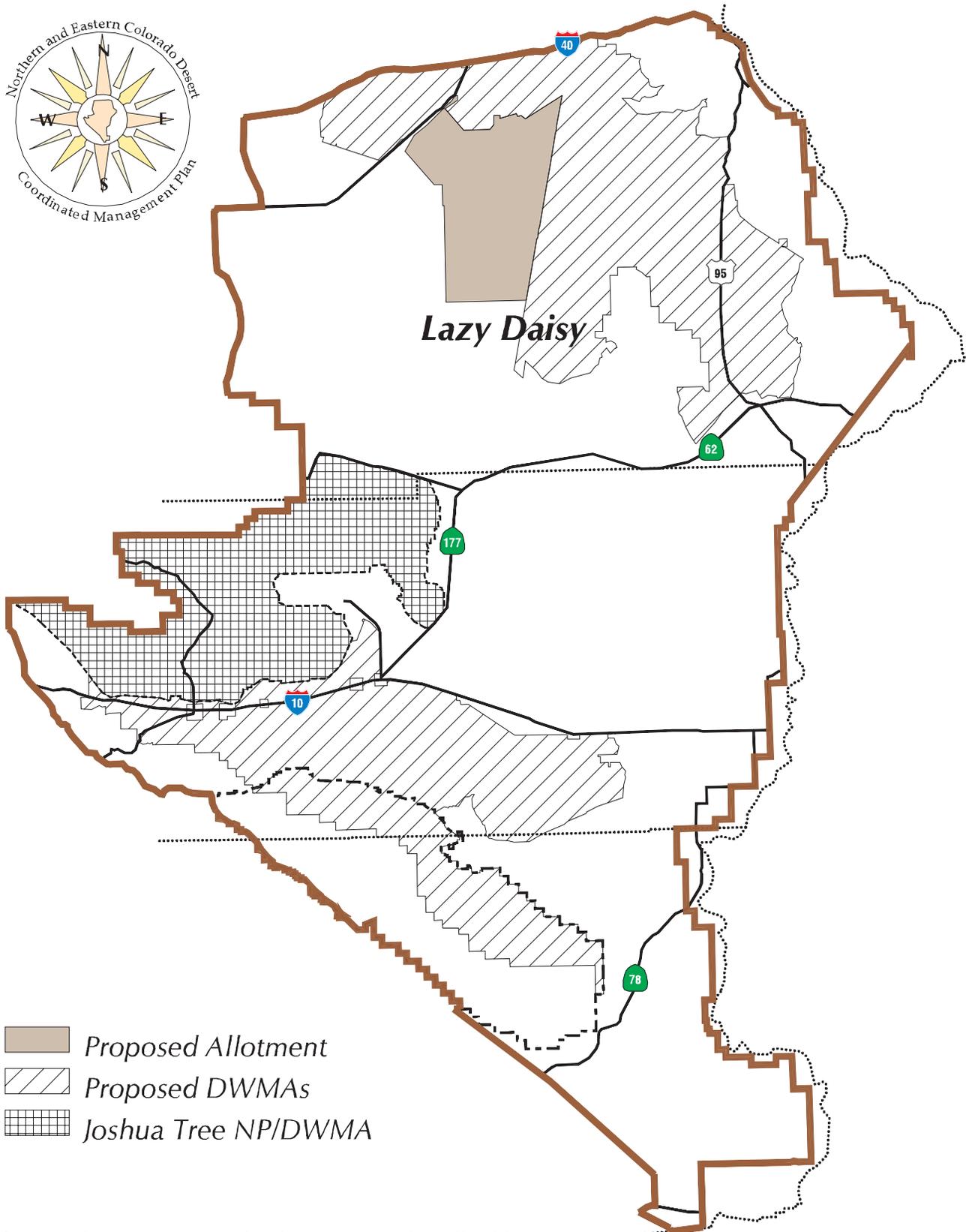
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-12**

Scale 1 : 1,120,000

# Small DWMA A Alternative Grazing Management



-  *Proposed Allotment*
-  *Proposed DWMA's*
-  *Joshua Tree NP/DWMA*

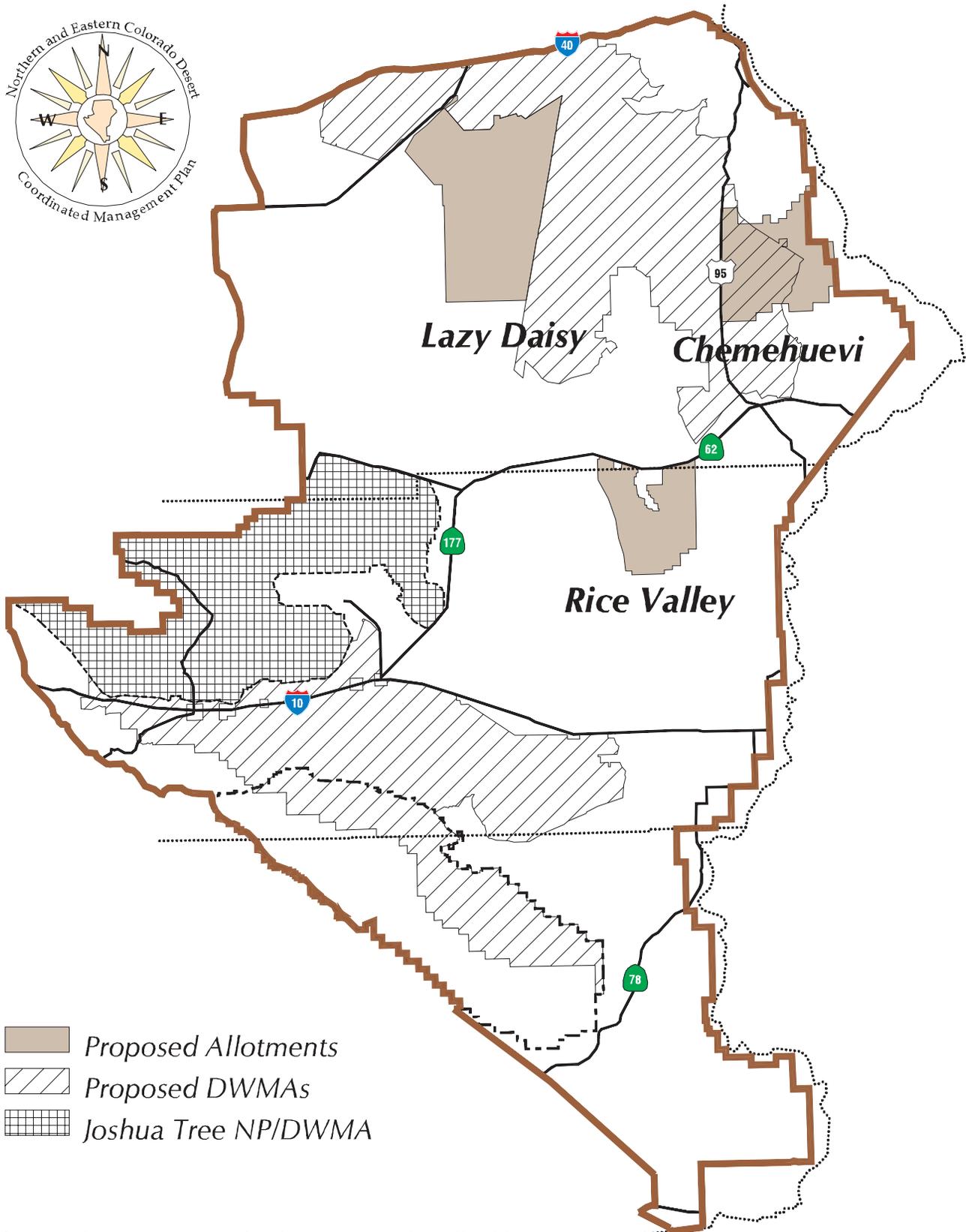
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-13**

Scale 1 : 1,120,000

# Small DWMA B Alternative Grazing Management



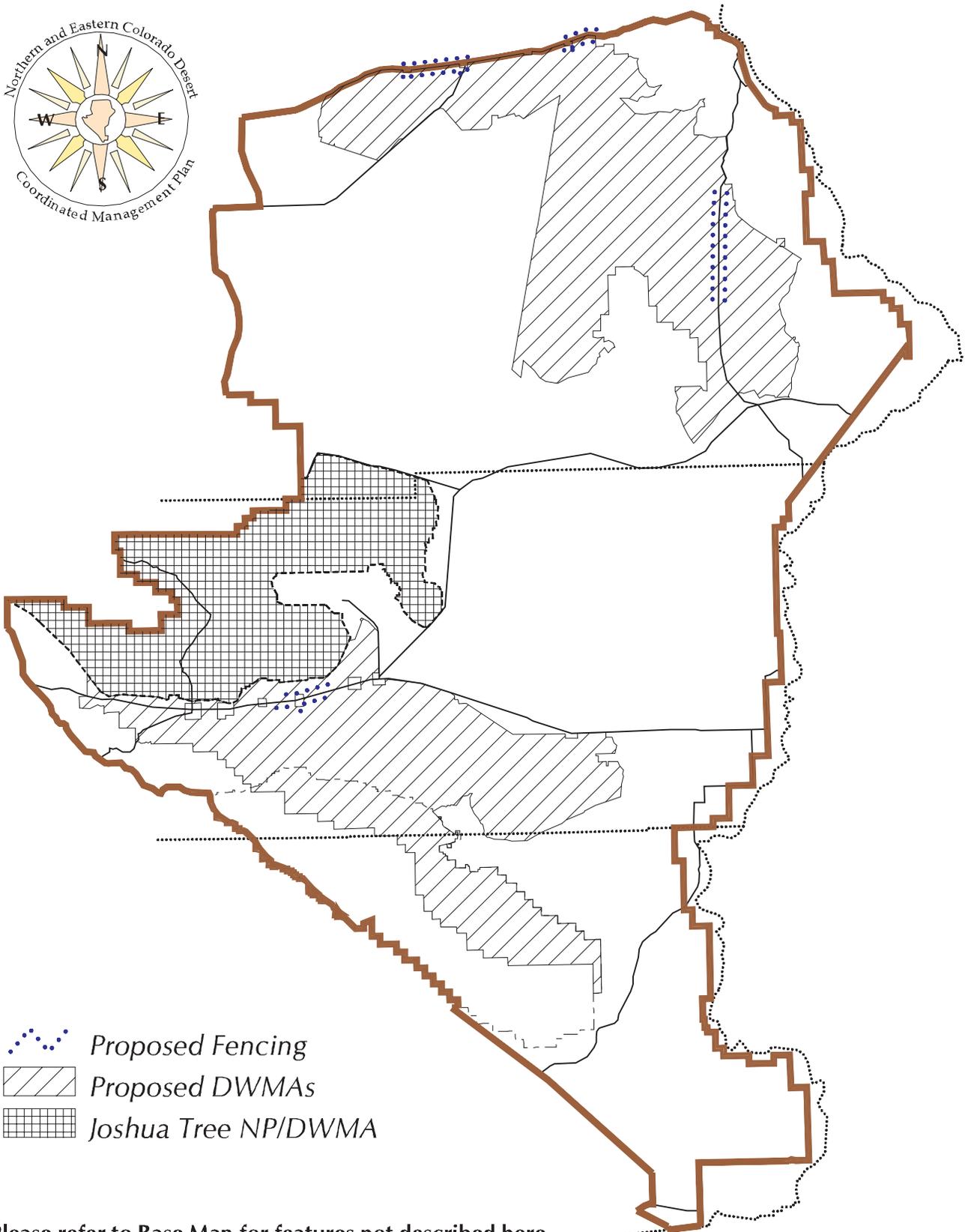
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-15**

Scale 1 : 1,120,000

# Small DWMA B Alternative Tortoise Fencing



-  Proposed Fencing
-  Proposed DWMA B
-  Joshua Tree NP/DWMA

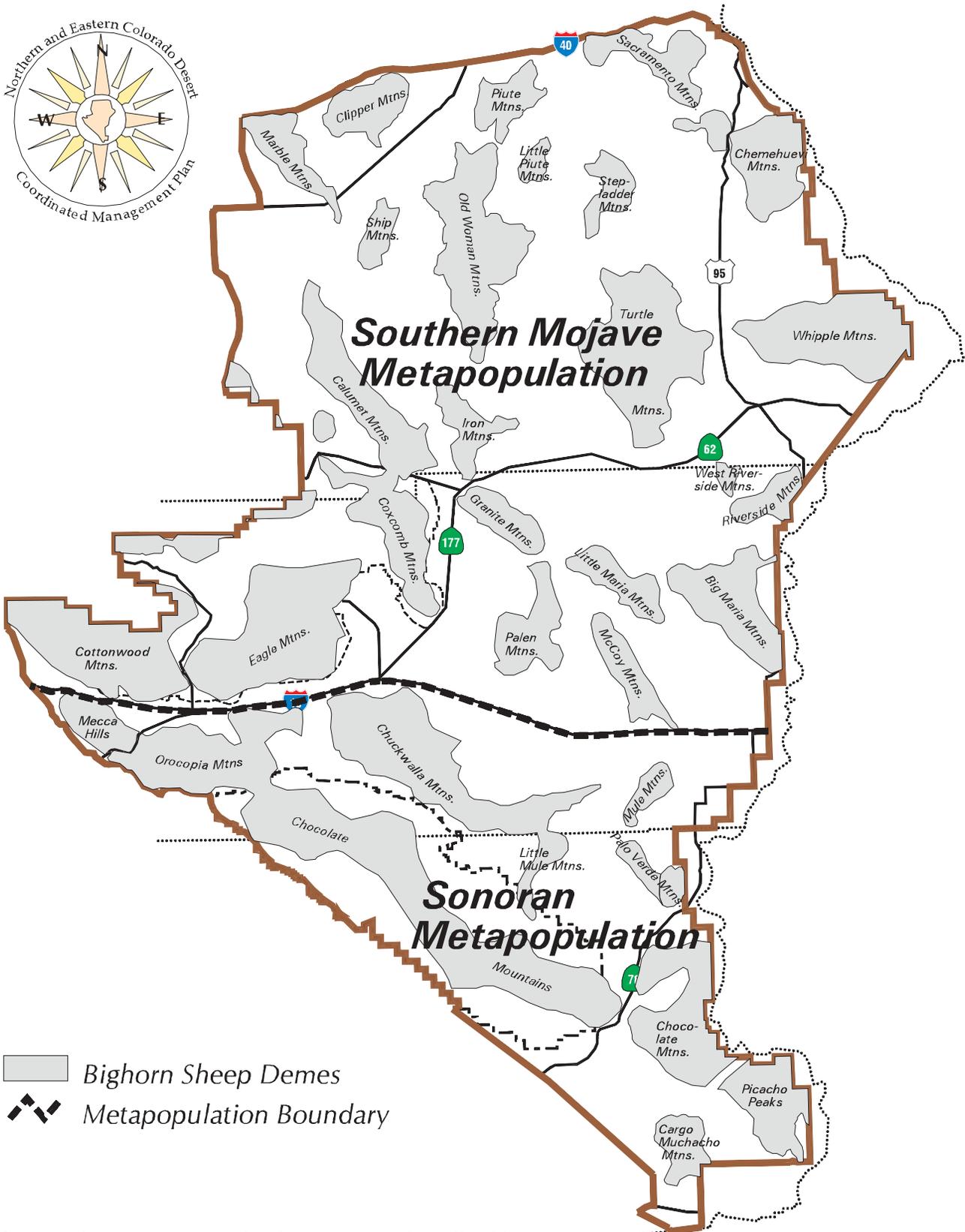
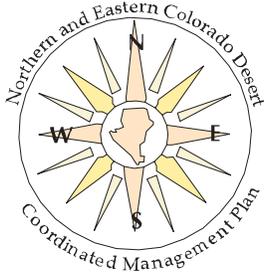
Please refer to Base Map for features not described here

May 30, 2002

**Map 2-16**

Scale 1 : 1,120,000

# Bighorn Sheep Demes



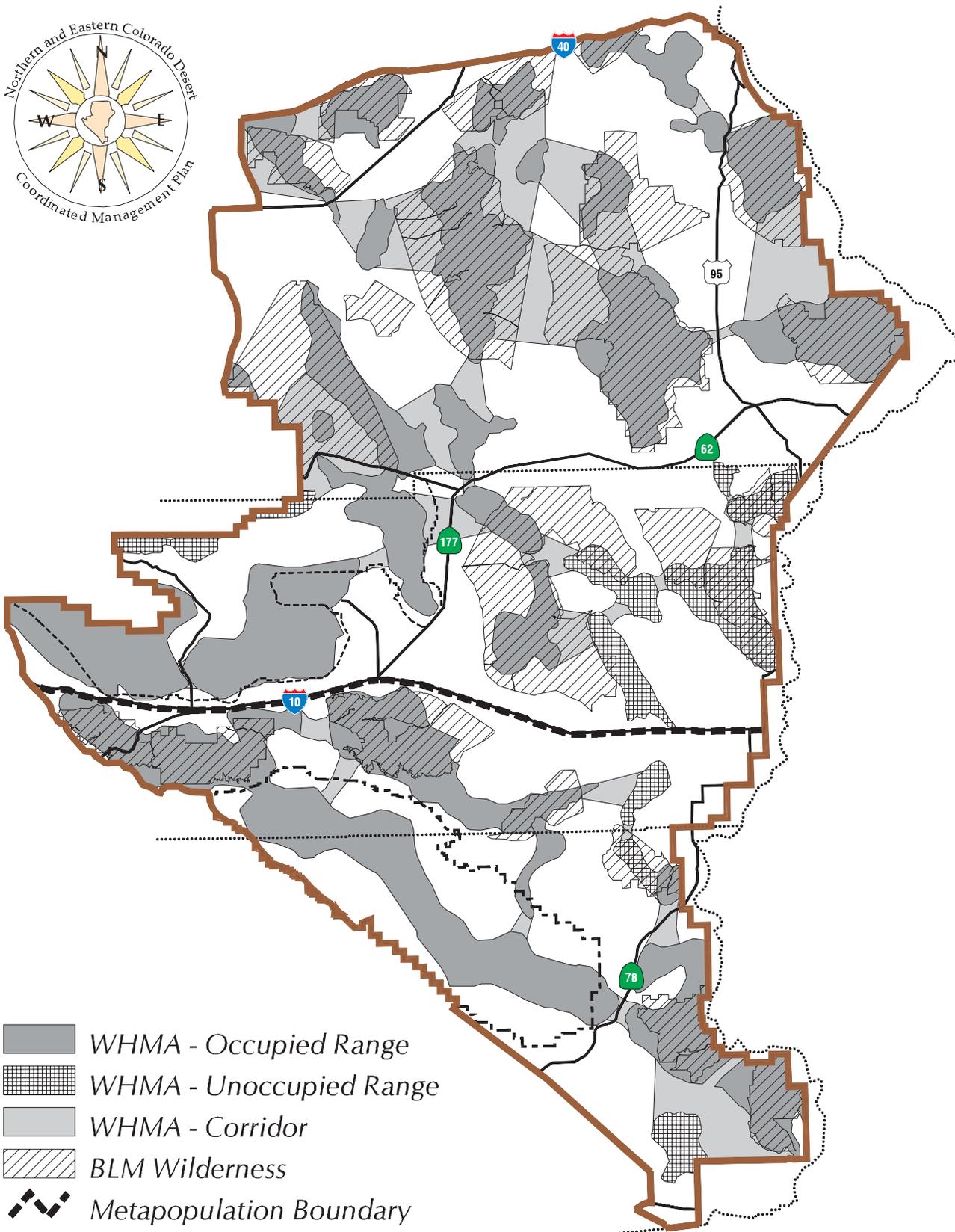
Please refer to Base Map for features not described here

June 5, 2002

Map 2-17

Scale 1 : 1,120,000

# Proposed Plan and Small DWMA A & B Alternatives Bighorn Sheep WHMAs



- WHMA - Occupied Range
- WHMA - Unoccupied Range
- WHMA - Corridor
- BLM Wilderness
- Metapopulation Boundary

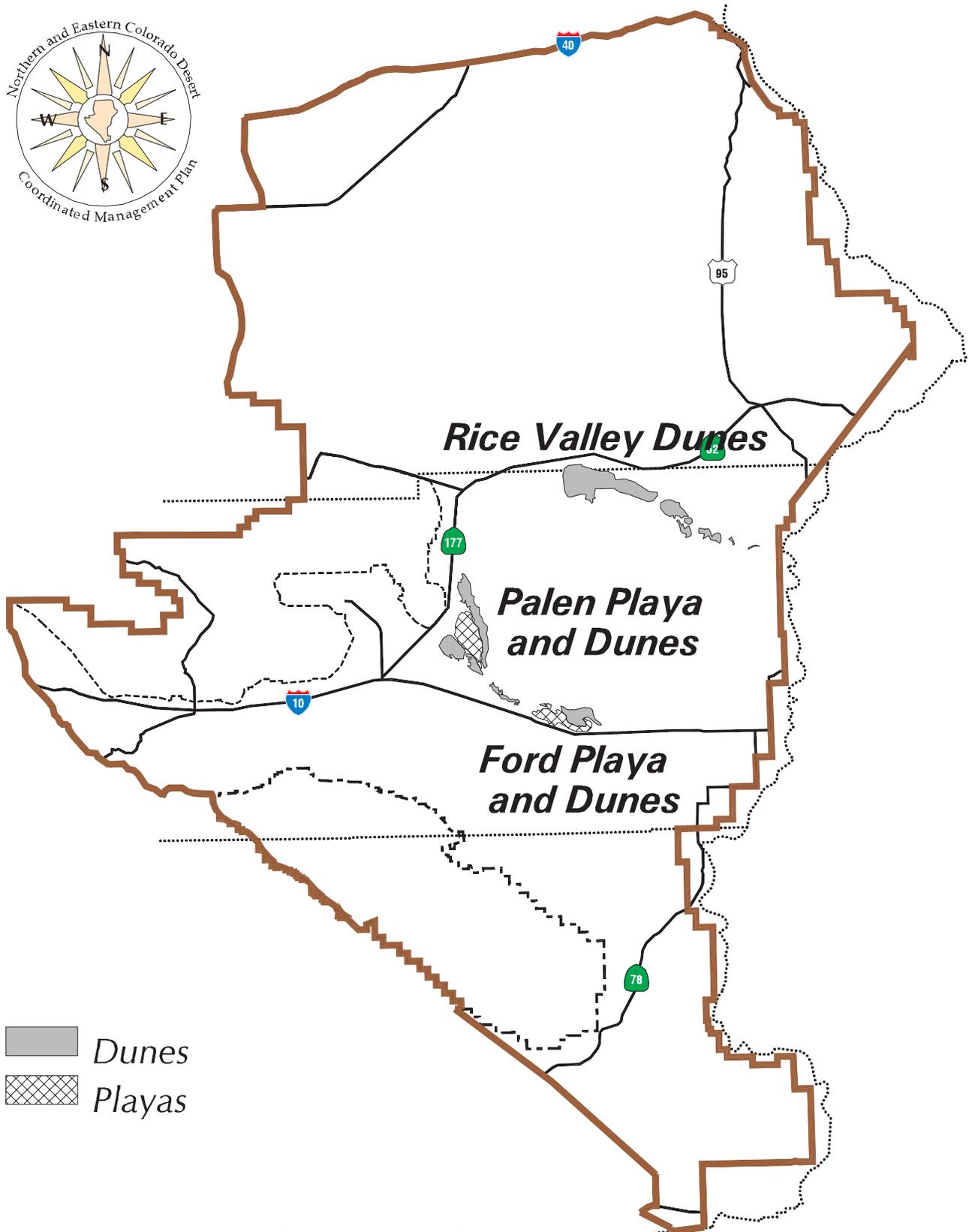
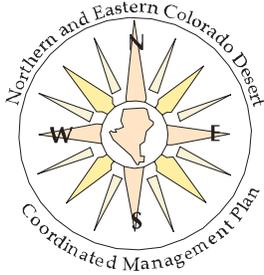
Please refer to Base Map for features not described here

May 31, 2002

**Map 2-18**

Scale 1 : 1,120,000

**Proposed Plan and Small DWMA A & B Alternatives**  
**Dunes and Playa Closures (Area Designations for Motor Vehicle Access)**



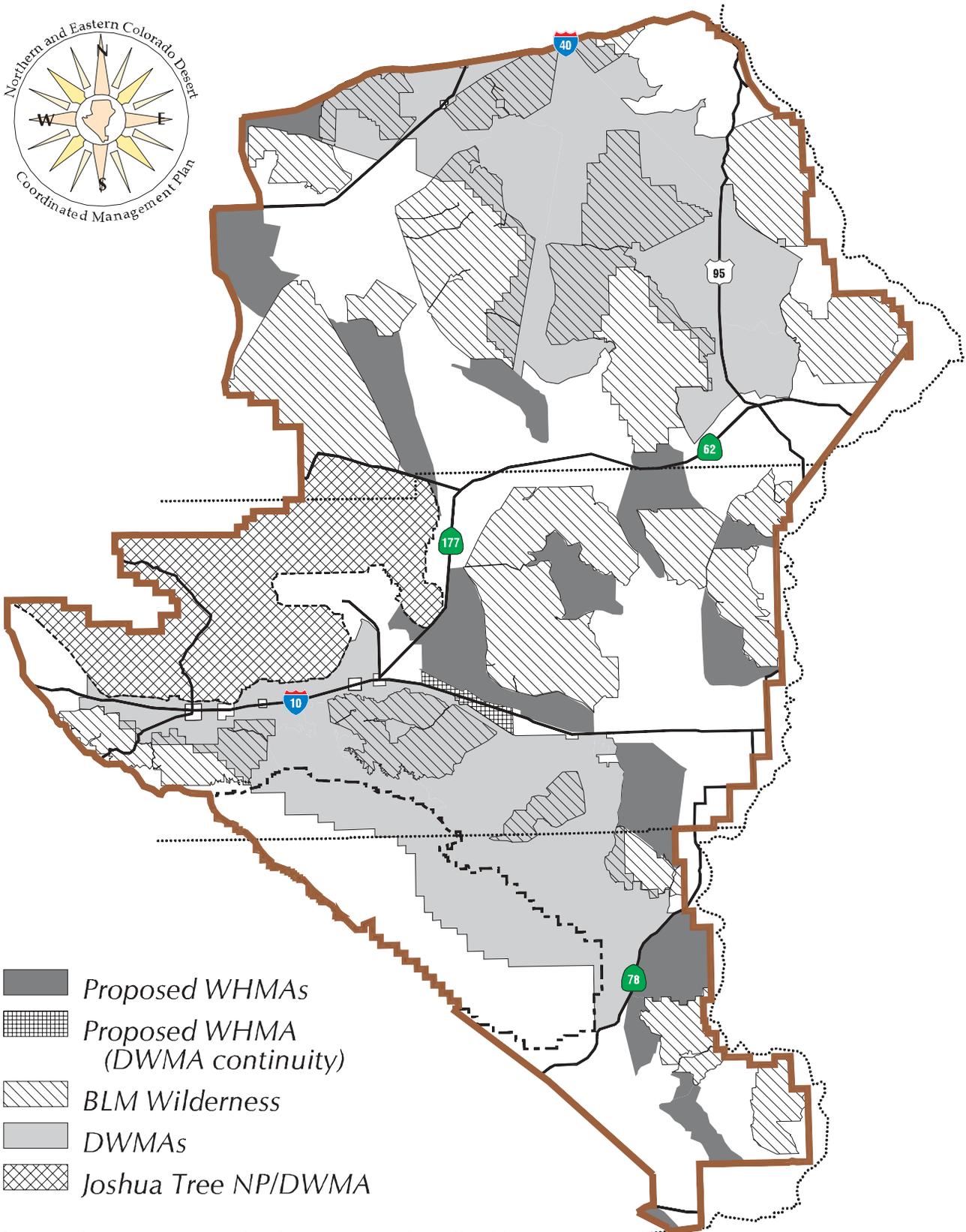
Please refer to Base Map for features not described here

May 31, 2002

**Map 2-20**

Scale 1 : 1,120,000

# Proposed Plan Multi-Species WHMAs



-  Proposed WHMAs
-  Proposed WHMA (DWMA continuity)
-  BLM Wilderness
-  DWMA
-  Joshua Tree NP/DWMA

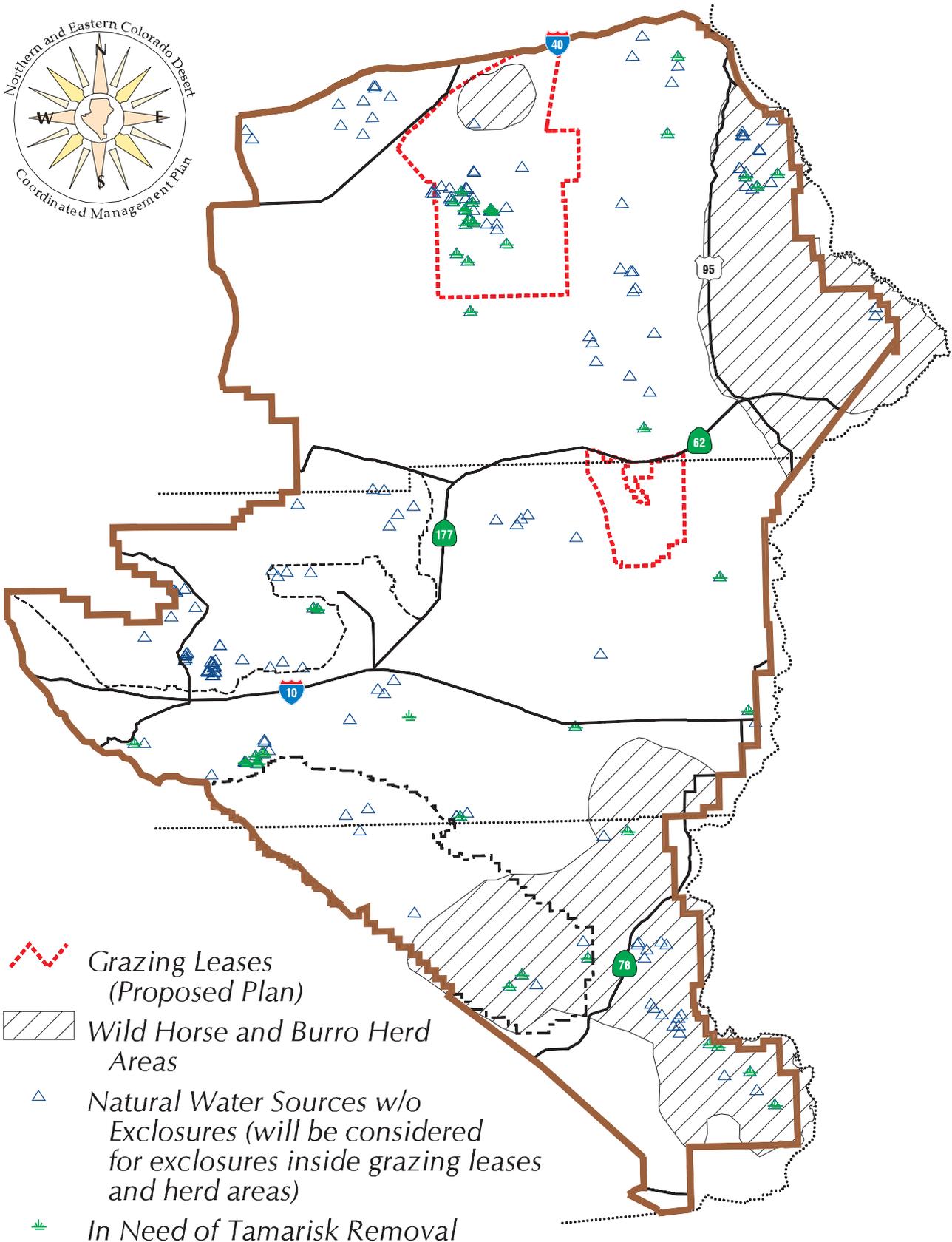
Please refer to Base Map for features not described here

June 5, 2002

**Map 2-21**

Scale 1 : 1,120,000

# Proposed Plan and Small DWMA A & B Alternatives Springs and Seeps Improvements



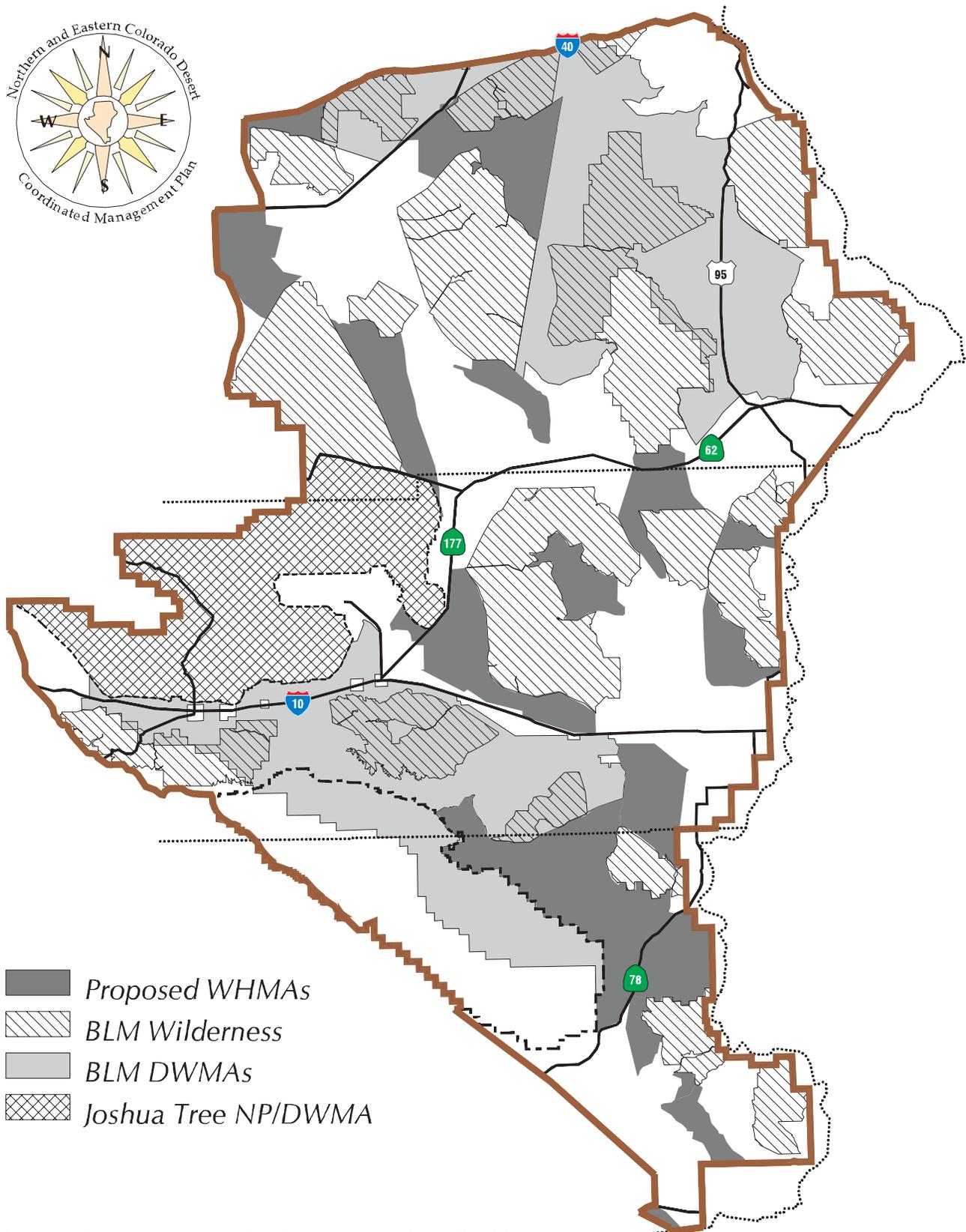
-  Grazing Leases (Proposed Plan)
-  Wild Horse and Burro Herd Areas
-  Natural Water Sources w/o Exclosures (will be considered for exclosures inside grazing leases and herd areas)
-  In Need of Tamarisk Removal

May 31, 2002

**Map 2-22**

Scale 1 : 1,120,000

# Small DWMA A Alternative Multi-Species WHMAs



- Proposed WHMAs
- ▨ BLM Wilderness
- BLM DWMAs
- ▩ Joshua Tree NP/DWMA

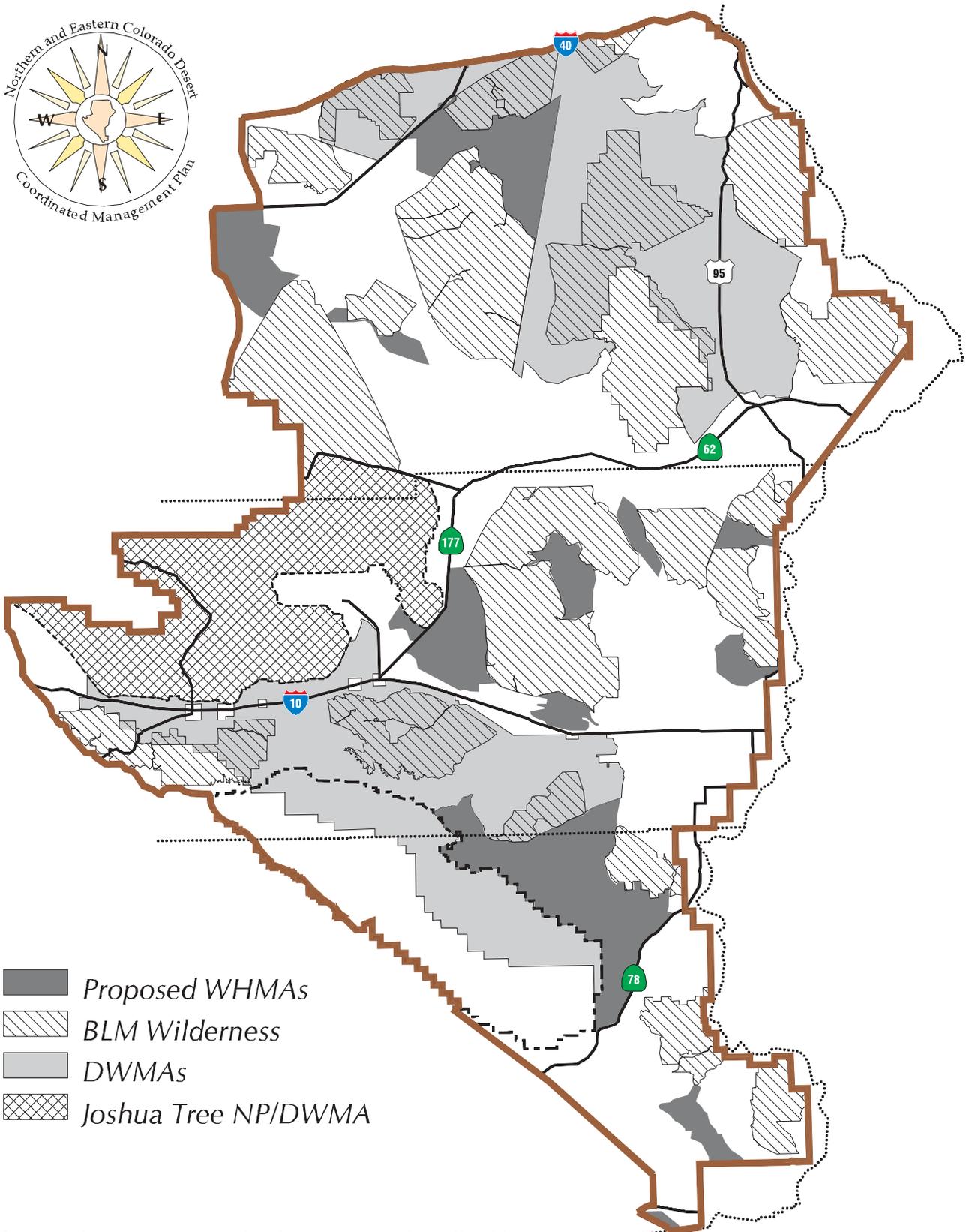
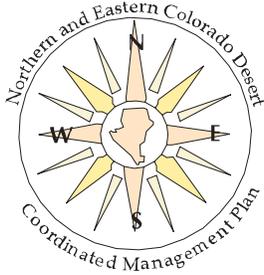
Please refer to Base Map for features not described here

May 31, 2002

Map 2-23

Scale 1 : 1,120,000

# Small DWMA B Alternative Multi-Species WHMAs



- Proposed WHMAs
- ▨ BLM Wilderness
- DWMAs
- ▩ Joshua Tree NP/DWMA

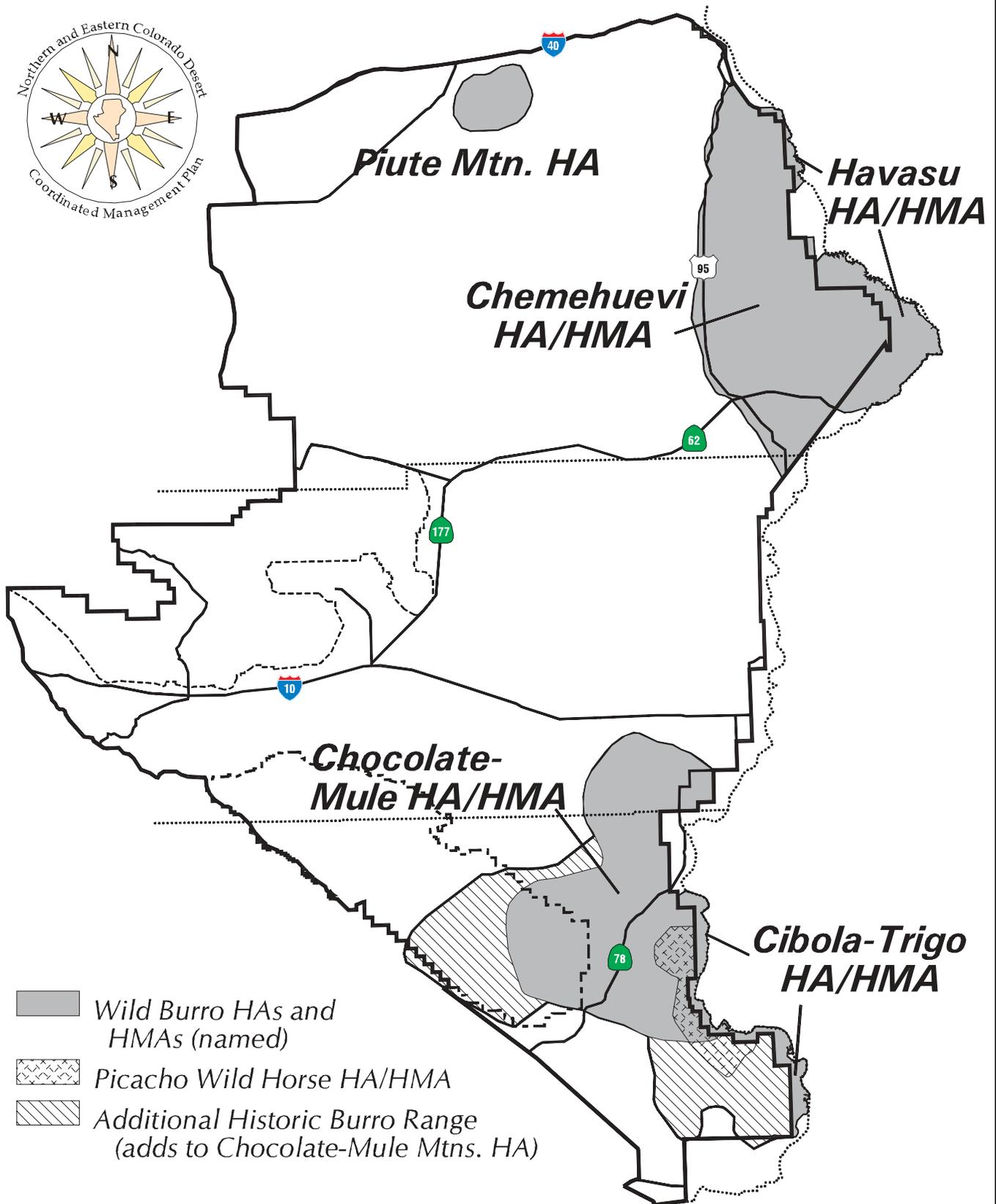
Please refer to Base Map for features not described here

June 5, 2002

Map 2-24

Scale 1 : 1,120,000

# Current Wild Horses and Burros Management



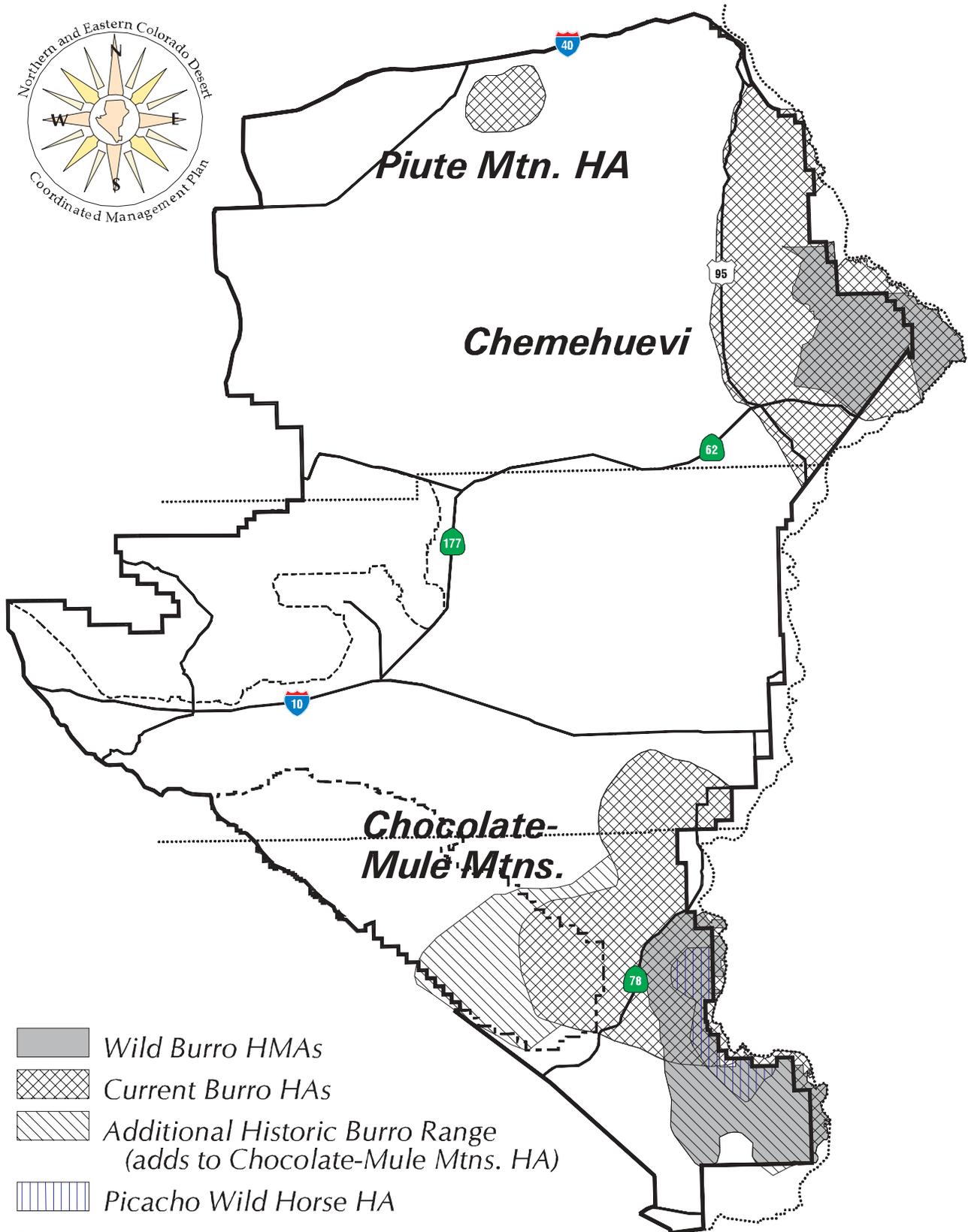
Please refer to Base Map for features not described here

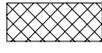
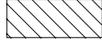
May 31, 2002

Map 2-25

Scale 1 : 1,120,000

# Proposed Plan Wild Horses and Burros Management



-  Wild Burro HMAs
-  Current Burro HAs
-  Additional Historic Burro Range  
(adds to Chocolate-Mule Mtns. HA)
-  Picacho Wild Horse HA

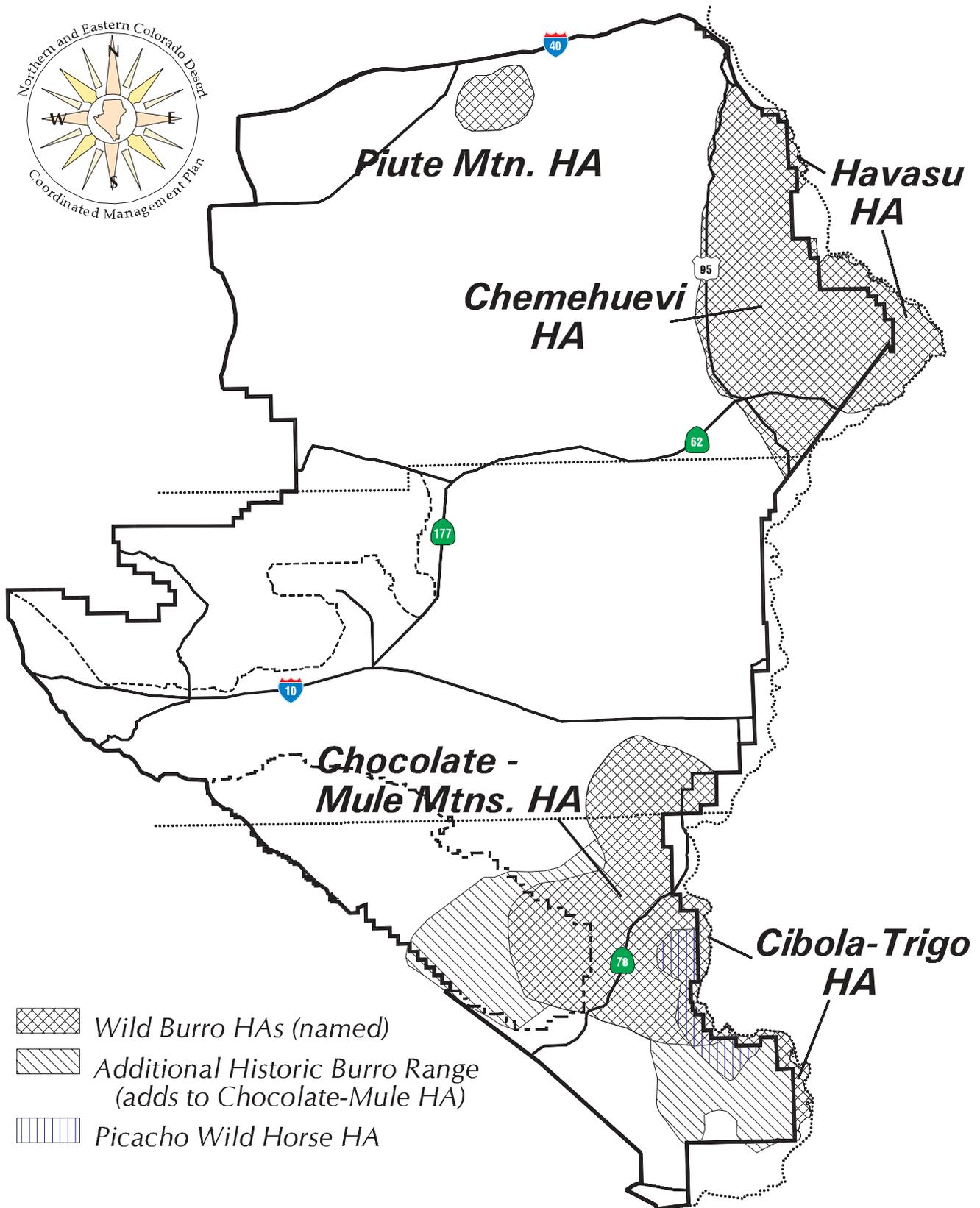
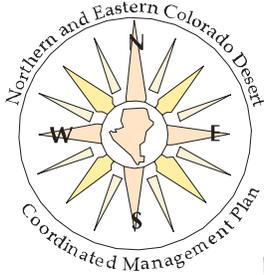
Please refer to Base Map for features not described here

May 31, 2002

**Map 2-26**

Scale 1 : 1,120,000

# Small DWMA A Alternative Wild Horses and Burros Management



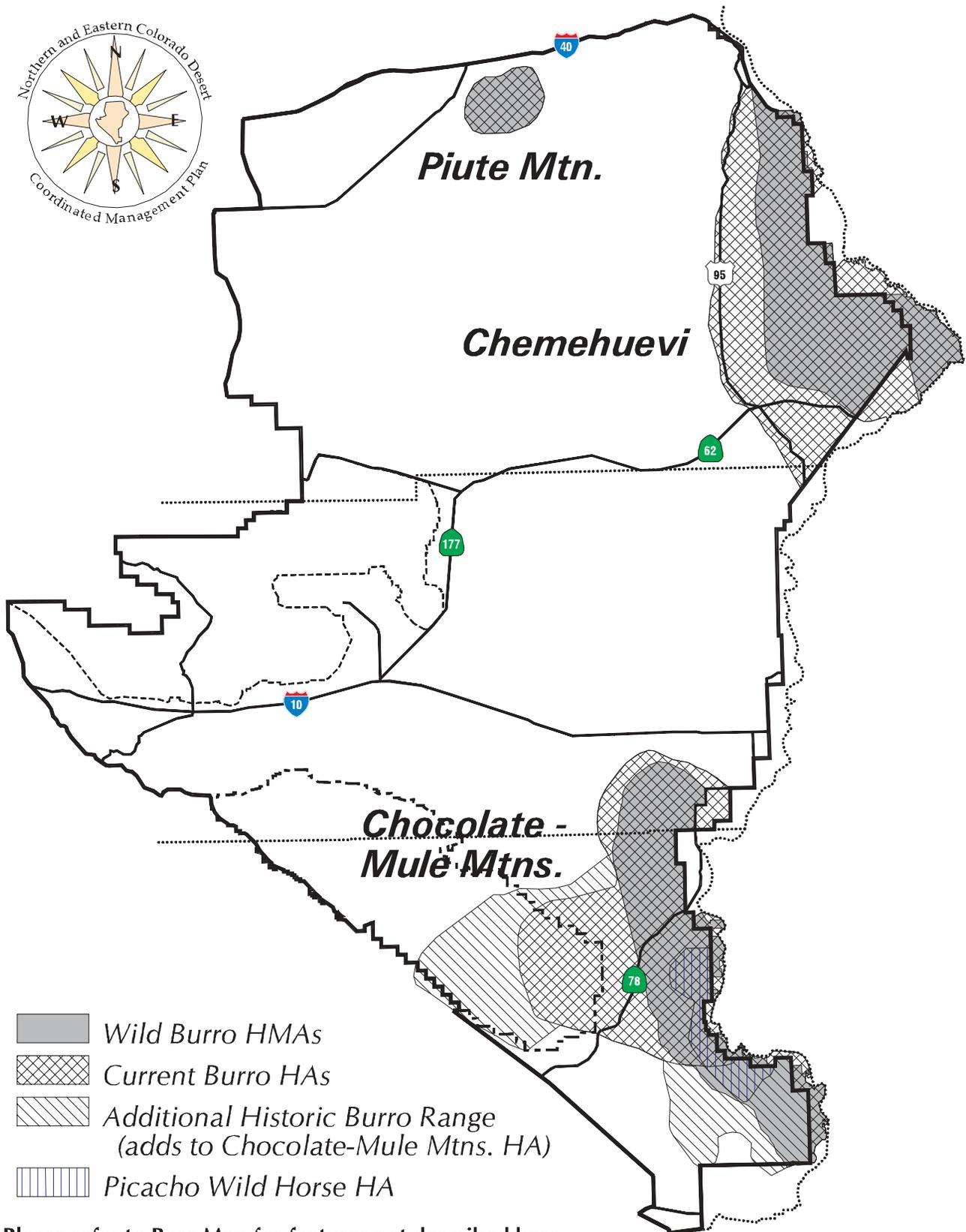
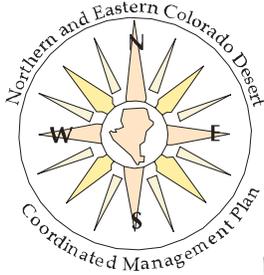
Please refer to Base Map for features not described here

May 31, 2002

**Map 2-27**

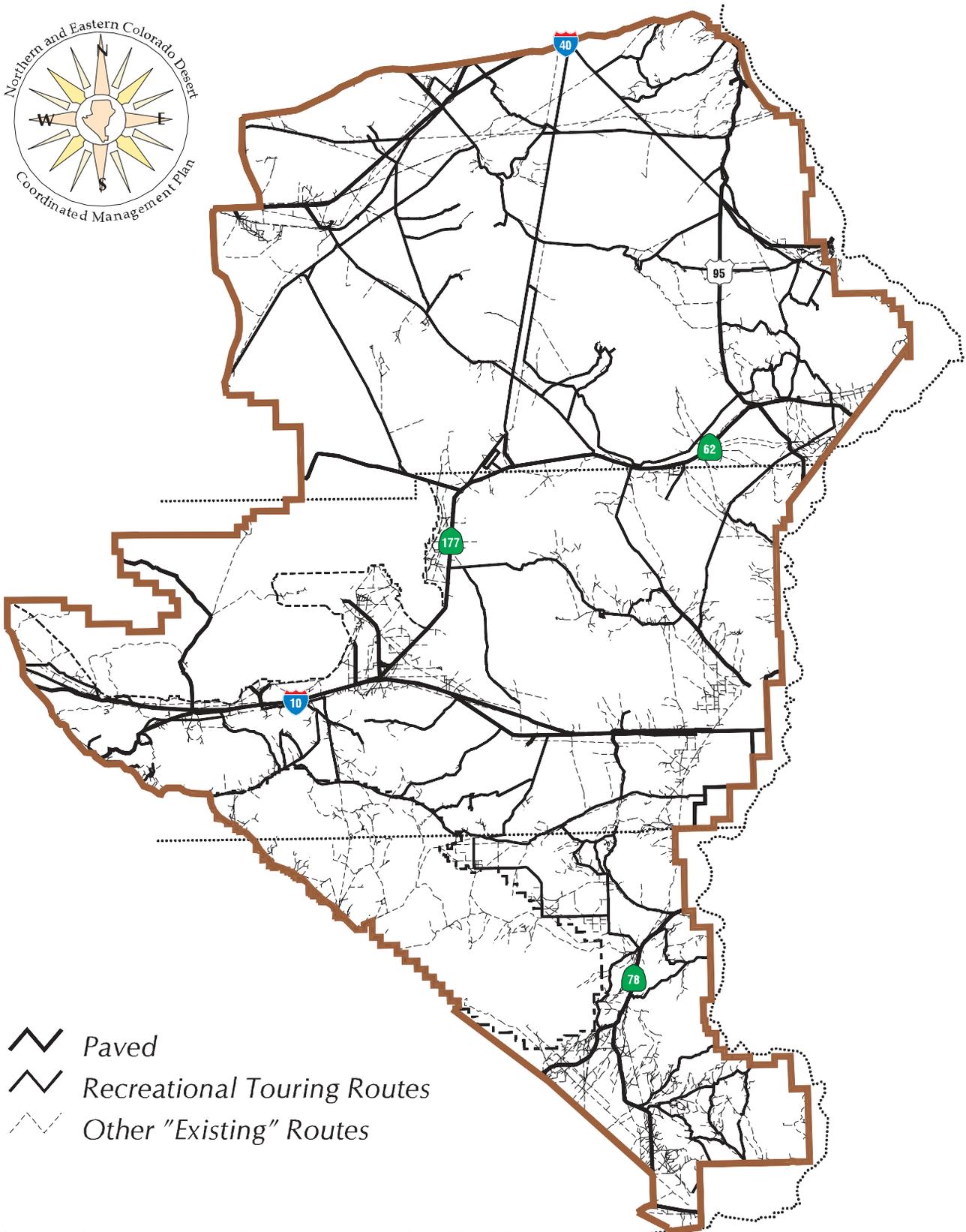
Scale 1 : 1,120,000

# Small DWMA B Alternative Wild Horses and Burros Management



Please refer to Base Map for features not described here .....

# Current Routes of Travel Network



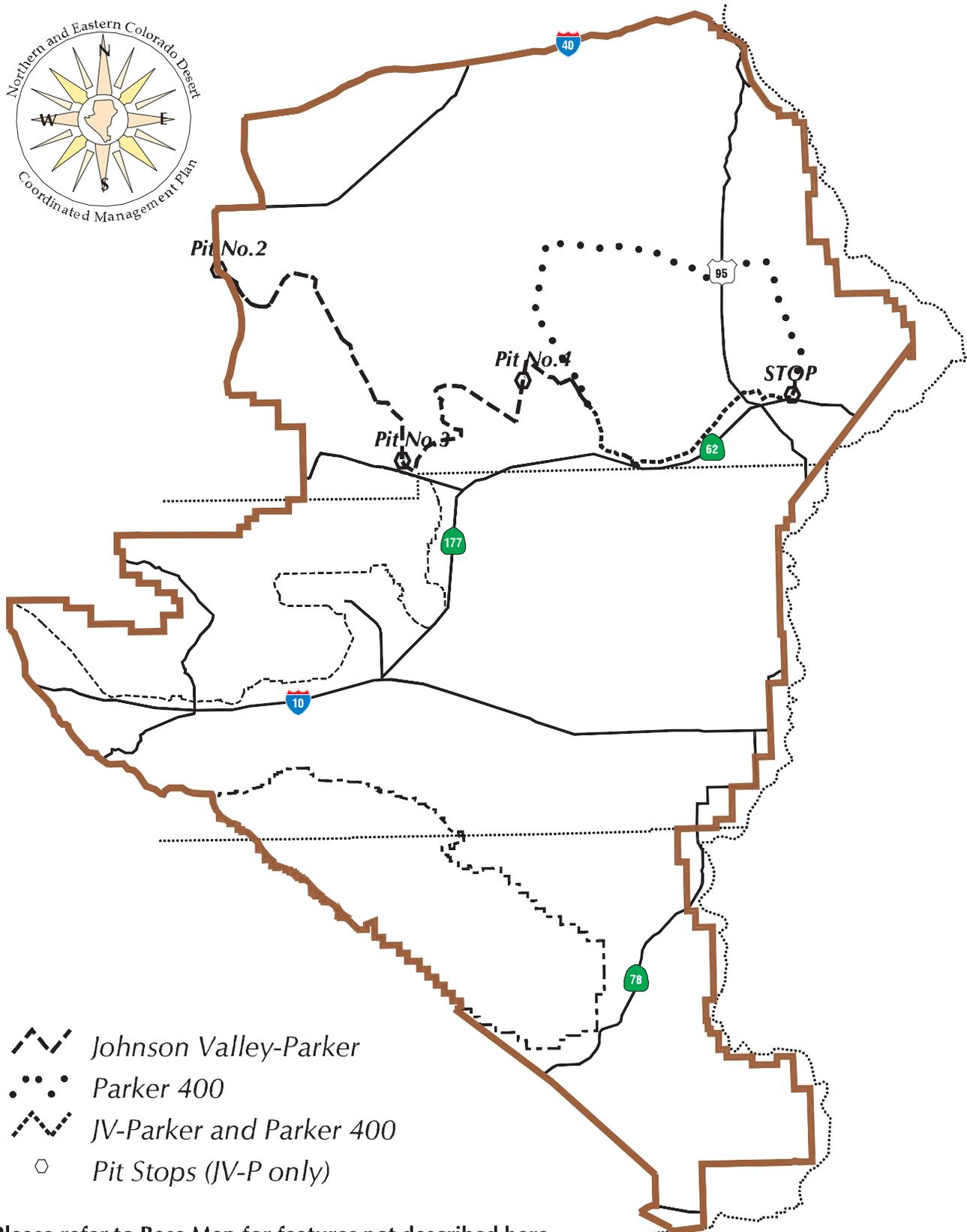
Please refer to Base Map for features not described here

May 31, 2002

**Map 2-29**

Scale 1 : 1,120,000

# Current Competitive Recreation Routes



- Johnson Valley-Parker
- Parker 400
- JV-Parker and Parker 400
- Pit Stops (JV-P only)

Please refer to Base Map for features not described here

May 31, 2002

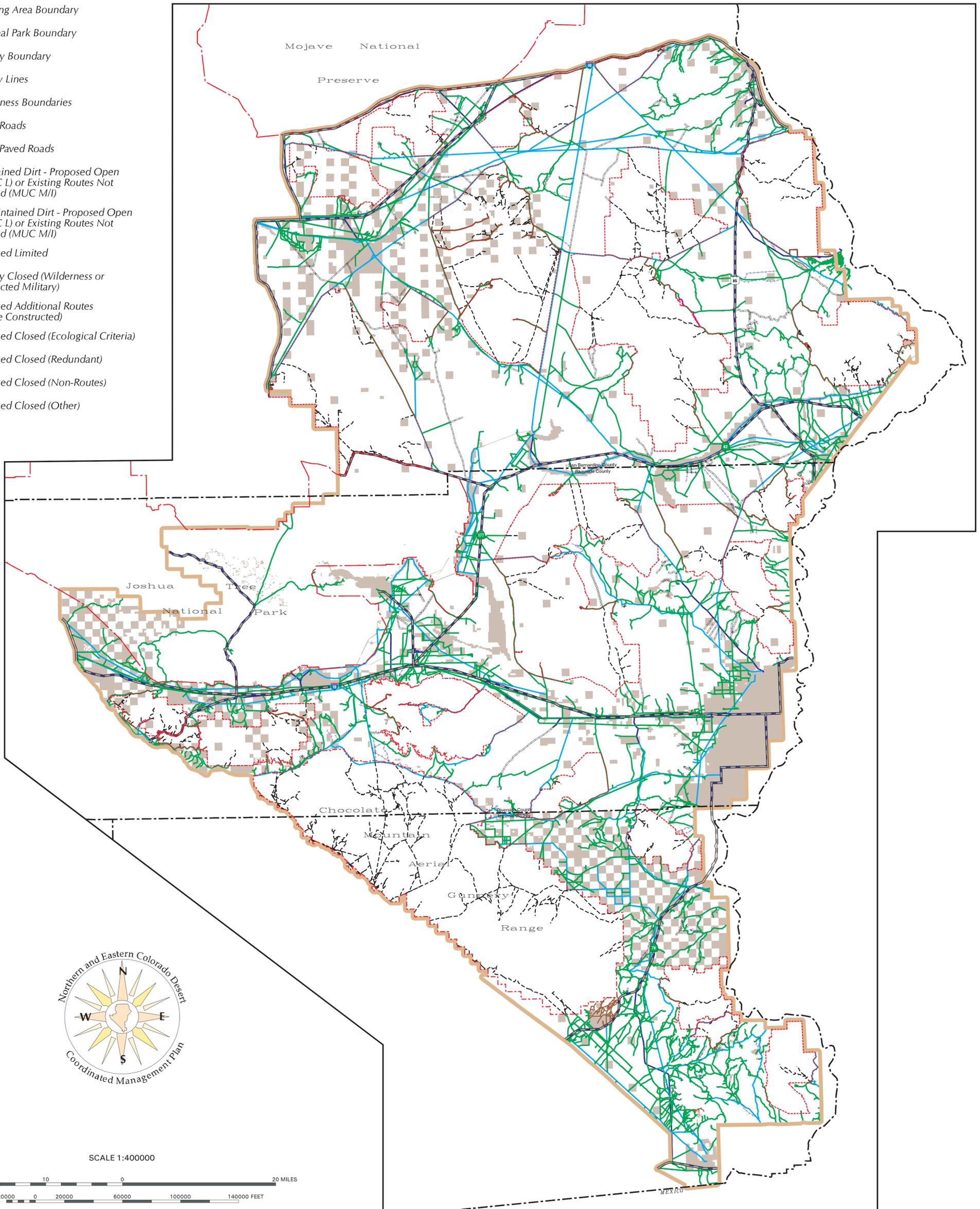
**Map 2-30**

Scale 1 : 1,120,000

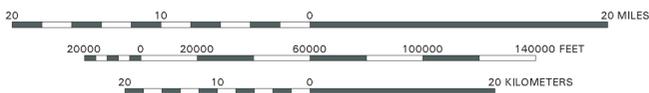
# No Action Alternative Route Designations

## Legend

-  Private Lands
-  Planning Area Boundary
-  National Park Boundary
-  Military Boundary
-  County Lines
-  Wilderness Boundaries
-  Major Roads
-  Other Paved Roads
-  Maintained Dirt - Proposed Open (MUC L) or Existing Routes Not Closed (MUC M/I)
-  Unmaintained Dirt - Proposed Open (MUC L) or Existing Routes Not Closed (MUC M/I)
-  Proposed Limited
-  Already Closed (Wilderness or Restricted Military)
-  Proposed Additional Routes (To Be Constructed)
-  Proposed Closed (Ecological Criteria)
-  Proposed Closed (Redundant)
-  Proposed Closed (Non-Routes)
-  Proposed Closed (Other)



SCALE 1:400000

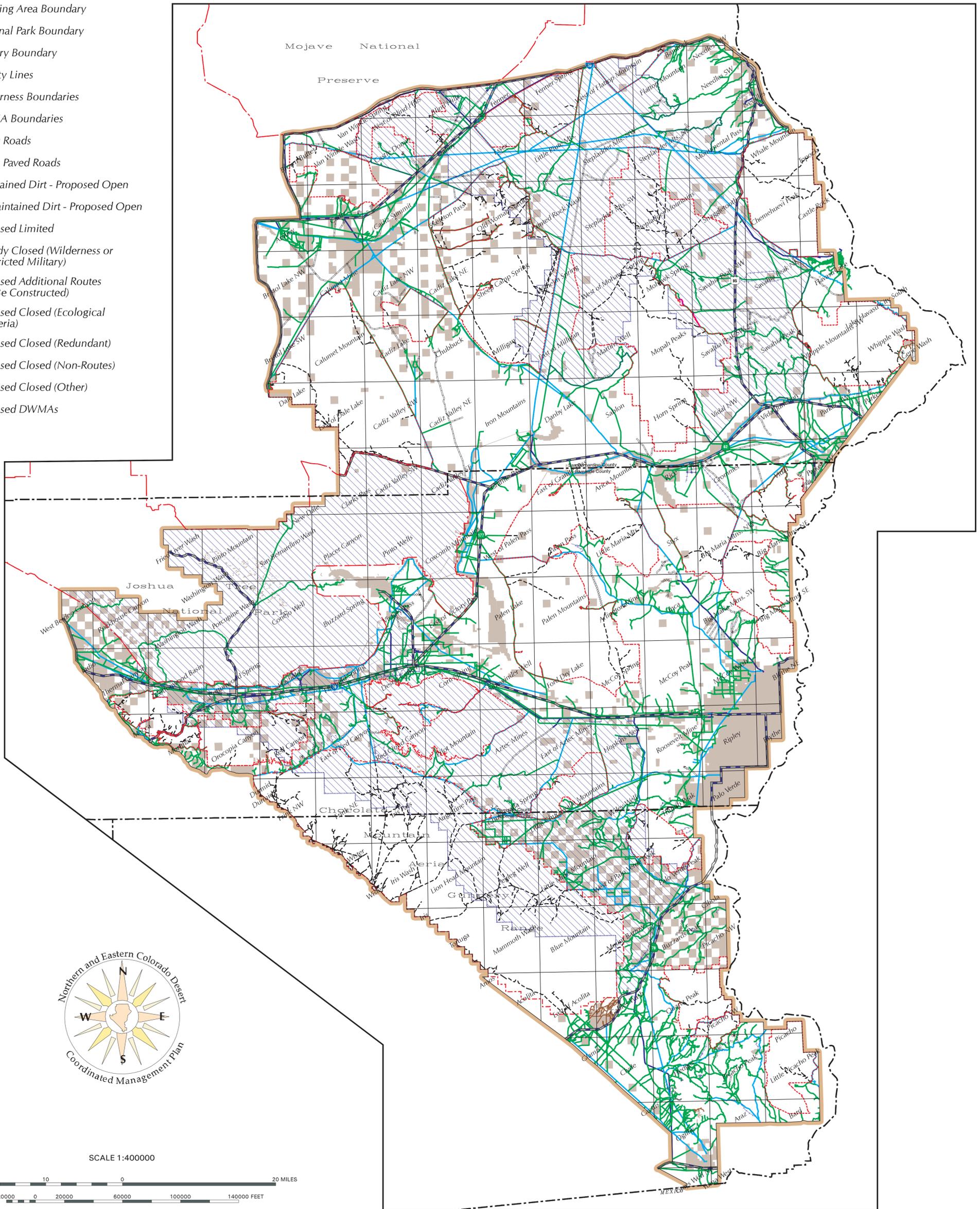


# Proposed Plan

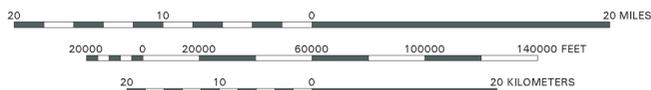
## Route Designations (with 7.5min Quad Sheet Index)

### Legend

-  Private Lands
-  Planning Area Boundary
-  National Park Boundary
-  Military Boundary
-  County Lines
-  Wilderness Boundaries
-  DWMA Boundaries
-  Major Roads
-  Other Paved Roads
-  Maintained Dirt - Proposed Open
-  Unmaintained Dirt - Proposed Open
-  Proposed Limited
-  Already Closed (Wilderness or Restricted Military)
-  Proposed Additional Routes (To Be Constructed)
-  Proposed Closed (Ecological Criteria)
-  Proposed Closed (Redundant)
-  Proposed Closed (Non-Routes)
-  Proposed Closed (Other)
-  Proposed DWMA's



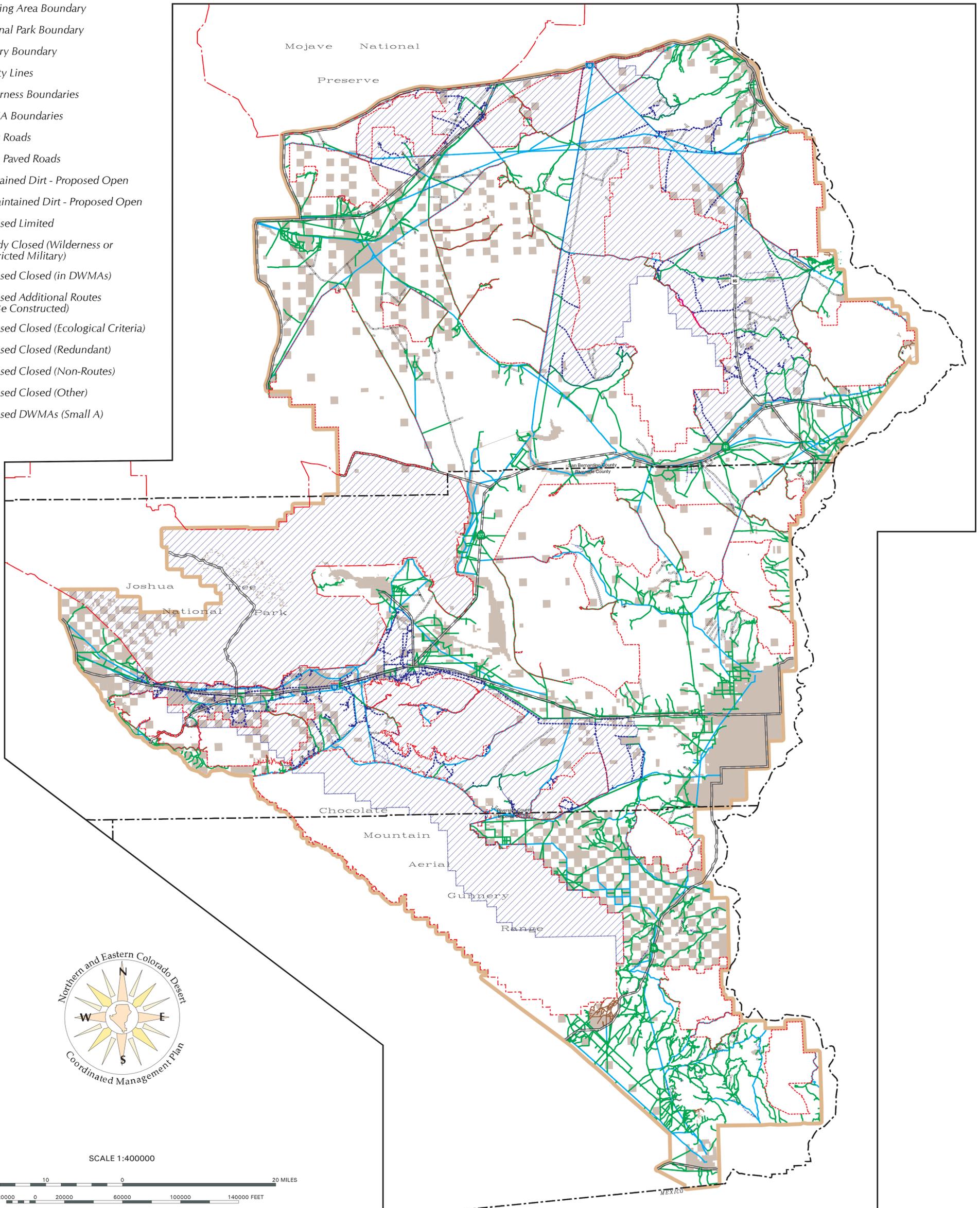
SCALE 1:400000



# Small DWMA A Alternative Route Designations

## Legend

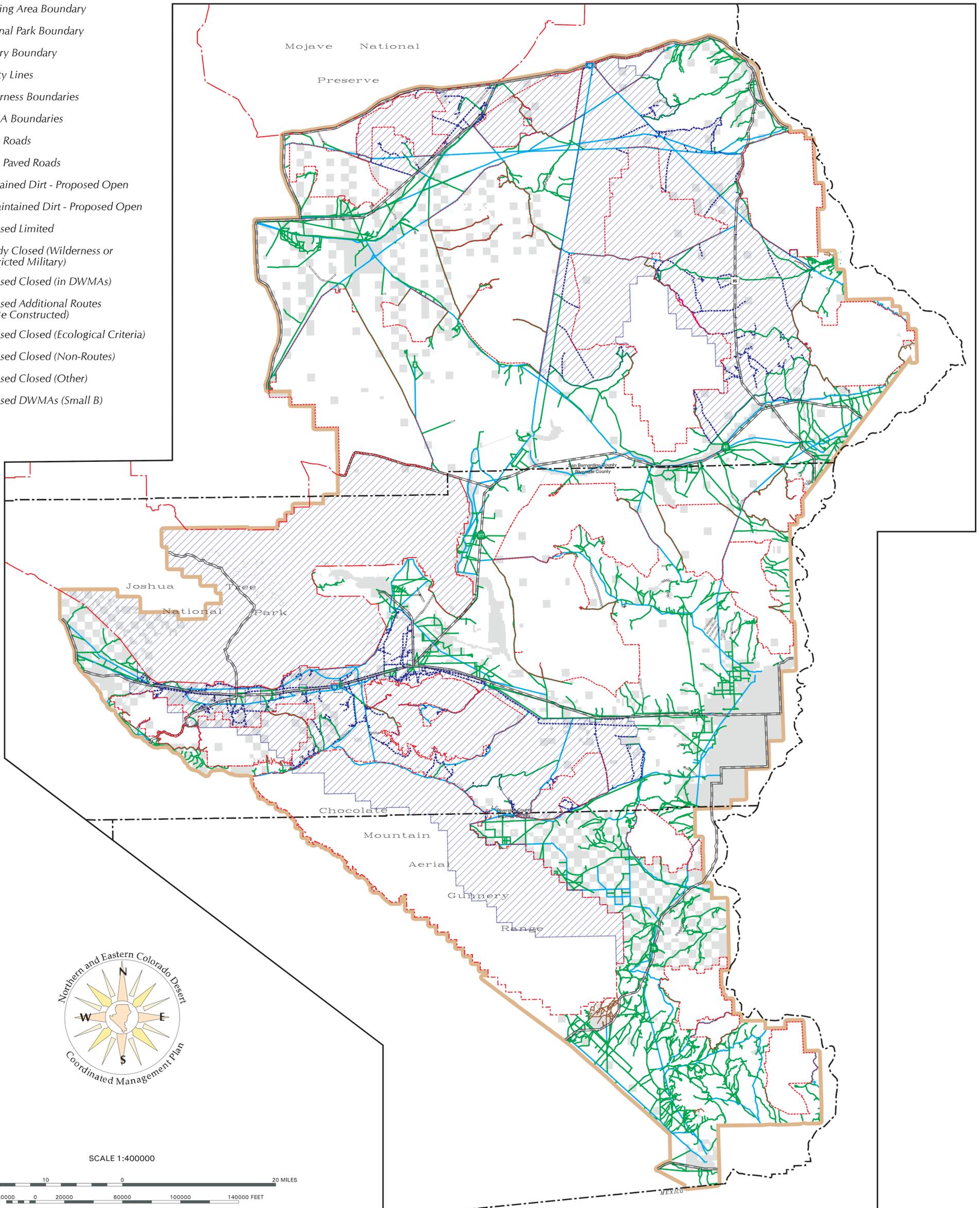
-  Private Lands
-  Planning Area Boundary
-  National Park Boundary
-  Military Boundary
-  County Lines
-  Wilderness Boundaries
-  DWMA Boundaries
-  Major Roads
-  Other Paved Roads
-  Maintained Dirt - Proposed Open
-  Unmaintained Dirt - Proposed Open
-  Proposed Limited
-  Already Closed (Wilderness or Restricted Military)
-  Proposed Closed (in DWMA's)
-  Proposed Additional Routes (To Be Constructed)
-  Proposed Closed (Ecological Criteria)
-  Proposed Closed (Redundant)
-  Proposed Closed (Non-Routes)
-  Proposed Closed (Other)
-  Proposed DWMA's (Small A)



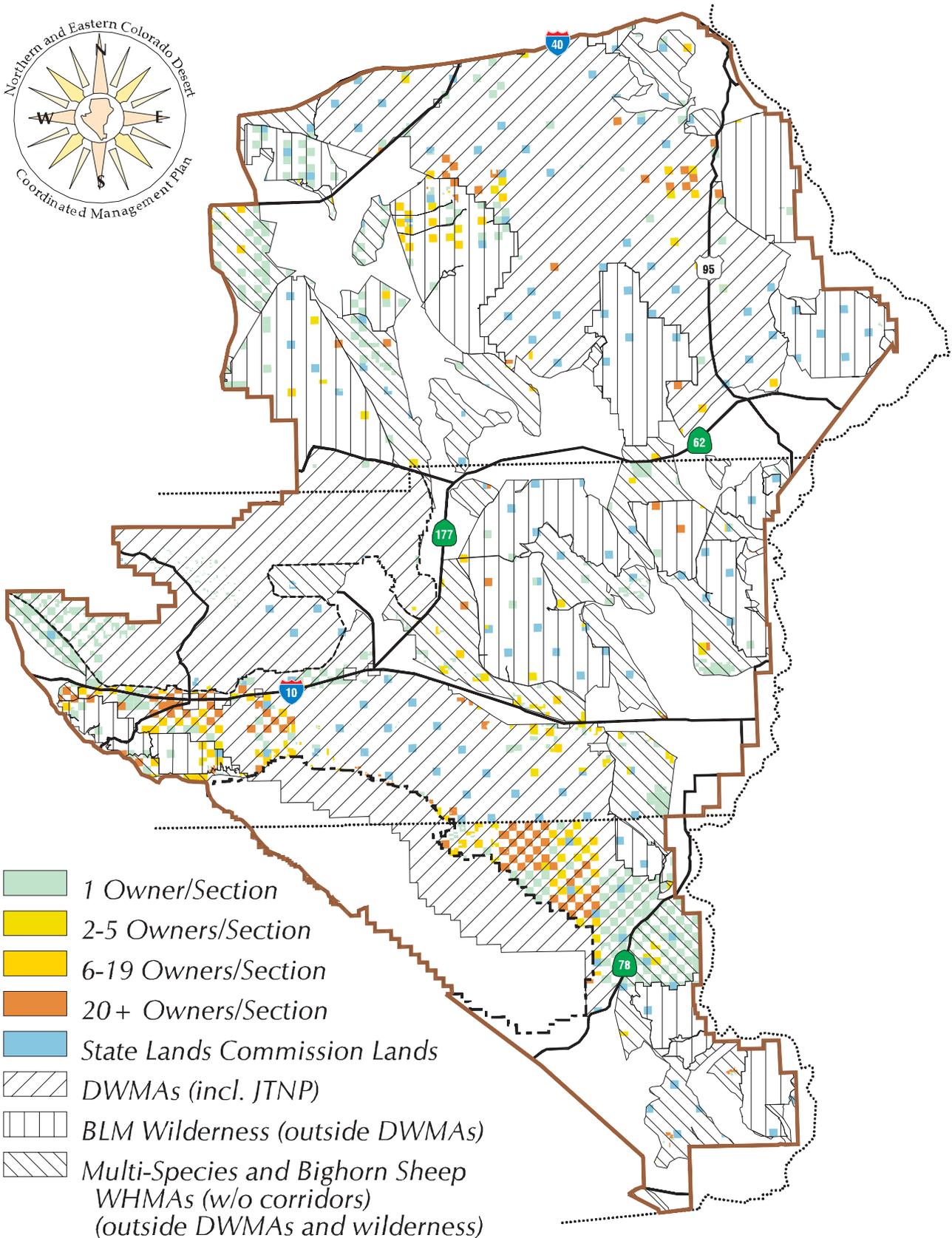
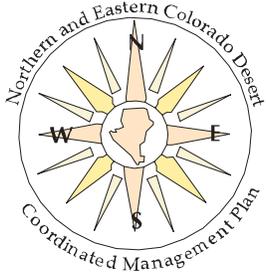
# Small DWMA B Alternative Route Designations

## Legend

-  Private Lands
-  Planning Area Boundary
-  National Park Boundary
-  Military Boundary
-  County Lines
-  Wilderness Boundaries
-  DWMA Boundaries
-  Major Roads
-  Other Paved Roads
-  Maintained Dirt - Proposed Open
-  Unmaintained Dirt - Proposed Open
-  Proposed Limited
-  Already Closed (Wilderness or Restricted Military)
-  Proposed Closed (in DWMA's)
-  Proposed Additional Routes (To Be Constructed)
-  Proposed Closed (Ecological Criteria)
-  Proposed Closed (Non-Routes)
-  Proposed Closed (Other)
-  Proposed DWMA's (Small B)



# Proposed Plan Acquire Habitat

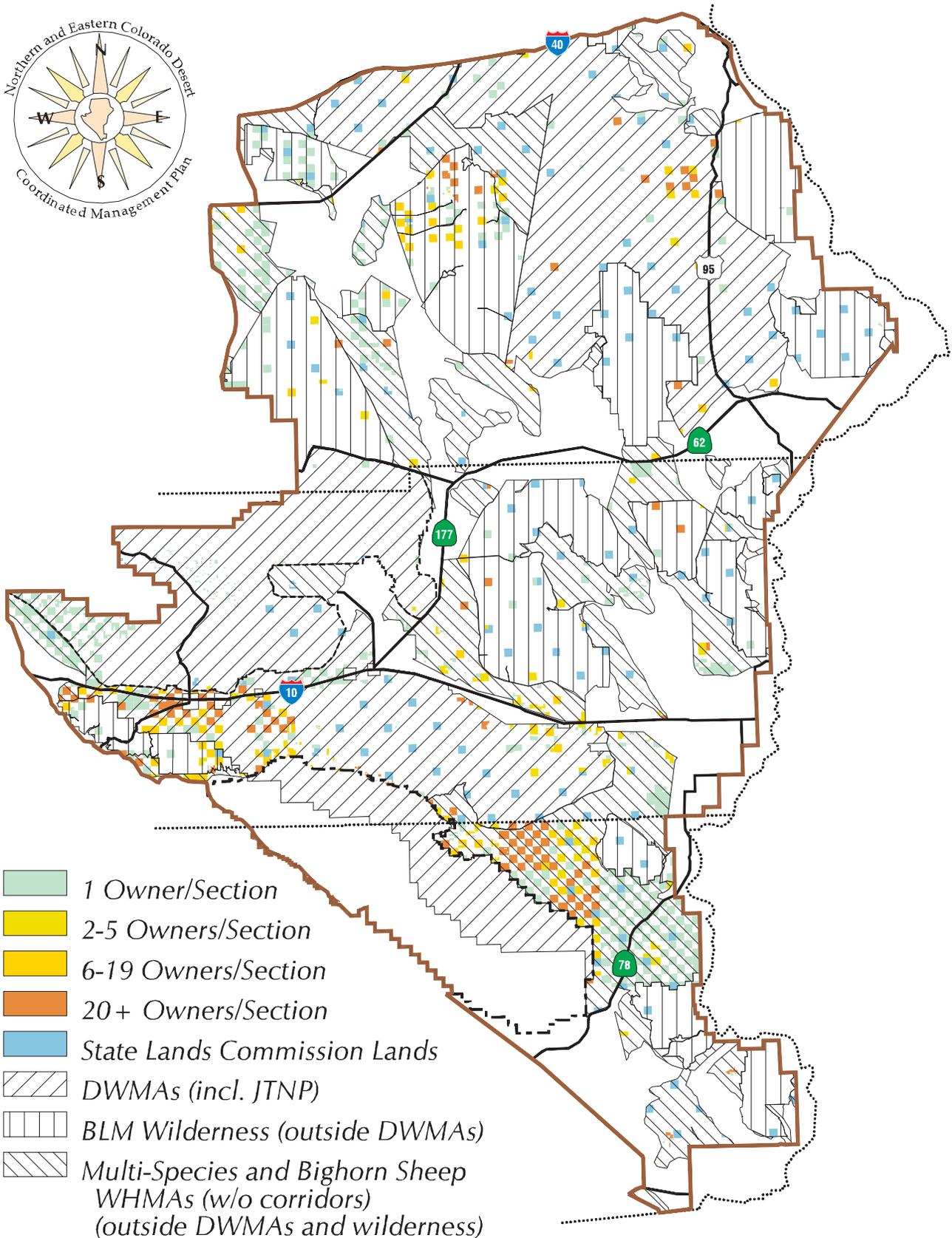
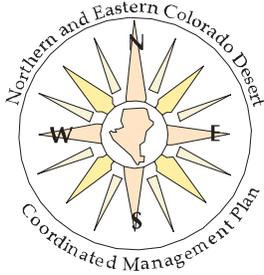


June 3, 2002

**Map 2-35**

Scale 1 : 1,120,000

# Small DWMA A Alternative Acquire Habitat



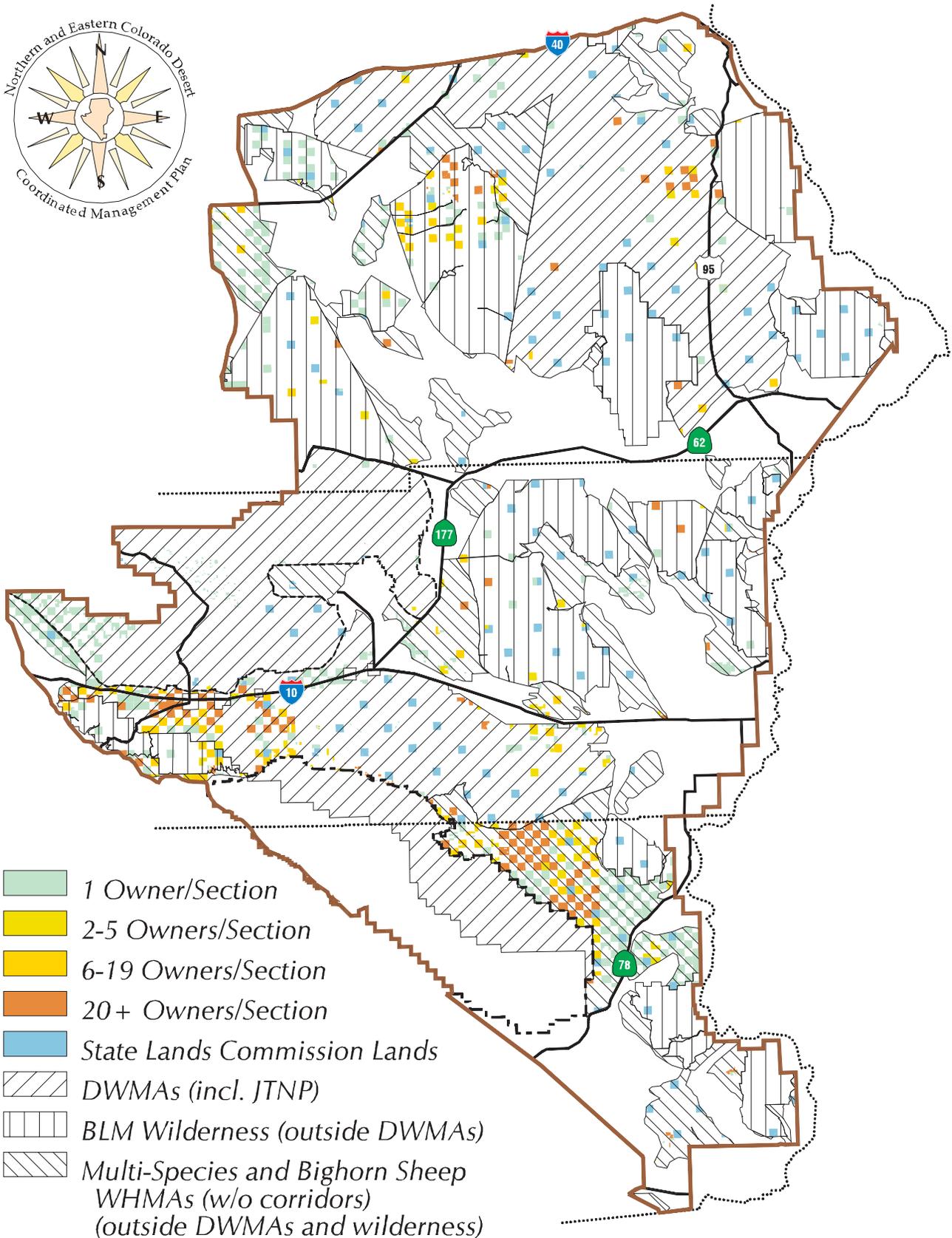
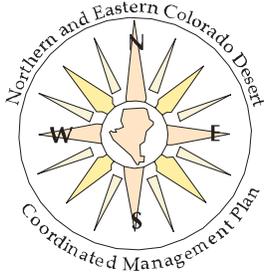
- 1 Owner/Section
- 2-5 Owners/Section
- 6-19 Owners/Section
- 20+ Owners/Section
- State Lands Commission Lands
- DWMA's (incl. JTNP)
- BLM Wilderness (outside DWMA's)
- Multi-Species and Bighorn Sheep WHMA's (w/o corridors) (outside DWMA's and wilderness)

June 3, 2002

**Map 2-36**

Scale 1 : 1,120,000

# Small DWMA B Alternative Acquire Habitat



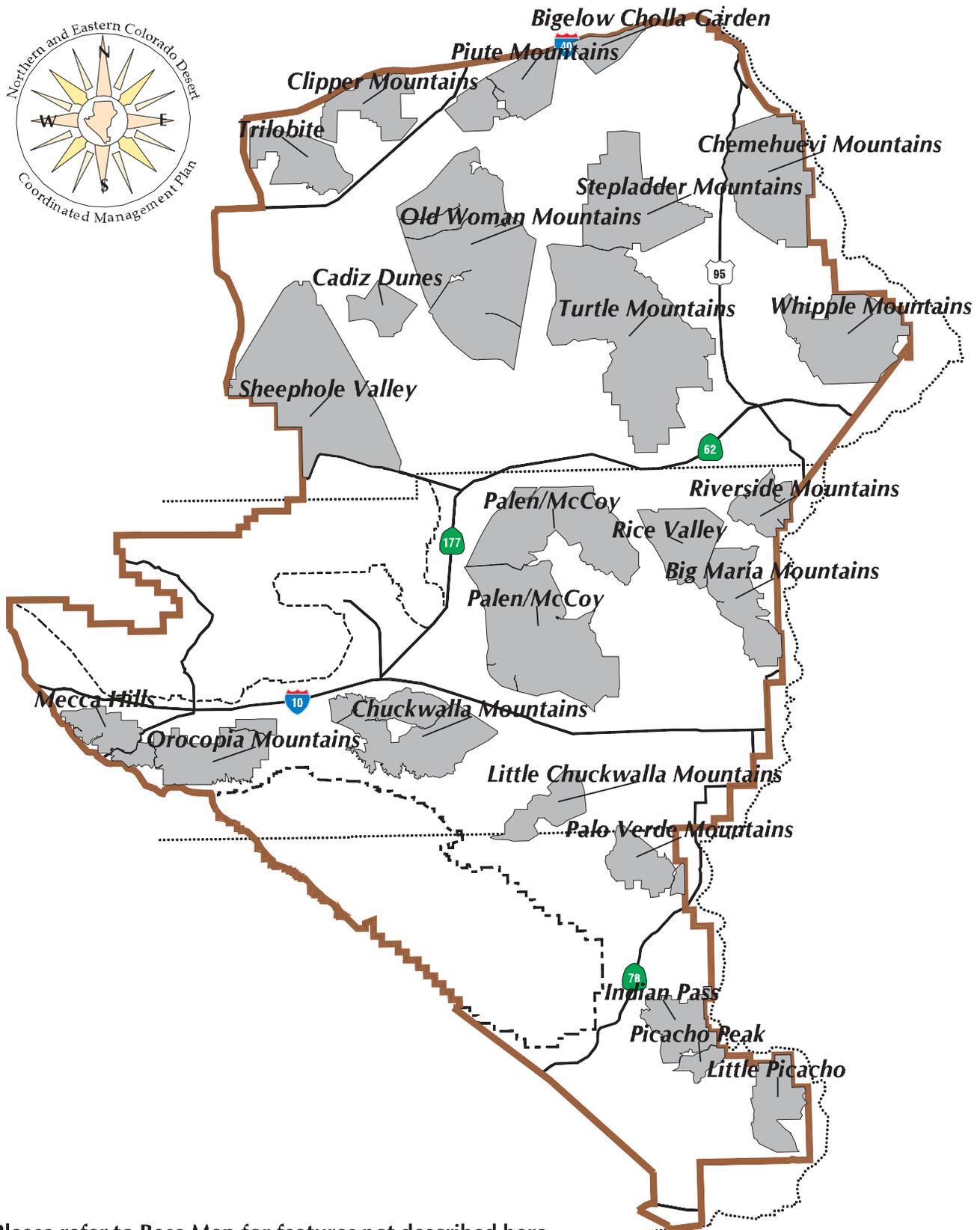
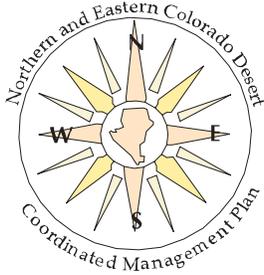
- 1 Owner/Section
- 2-5 Owners/Section
- 6-19 Owners/Section
- 20+ Owners/Section
- State Lands Commission Lands
- DWMA's (incl. JTNP)
- BLM Wilderness (outside DWMA's)
- Multi-Species and Bighorn Sheep WHMA's (w/o corridors) (outside DWMA's and wilderness)

June 5, 2002

**Map 2-37**

Scale 1 : 1,120,000

# BLM Wilderness Areas



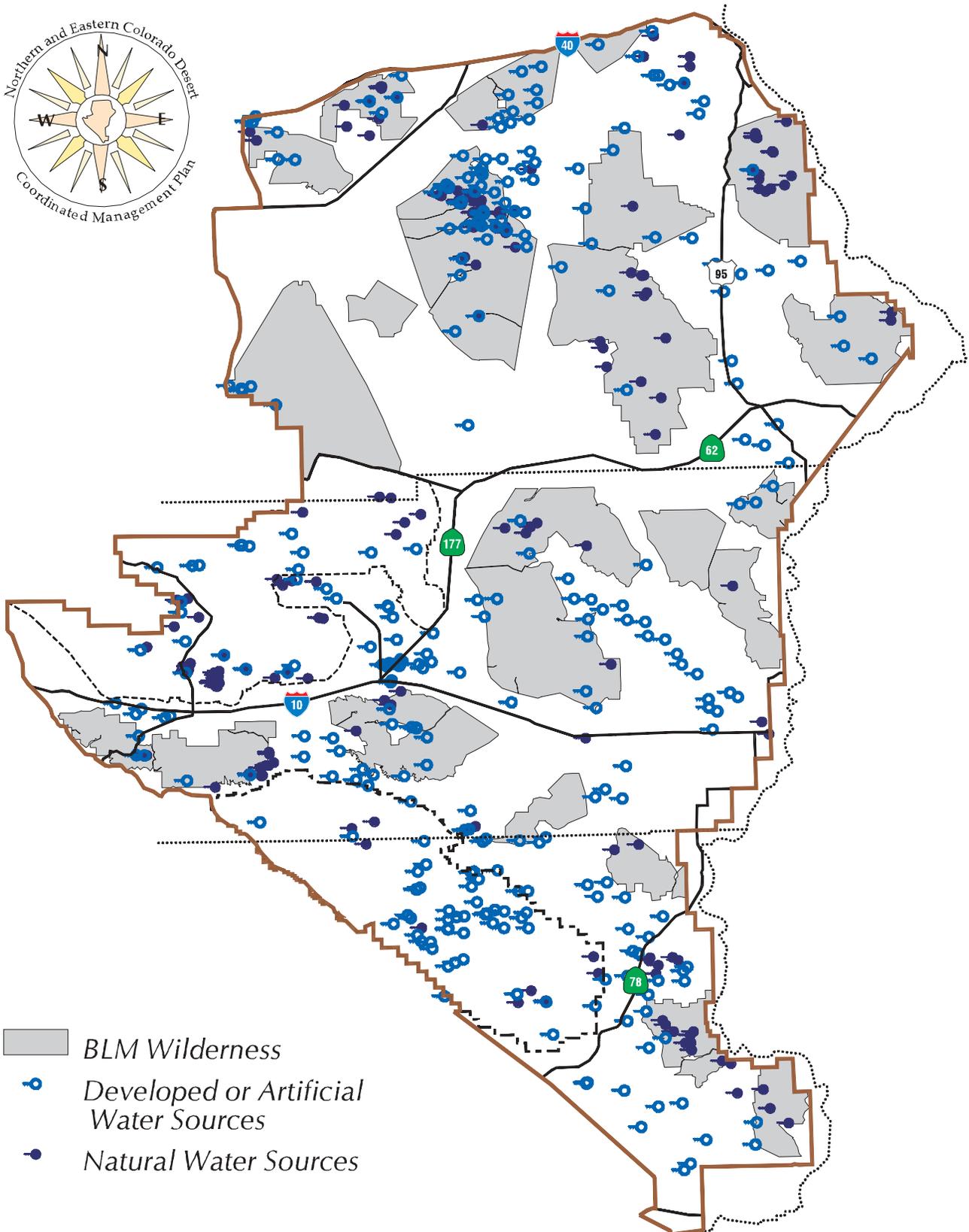
Please refer to Base Map for features not described here

June 5, 2002

Map 2-38

Scale 1 : 1,120,000

# Existing Water Sources



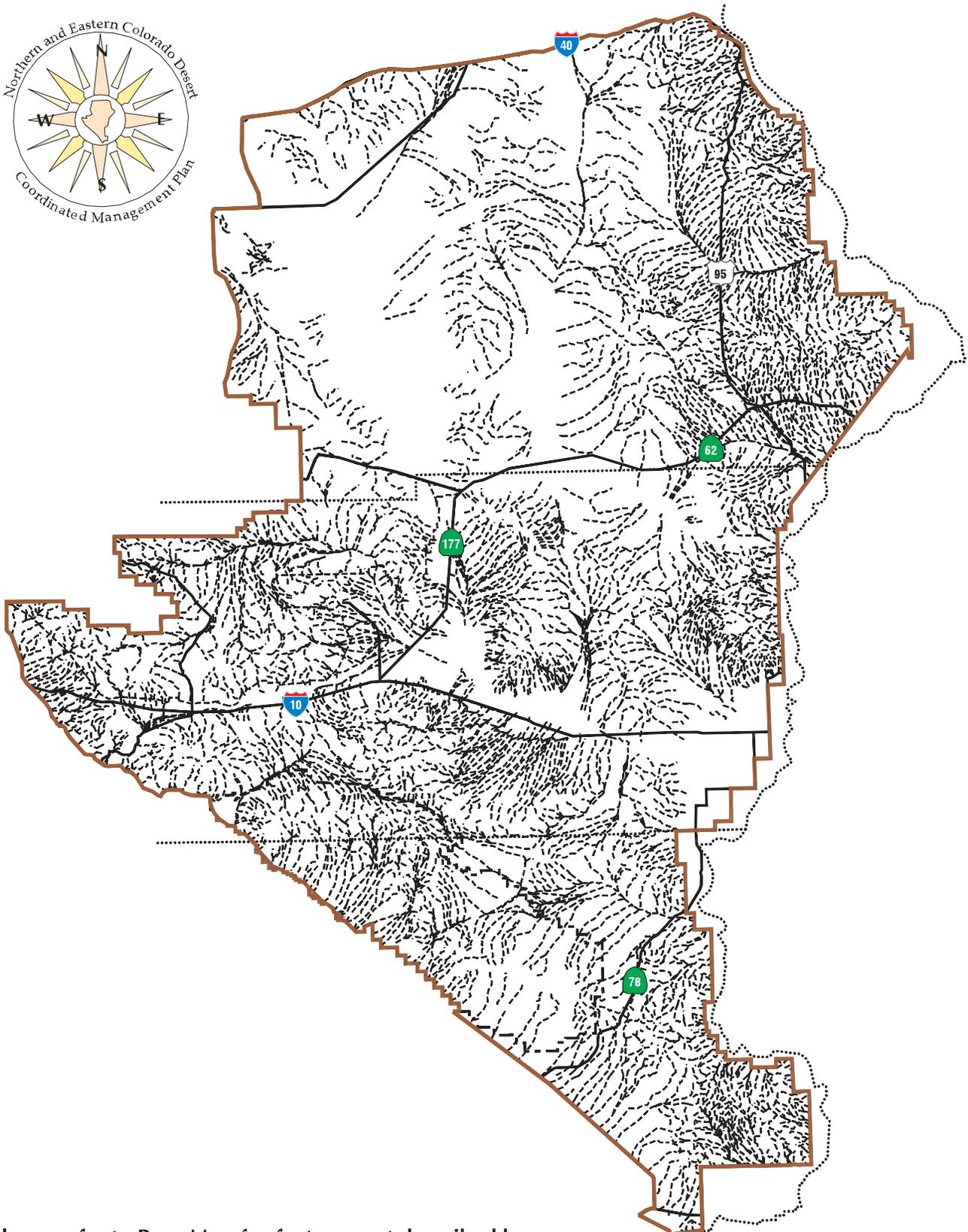
Please refer to Base Map for features not described here

June 3, 2002

Map 3-1

Scale 1 : 1,120,000

# Drainages



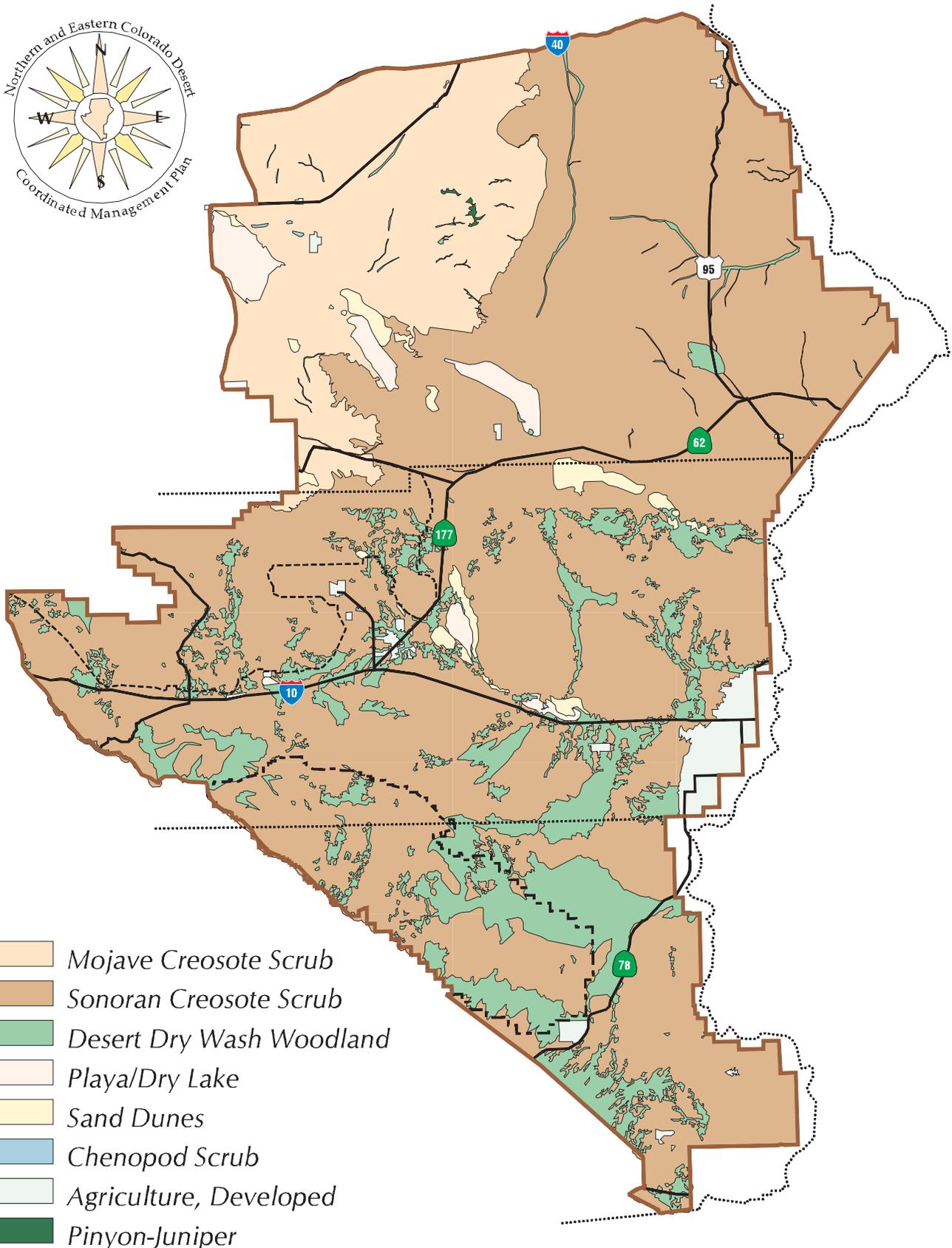
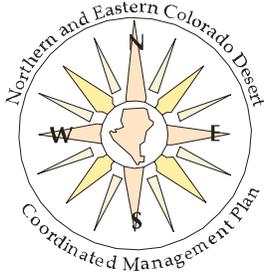
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-2**

Scale 1 : 1,120,000

# Plant Communities



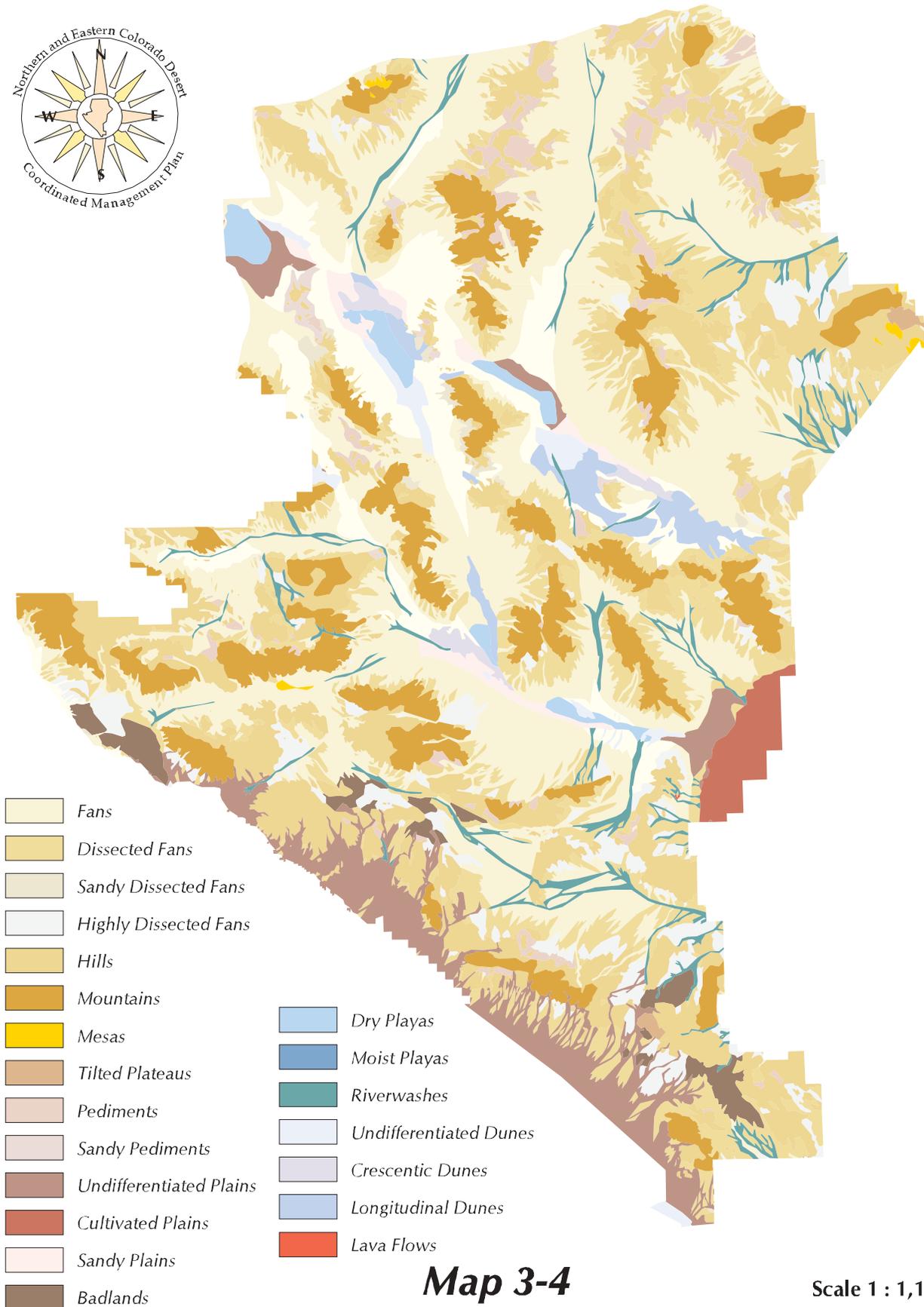
- Mojave Creosote Scrub
- Sonoran Creosote Scrub
- Desert Dry Wash Woodland
- Playa/Dry Lake
- Sand Dunes
- Chenopod Scrub
- Agriculture, Developed
- Pinyon-Juniper

June 3, 2002

Map 3-3

Scale 1 : 1,120,000

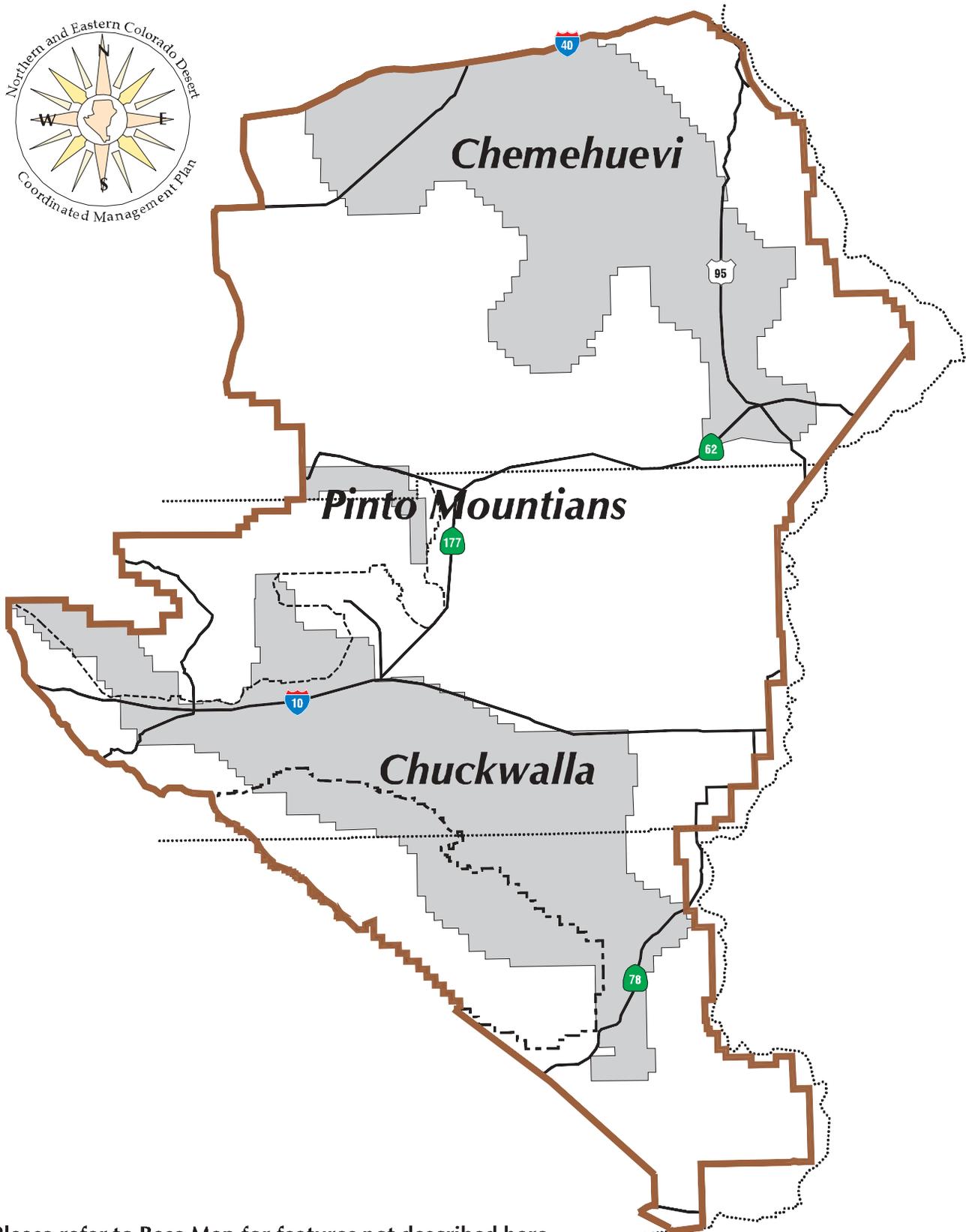
# Landforms



**Map 3-4**

Scale 1 : 1,120,000

# Desert Tortoise Critical Habitat



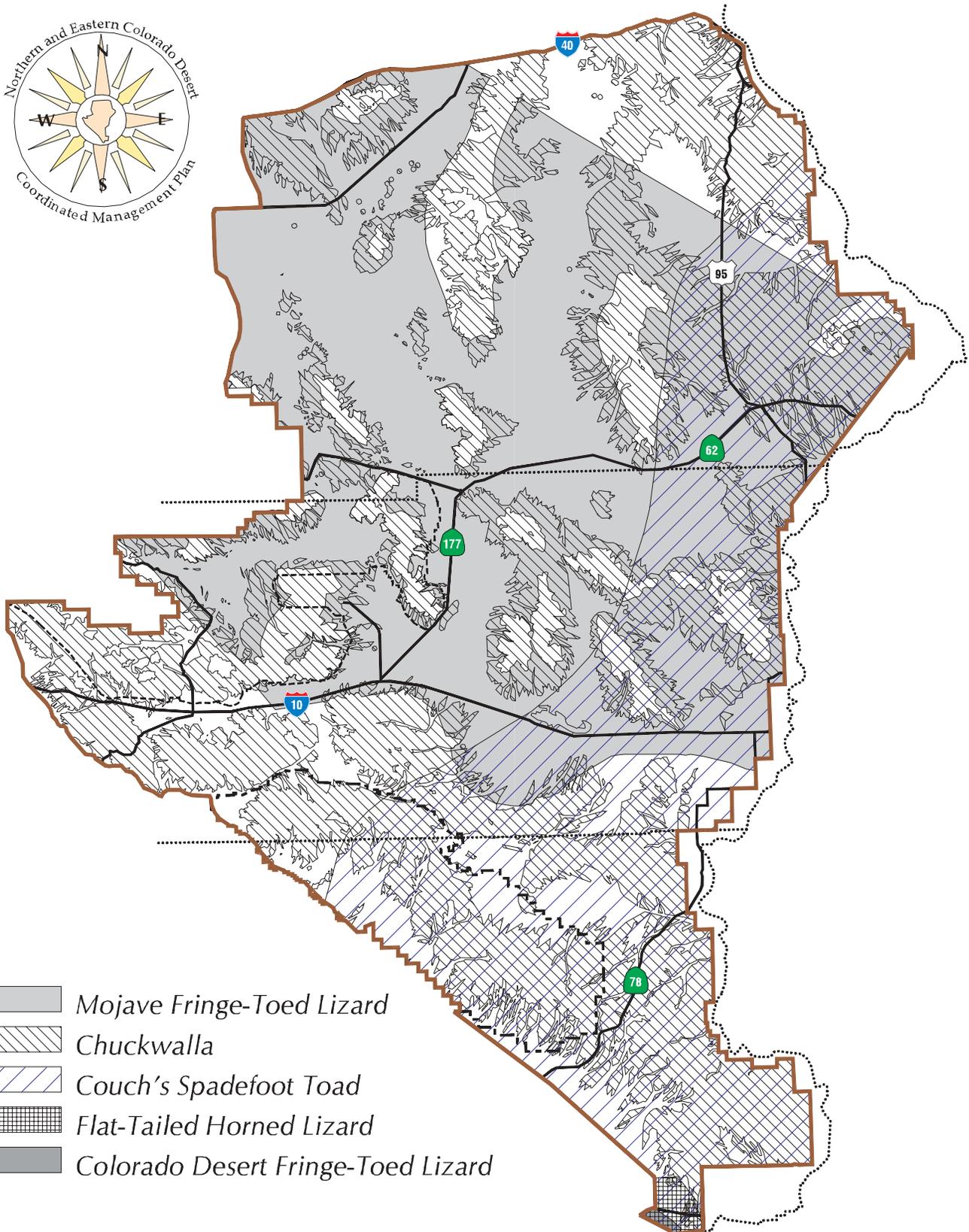
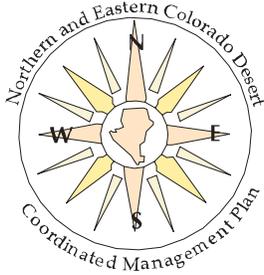
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-5**

Scale 1 : 1,120,000

# Special Status Species - Animals



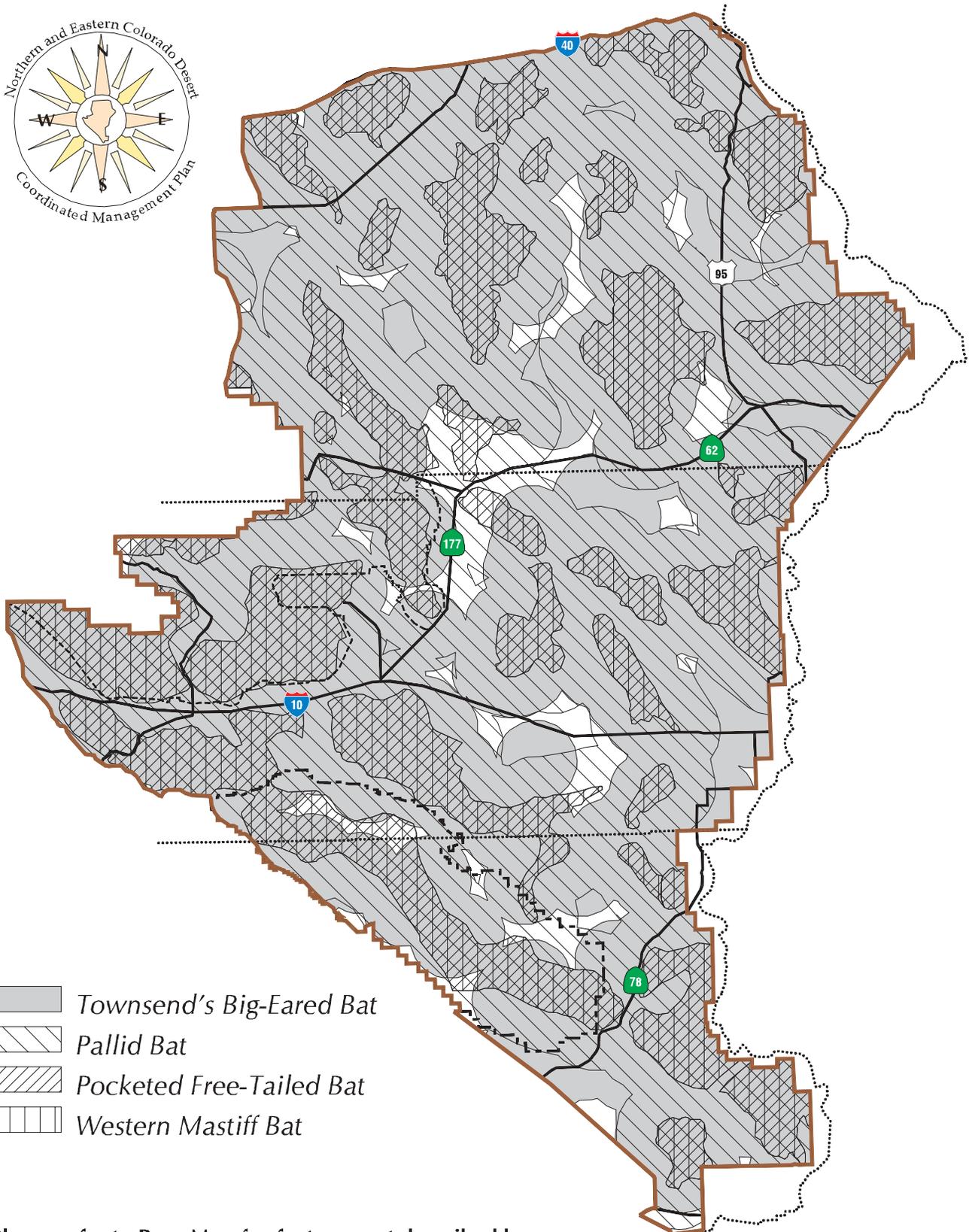
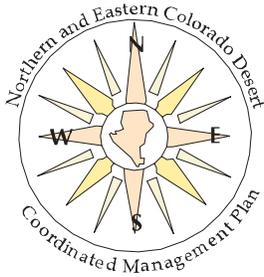
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-6a**

Scale 1 : 1,120,000

# Special Status Species - Animals



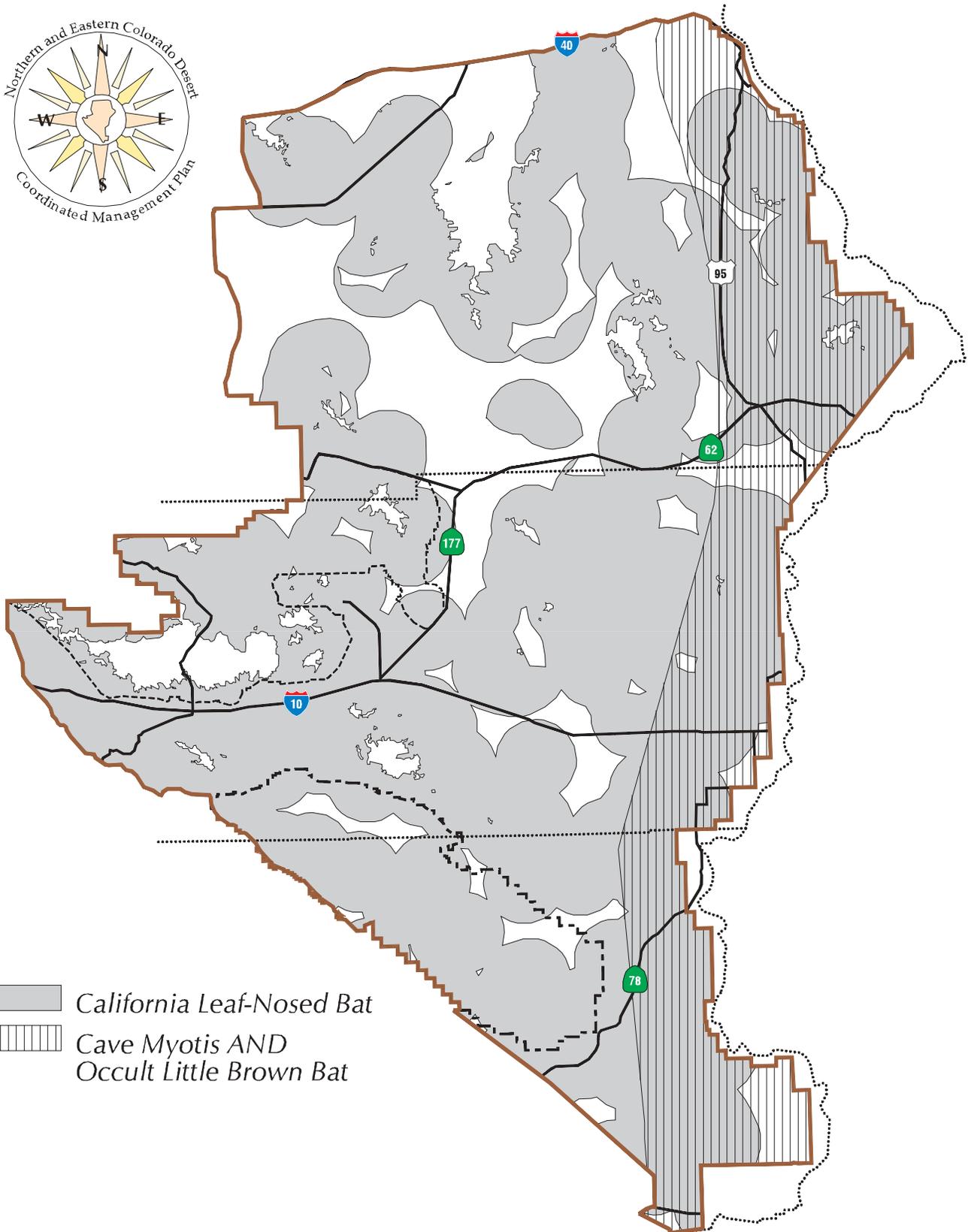
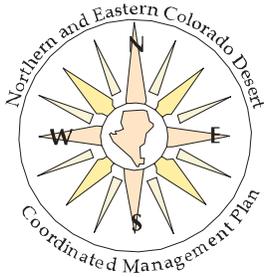
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-6b**

Scale 1 : 1,120,000

# Special Status Species - Animals



-  California Leaf-Nosed Bat
-  Cave Myotis AND Occult Little Brown Bat

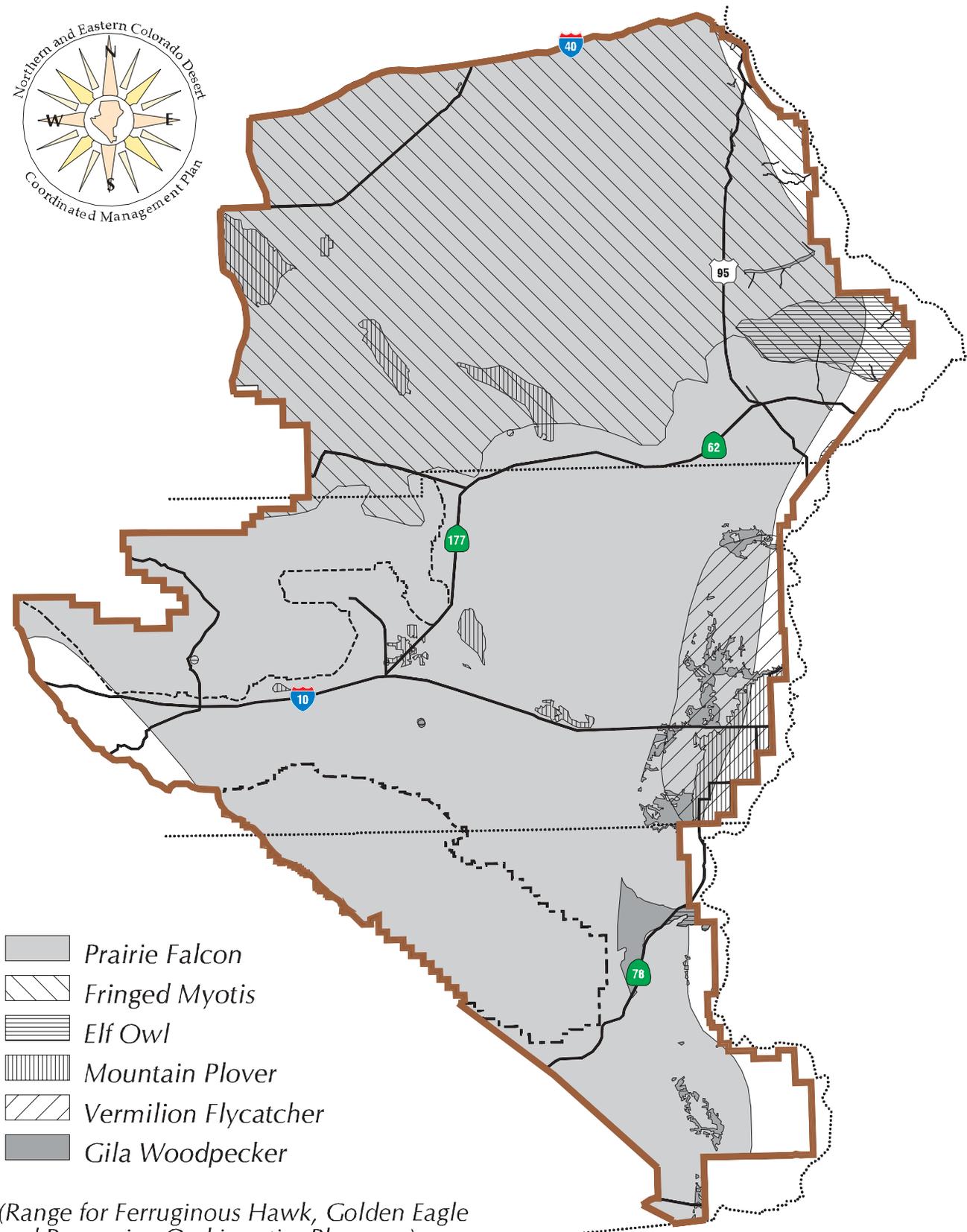
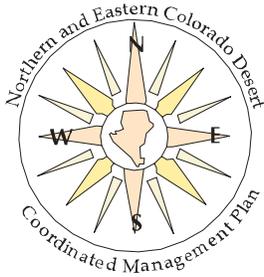
Please refer to Base Map for features not described here

June 5, 2002

**Map 3-6c**

Scale 1 : 1,120,000

# Special Status Species - Animals



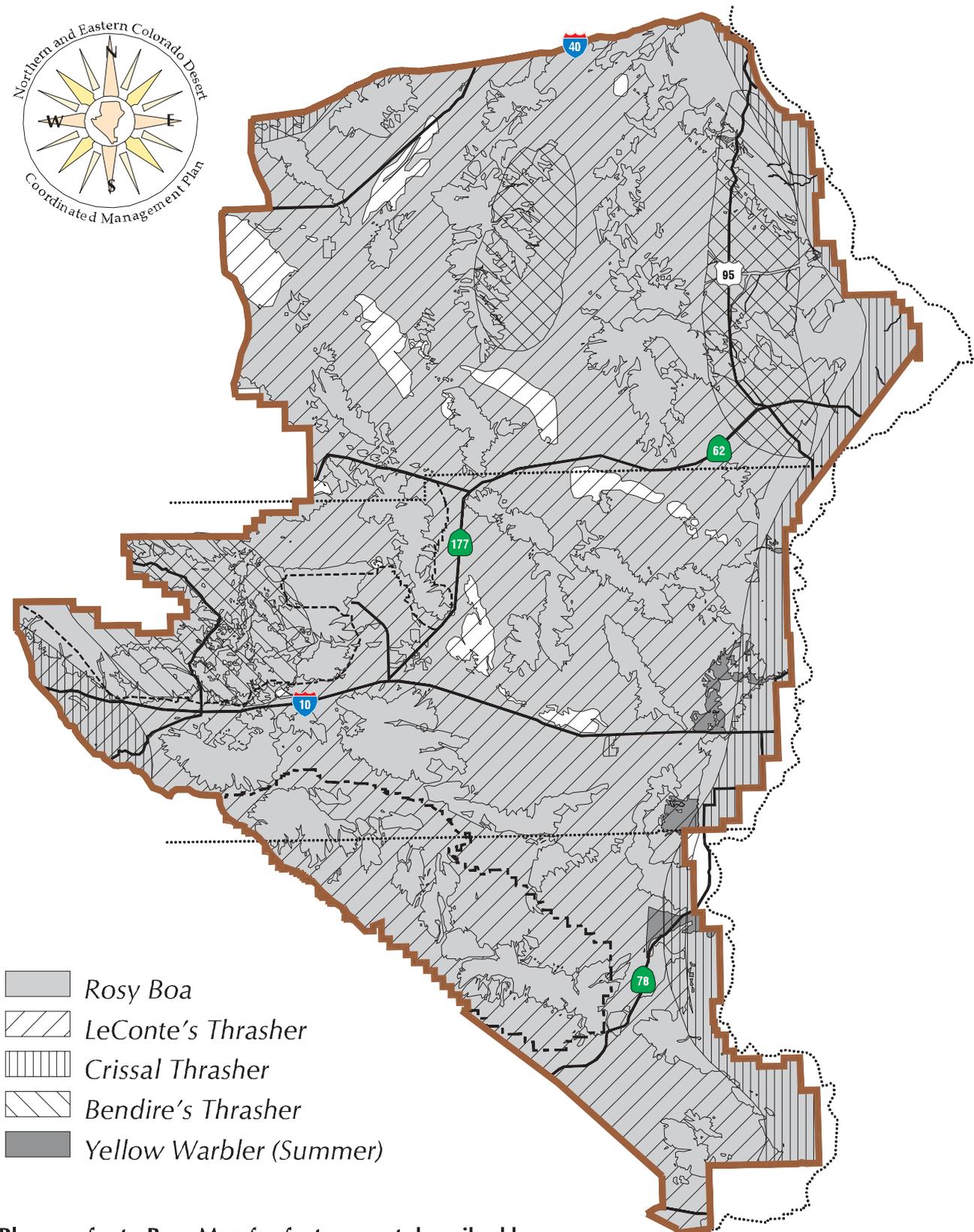
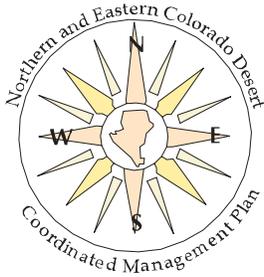
(Range for Ferruginous Hawk, Golden Eagle and Burrowing Owl is entire Plan area)

June 3, 2002

**Map 3-6d**

Scale 1 : 1,120,000

# Special Status Species - Animals

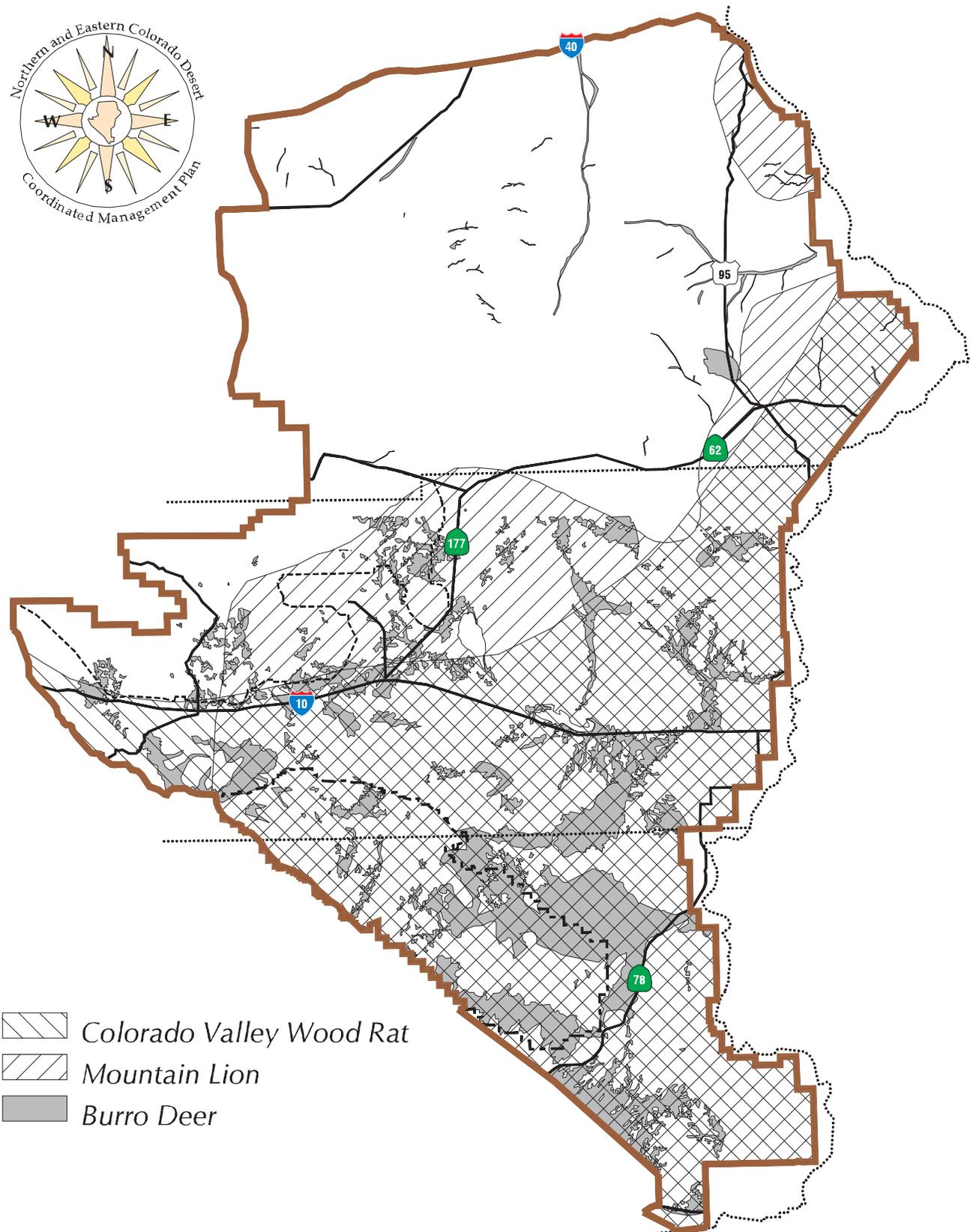
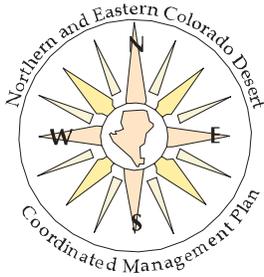


June 3, 2002

Map 3-6e

Scale 1 : 1,120,000

# Special Status Species - Animals



-  Colorado Valley Wood Rat
-  Mountain Lion
-  Burro Deer

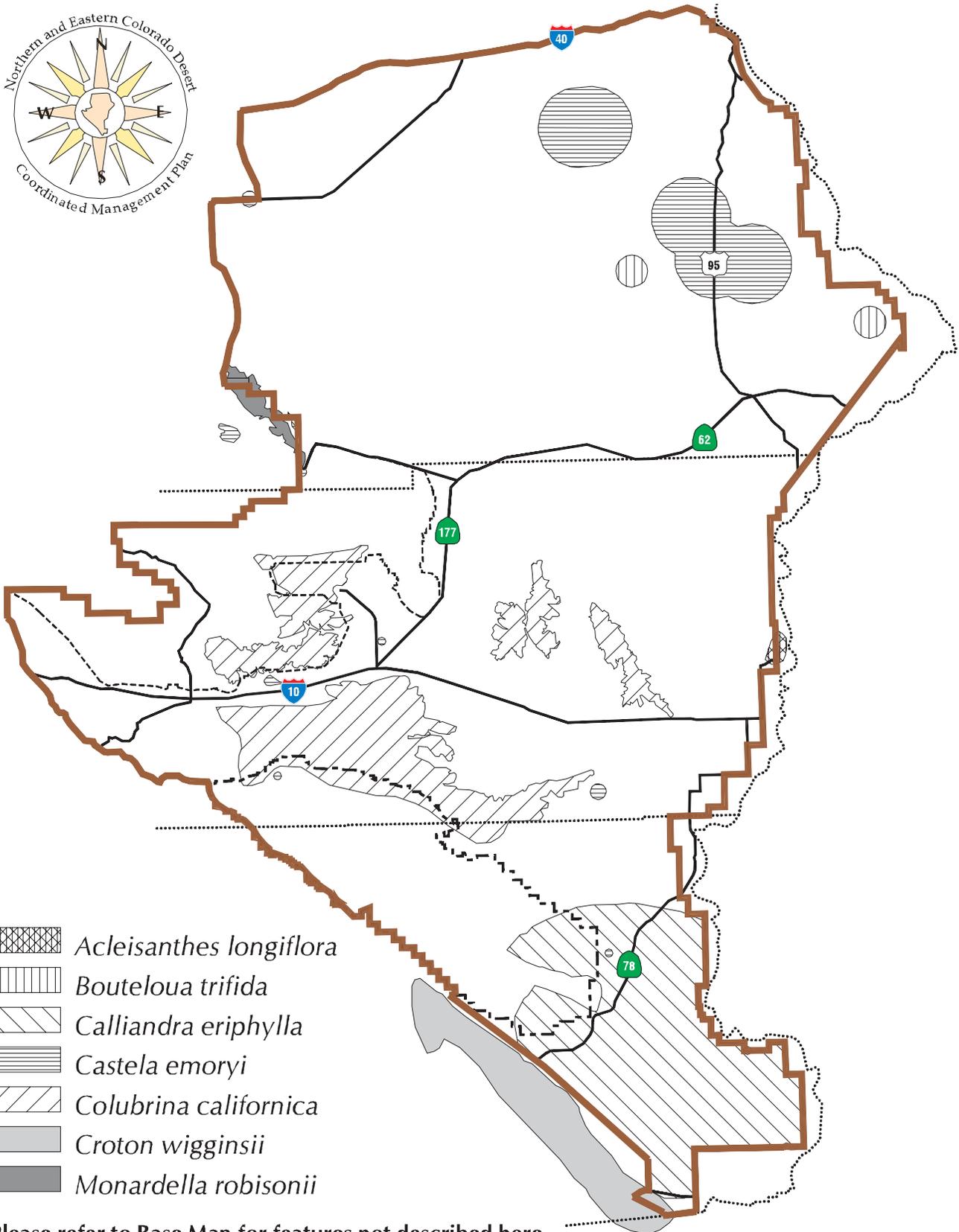
Please refer to Base Map for features not described here

June 5, 2002

**Map 3-6f**

Scale 1 : 1,120,000

# Special Status Species - Plants



-  *Acleisanthes longiflora*
-  *Bouteloua trifida*
-  *Calliandra eriphylla*
-  *Castela emoryi*
-  *Colubrina californica*
-  *Croton wigginsii*
-  *Monardella robisonii*

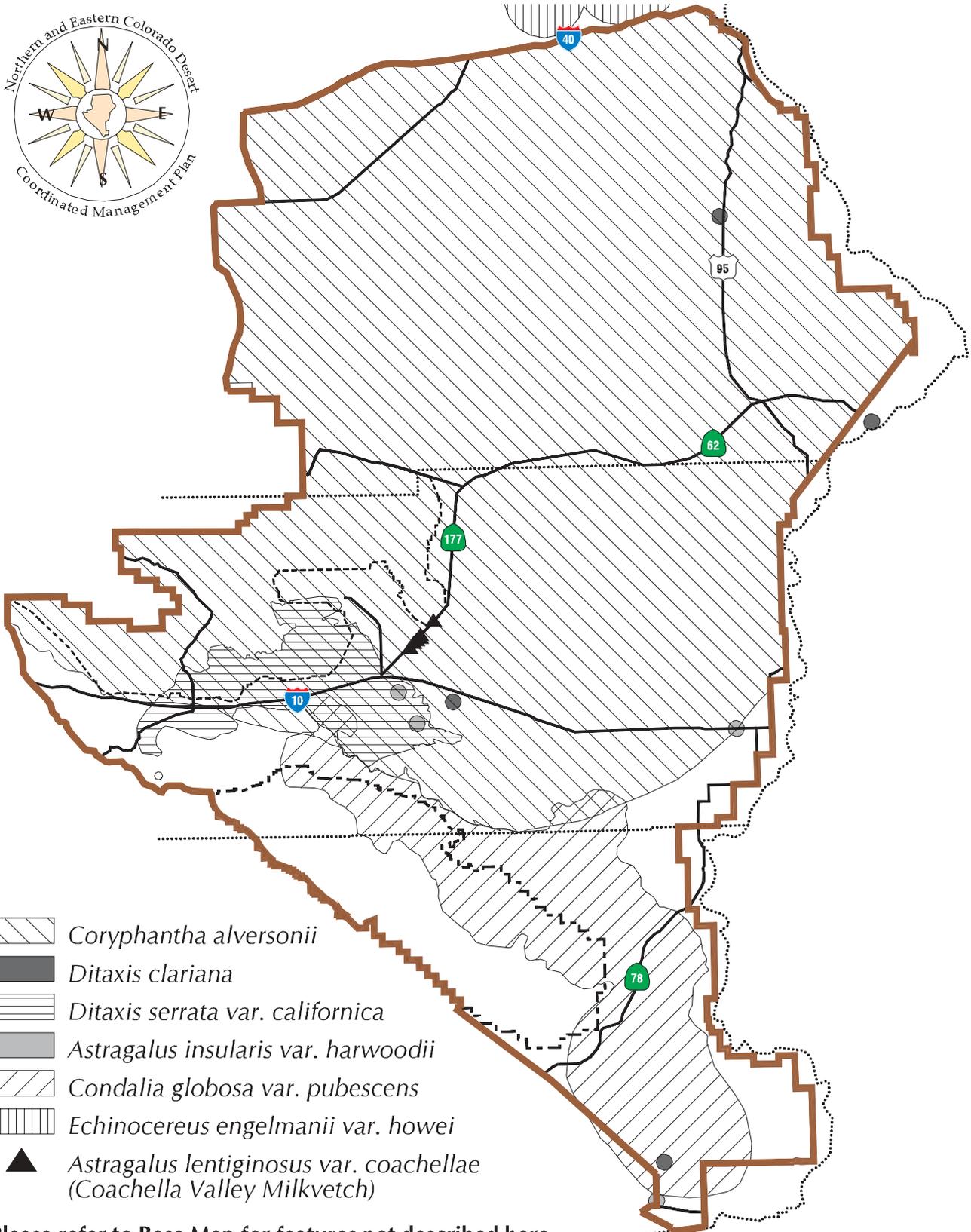
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-7a**

Scale 1 : 1,120,000

# Special Status Species - Plants



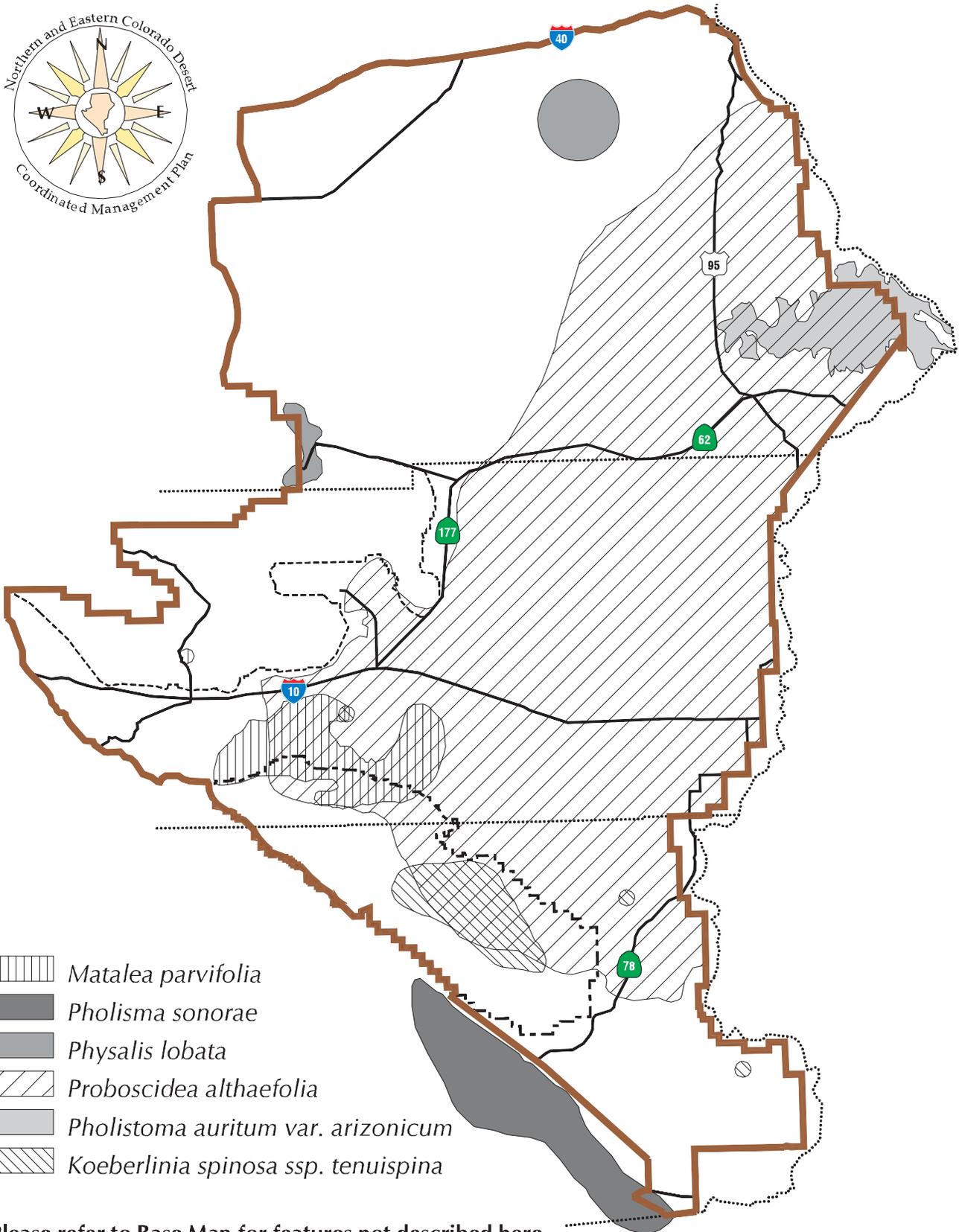
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-7b**

Scale 1 : 1,120,000

# Special Status Species - Plants



-  *Matalea parvifolia*
-  *Pholisma sonora*
-  *Physalis lobata*
-  *Proboscidea althaefolia*
-  *Pholistoma auritum* var. *arizonicum*
-  *Koeberlinia spinosa* ssp. *tenuispina*

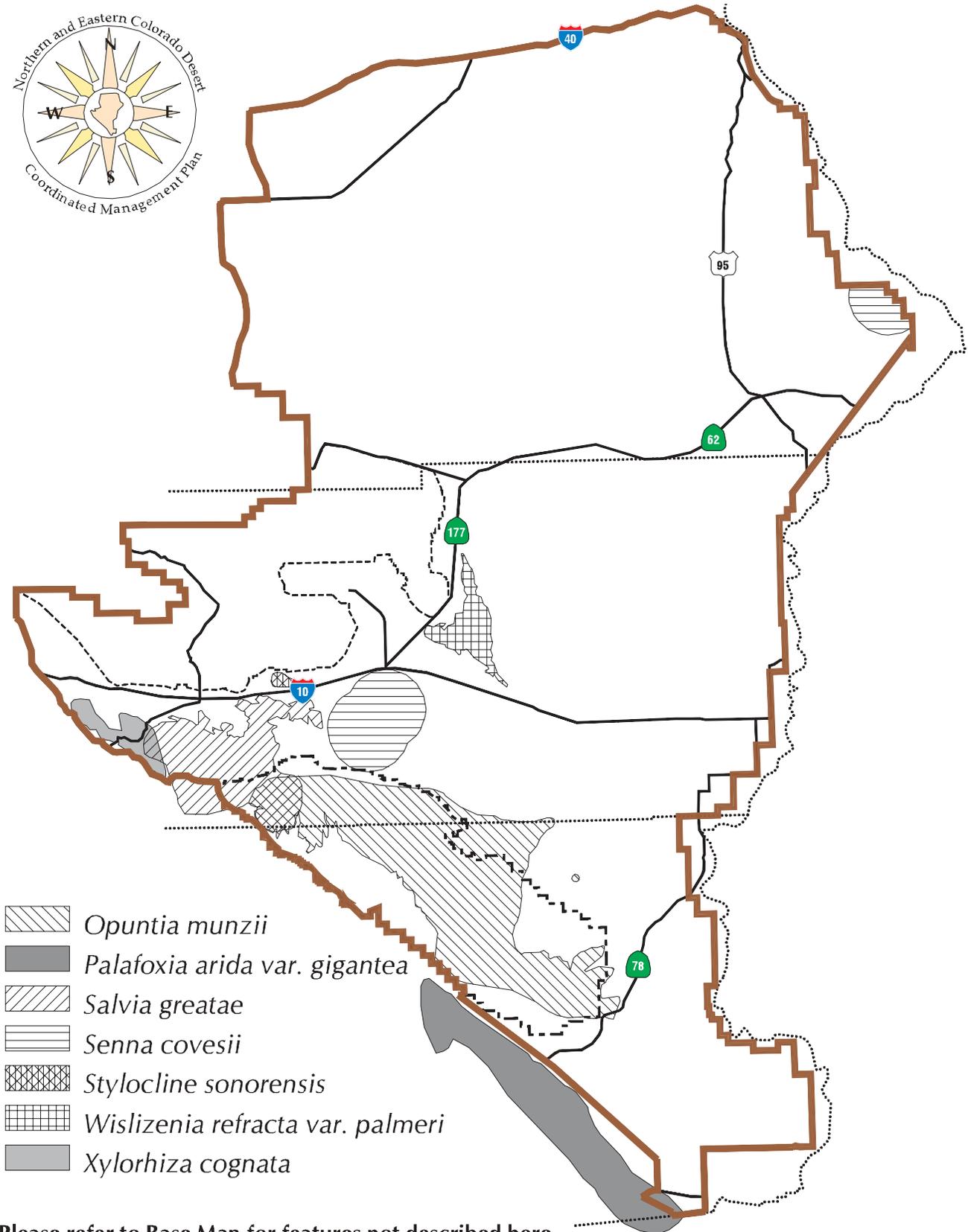
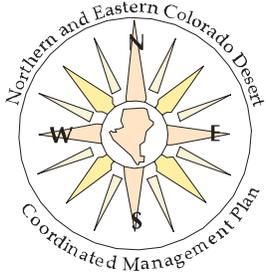
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-7c**

Scale 1 : 1,120,000

# Special Status Species - Plants



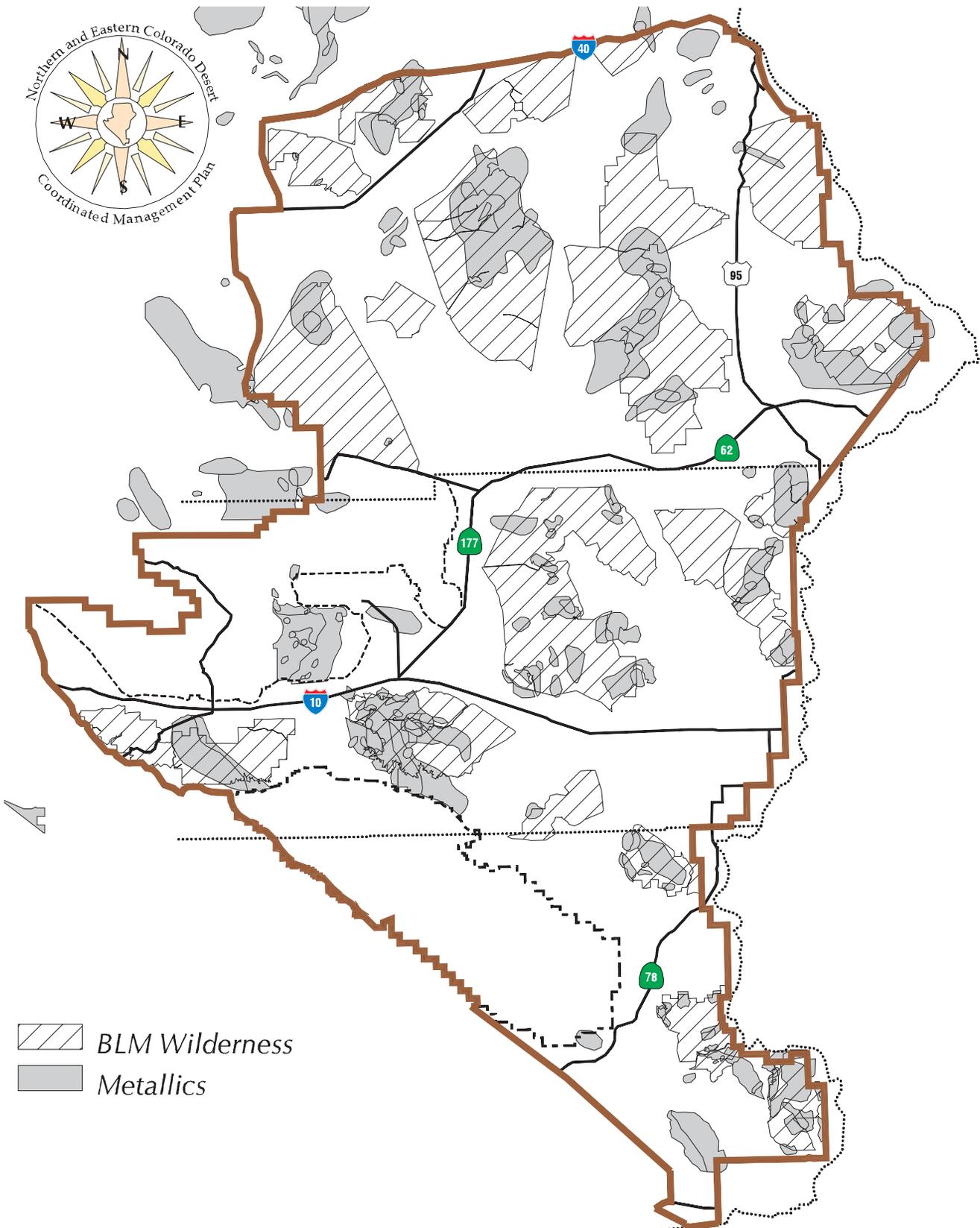
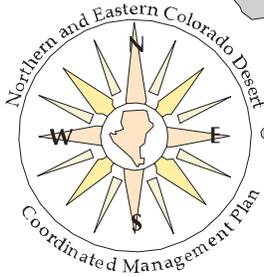
Please refer to Base Map for features not described here

June 5, 2002

**Map 3-7d**

Scale 1 : 1,120,000

# Mineral Potential - Metallics



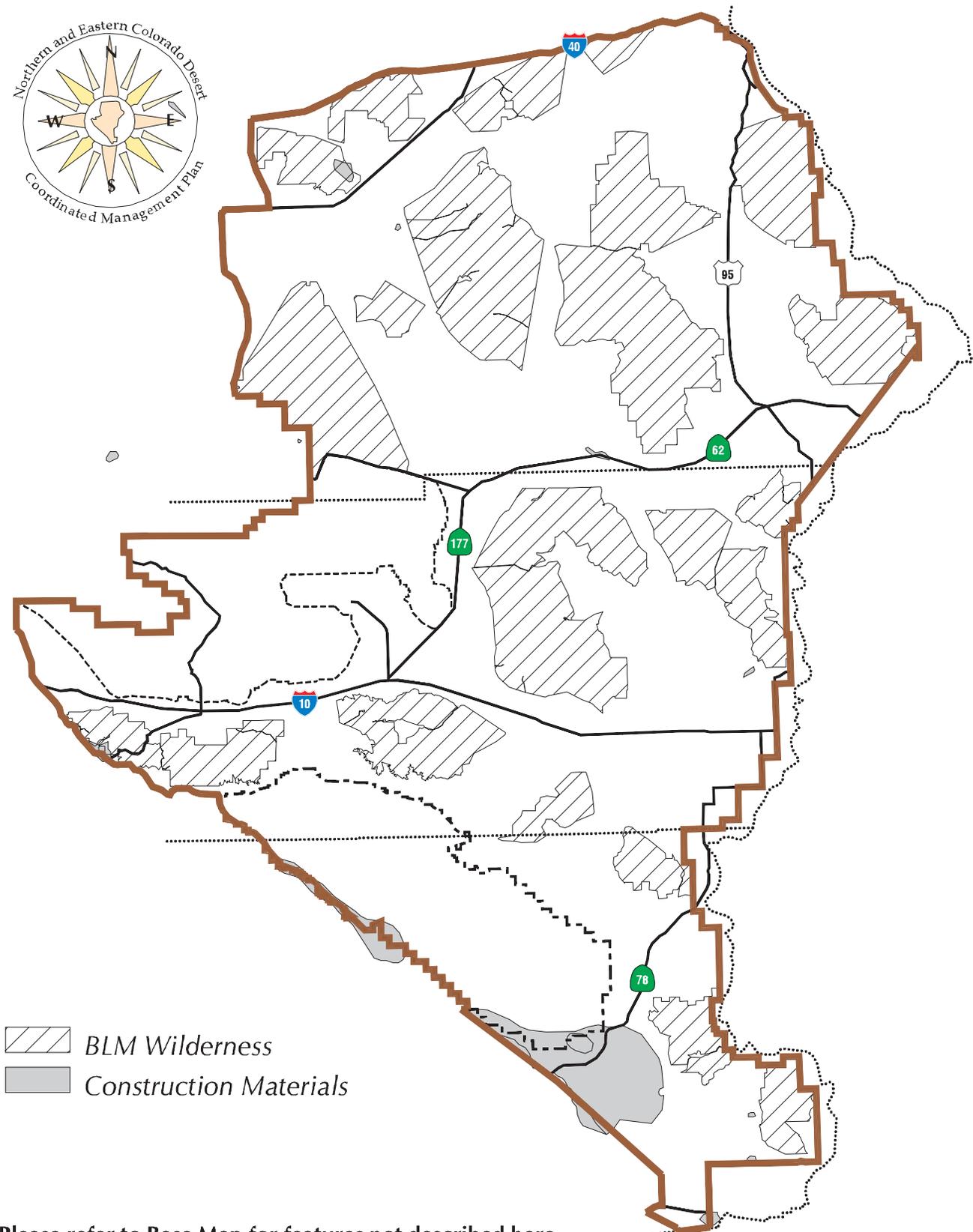
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-8**

Scale 1 : 1,120,000

# Mineral Potential - Construction

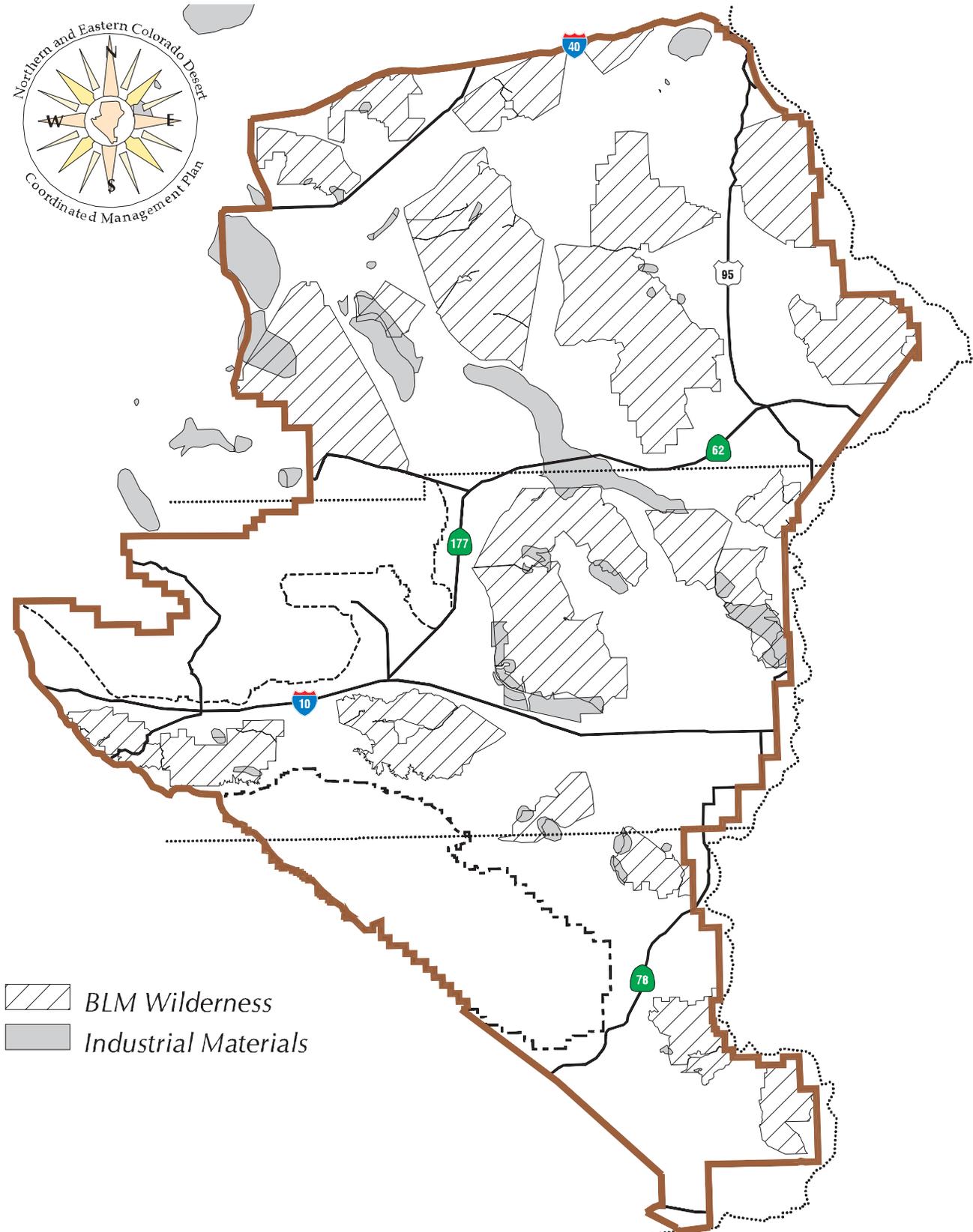
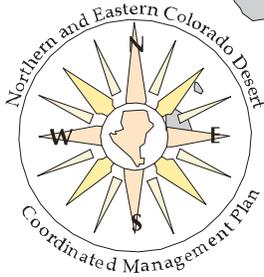


June 3, 2002

Map 3-9

Scale 1 : 1,120,000

# Mineral Potential - Industrial



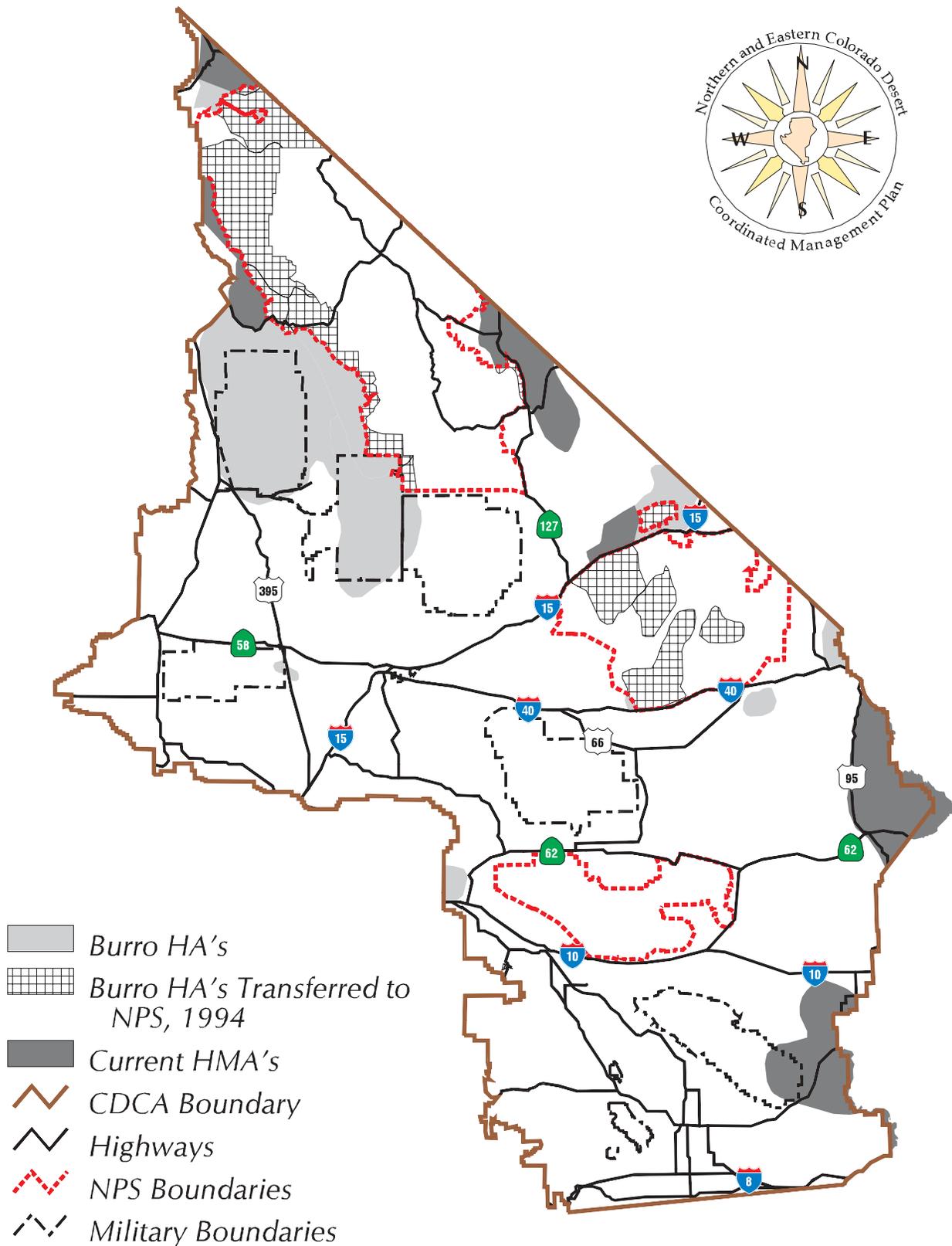
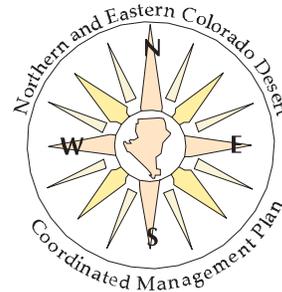
Please refer to Base Map for features not described here

June 3, 2002

**Map 3-10**

Scale 1 : 1,120,000

# Current CDCA Burro Management

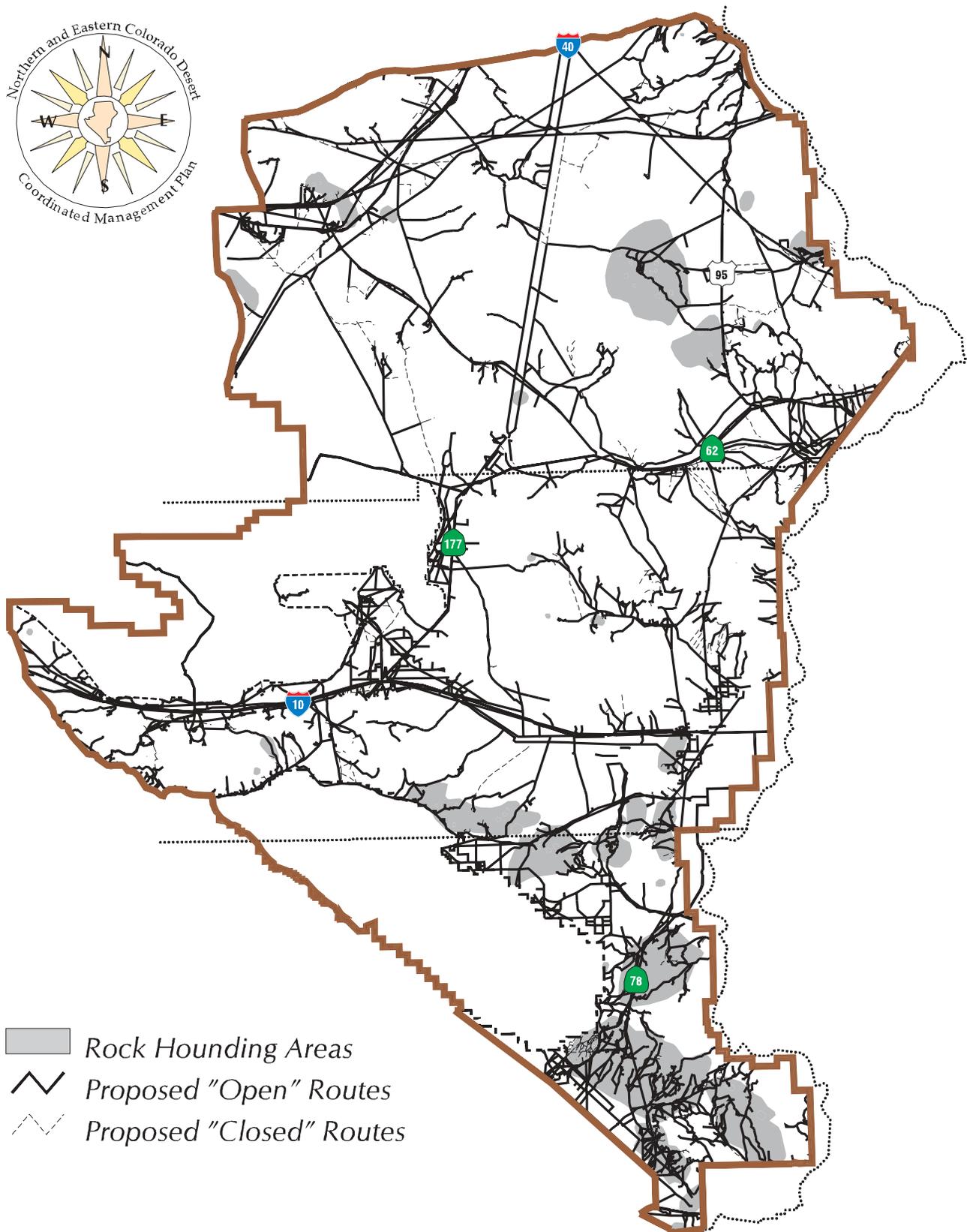


June 4, 2002

Map 4-1

Scale 1 : 2,700,000

# Popular Rock Hounding Areas



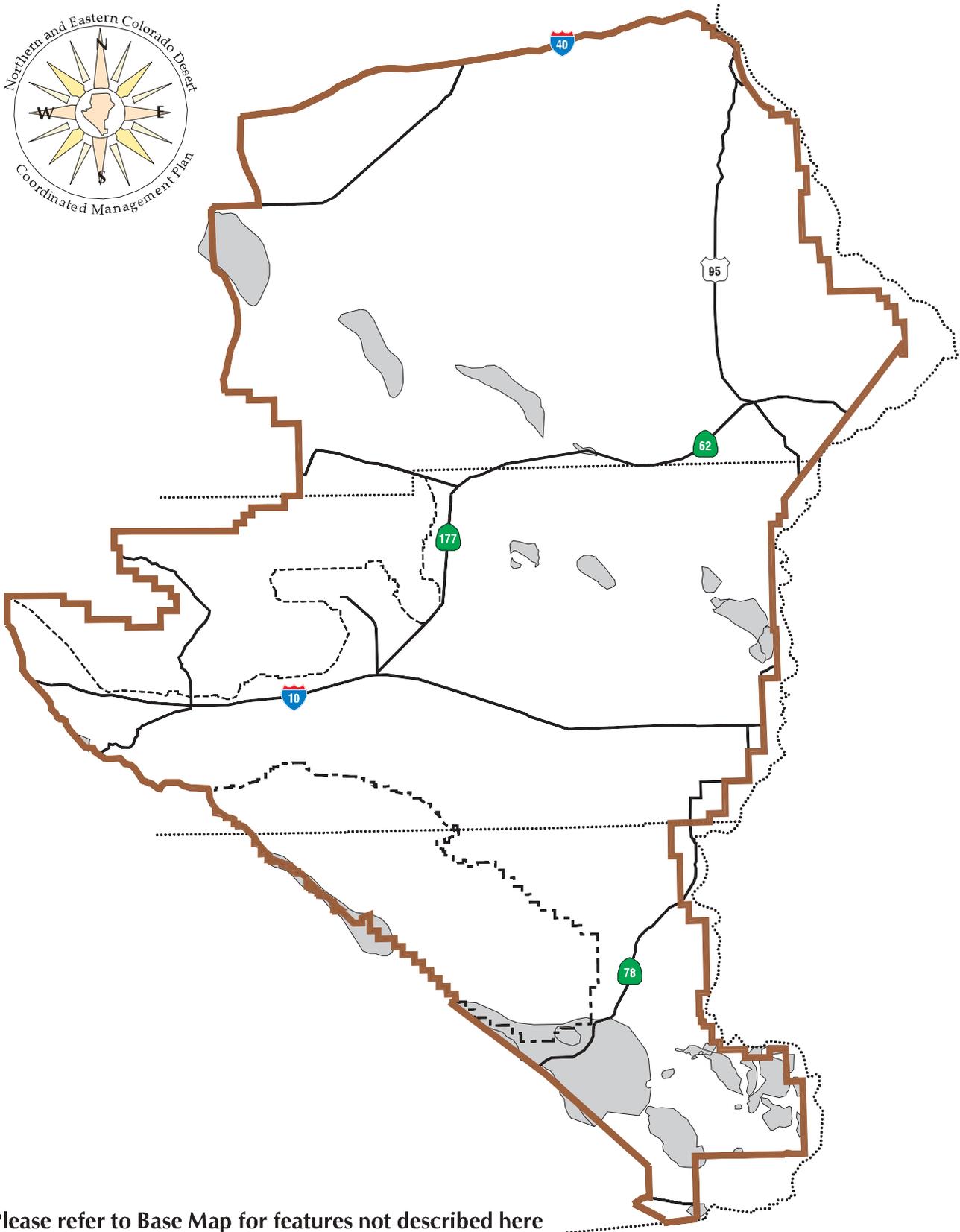
Please refer to Base Map for features not described here

June 3, 2002

Map 4-2

Scale 1 : 1,120,000

# High Mineral Development Potential



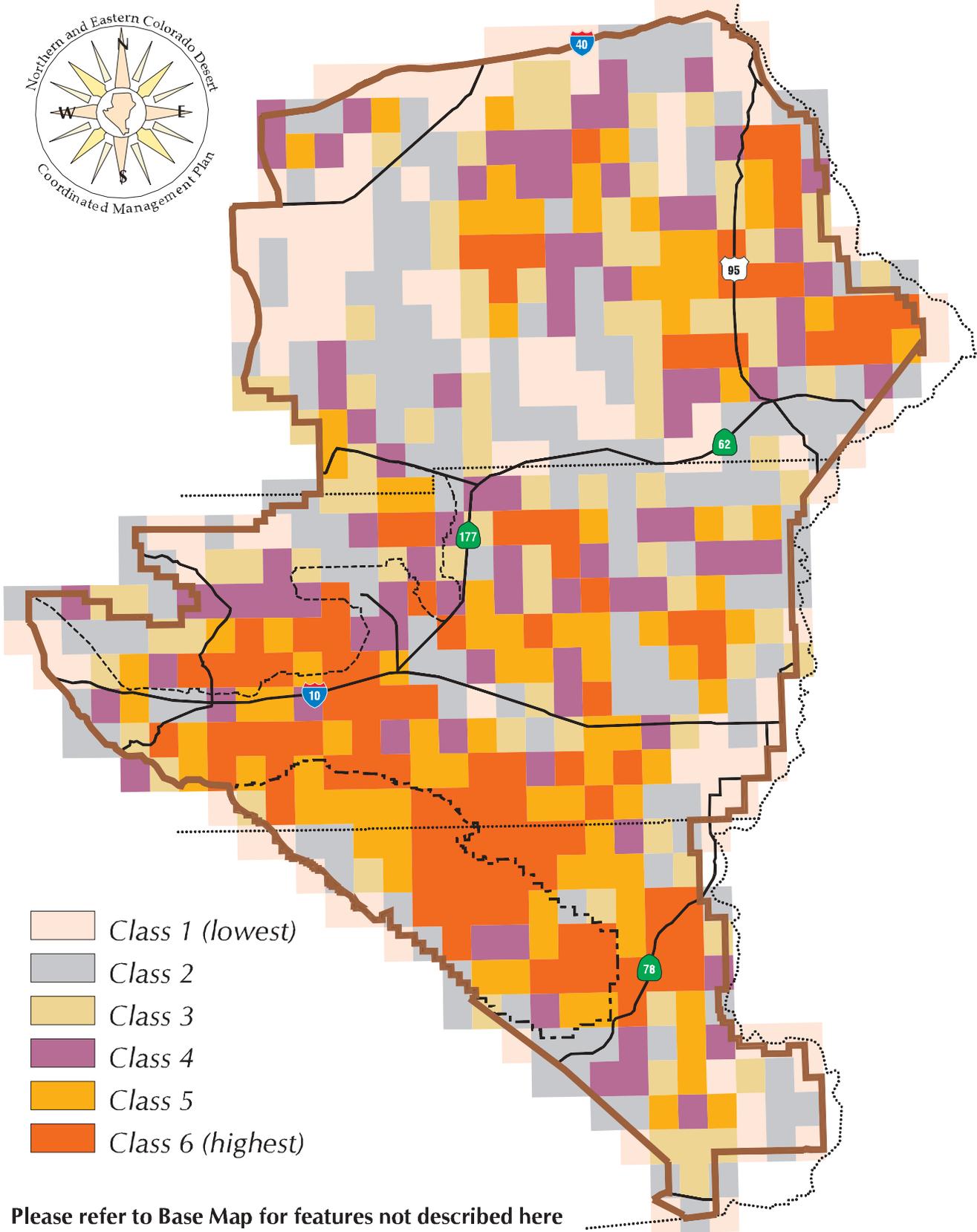
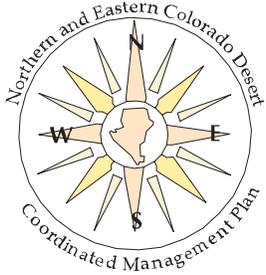
Please refer to Base Map for features not described here

June 3, 2002

**Map 4-3**

Scale 1 : 1,120,000

# Ecological "Hotspots" (Equal-Weighted Analysis)



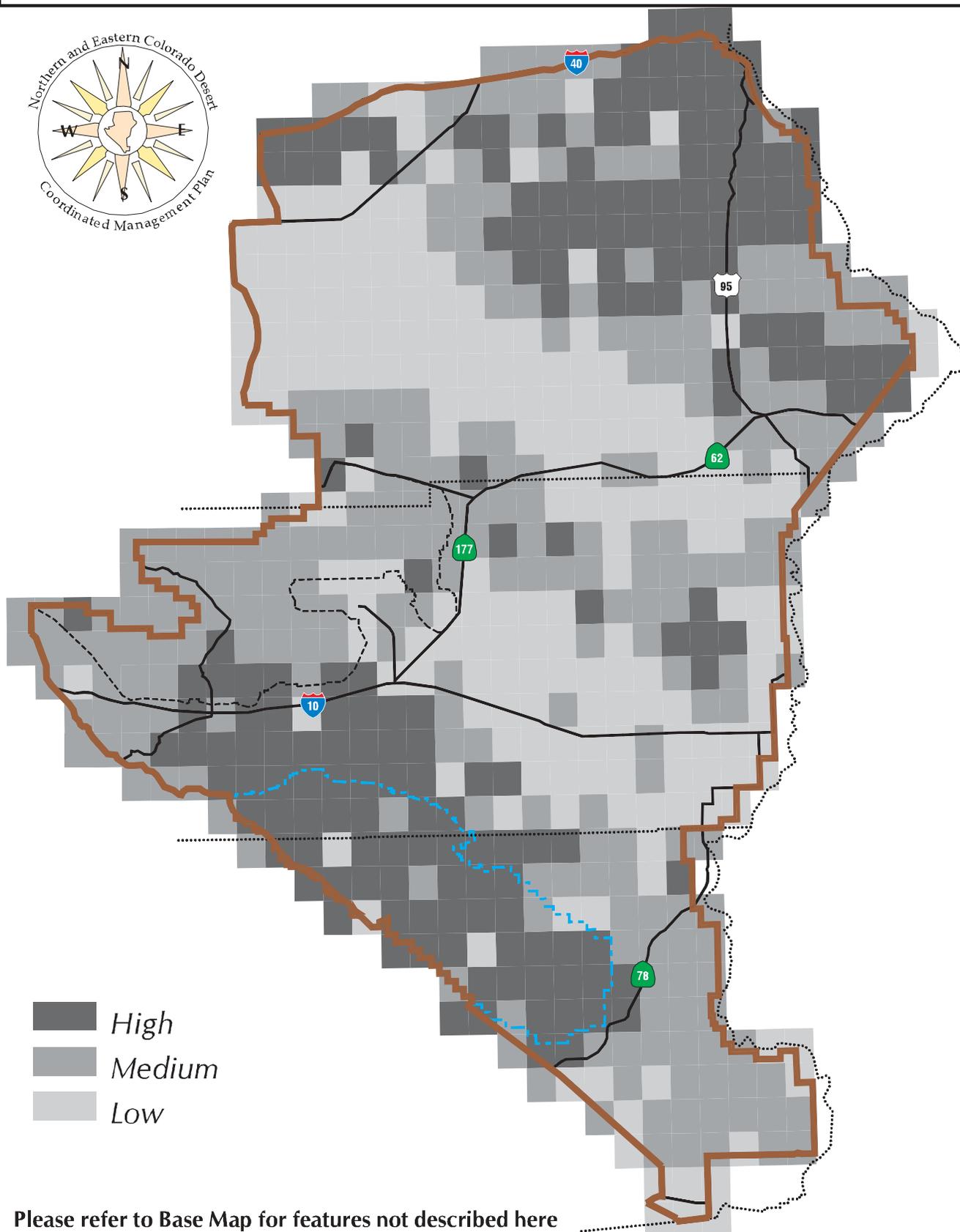
Please refer to Base Map for features not described here

June 3, 2002

**Map H-1**

Scale 1 : 1,120,000

# Plant Species Richness



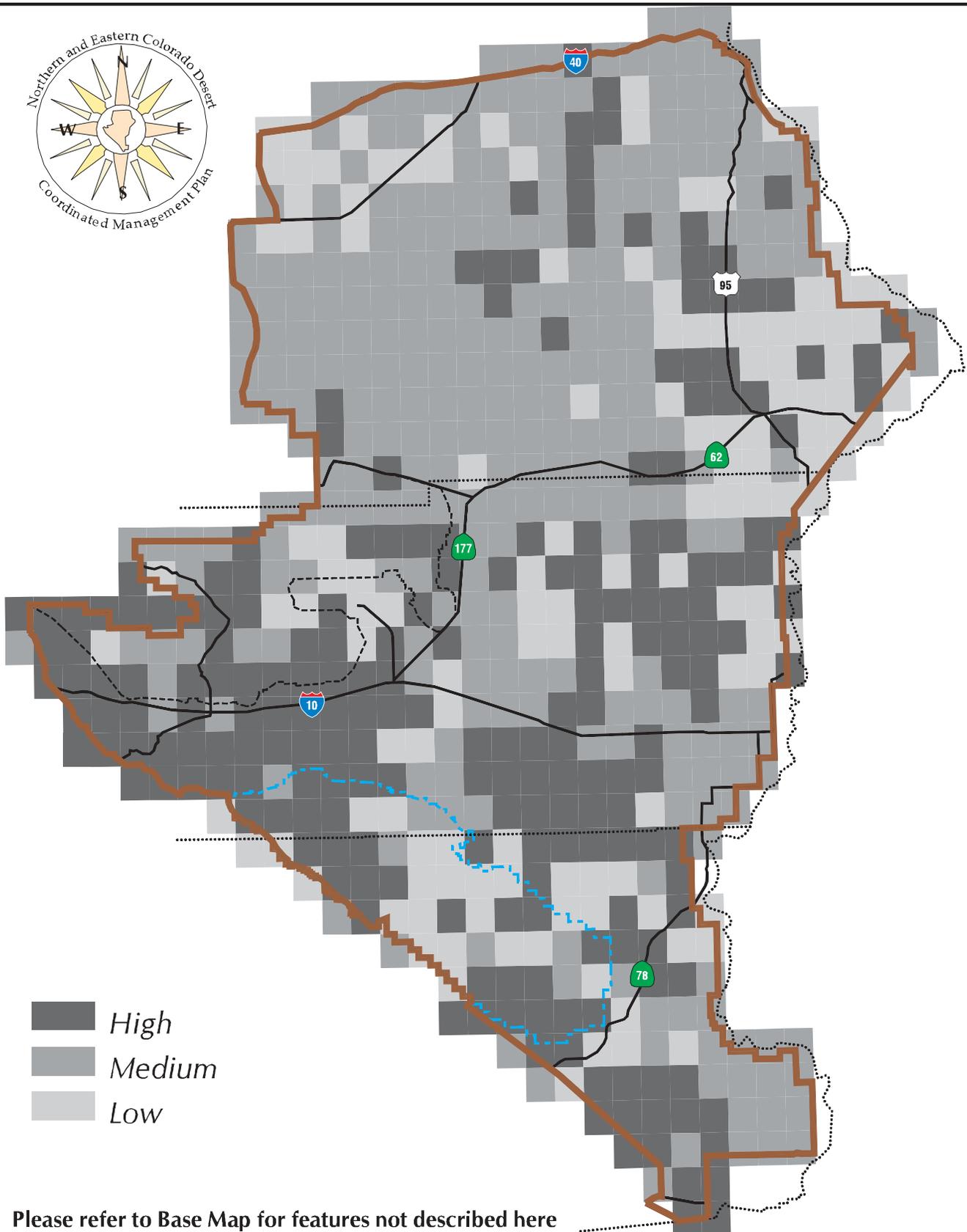
Please refer to Base Map for features not described here

June 3, 2002

**Map H-2**

Scale 1 : 1,120,000

# Animal Species Richness

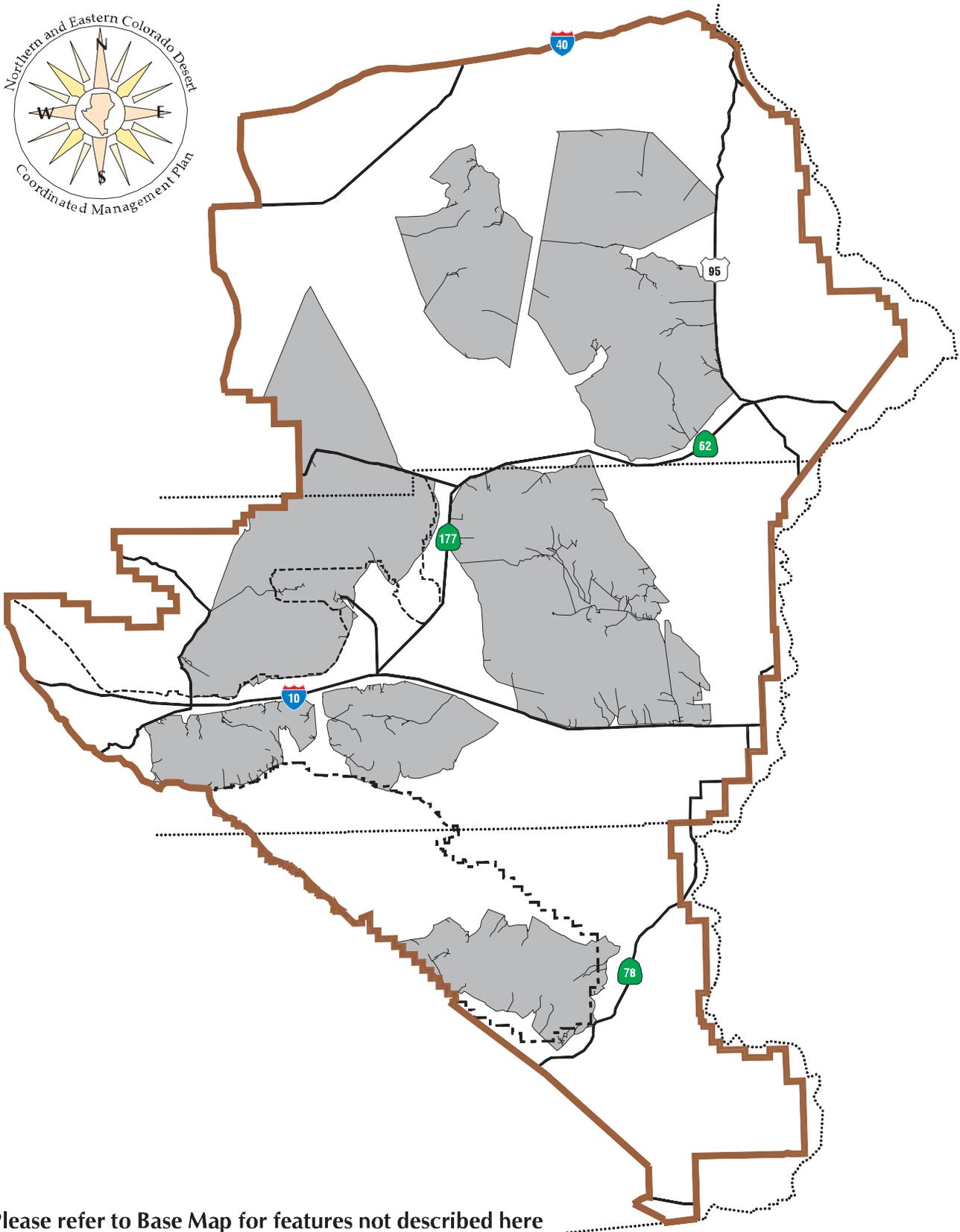


June 3, 2002

**Map H-3**

Scale 1 : 1,120,000

# Current Management Largest Unfragmented Areas



Please refer to Base Map for features not described here

June 3, 2002

**Map H-4**

Scale 1 : 1,120,000